

**The Magic is
B.A.C.**

**Bio Algae
Concentrates**

**Your source is
“BioSuperFood”**

By: Roland Thomas, ND

The Magic is B.A.C.

“Every great advance in natural knowledge has involved the absolute rejection of authority.” – Thomas H. Huxley

The extraordinary nutrients in Bio-Algae Concentrates efficiently nourish your cells. These well-nourished cells transform your health and your improved health will transform your life. Hello, my name is Roland Thomas and I am the author of “The Magic is BAC”. In this free online eBook, I present you with the latest information about Bio-Algae Concentrates (BAC), the culmination in cellular nutrition. This knowledge will change your beliefs about algae, food, and wellness. This online eBook builds on the previous book Awakening the Genius Within that I wrote about the research and development of Bio-Algae Concentrates available online.

Table of Contents:

4. Disclaimer and Copyright
6. One Disease – Cellular Disease
8. Why BAC is Likely the Most Efficient Food on Earth
10. Better than Bulk Vitamins and Minerals
11. Why I Want to Write About BAC
13. What are Bio-Algae Concentrates?
15. Bio-Algae Concentrates 20,000 Person Years of Russian Research
19. BAC – North American Research Chicken Viability
21. BAC – North American Research The Pleasant Mile Dairy Farm
23. BAC – North American Research The Alain Forget Dairy Farm
28. BAC – North American Research Saving Merri’s Bighorn Sheep
34. Bio-Algae Concentrates Helped Victims of Chernobyl
37. BAC – North American Leukemia Research
37. The Nutritional Treasures Inside BAC
39. The Ingredients in BAC
46. Detailed List of Nutrients in BAC
50. BAC Awakens the Genius Within
55. The Extraordinary Health Benefits of BAC
58. BAC – Nutritional Energy Medicine

60. BAC – The World’s Best Source of Protein and Amino Acids
63. The Incredible Array of Vitamins Contained in BAC
66. BAC Contains the Most Complete Offering of Minerals
68. Iron in BAC and the Prevention of Anemia
68. The Thousands of Enzymes in BAC
70. BAC – A Rich Source of Essential Fatty Acids (EFAs)
71. Gamma Linolenic Acid in BAC Stimulates Master Hormones
75. The Photosynthetic Life-Giving Pigment Content of BAC
78. Chlorophyll in BAC – The Shepherd of Light
82. The Incredible Arsenal of Antioxidants in BAC
84. BAC Contains High Levels of Astaxanthin, the King of the Carotenoids
92. Phycocyanin in BAC Enhances the Immune System
93. Porphyrin in BAC Supports Healthy Red Blood Cells
94. The Fats, Sugars, Salts and Calories of BAC
94. Differences Between BAC and Other Algae
96. BAC for People on a Low-Carb Diet
97. BAC for Dieting and Weight Loss
99. BAC for Vitality and Intestinal Health
100. BAC for Nervous System Disorders
101. BAC for Suppressing Appetite and Reducing Cravings
102. BAC for Enhancing Brain Function
104. BAC for Proper pH Balance
105. BAC for Assisting the Body in Preventing Cancer
107. Studies Show BAC Can Help the Body Reverse Cancer
109. The Nutrients in BAC Help the Body Fight Cancer
110. How BAC Boosts Immunity
114. The Important Polysaccharides Found in BAC

- 115. The Remarkable Protection Powers of BAC's Nucleic Acids (RNA/DNA)
- 115. BAC for Cardiovascular Health
- 120. Reducing Bad Cholesterol with BAC
- 122. Supporting the Heart and Blood Vessels with BAC
- 126. BAC for Heavy Metal Detoxification
- 127. BAC for Hypoglycemia and Diabetes
- 130. Seeing is Believing – Visual Health with BAC
- 135. BAC for Cleansing and Detoxification
- 136. Fertility, Fecundity and Viability with BAC
- 141. The Many Benefits of Consuming BAC
- 15. How to Take BAC
- 151. Effects of Consuming BAC
- 153. Human Use – Cases
- 161. The Cost of BAC
- 163. Where to Get BAC
- 163. FAQ
- 197. Human Use – Testimonials
- 308. Animal Use – Testimonials and Cases
- 331. Supporting Research
- 351. About the Author

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I have done my best to use information that makes natural food sense or that is commonly or universally known about the effects of the mechanics of actions of certain nutrients and their relationship to health.

Feel free to share the contents of this web site. We hope it is done in a positive manner. Forward the web address www.TheMAGICisBAC.com to anyone you think would benefit from it.

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One Disease – Cellular Disease

The conventional medical model lists hundreds of diseases and thousands of remedies for treating these diseases or their symptoms. More than 40 percent of Americans take at least one prescription drug and one-in-six takes at least three. There are currently over 600 approved cancer drugs. In no time at all, this palliative approach will have you taking a pill for cholesterol, a beta blocker for the heart, calcium for your bones, and so forth. In most cases these remedies are prescribed for alleviating or controlling the symptom(s), as in the case with blood pressure medication or insulin for diabetes. Meanwhile, the initial causes of the disease are rarely addressed. Often, practitioners of the alternative medicine model will do the same. They prescribe enzymes for poor digestion, antioxidants for low immunity, etc. I call this approach of treating the symptom, “fighting the battle and losing the war.” What then is this war that we must win?

ONE DISEASE, CELLULAR DISEASE

In a “purist” holistic health perspective, disease (non-health) is demystified. Let’s be realistic. Disease and its symptoms reside first at the cellular level. Let’s even be scientific. We are made up of hundreds of trillions of living intelligent cells which in turn make up our organs, bones, tissues, blood and brain. In this model, unhealthy cells lead to unhealthy organs, unhealthy organs lead to deficient metabolic activities, and this in turn leads to symptoms, which we name disease. It is safe to say that once you are diagnosed with a disease, the problem is usually systemic and bigger than just the symptoms. Usually, the causes that lead to disease are manifested in every cell of your body for some time before symptoms arise. We don’t catch diseases, we make them. In the holistic view, disease occurs at the cellular level.

Let me describe cellular disease in four points:

- 1) Once symptoms begin to manifest, most cells may be toxic and deficient in nutrients and energy. They are likely less efficient in conducting their myriad of metabolic activities including repair, detoxification, growth, and regeneration.
- 2) At the next level, due to cellular inefficiencies, the organs are now less efficient in conducting their own metabolic role(s). For example, with hypoglycemia, the pancreas is sluggish in regulating the blood sugar with insulin.
- 3) Realize now that the brain organs: hypothalamus, pituitary (master) gland, and the pineal gland, collectively known as the governing level responsible for overseeing all metabolism, are also affected by this cellular disease. They are rendered less efficient in controlling critically important metabolisms like that of blood sugar, pH (acidity/alkalinity), and even each beat of the heart.
- 4) Aggravating the problem, after years and often decades of metabolic inefficiencies (improper

pH, blood sugar, temperature, fats, etc.), the cells, the organs, and the endocrine glands have become misprogrammed to tolerate these negative behaviors. The body now thinks it is in a “healthy” state of health. For example, when the hypothalamus becomes lazy in regulating the misbehaving pancreas, we have a chronic condition known as diabetes.

At this stage, metabolism is dysfunctional or operates poorly. Problems occur with the Krebs/ATP cycle, assimilation, absorption, elimination, protein synthesis, and the osmosis of oxygen and water (hypoxia and dehydration). There is chronic acidity and resulting acidosis. Not only do you have incorrect pH levels, but inefficient flushing of cellular debris causes you to accumulate acid ash inside and between your cells. These conditions lead to infestations of bacteria and parasites (fungus, yeast and Candida), to “bad” fats (high cholesterol) and lack of viscosity, and to the crystallization of fats and other unassimilated debris into plaque and arthritis. Your food / nutrient digestion and elimination have become deficient and you have lost your healing energy. The problem is now a vicious cycle.

ONE HEALTH, CELLULAR HEALTH

How do you restore cellular health? The holistic approach to cellular health is to first realize that the doctor is the body itself. Each cell is geared to self-heal. The doctor is within, not without. After all, this body built itself from one tiny cell and managed quite well without an “external doctor” for decades, defending itself from millions of viral attacks, free radical damage, and constant pollution from food and the air. Holistic health is gained at the cellular level. This view is supportive of “the doctor within,” rather than employing an intervener. I call this approach “winning the war, not just the battle.”

Let me describe how to regain cellular health in five points:

- 1) First, do no harm: Begin by limiting the causes of cellular toxicity and burden. These include abuse of food, protein and sugar, dead, toxic and depleted food and beverages, and pollutants and toxins of all kinds including mental and emotional negativity. All substances including food, light, and even people, carry energy that can raise or lower your own energy level. Choose wisely; ask yourself before you eat or drink “Is this conducive to health or disease?”
- 2) Nourish your cells: Eat a high energy diet of fresh organic colorful fruits and vegetables with little meat and fish. Look for the “energy” in foods which we derive from natural minerals, trace elements, carbohydrates and chlorophyll contained in fresh and organic fruits and vegetables.
- 3) Increase cellular efficiency: Beyond avoiding harm and eating good foods, other factors are critical to health. Cellular oxygenation and detoxification can be vastly increased and achieved with movement and aeration. Let me suggest a few means to achieve movement and aeration:
 - a. Fasting is as important as eating. I call it “getting out of the way.” Fasting has been used as an element of health since the beginning of time. When a cat is sick, it stops eating until it gets better. During the fasting phase of the night, our liver is given a chance to perform a myriad of

biochemical processes. Give yourself a chance by introducing safe and short fasts in your life daily, weekly, monthly and annually.

b. We humans must exercise in order for our cell to not rust. The value of exercise has been proven. Enough has been said, so just do it. Move your body, arouse your lymphatic systems and increase your pulse and your temperature moderately. This kills viruses, removes toxins, and balances fats in each cell of your body. Shake every cell in your body with daily exercise like walking, running, qi-gong, yoga, etc.

c. In natural medicine, we say that 50% of toxicity is caused by our emotions and our state of mind. Maintain your spiritual and emotional balance with exercises, yoga, qi-gong, tai chi, prayer, etc.

4) Reprogram the governing organs: With degenerative and chronic conditions, the dietary and lifestyle changes recommended above may not be sufficient to reprogram the governing organs of the brain. To regain the health of your brain organs, you must do more daily. I propose a diet rich in nutrients that are known to be deficient in the brain as well as foods rich in minerals and trace elements, green, blue and red pigments and carotenoids, chlorophylls, fatty acids omega 3, 6, 9, and gamma and alpha lipoic acids, which are “the good fats that heal.” You should also exercise more and engage in energy balancing activities.

5) Introduce Bio-Algae Concentrates (BAC) into your life: At this point, I suggest a shortcut to brain health. As an additional aid in restoring cellular health and as a magnificent brain food, I recommend BAC. It is an extremely efficient food and the best food complement on earth because it is a blend of microalgae with extraordinary nutritional values.

Why BAC is Likely the Most Efficient Food on Earth

“If you take care of each cell in your body, disease cannot happen.”
– Harvey Diamond, Never Be Sick Again, 1992

By now most people have heard about algae and their phenomenal nutritive value. However, far fewer people have heard about Bio-Algae Concentrates. How can there be such a superior blend of algae, like BAC, that is hundreds of times more nutritionally functional than any single algae? We say that BAC is an “extremely efficient food” because of its unique combination of characteristics. In the pages that follow, I will describe several of these characteristics. Here are just a few:

nutritive – as in nutrients for energy, growth and repair
protective – as in nutrients for fighting and protecting
complete – as in over 5,000 nutrients,

balanced – as in the “science,” not just the “art,” of proper food combination,
synergistic – as in the whole is greater than the sum of its parts
whole – as in whole food
organic – as in pure

To start with, a major advantage of BAC is that it contains not only nutrients with nutritive properties, but unlike most blue-green algae, BAC also contains high levels of nutrients with protective properties.

Nutritive Nutrients

BAC's blue-green algae contain highly nutritive nutrients and elements such as proteins, vitamins, enzymes, and chlorophylls. For example, BAC has many times the amount of digestible proteins as fish and meat. It contains the full amino acid spectrum – not just 8 or 16, but all known amino acids. For this reason, it is one of the greatest sources of protein and one of the best assimilated forms of protein that you can get.

Protective Nutrients

The red algae in BAC contain high levels of nutrients with extraordinary protective properties in the form of mixed carotenoids and other free-radical fighting agents. For example, BAC contains astaxanthin, clinically proven to be hundreds of times more efficient as a free radical antioxidant power than vitamin E or vitamin C. It is also at least 20 times more efficient than beta-carotene.

Why introduce BAC in your life?

- 30 years of Soviet research have made BAC an “Extremely Efficient Food.”
- BAC is a blend of four (4) specific algae that, when combined, contain more than 5,000 nutrients. These include proteins, vitamins, minerals, enzymes and chlorophylls, which are considered nutritive, as well as many that are considered protective, such as essential fatty acids (EFAs) Omega 3, 6, and 9, GLA, and many pigments (green and red) with extraordinary antioxidant power.
- BAC will not only feed your deficient cells, but will nourish those more difficult to reach cells of the governing organs, the hypothalamus and the pituitary gland, restoring their energy and efficiency.
- BAC efficiently influences the hypothalamus. In the words of Dr. Kiriak “BAC awakens the genius within.”
- BAC delivers daily required nutrients, boosts your immune system, and helps restore energy and balance.

- In large animal trials, BAC was proven to prevent conditions such as cancer, diabetes, and obesity, and to reverse many advanced conditions. It was awarded International Honors and Medals for its successful use with the people of Chernobyl who suffered radiation illness from the nuclear explosion of 1986.
- BAC significantly quickens the recovery of your healing energy.

The algae in BAC, along with the specific way that they are combined, make it the most nutritional and functional food on earth.

Many phytochemicals and trace elements found in BAC have been linked to the reparation of nerve damage in the brain and nervous system. In addition, many nutrients in BAC have been clinically shown to have preventive and curative properties when it comes to all sorts of cancers. BAC also contains a high content of those rare and difficult to obtain essential fatty acids such as Omega 3 and 6 and GLA, as well as other “supposedly” non-essential acids like Omega 9. These nutrients are critical for healthy brain function and disease prevention. This explains why BAC is often helpful in the prevention and recovery from degenerative diseases such as Alzheimer’s disease, epilepsy, muscular dystrophy and Parkinson’s disease.

In the next pages you will learn all about the many health and nutritional benefits of BAC. After reading them, I am sure that you will want to incorporate it into your diet right away.

Better than Bulk Vitamins and Minerals

The only truly natural vitamins and minerals are those that come from whole foods. They are available in some whole food nutritional supplements as highly nutritious, concentrated foods; powdered concentrates of foods and herbs with ONLY the moisture (an isolated component of whole food) removed. Sources of these include ...wheat-grass juice, freshwater algae (blue-green algae, chlorella, spirulina), sea vegetables such as kelp, enzymes, wheat-germ oil...
– Home Safe Home by Debra Lynn Dadd

I have alluded to this throughout this report, but it deserves repeating: vitamins and minerals simply cannot compare with these micro-algae when it comes to superior nutrition. For one thing, there is no such thing as an isolated vitamin or mineral or nutrient in nature. No “Vitamin C” fruits grow on trees, for example; all fruits have a spectrum of vitamins and minerals. There are no “calcium leaves” on vegetables. All vegetables have an assortment of minerals and phytochemicals that work synergistically to support human health.

In nature, we find whole spectrum food sources that provide an abundance of synergistic elements that work together in the human body in ways that no scientist can truly comprehend. Modern scientists have not even identified all of the phytochemicals found in Bio-Algae Concentrates, much less studied their combined effects in full detail.

This is why Bio-Algae Concentrates are superior to isolated vitamins and minerals. In fact, if you consume Bio-Algae Concentrates on a daily basis, you can throw out your vitamins and minerals as there is simply no need to take isolated, individual vitamin and mineral supplements. Many of them, especially the cheaper brands, are made from entirely “unnatural” sources in the first place and are of questionable nutritional value. If you really want to consume vitamins the way nature intended, you have got to eat them as they are found in nature, which means consuming Bio-Algae Concentrates on a regular basis.

Certainly, many vegetables, fruits, nuts, seeds and other plants are also outstanding sources of nutrition, but even their nutritional density pales in comparison to Bio-Algae Concentrates. In my dietary plan suggestions, I recommend to eat lots of fruits and vegetables primarily for fiber and bulk. Although many vegetables are, indeed, powerful disease fighters, I find that in most people there has been too much damage done by the time they are 12 years old. Today’s statistics for kids that are overweight and pre-diabetic are staggering. When it comes to nutritional deficiencies and degenerative conditions, I strongly recommend Bio-Algae Concentrates.

You will not find any bottles of “calcium” or “Vitamin C” in my practice or my home: I have long since thrown them out. Instead, you will find row upon row of bottles labeled “Bio-Algae Concentrates.”

Why I Want to Write About BAC

Besides promoting and educating people about Bio-Algae Concentrates (BAC), I also use BAC daily as a complement to my diet, or I should say that I “eat” BAC since it is a whole food!

So am I a full-fledged medical scientist? No, I have a bachelor’s degree in science and a doctorate in naturopathy, and a doctorate in advanced nutrition. However, I have studied food and diets dating back to when I used to eat my grandmother’s vegetable soups at home. I have studied the macrobiotics of the 60’s, vegan and Ayurvedic diets, and I have even studied with a few Indian vegetarian masters. I have consciously lived and researched natural health in one way or another since I was 16 years old when I was introduced to yoga and vegetarianism, and then to natural foods and vitamins by my sister who worked in a health-food store back in 1968. For the last 14 years, I have been blessed to study with a real field researcher and scientist, Dr. Michael Kiriak, who holds a PhD in cellular nutrition and who is likely the leading authority on BAC and algae technologies and its use for human and animal health. I also, like all of us, have common sense and a long personal and professional life experience that has helped me to understand the subject.

I am also the editor of BioNews, a health eNewsletter covering a wide variety of health topics. I have read and studied hundreds of books on health and nutrition, and invested thousands of hours in researching the links between food and health, and I will continue to do so for as long as I live.

I started consuming BAC in late 2000. Surprisingly, this would soon help me overcome the health issues that I had been plagued with for years, including 45 extra pounds, chronic back problems, serious middle age fatigue and energy issues, mild bipolar and depression tendencies, colds and flues, pre-hypoglycemia and chronic acidity. And a most extraordinary outcome was the elimination 23 different supplements that I had been taking since 1980. You see, in wanting to learn and prove to myself the benefits of consuming BAC, I had decided to stop taking the 23 supplements. It worked out so well for me, that I have continued not taking any since 2000. What a relief!

I have since lost 40 pounds of weight, ran my first and several more marathons, and gradually evolved to a diet of healthier organic and natural foods. For the record, in the last 14 years, I have not had more than two cold or flu episodes that lasted more than a few hours. As a matter of fact, I would say that I have no more colds or flues, period. I have not missed one hour of work or fun due to being sick or even tired.

In the first year, I could not believe my rapid wellness progress. I had doubts about whether it was for real, and the thought of placebo effect often came to my mind. Now 14 years later, there is absolutely 100% no doubt.

I live a very active and high-stress life. I do not eat perfectly, I make food mistakes, and as an entrepreneur and business owner, I often over work and stress my mind and body. And it is a blessing that I have discovered BAC and been able to use it as a sort of shield in my self-defense against pollutants that I breathe, drink and consume or that I am subjected to. I use BAC to increase my daily essential vitamins, proteins, minerals and other important nutrients. I consume BAC for its great nutritional bonuses, rare phytonutrients and trace elements that are otherwise impossible to obtain in our daily diets. I use BAC to elevate and sustain my energy and my mood. I use BAC in helping my body in the prevention of cardiovascular diseases, loss of sugar and pH levels, and of many other potential glandular imbalances. I use BAC to protect me from cancer and Alzheimer's. And the best part is that BAC is a whole food. I love BAC because it also respects one of my most profound beliefs, "Let thy food be thy medicine."

I am a very skeptical individual. When I first found out about BAC, I was elated to have found a solution to so many problems in one bottle. But soon after, my usual skeptical brain kicked in with disbelief and questions. This led me to pry and investigate BAC from countless angles and perspectives for the next six years. Even better, I have been quizzed with those same questions and some much tougher from many of my clients and friends. I am grateful for these as they have forced me to get the answers and to learn even more about The Magic of BAC.

I have compared BAC, and continue to do so daily, with the leading "hot" and "popular" supplements. I have researched their ingredients one at a time, their nutritional value, their bio-availability, and much more, and after six years and hundreds of hours, I have found nothing that comes anywhere close to BAC. In the next pages, I hope to convey the rationale and the information that led me to this conclusion.

I do not try to hide that I am biased about BAC. I promote it to all those who want to hear, and it is actually the only supplement that I have promoted for the last six years. You certainly won't find me pitching any isolated vitamins or minerals. Most of the information on these pages is based on the knowledge that I have gained from interviews and mentoring with Dr. Michael Kiriak, PhD, and the reading of hundreds of publicly available articles, web pages, and several books on the subject. It is also based on my own successful personal experience, that of my direct clients and the clients of other health professionals working with BAC.

OK, let's take a look at BAC. One of the first things that people usually ask me about BAC is, "What is it made of anyway?".

What are Bio-Algae Concentrates?

Bio-Algae Concentrates are blends of microscopic plants that grow in fresh water. They are actually called micro-algae, since they are microscopic forms of algae. Throughout this book I will use the term "algae" to refer to both singular "alga" and plural "algae." These micro-algae have been around for quite some time: a few billion years, actually. They are some of the earliest and simplest life forms on the planet, and they appeared long before animals roamed these lands.

The cyanobacteria blue-green algae are known to be the first living organism responsible for the evolution of life as we know it. Having developed the ability to split cells and the cellular hormone system of communication early on, these microalgae were and remain the foundation of the food chain on earth.

There is more to the algae-human connection than meets the eye. One example is the human pH factor. As you may already know, pH is a measure of the concentration of H⁺ ions in a liquid. When a pH value is lower than 7.0, the concentration of H⁺ ions is high and the solution is termed acidic. Inversely, if the pH value is higher than 7.0, the concentration of H⁺ ions is low and the solution is termed basic, or alkaline.

The concentration of H⁺ ions, or pH, is a VERY important factor in any enzymatic reaction. One enzyme may work well at pH 4 while another works better at pH 8. Humans evolved from a marine organism that floated in salt water many millions of years ago. This organism already had a lot of enzymes and proteins working to make sure that it could get enough energy from its environment to reproduce and survive.

Since this organism came from the ocean, all of its enzymes were accustomed to working at a pH similar to that of the ocean's, and this goes back to bacteria and microscopic algae that live near ocean shores. This is why some scientists say that the pH level of blood is the same as the ocean's (and concentrations of salt and other electrolytes are also very similar to that of the ocean's, explaining the salty taste of blood).

Some micro-algae are known by scientists to be great sources of “sun power,” and could actually be a future source of energy if we decided to invest in learning how to harness it.

These micro-algae contain an astounding array of nutritional elements: vitamins, macro minerals, trace minerals, essential fatty acids, proteins, nucleic acids (RNA and DNA), chlorophylls, and a vast spectrum of phytochemicals. They are thought to contain every nutrient required by the human body. Yes, you could literally live off these micro-algae. You would not need to eat much of them either since they are so nutritionally dense.

The “micro” part of their name is no joke: these superfoods range in size from 2 to 8 microns, which is about the same size as a human blood cell. They appear green in color due to their chlorophyll content. Harvesting them requires special centrifuge equipment, which is one reason why individuals cannot grow their own micro-algae for consumption. You must get it from commercial processors who grow these superfoods in vast water farms located in regions of the world where the climate permits – the closer to the equator, the better, since there is more sunlight.

If Bio-Algae Concentrates were sold with a complete “Nutrition Facts” label, those labels could not possibly contain all 5,000 known nutrients in BAC, and they would be impressive indeed: zero refined carbohydrates, rich in digestible protein, packed with essential fatty acids, no “bad” fats, rich in chlorophyll, all vitamins, all macro and micro minerals and so on. I will list some of the known nutrients below, but it is also important to recognize that much of the healing phytochemical content in these superfoods is simply unknown. Scientists have not isolated and named all of the nutrients found in these plants yet, so just listing all of the vitamins and minerals found in them would not render a complete picture. The nutrients and phytonutrients that we know of are not the only ones that matter.

For example, in the early 1900’s, doctors thought there were only four vitamins needed by the human body. Now we know of over a hundred vitamins, minerals, amino acids, and other substances that are necessary for optimal health. For example, vitamin B was once thought to be a single nutrient that existed in extracts of rice, liver, and yeast. Researchers later discovered that these extracts actually contained several vitamins, which were then given distinguishing numbers. Had you decided to use vitamin B1 back in 1919, the first discovered form of vitamin B, you would have missed out on the rest of the vitamin B’s, including vitamin B2, B3, B5, B6, biotin, folic acid and the all-important cobalamins vitamin B12.

We will certainly discover even more nutrients in the years ahead, and when we do, chances are that they will already be found in micro-algae.

Bio-Algae Concentrates 20,000 Person Years of Russian Research

Beginning in the early 70's, the Academy of Science and later the Ministry of Nutrition of the former Soviet Union invested more than 20,000 person-years of research and development into producing nutrient-rich blends of algae, coined Bio-Algae Concentrates (BAC). This patient and innovative research delivered blends of algae that held extraordinary nutritional properties.

BAC Clip 2 Algae

<https://www.youtube.com/watch?v=b4pmAlvtY0Q>

Consisting of complementary and synergistic mixes of the best algae selected among thousands investigated, BAC far exceeds the benefits of any single alga, algae blend, green food or superfood known today. These concentrates were studied and tested in large animal populations and were also used in the real life production of millions of chickens, thousands of pigs, minks and dairy cows. These tests began a decade before and continued long after the 1990 breakdown of the former Soviet Republic.

In 2001, I wrote a book detailing these twenty years of intensive Soviet research. This book also tells the dramatic story of Michael Kiriak, PhD who pioneered algae research during those years as the principal scientist for the Academy of Science. His research led to the extraordinary algae blends in BAC, as well as the innovation of hydroponic technologies, some of which were patented and are still in use today.

BAC Clip 3 Bioreactors

<https://www.youtube.com/watch?v=4LV0pF2q9XI>

I invite you to read about this extraordinary achievement and to take an inside look at the science and politics within the Soviet Union into the 90's.

Get your copy at: *Awakening the Genius Within*

BAC was tested extensively with over twenty animal species, including rats, rabbits, birds, fish, cats, dogs, goats, and horses. I will relate only those projects that are considered undeniable proof of concept due to the number of animals involved. These blind study cases provide compelling evidence for the benefits of using BAC.

Chicken Research

The most compelling results for the effectiveness of BAC were demonstrated at a large poultry research center in Moldova from 1985 to 1995. A farm with a starting population of one million chickens was used as a principal research center in a production environment to demonstrate the prevention of cancer. In those ten years with BAC, the farm's population grew to 1.5 million and a 20% gain in overall productivity was achieved.

BAC Clip 4 Research

<https://www.youtube.com/watch?v=wT-3Pif7nfc>

Here are some of the benefits that were seen:

- Eradication of Marek's disease
- Greater vitality, reduction of disease
- Larger eggs with stronger shells due to higher calcium content
- Viability increased from 90% to 98% (birth mortality dropped from 10% to less than 2%)
- Increased egg laying period from 17 months to 24 months (due to reduction in bone loss)
- 50 additional eggs per chicken, per year
- Higher nutritive value of the eggs
- Better tasting meat and eggs

Dairy Cow Research

In Russia, many clinical trials showed significant results with cows using BAC. A large trial was done on a dairy farm with 15,000 cows. This farm, which had been affected by cancers and low productivity, saw significant benefits after introducing BAC. Here is a partial list of observations from this trial:

- Increased viability of donor's embryos and resulting fecundity
- Increased spermatozoid counts and motility (4-5 times)
- Increased instances of multiple births (twins)
- Increased viability of newborns

- Increased butterfat and protein percentage in milk
- Extension of lactation periods decreasing turnaround for new cows
- Reduction of daily protein/feed by 10%-15% with no decrease in milk
- Increased calcium absorption and retention, reduction of bone loss
- Reduction and prevention of metabolic mastitis by over 90%
- Faster healing of mastitis with less loss in lactation time
- Prevention and relief from arthritis
- Fewer hormonal disorders
- Reduction of thyroid problems in calves and quicker healing
- Increased fertility, fecundity and viability
- Increased immunity and prevention of tumors and cancer
- Accelerated healing and tissue repair, strength and flexibility
- Prevention and reduction of degenerative diseases and associated costs
- Prevention of encephalopathy through increased immunity
- Balanced mood and less excitability
- Improved digestion and detoxification
- Elimination of the use of antibiotics and growth hormones
- Healthier and better tasting milk and meat

Pig Research

A pig farm with 54,000 pigs near Voronege was plagued with various cancers and low productivity. The following results were observed:

- Increased spermatozoid counts and motility (4 times)
- Increased size of pig litter

- Increased viability of piglets
- Increased fertility
- Healthier and better tasting meat

Mink Research

In Siberia, hundreds of mink farms containing a total of more than 10,000 animals were affected by various cancers and low productivity, adversely affecting this important Soviet industry. The following results were observed:

- Increased viability of donor's embryos and resulting fecundity
- Increased spermatozoid counts and motility (4 times)
- Significant increase in litter size
- Increased viability of newborns
- Shinier and healthier coats
- Increased fertility

Dog Research

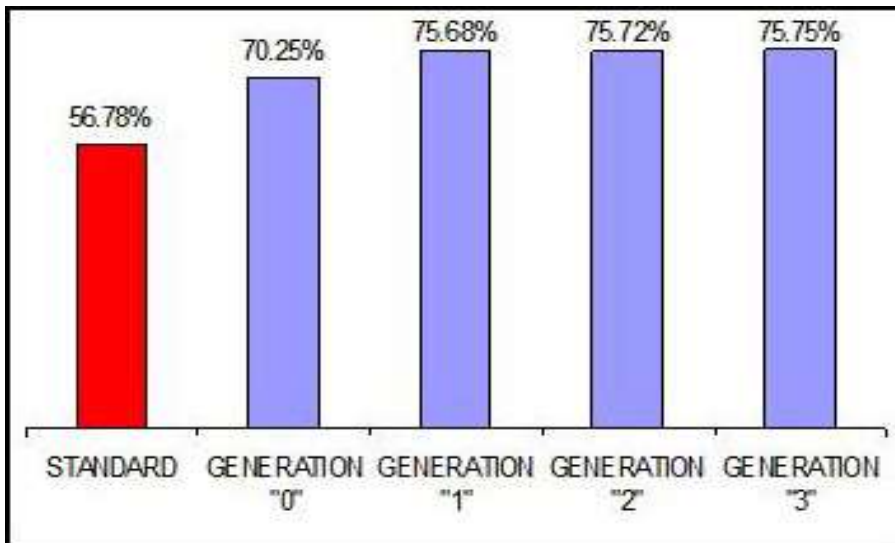
In this informal study, hundreds of dogs, the majority of which were German Shepherds, were observed over the course of several years. The dogs were used in Moldova to guard the poultry research farm from foxes and other predators. The following results were noted:

- Increased litter size
- Increased viability of puppies
- Minimal health problems as compared with the neighboring farm's dog population
- Increased fertility

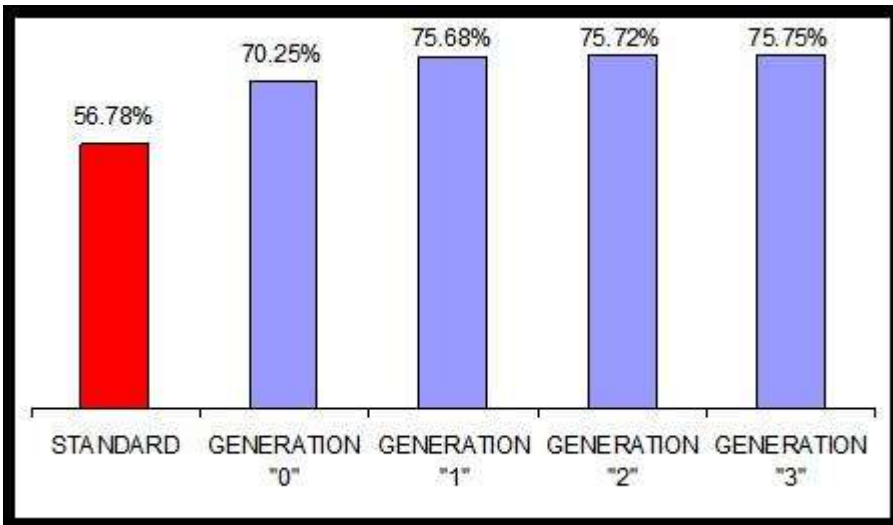
BAC – North American Research Chicken Viability

Since 1999, BAC has been used by thousands of people and on several farms across Europe and North America. Its proven benefits with livestock are also being reproduced in North America.

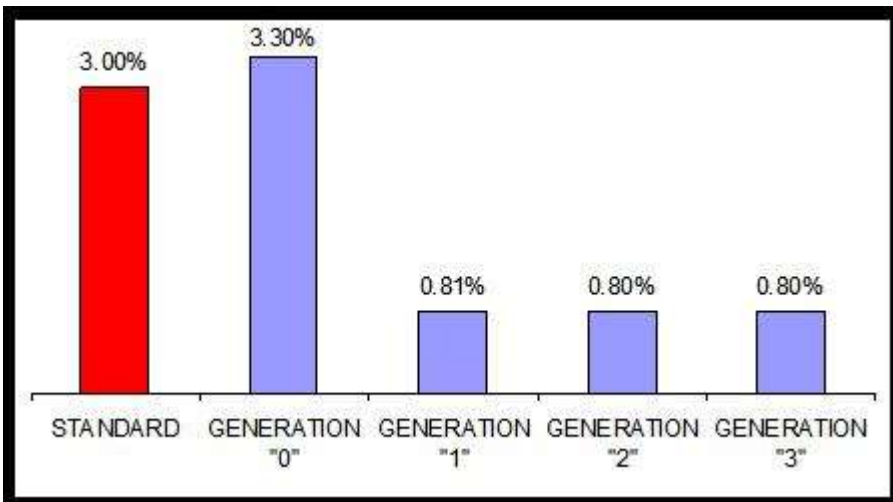
From 1999 to 2000, the research department of McGill University in Montreal reproduced some of the results of poultry productivity which were achieved in Moldova. Working with two tests groups of 13,000 chickens each, one group was given BAC in their grain while the other was fed a normal diet. The BAC group demonstrated many of the expected results. Notably, the mortality rate dropped from an average of 10% to below 2% within the first generation. This test was performed twice for accuracy, and the same positive results were realized.



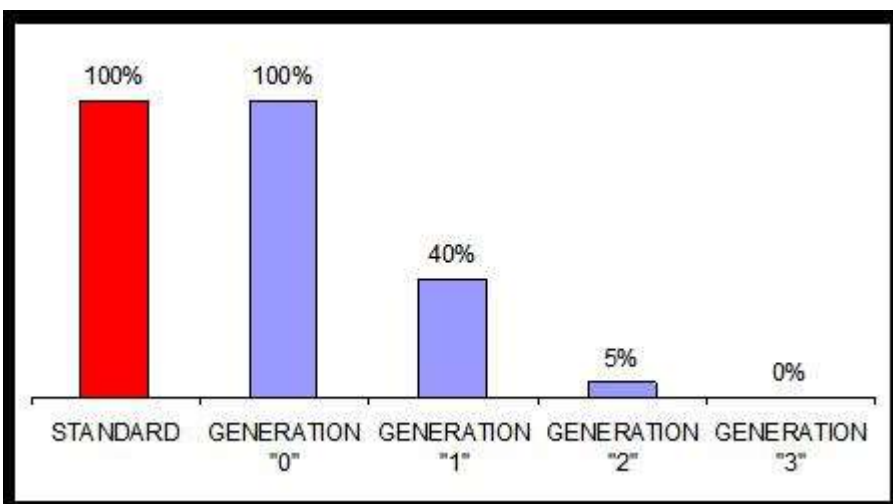
Increased albumin content



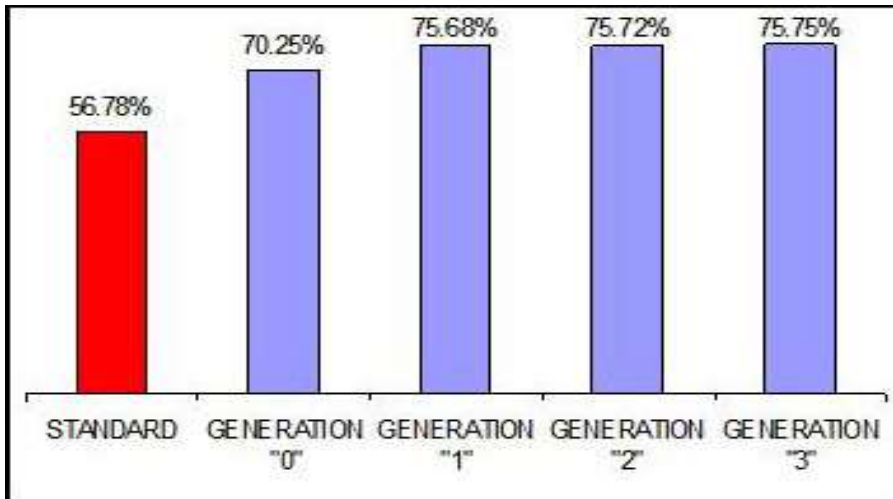
Increased amino acid content



Elimination of antibiotics



Reduction in fat content



Reduction in the birth mortality rate

BAC – North American Research The Pleasant Mile Dairy Farm

John and Lisa Perrone are third generation dairy farmers in Wisconsin. They milk twenty-three Holstein and six Jerseys cows. Ten of these cows are being tested with Bio-Algae Concentrates. Here is John's letter after one year of using BAC with his cows.

General and individual observations:

Cows seem to be calmer. I feel comfortable letting our kids milk 3 of the 4.

I have not noticed the consumption of feed decline but there seems to be less manure.

I have not noticed an increase in milk production however I am able to maintain production on less protein (between 14.5 and 15.5 percent)

Butterfat and protein percent in milk has increased.

Our s.c.c. has been under 100 for the first time in my life.

Early on, the manure loosens slightly and any small amounts of grain that used to be in the manure are almost completely gone.

The mammary systems continue to milk out more and more cleanly as they milk down to practically nothing. The texture of mammary on the older cows continues to improve and young animals milk out to nothing.

The biggest change is that I am now noticing a decline in feed consumption. To most farmers this would sound devastating as we have been taught that less feed means less milk however, my milk production did not decline. I feed all the cows one mix so by only having a portion of the cows on BAC, I can estimate the decrease. Figuring it at the low end, they are eating about 1.25

pounds less per day. To put this in perspective, this is equivalent to almost two sixteen-foot chopper boxes of feed a month. This is truly unbelievable!

Specific observations and cases:

An 11-year-old cow that had a cyst the size of a small softball is safe with calf. I had been trying to get rid of the cyst for seven months with both vitamins and medicine. After being on algae for two months the cyst was gone and now she has settled with calf after I bred her only once. This is definitely one of the most exciting things that has happened.

A 2-year-old that hurt her leg as a young calf, and used it almost like a stump, is now beginning to move her knee. She gave birth to a calf and it is the most active calf that I have seen.

I gave BAC to one cow with clinical mastitis and it cleared her quickly. After that, she remained slightly shy on milk levels for that quarter (down about 35%). Note that without the algae, you usually don't get more than 50% the usual amount of milk for several months after a case of mastitis.

One other big change concerns the inflammation in the udder of one cow. I began giving her two capsules per day in six feedings. Within two days the swelling started to decline. She is now milking out silky smooth like the rest of the cows on algae. I have the last fresh cow on two pills a day (one in the morning, one at night) and she too is responding well. This is a big relief to me because the anti-inflammatory medication from the vet always puts the immune system in jeopardy.

I have been feeding BAC to all the cows during their dry period, and since November I have had thirteen cows give birth. As I mentioned previously, the calves have more energy and are much more aggressive eaters than when they were without the algae. Of the thirteen cows, one had twins and three had what I consider to be difficult births. The remarkable news is that all thirteen dropped their placenta, and only one older cow got milk fever, which is a calcium deficiency. These algae are proving to be very good for the cows' health.

The other good news is how quickly they are breeding back. I checked three pregnant cows this morning and they are all safe with calf that are bred back within 29 days after calving. One cow was fresh only 19 days, and is now safe with calf. This is amazing!

As far as some specific numbers go, here is the evolution for butter fat and protein for the first five months:

<u>Months</u>	... <u>Fat</u>	... <u>Protein</u>
October	... 3.96	... 2.98
November	... 3.90	... 2.96
December	... 4.12	... 3.06

January ... 4.32 ... 3.19
February ... 4.40 ... 3.20

John and Lisa Perrone,
Owners, Pleasant Mile Dairy Farm
Wisconsin, USA

BAC – North American Research The Alain Forget Dairy Farm

Alain Forget has a large dairy farm in Laval, Quebec. His farm produces some of the highest quality milk in Canada. Alain accepted to trial BAC on his farm in January, 2006. This trial is an ongoing preliminary step towards a formal presentation to the Canadian Agricultural Agency. Read next, three reports presented by Alain Forget on his results obtained to date.

The First Six Months

Note: All statistics collected at the farm and presented in this report are mandated and regulated by the Canadian Agricultural Agency.

Find next, in Alain Forget's own words, the summary of results after the first six months. Updates will be presented as they become available.

ALAIN FORGET DAIRY FARM

For six months now, The Alain Forget Dairy Farm of Laval has been participating in a research project consisting of administering a special blend of algae to the dairy cows. Find here a synopsis of the farm's results after 6-month trial.

We have a farm averaging 40kg of Butter Fat per day. We keep our cows free range and feed them the Total Mix Ration (TMR). The 20 cows involved in the trials are pure breed Holstein. Their average production before the start of the trial was 10,039kg of milk per cow with a Breed Class Average (BCA) of 226 M, 219 Fat, 223 Proteins and somatic cells count (SCC) averaging 84,000 for the previous 12 months.

After six months of trial with BAC their productivity averages have shifted to 10,565kg of milk per cow with a BCA of 248 M, 242 Fat, 236 Proteins and a somatic cells count averaging 70,000 for the six month period. In summary the milk quality and improvement numbers are :

... .Production Milk Fat Protein SCC

Pre-trial	10,039kg	226	219	223	...	84,000
Post-Trial	10,565kg	248	242	236	...	70,000
Differences	+526kg	+22	+23	+13	...	- 14,000
Improvement	10.5%	10.8%	11.5%	10.6%	...	8.33%

We have also noted signs of better health of the herd and a better emptying of the udder from milking. Previously with these cows in the trial and currently with the cows not involved in the trial, the udder will remain somewhat hard after milking while on the cows using BAC the udder is nice and soft.

These results represent only six months of trial feeding BAC to the cows. I have learned that there is never smoke without fire. I believe that the use of BAC increases the health of the cow's udder, its total health and the health of the herd.

Alain Forget,
Owner, Alain Forget Dairy Farm,
Laval, Quebec, Canada

The Next Six Months

Note: All statistics collected at the farm and presented in this report are mandated and regulated by the Canadian Agricultural Agency.

Find next, in Alain Forget's own words, the summary of results after the first twelve months of study. Future updates will be presented as they become available.

ALAIN FORGET DAIRY FARM

Laval, November 2006

It has now been nearly 12 months that our farm has been adding the Bio-Algae Concentrates to the daily feed of our Holstein herd. The results of 12 months show the following augmentations; 400kg in milk, 5% in BCA, 4% in fat and 2% in protein.

The trends observed after the first months are now firm and absolute numbers. For uncontrollable reasons we had stopped using BAC during December 2006. We noted a rise in somatic cells count (SCC) from 50,000 to 367,000, and then immediately after resuming the use of BAC, the SCC dropped by 200,000.

Because of this stoppage in the use of BAC in December, our SCC which was running at 84,000 yearly average after the first six months trial has now passed to 95,500 which is still an excellent SCC when compared to the state average of 285,000.

The stoppage in December alone made the SCC avg rise by 20,000 over the expected annual SCC. Removing the use of BAC for one month has demonstrated clearly the positive effects of BAC on the quantitative quality of the udder. Additionally, when not using BAC as in December, we noted a significant increase in the cows' nervousity, and resulting difficulty when milking them.

All feed parameters are measured monthly for the urea test. These urea tests are generally stable varying from 10.4mg to 12.5mg, which is expected since feeding is generally stable and not changed for the duration of this study. So it stands that the augmentation of the milk quality and volume are of physiological nature.

We observe that the use of BAC appears to benefit many of the cows' metabolisms which in turn results in higher milk quality, a rise in productivity, and a diminution of the cows' nervousity during milking. There is also less stimulation required for a fuller emptying of the udder.

We observed a notable decrease in the health of the teat when not using BAC. This same stoppage period resulted in an augmentation of the SCC to 95,500 average, accounted for by a rise of 25,000 SCC/ml during this period.

We will continue the study with BAC while comparing the results keeping into account that the average age of the herd has risen by two months during the year.

We conclude our findings; a healthier teat and udder, easier milking and emptying of the udder, increased productivity, longevity foreseen, and resulting higher profit per cow."

Alain Forget,
President, Alain Forget Dairy Farm,
Laval, Quebec, Canada

[Click to read Alain Forget's testimonial](#)
After 24 Months

Now 24 months of testing the Bio-Algae Concentrates with the Holstein herd demonstrates results that are undeniable, not placebo, scientific research. I call that kind of research "the real deal". The research plan is to proceed another year with this herd before continuing on with the entire herd at this farm. The results of three years will be considered 100% confirmed. Read next in his own words (translated from French) Alain Forget's report after 24 months.

ALAIN FORGET DAIRY FARM

Laval, October 2007

For 24 months our farm has used Bio-Algae Concentrates for the Holstein cows within our larger herd. The following results show increases in milk productivity indexes; 2000kg increase of milk per cow, 12% increase of the Breed Class Average (BCA) for milk, 9.3% increase in butterfat, and 8.6% increase in proteins.

These observed tendencies should increase given the increased health of the teats. We can also quantify this projection when using the leukocyte index of the milk which is decreasing since the beginning of research.

The following results are now evident: the cows' teats are getting healthier (confirmed by the decreasing leukocyte index), milking is easier given the fact that the cows are calmer, and the cows' udders empty better. All these factors contribute to the augmentation of the average butterfat percentage.

Feeding parameters are measured each month for the urea test. The urea test results are relatively stable varying between 10.4mg and 12.5mg, which is reasonable given the regular feeding. These cows are fed the usual diet for the duration of this research. Thus we believe the productivity increases are physiological in nature.

In conclusion, it seems that feeding Bio-Algae Concentrates to the cows augments cellular nutrition which returns better milk quality, increased quantity of milk, and diminished nervousness of the cows during milking, which results in a more complete emptying of the udder with less stimulation. We believe these benefits are due to better health of the cows' brain glands.

We are confident that feeding Bio-Algae Concentrates will augment any farm's productivity no matter their productivity level, given that we have derived such benefits with our already high performing cows.

We will continue the research with Bio-Algae Concentrates with focus on the index of longevity of the herd. Already in the current year the longevity of the herd has increased 4

months which means that on average each cow will be productive for an additional 4 months. Better teat health, longevity of the cow, and higher profits per cow; these are our conclusive observations so far.

Alain Forget,
President, Alain Forget Farm
8270 Blvd. des Mille Isles,
Laval, Quebec, H7A4C6

[Click to read Alain Forget's report after 24 months](#)

After 36 Months

Now after 36 months of testing the Bio-Algae Concentrates with the Holstein herd, we have demonstrated results that are undeniable, not placebo, scientific research. The results after three years can be considered conclusive. Read next a fourth report of the evaluation, as written by Alain Forget owner of the Alain Forget Dairy Farm, 8270 Milles Isles Blvd., Laval, Quebec. This summary includes the productivity markers collected at various intervals over the last 36 months.

ALAIN FORGET DAIRY FARM

Laval, August 2008

For 36 months we have been using BAC with a group of cows within our Holstein dairy herd. The results show a 3,000 kg augmentation of milk production over 36 months, a general augmentation of the Breed Class Average (BCA) of 20% for milk, 9.3% in fat and 8.6% in proteins.

These results have earned us the General Herd Performance award from Valacta, the Quebec milk control agency. We have also observed the following results when compared to provincial averages: a gestation interval of 384 days as compared to 426 for the provincial average, milk production of 12,186 kg per year compared to 8,622 kg, 434 kg production of fat versus a provincial average of 329 kg; and protein production of 399 kg as opposed to 278 kg for provincial. Additionally, the longevity of the herd has increased to 42.4 days as compared to 39.4 days for provincial.

During the period, the evaluated herd grew from 22 to 40 lactating cows. The augmentation of the average age of the herd has an influence on the somatic cell count (SCC). We observed our SCC distort by nearly 34% because of two or three cows. With the deviation, the count stands at 235,000, slightly over the provincial average. During the months of March to May, the SCC

stood below the provincial average of 110,000, with 105,000 in March, 102,000 in April, and 65,000 in May.

Because of the independently and statistically measured results obtained with our herd, we believe that BAC must affect positively the brain organ hypothalamus responsible for the regulation of all metabolisms of health. We are excited to continue the evaluation with focus on a healthier udder, on increasing the average age and the longevity of the herd, and thus on increasing the profits of the farm.

Alain Forget, President,
Alain Forget Dairy Farm
Laval, Quebec, Canada

Read the complete evaluation report with tables and graphical representation of results with comments: BAC on the Farm – North American Research, A Report by Michael Kiriatic.

[Click to view this report](#)

BAC – North American Research Saving Merri's Bighorn Sheep

In October 2007, we began a study in cooperation with Merri, the owner of a herd of bighorn sheep that were destined to die from Johne's disease. When this disease affects a herd, it usually kills the sheep before they reach the age of two. BAC, provided by BioSuperaliment Inc., is being evaluated in regards to its effects on twelve bighorn sheep selected amongst the herd of thirty-five that are affected by Johne's disease.

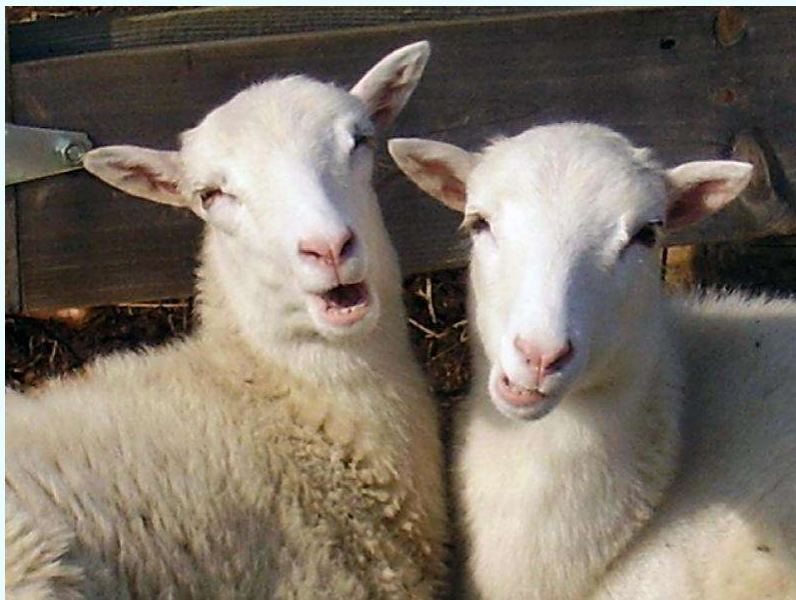
Johne's disease (pronounced "yonee's") is a disease of ruminants characterized by wasting and terminally, by diarrhea. It is caused by a bacterium called Mycobacterium avium subspecies paratuberculosis. Johne's disease has been reported all around the world in cattle for several decades. Although it has also been reported in sheep for many years, no one is certain of how widespread it is or exactly how much damage it is doing to our sheep industry.

BAC is being incorporated into the daily feed of the selected sheep with the purpose of improving overall cellular nutrition, and increasing vitality and immunity. For the purpose of the study, the selected sheep are being kept apart from the main herd. At the start of the evaluation, the herd was already being decimated by Johne's and the owner was thinking of euthanizing the entire herd as recommended by the veterinarian. Once a herd is affected, there is often no other solution.

Merri's First Report After Six Months – March 2008

BIGHORN SHEEP FARM

This is a report from Merri, the loving owner of a herd of sheep that suffer from a deadly bacteria that perniciously lodges itself in the digestive tracks and typically kills the animal after approximately two years of life. We are conducting a study and hoping to save the herd using Bio-Algae Concentrates. We started the research with some of the older animals and we are watching for positive results. But better results are expected from the newborn lambs of parents that had already been taking BAC. We are hopeful that these new lambs will live at least "much" longer, or live their "full" lives. The report that follows is the first set of observations from the newborn lambs.



“What first comes to mind is the hair quality. All the lambs on the program from conception have superior hair coats from the last crop. The hair is softer and shinier. The color seems to be intensified as well. I also notice them to be calmer and easier to wean. Horn growth on the 2-3 month old rams comes sooner and with bigger diameter at the base and length overall for that age.”

Merri,
Owner, Bighorn Sheep Farm,
USA – March 2007

Merri’s Second Report After Eleven Months – October 2008

Find next, in Merri’s own words, the summary of results after the first eleven months.

BIGHORN SHEEP FARM

Hello Roland and Dr. Kiriac. Well, I finally had a chance to get this together. A brief testimonial on the effects of BAC on my bighorn sheep.



First, I want you to know that I have not had a symptomatic sheep in 9 months.



The two rams that were born with symptoms, although undersized, appear to be fine. Both of their mothers died from the disease.

Now we know that the symptoms of the disease usually show up at or just after age two, so we will have to wait on these rams awhile. BUT I have quite a few sheep that have passed their two year birthdays that did not get the algae until they were over a year that seem symptom free. I have my fingers crossed on this, as two of my very best rams are becoming too soon. They look great, but I know they can go down quickly so this is no indication they are not affected. One of these rams' father died of the disease, and the other lost both parents, so it will be interesting to see what happens.

Another interesting factor is that I have two sheep from the original herd that are at least 4 years old, and appear symptom free. Many of the sheep from that herd died from the disease. It seems that there are so many factors to consider with Johne's. Some are symptomatic, some carriers with no symptoms, etc. I believe the best test will be the two young rams that were born with symptoms, and now appear symptom free. We will know closest to the truth when they are two.

I think this is a good place to start, because the rams who started on your product a year ago are starting to turn two.



So far all are healthy, but the most amazing thing is their horns. (Ramsey's above).



I have enclosed a few photos of examples of rams who have the horn growth of three to four year old rams at barely two years. (Gunner's above).

These rams and the crop behind them also have larger body mass than previous crops with the same bloodline. All of the sheep coats are thick and colors are intensified. I have also noticed a calmer nature and ease of handling with these normally difficult to handle breeds. During gestation the ewes seem to gain weight almost too rapidly. I often have to cut back on the dosage during this time and lactation or the ewes get too fat and produce too much milk. I no longer have the problem of an ewe's drastic weight loss due to feeding twins over a three month period. I have also reduced the amount of grain I feed with the same results as the former amount.

See the photos of Humpfrey and Jackson, two rams born sick out of the sick ewes that died within weeks of delivering. Jackson the black one was bottle fed with algae added to milk. His mother had algae from start of the program, but I believe was sick but not symptomatic for two years prior. Humpfrey, the brown one, nursed from his mother who ate algae but died after two months; she was also sick but not symptomatic for two years prior. Both rams are undersized for their age, but symptom free at this time. They will be a year old in November. They both got bad starts because they were undernourished during development, and the brown one had poor quality milk from the ewe.



Humpfrey (brown) is a real stinker, hates to be caught, and gets out of everything true to his Mouflon nature.



Jackson (black) is totally tame, much like a cat. He also likes to ram the cats and steal their food.

I feel totally blessed that you both have given me the opportunity to save my herd and demonstrate the benefits of your product. I have actually started thinking that I could sell some of my sheep again without wondering if I am causing grief in someone else's herd. The frustration I have experienced with turning buyers and breeders away after working on the breeding aspects of this herd for 4 years is difficult to describe. You and the Doctor have given me some hope that at least I can keep my beautiful animals and not have to helplessly watch them die.

Merri,
Owner, Bighorn Sheep Farm,
USA – October 2008

Comments on Status

The ultimate intent of this study is to save Merri's sheep, including as many as possible of those already infected before the study began, and certainly their offspring. At this time, it appears that this goal will be realized. We will report back.

In the meantime, the many benefits (UNDERLINED IN MERRI'S TEXT ABOVE) that Merri has observed with her sheep are very much the same as those demonstrated with several species during the Russian research. Benefits such as :

- calmer mood
- shinier hair and coats

- larger and healthier animals
- less feed needed
- increased survival rate
- prevention of mad cow disease
- prevention of various viral or bacterial infections
- healthier animals from one generation to the next
- prevention of osteoporosis and increase in bone mass
- increased fertility
- increased protein and good fats in milk, eggs and meat

and many more...

Dr. Michael Kiriak had never worked with bighorn sheep before and when asked about the successes observed so far, he commented on the larger horns:

“When the animal eats BAC, which feeds the brain efficiently, the brain organs awaken. The hypothalamus alone is responsible for homeostasis of all body metabolisms including that of energy, then all metabolisms awaken; assimilation and absorption of nutrients from foods, such as protein assimilation and absorption (hence less feed is needed for the sheep), mineral metabolisms, synthesis of proteins and enzymes within cells. When Collagen metabolism is more efficient (Collagen is the main protein of connective tissue in animals and the most abundant protein in mammals, making up about 25% to 35% of the whole-body protein content), then there is better growth of the animal as in larger animal, and as in stronger and larger horns. In chickens it was larger and stronger eggs; in dairy cows, it was more and better milk with increases in protein and butter fat; in pigs and minks, larger litter; etc.”

Bio-Algae Concentrates Helped Victims of Chernobyl

[Leave a comment](#)

The Chernobyl nuclear power plant reactor exploded on April 26th 1986, creating chaos, extreme pain, and suffering, but at the same time allowing major advances in the human application of BAC. The disaster was a major event in the life of Mr. Kiriak and his family, and of

course for the USSR at large. War measures were enacted for all of Russia after the explosion and were maintained for months.



The extent of the disaster was increasing every day and its potential spread remained unknown. Mr. Kiriac and his family lived 500 km (about 300 miles) from the epicenter and were subjected to radiation directly as well as through the local food from plants and animals. Both his children, Rodika and Stefana, were affected like most local children. Both daughters had marks on the head and body. Rodika, then seven, was losing up to two-inch wide patches of hair.

Mr. Kiriac fed BAC to his entire family, putting them on daily rations of the thick paste concentrates, fresh from the bioreactor. To this day, the oldest daughter, Rodika, can still remember the strong smell and taste of BAC. She is very grateful to her father for providing his wonderful invention to the family. Today, both daughters are healthy, beautiful young women.

When disaster struck at Chernobyl, Ukraine, not only was the region around the reactor affected, but the neighboring state of Belarus received 70% of the radioactive fallout and 23% of its territory became contaminated. Hundreds of cleanup workers and thousands of children and adults were victims of radiation poisoning which resulted in birth defects, leukemia, cancer, and thyroid disease, degeneration of spinal fluids, liver and bone marrow, as well as anemia, loss of vision and appetite, and a severely compromised immune system.

Because of his previous success with BAC and various cancers in many animal species, and with humans in smaller scale clinical studies, Mr. Kiriac was able to work locally with adults and children from neighborhood schools that were suffering from radiation exposure.

BAC was administered in therapeutic doses, and Mr. Kiriac, working with a small team, was able to closely monitor the regenerative power of BAC. Several health improvements were noted:

- Leukemia, dangerously low white blood cell counts were significantly redressed in less than 20 days, leading to rapid improvements in the health of treated children compared to others who did not receive BAC
- Regeneration of bone marrow, spinal fluids, blood, and liver
- Reduction in urine radioactivity levels by more than 40% in less than 20 days

- Many other improvements were observed

Amazingly, there was health restoration even when children's disease was so advanced that their eyeballs were bulging out of their sockets. In addition, the healing occurred during continuous presence of radiation as well as contaminated food and water sources.

Many people died as a result of the Chernobyl explosion, but the miracles were numerous. Given the super nutrients in BAC, rapid health progress was observed and many of the victims survived and are alive today.

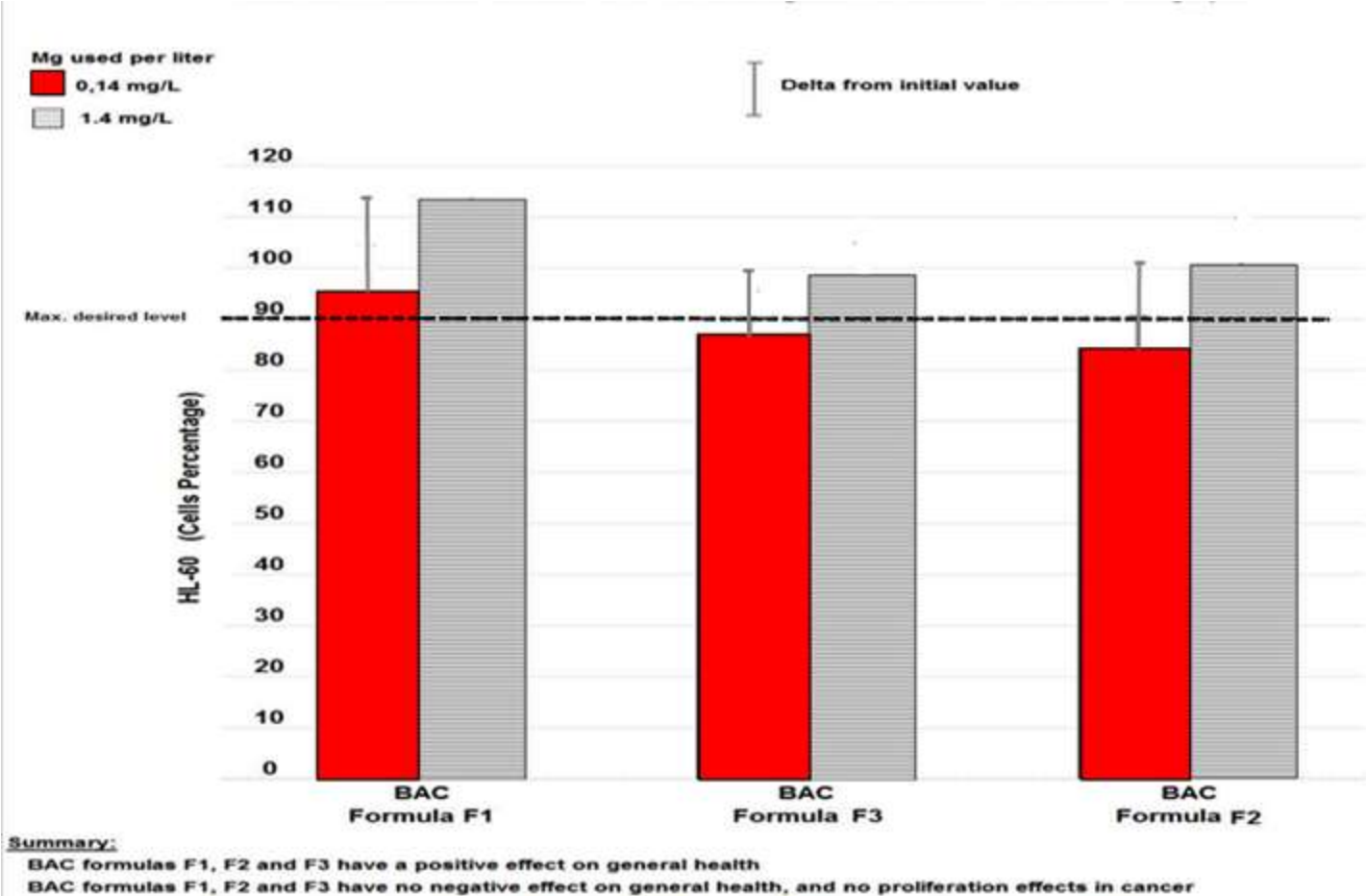
Mr. Kiriac remarks, "It is important to note that the Chernobyl disaster is still ongoing. Even though the exploded reactor is "sealed" in concrete, radiation continues to escape not only into the local atmosphere, but due to winds, into the world atmosphere as well."

View the Chernobyl story

https://www.youtube.com/watch?v=F_Fu28FUWg

BAC – North American Leukemia Research

Since 2001, additional studies with BAC and leukemic blood have been conducted by independent researchers from a Quebec Hospital Medical University. The preliminary clinical results of in vitro tests consistently showed that BAC was able to normalize leukemic blood as seen converging towards the dotted line on this image. Interestingly, these same tests demonstrated that BAC was more efficient when administered in smaller dose (0.14mg vs 1.4mg) frequently rather than in larger doses applied infrequently.



The Nutritional Treasures Inside BAC

Bio-Algae Concentrates are packed with nutrients and phytonutrients that boost health and fight disease. In this section, we will take a closer look at their major nutritional components and see just what these superfoods have to offer.

The four algae found in Bio-Algae Concentrates are so tiny that they are invisible to the naked-eye. They are multi and single-celled water-grown microalgae that contain a nucleus and large amounts of readily available chlorophyll. In total, Bio-Algae Concentrates contain over 5,000 naturally occurring nutrients. In fact, they are certainly the most complete food on earth.

To understand the role of nutrients, it helps to understand a little bit about the chemistry of your body. Living organisms rely on highly complex processes to perform and regulate internal functions that are necessary to maintain life. There are myriads of processes in place to perform all of the following functions:

- Build the cells that make up your body's structure
- Meet the separate needs of different types of cells
- Permit each of these different cell types to carry out their own specific functions
- Help maintain cellular structure and performance
- Alter the type and degree of cellular activity in the face of changing circumstances
- Communicate and coordinate each cell's activity with the activity of other cells and organs in the body
- Adjust cellular behavior, as needed, in ways that will permit a coordinated response of the whole organism to its environment
- Dispose of waste products
- Govern the disposal of cells when their job is done

The scientific term we use to describe all this is homeostasis.

Homeostasis can be defined, then, as the ability of a living organism to maintain its structure and function intact, separate from and invulnerable to the forces of its environment.

The maintenance of homeostasis is highly complex, requiring many series of chemical reactions, distinct and yet interrelated. Each step in each reaction requires the presence of specific substances, often in minute amounts. If these materials are not present, or are present in too small a quantity to perform their roles, the reactions that require them cannot proceed correctly.

Vitamins, minerals, and trace elements are among these necessary substances. With the exception of vitamin D, which can be made within the skin, they cannot be made in the body;

they must be absorbed to be obtained. Some are produced for us within the gut, by bacteria that live there.

Given perfect health and a well-balanced diet, we do not need a lot of them and we can get what we need from the food we eat. Though, as is most frequently the case, given states of altered metabolism, we need more. And with degenerative conditions and during or following an illness, the body's natural processes of healing and repair cannot go forward unless we have enough or sometimes more of the nutrients required.

Today there is ample evidence that demonstrates that higher amounts of some of these substances will actually improve our health even when we are not sick, by giving our bodies a richer source of materials to draw from in the face of normal or abnormal stress. This view is no longer controversial, as more and more research supports it.

BAC is an extremely efficient food that delivers nutrients that will greatly augment your body's capacity to reach homeostasis.

The Ingredients in BAC

One of the most frequent questions I get is "what are the ingredients in BAC?". In this section, I will do my best to help you to understand the ingredients of BAC even though it is virtually impossible. Impossible for several reasons as you will see.

It is a proprietary blend, a private blend

Of all the nutritive substances that health science knows about, few are not contained in Bio-Algae Concentrates. At the top, BAC contains the most nutrient and phytonutrient-dense algae found on earth, selected amongst thousands of strains of algae and empirically tested for 20 years. For example, over 200 different strains of blue-green algae were investigated by the Russian researchers to arrive at those contained in BAC. The rationale for this selection will become clear as you read on.

The list of nutrients in algae, such as spirulina and chlorella, is frequently made available by the grower of these algae and in the scientific literature. The first thing you will note is that they are never the same. Anyone is welcome to make a blend of algae, and as such there are a few other blends on the market. But I urge you to consider the research involved with BAC. Like grandmother's soup, making a blend of microalgae is both an art and a science. Either it will result in a nutritious and delicious soup or it will be a disaster if you don't know what you are doing. BAC is hundreds of times more complex and delivers hundreds of times more nutritional benefits than grandmother's soup.

There are 5,000 known nutrients in BAC and many more unknown

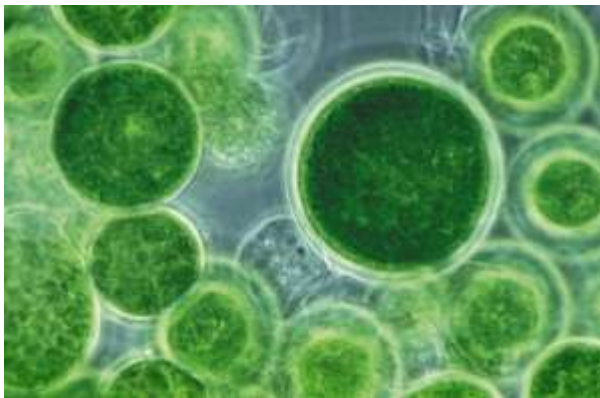
BAC is a blend of four whole microalgae (whole as in whole food), each containing thousands of nutrients, totaling over 5,000 that can be seen under the microscope or detected with the

latest laboratory equipment. As with some fruits and vegetables, in BAC's microalgae, there are hundreds and possibly thousands more phytonutrients that are too small to be seen with our current microscopes and technologies, but that will be identified in the years to come. For example, only a few decades ago we identified lycopene in tomatoes even though it had been present in tomatoes for thousands of years.

The BAC blends contain four highly nurtured and balanced microalgae:

- *Spirulina Pacifica*
- *Spirulina platensis*
- *Dunaliella Salina*
- *Haematococcus Pluvialis*

Spirulina is a microalgae that cannot be seen by the naked eye. It is a multi-cellular blue-green algae, grown in warm and brackish water, with alkaline properties. The most well-known strain of *spirulina*, researched in more than 30 countries by 4,000 scientists worldwide, is *Spirulina platensis*. The root of "spirulina" comes from Latin, meaning helix or spiral, and it refers to the spiral shape of the cells.

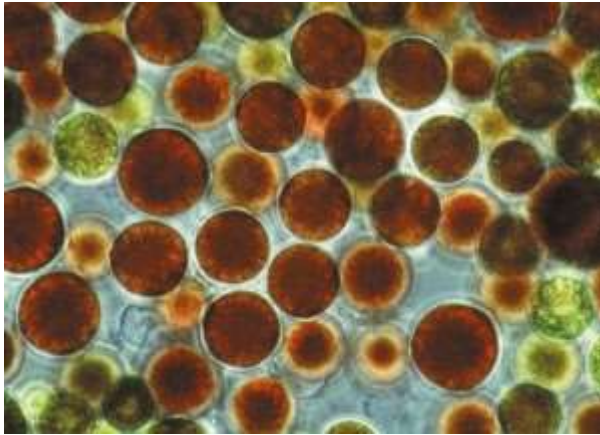


Spirulina's helix or spiral structure

Spirulina is typically found in fresh or brackish water. It is composed of 60-70% protein in dry weight. Its protein elements include 18 types of amino acids, several vitamins and minerals, thousands of enzymes and several essential and non-essential fatty acids.

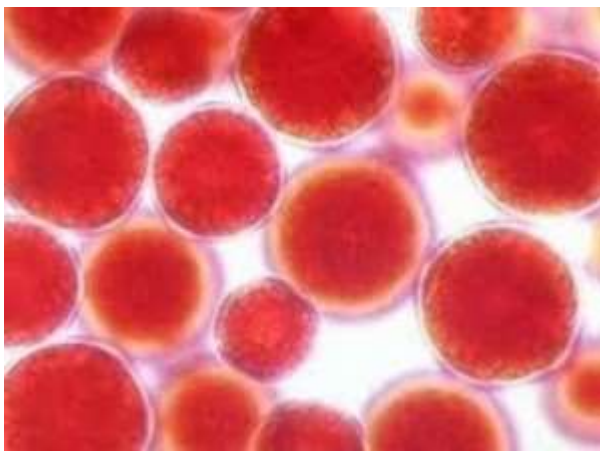
Dunaliella Salina is a single-celled, saltwater microalgae that accumulates massive amounts of carotenoids under appropriate growth conditions. It is characterized by its ability to accumulate very high concentrations of β -carotene. Concentrations of up to 14% of its dry weight have been reported (Aasen et al., 1969; Borowitzka, LJ et al., 1984). The green unicellular flagellate

Dunaliella Salina also accumulate very high concentrations of glycerol (Borowitzka, LJ and Brown, 1974; Borowitzka, LJ, 1981 b).



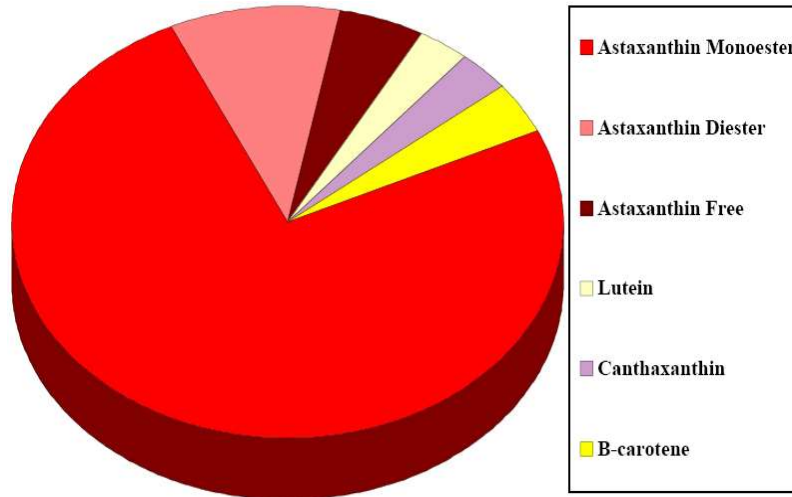
Natural mixed carotenoids found in Dunaliella Salina are among nature's best antioxidants, containing a variety of carotenoids such as β -carotene, α -carotene and xanthophylls like zeaxanthin, cryptoxanthin and lutein. Natural mixed carotenoids belong to a family of naturally occurring yellow, orange and red pigments, which are also found in various fruits, cruciferous, yellow and dark green vegetables and in abundance in certain microalgae.

Haematococcus Pluvialis is believed to be by far the world's richest known source of astaxanthin, a unique natural carotenoid pigment and biological antioxidant. When compared with vitamin E, astaxanthin's potency as an antioxidant ranges from approximately 80 to as much as 550 times greater. Additionally, when tested against a wide array of ROS and nitrogen-reactive species, astaxanthin appears to be the most effective in scavenging this wide variety of harmful products. Astaxanthin is known to be able to span the lipid/protein bilayer of biological membranes, imparting a powerful antioxidant effect.



Haematococcus: the richest source of Astaxanthin

Haematococcus Pluvialis' combination of carotenoids yields superior potency and versatility for an ideal antioxidant. Additionally, because its astaxanthin appears to enter the central nervous system better than many other antioxidants, its utility for many disorders of the central nervous system is promising.



Haematococcus yields mixed carotenoids

BAC is likely the most complete food on earth

Find next a list of the nutrients and phytonutrients of the algae that compose BAC. In the next pages you will also find a detailed list of those nutrients.

Summary of nutrients and phytonutrients in BAC

- High-quality complete protein that is more dense and more digestible than any animal-derived protein. (between 25% to 50% protein).
- All known essential and non-essential amino acids.
- All known vitamins: A, B complex, C, D, E and K.
- All known B vitamins, including vitamin B12 (human active) which is almost never found in plants. Great for vegans and vegetarians.
- All known minerals and trace elements: calcium, magnesium, zinc, potassium, sodium, iron, etc.
- The “good fats that heal”: the essential fatty acids Omega-3 and Gamma Linoleic Acid (GLA) and the non-essential fatty acids Omega-6, Omega-9 and more.

- Over 4,000 enzymes critical for good health. Enzymes facilitate the breakdown of food and increase the reproduction of lacto-bacilli, the bacteria that digests our food.
- Mucopolysaccharides: these lipids and polysaccharides modulate the immune system and regulate blood sugar levels.
- Alpha and beta-carotene with antioxidant power hundreds of times more protective than vitamins E and C.
- Dozens of other antioxidants in the form of mixed-carotenoids: lycopene, lutein, quercetin, phycocyanin, and many more.
- Nucleic acids (RNA & DNA).
- Chlorophyll with extraordinary calcium spirulan.

The exact quantity, weight or values are never exactly the same

As with any vegetable, fruit or meat, when dealing with whole food you can never achieve the exact same nutritional values. No two tomatoes can grow with identical vitamin or mineral content; that is the way nature is. With micro marine life, such as microalgae, we have even less control of the specific ingredients. However, like most food, the values tend to be approximately 80% the same given the same growing environment. With BAC, the most advanced and rigorous algo-technologies are applied to maintain its stability, quality, continuous potency and results.

Many of BAC's ingredients are impossible to measure with even the most advanced instruments

As with most microalgae, BAC also contains ingredients that are too small and/or not yet identified; but as experience shows, all nutrients are important. In natural life it is rarely about quantity but frequently about quality and functionality. Over the last century we have identified hundreds of nutrients that are essential to a healthy life; Vitamin C is one example.

As our technology and knowledge advances we are continually discovering new phytonutrients and their importance to life. A good example is aluminum, which was thought to be useless to life processes until recently. It is now thought to be involved in the action of enzymes such as succinic dehydrogenase and d-aminolevulinic acid dehydrase (involved in porphyrin synthesis). Microalgae are the furthest and smallest frontier of exploration in nutrition and we will surely discover many phytonutrients contained within them in the future.

Required Daily Allowances (RDA)

In this section I will make no attempt to compare the ingredients in BAC to the Required Daily Allowances (RDA) of nutrients as suggested by the Food and Drug Administration (FDA). The

main reason for this is the futility of that exercise. Like the food pyramid, which crumbled a few years ago, the RDA concept is detrimental to health. It is detrimental because it creates a false sense of security. It leads people to believe that they can be healthy by taking partial, isolated and synthetic chemicals instead of eating real bio-chemical nutrients that can only occur in food as nature made it.

The nutritional mission of BAC

Mind you, if you want to play the RDA game, then BAC can easily meet most of the RDA requirements, even surpassing them and addressing hundreds that are not in the RDA tables but should be. Yet fulfilling the RDA is not the intention of BAC. BAC's mission is "to awaken the dormant genius within". BAC is not a vitamin, a mineral, an antioxidant, an enzyme or even a supplement; BAC is all of the above. This is possible only because BAC is a whole food, but not just that, it is an extraordinary whole food.

To make my point clearer about the role of BAC I will elaborate on the nutritional efficacy of nutrients as they occur in whole foods as compared with nutrients occurring as isolates. I will use the critical nutrient calcium for my elaboration.

In the USA, the Recommended Daily Allowance of calcium is 1-2.5 grams, while the European recommendation is 400 mg. Who is right? The RDA recommendation was based on an emerging crisis of osteoporosis, which has now reach epidemic proportions. However, the RDA for calcium has not made much of a dent into the osteoporosis crisis.

The calcium supplementation industry is worth billions of dollars. There are hundreds of different kinds of calcium supplements sold with a variety of delivery options; liquid, chelated, occurring with other minerals, etc. Yet this large industry has also not made much of a dent into the epidemic of osteoporosis.

It is true that our processed foods are often depleted of calcium and other minerals. It is also true that our soils are depleted of these same minerals. However, calcium is one mineral that still occurs plentifully in many foods especially when organically grown and eaten fresh. It is not difficult to eat one gram or more of calcium daily with a normal diet. Yet the epidemic of osteoporosis is ongoing.

The missing factor must be calcium absorption. There are many chemical and metabolic factors that influence the absorption of calcium and the absorptive mechanism itself. The former includes substances that form insoluble complexes with calcium, such as sodium, magnesium and phosphate ions. For example, the relatively high calcium-phosphate ratio of 2.2 in human milk compared to 0.77 in cow milk may be a factor in the higher absorption of calcium from human milk than cow milk.

Furthermore, intestinal calcium absorption is mainly controlled by serum concentration, hydroxylase activity and catalyses' in the kidneys, which may be negatively related to the

plasma calcium and phosphate concentrations and positively to the plasma parathyroid hormone.

Another example of the complexity of calcium absorption is found when phytates, present in the husks of many cereals as well as in nuts, seeds, and legumes, can form insoluble calcium phytate salts in the gastrointestinal tract.

Calcium taken as an isolated supplement is even harder to break down and assimilate because it is usually a metallic inorganic molecule which is much larger than its naturally occurring form in food. Our absorption metabolism and even our cell membranes cannot deal with inorganic calcium. And one wonders why we have so much osteoarthritis? Could it be that this form of inorganic calcium is not only quasi impossible to break down, but also extremely difficult to eliminate?

BAC contains more naturally occurring calcium per gram than cow's milk with high bioavailability and zero toxicity. BAC also contain calcium spirulan, a form of calcium that has extraordinary properties. In studies, calcium spirulan is shown to inhibit HIV at very low concentrations by preventing the virus from penetrating the human cell membrane and infecting the cell. In that sense, calcium spirulan is an antioxidant.

In a Soviet research trial on a dairy farm with 15,000 cows, when the 2,000-pound dairy cows were fed 625mg of BAC daily (equivalent to 2-3 capsules), they ceased suffering from bone loss (osteoporosis).

It is a known fact in the dairy industry that dairy cows lose their calcium to their milk because of the "unnatural" daily lactation mission and poor nutrition. Bone loss occurs gradually and peaks at around 45 months in the cows' lactation period, at which time, because the cows can hardly "stand up", they are usually slaughtered for meat.

When taking BAC, these same cows will go on giving milk their entire lactation period of approximately 70 months without signs of severe bone loss.

Now the first question usually is "Is there enough calcium in BAC for the cow's daily requirement?". The answer is "NO there isn't." But, we do know that there is "much" calcium already present in the cows body, and that there is also calcium in its daily food. So the question becomes "What prevents the cow from suffering from calcium deficiencies when consuming BAC?" The answer is that when a cow consumes BAC, its hypothalamic-pituitary complex is positively influenced by the efficiently delivered nutrients in BAC. When this all mighty hypothalamic-pituitary complex is nutritionally invigorated, it "awakens" and commands via precursor hormones, hormones and peptides, billions of biochemical actions and hundreds of metabolisms, amongst those; calcium assimilation, calcium activity and calcium utilization. In essence, the cow is able to breakdown and absorb more calcium from its food, and more efficiently utilize it.

Detailed List of Nutrients in BAC

The following list, though detailed, remains partial and estimated. It is based on the available nutritional values for those “plain” micro-algae at the time of writing. “Plain” in this text means standard or common. One can easily grow a plain, nutrient-poor, small, yellowish tomato in the desert of Colorado or one can grow a “super,” nutrient-rich, large, juicy, red tomato in a protected and rich soil. The same goes for algae, except that due to the density of algae, the difference can be gigantic.

The algae in BAC are not “plain”. They are grown in a rich “soil” or “base” with an extraordinary offering of trace elements and other required nutrients. The difference between a Hawaiian volcanic region, an Australian volcanic region and a Siberian volcanic peninsula is worlds apart when it comes to their content of trace elements – the stuff that life is made of.

As mentioned previously, I will not attempt to list all the nutrients in BAC and their exact amount or quantity, for this task is impossible as we now know that there are more than 15,000 nutrients/phytonutrients in those micro-algae, and the list would change with each batch. With natural foods, even with the best of growing, harvesting and blending technology, one can never achieve a standard delivery of nutrients and certainly not on the microscopic level. But that’s the way nature is, and that’s the way our bodies are too; not one of us has the same biochemical make-up or needs.

The values listed are quantitative by weight, units or in proportion to the overall weight. They are not in proportion or in relation to the RDAs. Some values listed as “n/a” are either not available, not applicable, not present, or not researched by the author. In some cases, I have listed the average of a range rather than the range.

Ingredients*	Spirulina platensis	Spirulina Pacifica	Dunaliella Salina	Haematococcus Pluvialis
General Composition				
Proteins	65%	54%	41%	24%
Glucides	18%	19%	9%	38%
Fats	5%	6%	7%	14%

Amino Acids

Essential Aminos

Isoleucine	350 mg	n/a	n/a	n/a
Leucine	540 mg	n/a	n/a	n/a
Lysine	290 mg	n/a	n/a	n/a
Methionine	140 mg	n/a	n/a	n/a
Phenylalanine	n/a	n/a	n/a	n/a
Threonine	n/a	n/a	n/a	n/a
Tryptophane	n/a	n/a	n/a	n/a
Valine	n/a	n/a	n/a	n/a

Non-Essential

Alanine	470 mg	n/a	n/a	n/a
Arginine	430 mg	n/a	n/a	n/a
Aspartic Acid	610 mg	n/a	n/a	n/a
Cystine	60 mg	n/a	n/a	n/a
Glutamic Acid	910 mg	n/a	n/a	n/a
Glycine	n/a	n/a	n/a	n/a
Histidine	n/a	n/a	n/a	n/a
Proline	n/a	n/a	n/a	n/a
Serine	n/a	n/a	n/a	n/a
Tyrosine	n/a	n/a	n/a	n/a

Vitamins and Enzymes

Vitamin A (from Carotene)	22,000 IU	43,000 IU	n/a	n/a
Vitamin B1 (Thiamin)	0.31 mg	0.34 mg	n/a	0.048 mg
Vitamin B2 (Riboflavin)	0.35 mg	0.33 mg	n/a	0.17 mg
Vitamin B3 (Niacin)	1.46 mg	2.07 mg	n/a	0,66 mg
Vitamin B6	0,066 mg	0,042 mg	n/a	0,036 mg
Vitamin B12 (Human active)	32 mcg	22 mcg	n/a	0.012 mg
Vitamin C	0 mg	0.48 mg	11 mg	0.86 mg
Vitamin E (d-a tocopherol)	1 mg	150 mcg	n/a	186 IU/lb
Inositol	1.74 mg	1.74 mg	n/a	n/a
Biotin	0.97 mcg	0.97 mcg	n/a	n/a
Folic Acid	1.6 mcg	1.6 mcg	n/a	n/a
Pantothenic Acid	13.8 mcg	13.8 mcg	n/a	n/a
Superoxide dismutase – (S.O.D.)+	2450 u	2450 u	1000 u	1000 u
Antioxidant enzyme activity				

Fatty Acids*Omega 6 Family*

Gamma Linolenic (GLA)	135 mg	100 mg	n/a	0.21
Essential Linoleic	27 mg	n/a	n/a	n/a
Dihomogamma Linolenic	1.59 mg	n/a	n/a	n/a

Omega 3 Family

Alpha Linolenic	0.0435 mg	n/a	n/a	n/a
Docosahexaenoic (DHA)	0.0435 mg	n/a	n/a	n/a

Monoenoic and Other Family

Palmitoleic	5.77 mg	n/a	n/a	n/a
Oleic	10.38 mg	n/a	n/a	n/a
Erucic	0.072	n/a	n/a	n/a
Myristoleic	0.6 mg	n/a	n/a	n/a
Palmitic	60 mg	n/a	n/a	n/a
Stearic	2.33 mg	n/a	n/a	n/a
Arachidonic	0.285 mg	n/a	n/a	n/a
Behenic	0.18 mg	n/a	n/a	n/a
Inositol	n/a	10 mg	n/a	n/a
Glycerol	n/a	n/a	34%	n/a
Nucleic	n/a	n/a	3.5%	n/a
Tocopherol	n/a	n/a	2.3 mg	n/a

Carotenoids / Phytonutrients

Alpha-carotene	n/a	n/a	8%	14%
Beta-carotene 9-cis	1.6 mg	n/a	n/a	n/a
Beta-carotene 13-cis	0.51 mg	n/a	n/a	n/a
Beta-carotene 15-cis	0.12 mg	n/a	n/a	n/a
Beta-carotene all-trans	7.8 mg	n/a	n/a	n/a
Myxoxanthophyll	9 mg	9 mg	n/a	n/a
Zeaxanthin	8 mg	8 mg	n/a	n/a
Cryptoxanthin	1 mg	1 mg	n/a	n/a
Echinenone	1 mg	1 mg	n/a	n/a
Other Xanthophyll's	3 mg	3 mg	n/a	n/a
Lutein	n/a	n/a	n/a	n/a
Lycopene	n/a	n/a	n/a	n/a
Quercetin	n/a	n/a	n/a	n/a

Zeaxanthin	0.95 mg	n/a	n/a	n/a
Chlorophyll	115 mg	79 mg	n/a	n/a
Phycocyanin-crude	1.5 mg	1.11 mg	n/a	n/a
C-Phycocyanin	130 mg	125 mg	n/a	n/a
Glycolipids	200 mg	200 mg	n/a	n/a
Sulfolipids	10 mg	10 mg	n/a	n/a
Polysaccharides	460 mg	460 mg	n/a	n/a
Minerals				
Calcium	80 mg	42 mg	n/a	1.58%
Magnesium	35 mg	48 mg	n/a	1.14%
Boron	30 mcg	27 mcg	n/a	n/a
Copper	3 mcg	33 mcg	n/a	n/a
Molybdenum	3 mcg	9.7 mcg	n/a	n/a
Potassium	140 mg	200 mg	n/a	n/a
Iron	13 mg	10.5 mg	n/a	0.73%
Sodium	60 mg	95 mg	n/a	n/a
Phosphore	93,5 mg	102 mg	n/a	n/a
Manganese	0.49 mg	0.25 mg	n/a	n/a
Zinc	0.27 mg	0.12 mg	n/a	n/a

**Estimated per 10 grams from base “plain” algae value*

Looking at the nutrients that BAC provides, a well-informed nutritionist can only stare in awe: these are ALL of the nutrients needed by every human body, in near-perfect ratios! It is almost as if Mother Nature herself reached down from the heavens and said, “Here is the perfect food for all human beings...” and gave us micro-algae. They are that impressive.

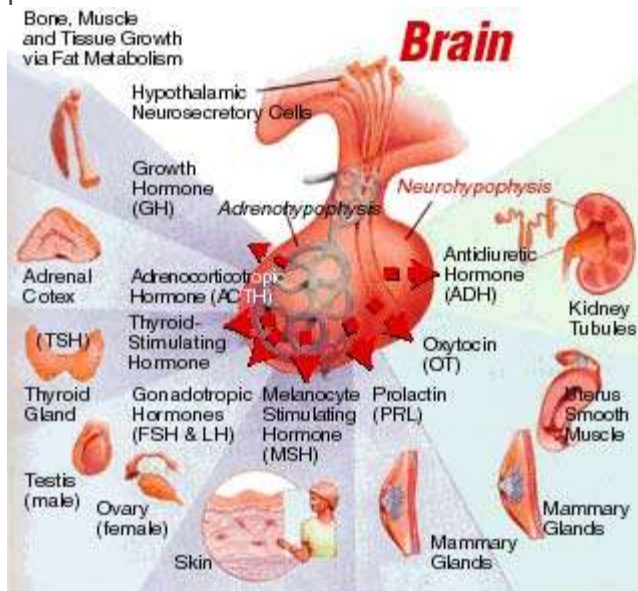
The only thing that is not impressive about these superfoods is their publicity. Owing to the fact that pharmaceutical companies cannot profit from them, the true healing benefits of these superfoods are virtually unknown by Western medical professionals. As you will see in the sections that follow, this is an extremely unfortunate situation as the use of BAC in patients can not only prevent millions of cases of serious disease each year, it can actually help the body to reverse conditions like cancer. It can even be used as an adjunct “complementary” therapy to help those who choose the Western medicine route and allow themselves to be subjected to chemotherapy, for example.

BAC Awakens the Genius Within

What is the genius within?

Back in 1999 when I met Michael Kiriak, PhD, ND, scientist and inventor of Bio-Algae Concentrates, he told me that consuming BAC is a vastly different concept than supplementing with 23 different supplements, which is what I was doing at the time. He explained that because of its completeness, balance, synergy and ultimately its extraordinary bioavailability, BAC is an extremely efficient food that can easily reach areas of the brain that are more difficult to feed than others. He told me that BAC has the power to “awaken the genius within”. Of course he was referring specifically to the hypothalamus, or the “governing” organ.

The hypothalamus is a region of the brain that controls most of our metabolisms and bodily functions. It is located in the middle of the base of the brain and encapsulates the ventral portion of the third ventricle.



The main function of the hypothalamus is homeostasis, or maintaining the body’s status quo. Factors such as energy, blood pressure, body temperature, fluid and electrolyte balance, and body weight are held to a precise value, called the set-point.

Ultimately, the hypothalamus along with its two principal allies, the pituitary and the pineal glands, is responsible for regulation of all physiological metabolisms. These metabolisms include the endocrine system, the sympathetic and para-sympathetic nervous systems, the

central nervous system, the lymphatic system, the cardiovascular system and the digestive system with its assimilation, absorption and elimination functions.

The hypothalamus and its allies are so important that they have gained the reputation of being “the guardians of health”. In essence, all metabolic functions report back to and are governed by the hypothalamus – the genius within.

Problems with the hypothalamus

In this section, I will focus the discussion on the hypothalamus and will not address the brain itself as it will be the subject of another section. The hypothalamus, like any other part of the body, is comprised of billions of cells, each with its own cellular activities to perform. Only when the cells that make up the hypothalamus are healthy will the hypothalamus adequately perform its own overseer metabolic role. In order to be healthy and perform their activities, cells need hundreds of critical nutrients, many of which are required daily. Only with these nutrients and the energy derived from them will cells be able to grow, repair, defend from attacks and perform their localized metabolic functions.

The hypothalamus, unlike the brain, is not protected by the blood brain barrier and is therefore subject to microbial and other attacks. Because of its location within the head it is also more difficult to nourish adequately, which becomes an even greater problem as we age and become less efficient at assimilating certain nutrients from the foods we eat. Of course this problem is compounded by our choice of foods which are often depleted of nutrients or inassimilable. Often, this problem is already present at birth due to the mother’s genes and deficiencies or will manifest early during infancy due to poor nutrition.

When the cells of the hypothalamus are starving, toxic or plagued with acidosis or other bacterial infections, you’ve got a problem. From the diagram and description of its role above you can imagine the resulting cascading problems that can arise when the “guardian of health” itself becomes atrophied.

How BAC awakens the genius within



As per Hippocrates's advice: "let thy food be thy medicine," all good foods have the potential to nourish and heal. For this healing to be a reality, the nutrients in the food we eat must be assimilated and absorbed by the cell wall in sufficient and required quantity. Because of bad food choices, aging and other metabolic deficiencies, this becomes quite difficult to achieve and cellular disease takes over.

Due to its content of extraordinary nutrients and their bioavailability, BAC has nourishment potential hundreds of times more efficient than ordinary foods and other source of nutrients. BAC's combined nutritional values and high utilization properties deliver optimum cellular nutrition. Some of these properties are:

Whole food – In natural and holistic nutrition it is well known and proven that whole foods are the way nature was meant to be and that quality not quantity counts. For example, a miniscule amount of Vitamin C as it occurs in a whole orange or green pepper is tremendously more nutritionally functional than a mega-dose of isolated ascorbic acid.

Organic – The "Bio" in Bio-Algae Concentrates means that it is of a living organism and that it is not isolated or separated. It is grown without the use of synthetic fertilizers, pesticides, antibiotics, growth hormones or feed additives.

Micro food – This is a key characteristic of BAC that explains why such nutritional power can come from such a small source. BAC's algae are selected microalgae that hold extraordinary nutritional value for their size. The microalgae in BAC are invisible to the naked eye but they deliver more nutrients than any visible food particle. Furthermore, there is no extraneous material in these microalgae such as fiber, fat, bulk or water. This makes BAC extremely digestible and non-toxic and means that it has minimal assimilation and elimination burden for the body. BAC is pure energy. It is the food that salmon and even some whales live on.

Complete – Most foods, like an apple, are whole within themselves, but an apple does not contain all of the required nutrients that we need to sustain life. BAC is not only whole, but it is also the most complete food on earth containing all daily required nutrients and thousands more. There are over 5,000 known nutrients in BAC including Vitamins A, B, C, D, E, and K, all known minerals and trace elements, all known amino acids, a full protein makeup, chlorophyll, an array of mixed carotenoid antioxidants and over 4,000 enzymes.

Balance – There are four microalgae in BAC. Each alga is a whole food and is naturally balanced within itself as is most food. However, anytime you mix different foods together you must be concerned with the chemical interactions as per the science of food combination. For example, eating watermelon after a steak is a nutritional disaster that will cause digestion problems. It took nine years of intensive research to formulate the optimum balance found in BAC, patiently selecting the most compatible algae amongst the 1,000 investigated.

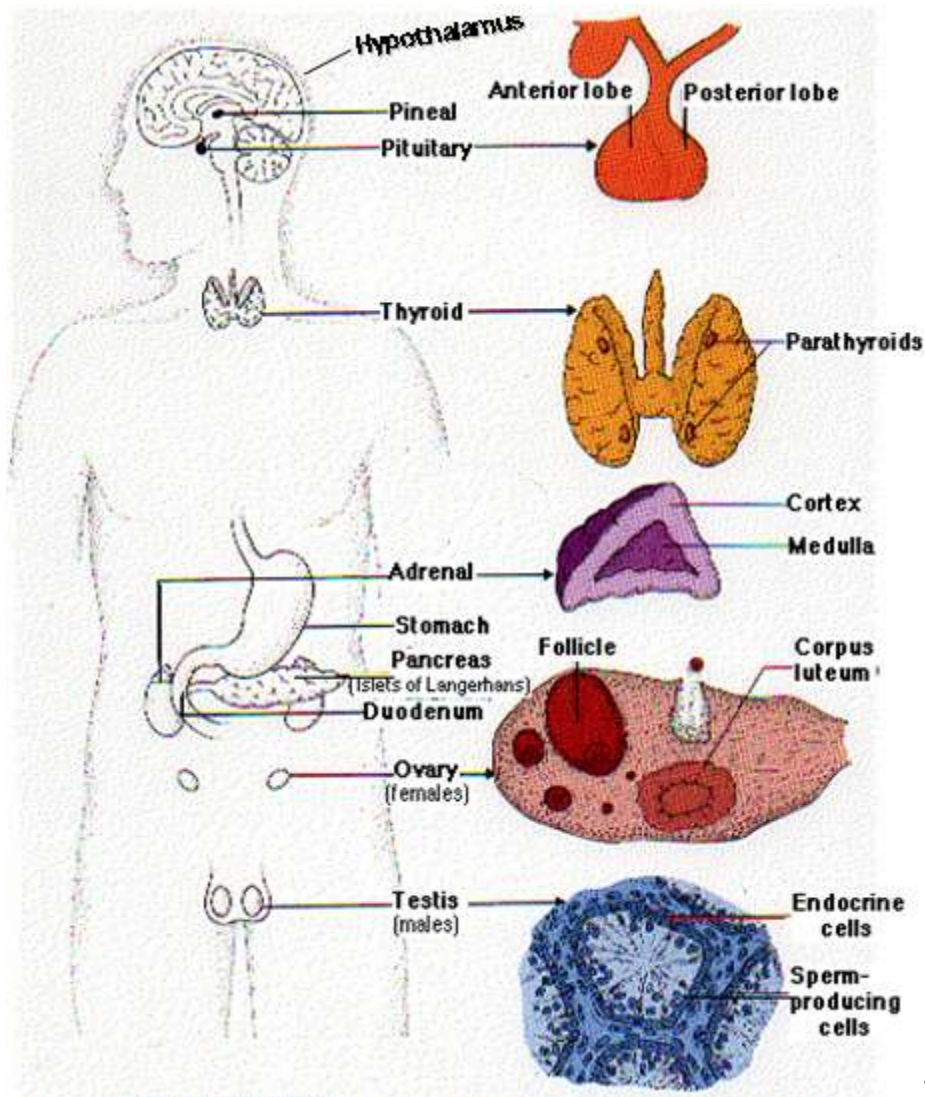
Bioavailability – BAC has an exceptionally high overall utilization ratio with no resulting toxicity. For example, its human active proteins have a 95% net utilization ratio while its calcium has a net utilization ratio over 90%. Several of its nutrients such as beta-carotene, alpha-carotene and astaxanthin have been proven to penetrate the blood brain barrier. This sort of bioavailability and net utilization is possible because of the previously mentioned characteristics: whole food, organic, complete, micro food and balance.

Synergy – At the molecular level, synergy is real. Synergy is what makes a violinist a virtuoso. Once the 5,000 nutrients in BAC are subjected to the digestive enzymatic breakdown, they further explode into 50,000 sub nutrients and millions of sub molecules that are assimilated into the blood and distributed within seconds across the entire body to nourish trillions of cells. BAC is super nutrition that delivers optimum cellular nutrition.

What are the benefits of consuming BAC?

We are energy beings. We live off the energy that we derive from the food we eat. When the cells of the body receive the nutrients and energy that they need, they, like a good virtuoso, will perform their multitude of cellular metabolic activities: growth, repair, cleansing, regeneration and more. When each cell of an organ performs its job well, the organ will have a fighting chance to perform its metabolic activities such as blood sugar regulation in the good example that is the pancreas. But as per the diagram presented above, let us not forget that cellular activities and organ metabolic functions are governed by the glandular level which itself is overseen by the “master gland”, the hypothalamus.

There is no doubt that the nutrients in BAC efficiently nourish all of the cells of the body including those cells of the hypothalamic region. Several phytonutrients and pigments found in BAC, including beta-carotene, alpha-carotene and astaxanthin, have been shown in human clinical trials to be able to penetrate the blood-brain barrier and furthermore penetrate the blood-iris barrier.



When the genius within is awakened, like any good commander, its first mission is to restore the balance within his team: the endocrine glands, or the guardians of health. When the endocrine glands are tasked by the hypothalamus they have no choice but to obey its hormonal commands.

These glands are largely responsible for triggering the metabolic activity of the various organs and systems of the body. At that level we can mention a few specific systems such as blood insulin level, pH levels, cardiac function, selenium and calcium activities, and more.

In turn, when these metabolic systems begin to function well, we will derive symptoms of health instead of symptoms of disease. Allow me to list a few of the symptoms and/or benefits that can be obtained when we awaken the genius within:

- Improved brain function
- Improved memory

- Improved neurological function
- Improved cellular repair
- Prevention of tumorigenesis
- Increased assimilation and absorption of nutrients from regular food
- Better digestion
- Improved cardiovascular function
- Improved metabolism
- Enhanced nucleotide production
- Balanced blood sugar
- Enhanced cellular glucose uptake
- Enhanced hormonal function
- Better bowel movements
- Improved detoxification process
- Protection from free radicals
- Reduced fatigue
- Increased energy
- Enhanced libido

The Extraordinary Health Benefits of BAC

Bio-Algae Concentrates offer a stunning array of health benefits. In fact, they have been described as the best nutraceutical on earth – “the perfect food.”

Aside from being a complete protein and containing all the B vitamins, vitamin C, vitamin E, major minerals and mixed antioxidants (many in amounts large enough to be considered

supplementary), Bio-Algae Concentrates have been found to rapidly improve the immune system, improve digestion, detoxify the body, accelerate healing, protect against radiation, aid in the prevention of degenerative diseases, help treat candida albicans, relieve arthritis pain and, because of its nutritional content, aid in the success of numerous weight loss programs.

Bio-Algae Concentrates have been shown to be effective in preventing and helping the self-healing power of the body in reversing the following conditions:

- Cancers (all types)
- Obesity
- Diabetes
- Hypoglycemia
- Arthritis
- Depression
- Severe liver damage and liver disorders
- Intestinal ulcers
- Hemorrhoids
- Asthma
- High blood pressure
- Constipation
- Bleeding gums
- Infections
- Inflammation of joints and tissues
- Body odor / breath odor
- Various degenerative diseases
- Essential fatty acid deficiencies
- Malnutrition of all kinds

- Mineral deficiencies

Bio-Algae Concentrates are particularly useful for:

- People with poor digestion and assimilation (these micro-algae contain thousands of enzymes and are easy to digest and absorb)
- People with poor vitality and anemia
- Individuals who consume large quantities of animal protein (the micro-algae protein, in contrast, is easier to digest and offers a far healthier balance of minerals)
- People who eat refined or processed foods
- People who take prescription drugs (spirulina protects the kidneys and liver)
- People who are overweight or obese
- High performance individuals who engage in physical exercise and/or strength training
- High performance and high achieving individuals with high stress jobs
- People with low energy levels (feeling depleted, exhausted, etc.)

The algae in Bio-Algae Concentrates have such strong health benefits that many well-known doctors and authors use these products and note their benefits:

About spirulina found in Bio-Algae Concentrates, its predigested protein provides building material soon after ingestion, without the energy-draining side effects of meat protein; its mucopolysaccharides cellular membrane relax and strengthen connective tissue while reducing the possibility of inflammation; its simple carbohydrates yield immediate yet sustained energy; its GLA fatty acids improve hormonal balance; and its protein-bonded vitamins and minerals, as found in all whole foods, assimilate better than the synthetic variety. Spirulina can generally be considered an appropriate food for those who exercise vigorously, as evidenced by the many world-class athletes who use it.

– Healing With Whole Foods by Paul Pitchford

It is possible that the GLA found in spirulina and possibly these other products accounts for some of the positive effects that people experience when using them, including decreased appetite, weight loss, and improved energy levels, especially mental energy. I personally have used all of these products and must say I have experienced a subtle increase in mental clarity and alertness (not like a nervous, caffeine-type stimulation). These algae must subtly stimulate

our nervous systems or release certain internal neurochemicals that create this “up” feeling.
– Staying Healthy With Nutrition by Elson Haas, M.D.

Ultimately, these Bio-Algae Concentrates are not just effective at supporting the reversal of a long list of serious diseases (discussed in more detail below), but they are powerful health enhancers that demonstrate phenomenal benefits even to people who are in “good” health.

BAC – Nutritional Energy Medicine

In this brief discussion I will describe energies that affect humans and animals and/or are required from a physiological and metabolic health perspective. There are many more perspectives from which to explain energy that I will not address here, such as gravitational energy as in an apple falling and hydro energy as in water osmosis, a prevalent force in the human body. There are three fundamental nutritional energy types that I will discuss.

What are these three fundamental nutritional energy types?

1. EMF (Electro Magnetic Frequencies): Electrical as in a light bulb, magnetic as in a magnetic pole, light as in sunlight and radionics as in radiations from the Van Allen belt. Each of these EMF energy types greatly affects our human body and emotions. Without sunlight we would disappear swiftly. The moon causes the daily tide.

2. Heat: As in the fire burning at the core of the earth, as in wood burning and as in the energy generated in the mitochondrion of each cell of our body when carbohydrates and fats are transformed into ATP (Adenosine Triphosphate) when they pass through the Krebs cycle.

3. Strength: As in the force that holds the atom (nucleus, proton, and electron) in place and that when harnessed can be mighty as in nuclear energy. As in the basic atomic energy found in the molecules of the minerals in our food which, when disassembled by digestion, are then assimilated and absorbed within our cells.

In the context of human health, we know that energies are either perceptibly or subtly important. For example, thousands of years ago, the Chinese explained “Chi” energy as a force centered at the navel and today we are just starting to figure out what they meant. For example, we know that a combination of the earth’s gravitational forces and other electromagnetic forces affect and converge at the navel in the human body, and do so optimally when the body is well balanced. We also know today that trace elements will be distributed in the human body not loosely without logic, but according to gravitational and electromagnetic forces and attractions so that a certain element may be found densely in the brain and sparsely in the liver.

BAC as nutritional energy medicine

“We are energy beings. We do not live off the foods that we eat, but from the energy that we derive from them.” Dr. Carey A Reams, Reams Ideal

ALL substances like food and light, including your friends and loved ones, carry frequencies and energies that will either raise or lower YOUR energy and frequency. Choose wisely.

Bio-Algae Concentrates are a new and extremely efficient form of natural micro-food that may contain over 5,000 nutrients. Their freshness and life-giving energy is maintained throughout growing, harvesting, freeze drying, blending, encapsulating, bottling, and transportation. We know this by testing its life force with energy machines and kinesiology tests. When photographed using Kirlian photography, Bio-Algae Concentrates in their powder form demonstrate a powerful jump between the central core powder and its band of radiating white light which then extends further in many rays of bright white light.

What makes BAC energy medicine?

1. EMF: BAC helps the body resonate at healthier frequency levels. The molecules in BAC resonate at frequencies ranging from 50 Hz to several hundred Hz. The human red blood cell resonates at an optimum frequency of ~62 Hz +. When cells vibrate at healthy frequencies, bacteria and microbes will leave them alone as they cannot survive these levels of vibration. For example, the coccidiosis parasite, which commonly affects chickens, is not likely to survive if chickens are given BAC in their diet. In humans, foods that vibrate below 40 Hz deprive people of energy instead of give them energy when consumed and are considered cancer causing foods. The molecules of a typical caged chicken boosted with antibiotics and fed growth hormones and the typical commercial diet will vibrate mostly below 40 Hz.

2. Heat: BAC “fires” your ordinary foods. The microalgae in BAC are among the greatest sources of stored sunlight power. BAC contains high quality carbohydrates and fats and importantly a large proportion of chlorophyll and magnesium (Mg) which are the keys to ATP (Adenosine-tri-phosphate). For any ATP transformation to take place during the Krebs cycle, the chlorophyll-magnesium pair is required. We derive the majority of our ATP energy from our food and a lesser portion from direct sunlight.

3. Strength: BAC contains over 114 minerals and trace minerals naturally chelated by the plant and bio-energetically available. Our digestive enzymes break down the nutrients of our food into a loose state from which they are then delivered to the liver for reassembly into human frequency. We derive a large portion of our atomic energy from the air we breathe and a lesser portion from the minerals and trace minerals in our foods (mostly fruits and vegetables).

BAC – The World’s Best Source of Protein and Amino Acids

Proteins are made up of amino acids. There are at least 20 identified amino acids, nine of which are essential yet cannot be produced or stored by the body; they must be obtained from the food that we eat. Non-essential amino acids are also needed, but the body can produce these itself. Essential amino acids and sufficient nitrogen obtained from our food are needed to synthesize the non-essential amino acids.

As a matter of fact, the body can synthesize thousands of different types of proteins and enzymes from the set of basic amino-acids. Each type of protein has a unique, genetically defined amino acid sequence that determines its specific shape and function. They are called upon to serve as enzymes, structural elements, hormones, immunoglobulins, and more. They are involved in a myriad of metabolic processes including oxygen transport, muscle contraction, electron transport and other activities throughout the body including the all-important photosynthesis and energy metabolism.

Because of the important role proteins play in our overall health and well-being, they are often referred to as the building blocks of life.

BAC contains all known amino-acids

Amongst its many nutrients, BAC’s protein content derived from the best microalgae on earth has a distinct advantage over other forms of food, algae or supplements. The algae contained in BAC are 45-65% protein and are made up of all known essential and non-essential amino acids. The proteins in BAC are biologically complete, which means they provide all nine essential amino acids in their proper ratios. Most plant foods are not complete proteins because they lack one or more amino acids. In fact, with its human-active B12 content (more than that found in liver), BAC is literally the most complete protein source on earth.

The quality of a protein depends on the quantities of amino acids contained in it. The more closely the protein matches the body’s requirements, the higher the quality. The algae in BAC make up a “complete protein” because they contain all of the essential amino acids. This means that by consuming BAC, we can get our necessary intake of protein without subjecting our digestive system to the hard work of processing animal derived proteins.

The proteins in BAC are 85-95% digestible, which makes it one of the most efficient sources of protein. In fact, the spirulina in BAC is second only to a dried egg supplement with regards to usable protein, and higher than any common food in the form in which it is usually purchased. The algae in BAC have cell walls that are composed of soft mucopolysaccharides. This means that unlike certain grasses or chlorella, they contain little or no cellulose, which makes it extremely easy for the body to digest and assimilate them. BAC’s amino acids are delivered to

the body for rapid absorption. That is one of the many reasons why we call BAC an “extremely efficient food.”

Protein digestibility is important for many people and especially important for people suffering from intestinal mal-absorption or digestive disorders. Older people typically have difficulty digesting complex proteins and may be on restricted diets. They will find BAC’s protein an ideal way to ensure they receive the nourishment they need. BAC is an effective supplement for those who suffer from malnutrition diseases where the ability of the intestine to effectively absorb nutrients has been damaged. Given to malnourished children, it is more effective than milk powders because milk’s lactic acid can be difficult to absorb.

What this means is that BAC is an ideal food source for people who suffer from mal-absorption, people who are fighting cancer and cannot gain weight after or during chemo therapy treatment, people with high protein requirements like athletes, long distance runners and bikers, bodybuilders, and malnourished or frail people

Blue-green algae, and the spirulina family in particular, have a primitive structure with few starch storage cells, cell membrane proliferation and rich amounts of ribosomes, which are the cellular bodies that manufacture protein. This unique organization of nutrients along with chlorophylls allows for efficient photosynthesis and protein formation.

Unfortunately, our body does not store amino acids in anticipation of replenishing deficient ones with subsequent meals. In the process of protein synthesis for the body’s repair and maintenance, all dietary protein factors must be present simultaneously, or the amino acids are wasted.

Furthermore, even if complete protein is consumed, digestive difficulties can prevent assimilation of all needed elements. BAC provides all the required amino acids in a form that is much easier to digest than that of fish, eggs, meat or soy.

Essential amino acids found in BAC:

ISOLEUCINE : Required for optimal growth, intelligence development and nitrogen equilibrium in the body. Used to synthesize other non-essential amino acids.

LEUCINE : Stimulator of brain function, increases muscular energy levels.

LYSINE : Building block of blood antibodies, strengthens circulatory system and maintains normal growth of cells.

METHIONINE : Vital lipotropic (fat and lipid metabolizing) amino acid that maintains liver health. An anti-stress factor, it calms the nerves.

PHENYLALANINE : Required by the thyroid gland for production of thyroxine which stimulates metabolic rate.

THREONINE : Improves intestinal competence and digestive assimilation.

TRYPTOPHAN : Increases utilization of B vitamins, improves nerve health and stability of the emotions. Promotes sense of calm.

VALINE : Stimulates mental capacity and muscle coordination.

Non-essential amino acids found in BAC:

The algae in BAC supply all non-essential amino acids. “Non-essential” does not mean that these amino acids are not needed by the body, but merely indicates that the body can synthesize them itself if it needs to, provided that the appropriate nutritional building blocks are available. Nevertheless, the body is better served if these excellent protein components are readily and totally available from dietary sources, since all the amino acids must be on hand as the cells manufacture enzymes, proteins, hormones, brain chemicals and other products of metabolism. Of the thousands of biochemical substances acting and interacting in the human body, not one is derived from a vacuum; the body is ultimately dependent upon nutrient intake for all of its functions.

ALANINE : Strengthens cellular walls.

ARGININE : Important to male sexual health as seminal fluid is 80 percent arginine. Also helps detoxify the blood.

ASPARTIC ACID : Aids transformation of carbohydrates into cellular energy.

CYSTINE : Aids pancreatic health, which stabilizes blood sugar level and carbohydrate metabolism. Has been used to alleviate some symptoms of food allergy and intolerance.

GLUTAMIC ACID : With glucose, one of the principal fuels for the brain cells. Has been used to reduce the craving for alcohol and stabilize mental health.

GLYCINE : Promotes energy and oxygen use in the cells.

HISTIDINE : Strengthens nerve relays, especially in the auditory organs. Has been used to reverse some cases of deafness.

PROLINE : A precursor of glutamic acid.

SERINE : Helps form the protective fatty sheaths surrounding nerve fibers.

TYROSINE : Slows aging of cells and suppresses hunger centers in the hypothalamus. Can be synthesized from phenylalanine. Involved in proper coloration of hair and skin, including protection from sunburn.

Knowing what I now about BAC, I am assured that I get my essential amino-acids each and every day. I am mostly vegetarian and I no longer need to worry about eating meat, fish, or even eggs to get the essential proteins. And for this peace of mind, I only need to eat a few capsules of BAC every day.

In addition to all the virtues of BAC in regards to protein, I ask you to recall the past and current research with dairy cows. When dairy cows consume a few capsules of BAC each day, their daily protein consumption is reduced by 1.25 lbs. Why is that? The researchers explain that since the cows are able to assimilate more proteins/amino-acids from their food, and better synthesize and utilize the existing proteins and enzymes stored in their body, they no longer need to consume as much protein.

That translates into a bonus for us humans. Eating BAC's amino acids complements the protein in our regular food like beans and other vegetables, increasing their assimilation and quality. Furthermore, when consuming BAC, our cells become more efficient at utilizing and synthesizing proteins and enzymes.

The Incredible Array of Vitamins Contained in BAC

There are over 70,000 species of algae in the world. Some are magnificent whole foods such as Spirulina and Dunaliella like those contained in BAC. BAC is a very special blend of some of the oldest food on the planet. There exist fossils of cyanobacteria blue-green algae that are over 3.5 billion years old. BAC is an extremely good source of vitamins and minerals due to the rich variety present in its microalgae makeup. BAC contains all vitamins, including a full Vitamin B Complex, vitamins A, D, K, E & C and has a wide range of minerals, including magnesium, potassium, iron and calcium, and all other nutrient co-dependents for these vitamins to be functional and active for human assimilation. BAC is great for anyone from infants to the elderly.

Since BAC is a complete food, you do not need to worry about dosages when taking it. You cannot make a mistake with mixing and matching like you might with isolate and separate vitamins and minerals. You do not even need to worry about taking it with or without food. All you need is water. When you take BAC, you automatically get complete and perfect ratios of the nutrients contained within it. BAC is known for its balance and synergy between the vitamins and minerals that your body needs. The way nature makes vitamins and nutrients in plants cannot be replicated by chemists now and it will never be possible. A small amount of vitamin C occurring in a green pepper is tremendously more nutritionally functional than 1,000 mg of ascorbic acid from a bottle.

Furthermore, when you take vitamin supplements, you are taking risks with mixing and matching isolate and synthetic compounds that fall in the chemical category. You CANNOT sustain life eating multi-vitamins and minerals as supplements.

Yet you could live on about 60 capsules of BAC per day. That's barely 10 grams of food! I do not recommend that you do that, but I would not hesitate to do it myself.

I have not recommended isolate supplements to anyone for over 16 years, and I will never regret this decision. I am intellectually convinced by scientific research and experimentally by my real-life experience that the best way to get your vitamins is to "let thy food be your medicine." I do not care what any vitamin company or scientist has to say about isolates/separates, they are just chemicals. The only way to restore your healing energies is from naturally occurring vitamins, minerals, phytonutrients and other nutrients that you can only obtain "the way nature intended it", from your food, and you can get even more into you with BAC.

BAC contains all of the vitamins that all living beings need to carry on metabolic processes. You will find vitamins A, B, C, D, E, K, folic acid, inositol, and biotin:

VIATMIN A : Necessary for the growth and repair of body tissues; helps maintain smooth, soft, disease-free skin; helps protect the mucous membranes of the mouth, nose, throat and lungs thereby reducing susceptibility to infections; protects against air pollutants; counteracts night-blindness and weak eyesight; aids in bone and teeth formation. Current medical research shows that foods rich in beta carotene (a precursor to Vitamin A) help reduce the risk of lung cancer and certain oral cancers. Unlike Vitamin A from fish liver oil, Vitamin A from Bio-Algae Concentrates is non-toxic.

PYRIDOXINE or B6 : Involved in the breakdown and assimilation of protein. Protects cardiac health, reduces edema and stabilizes female hormone levels. Dr. Carl Pfeiffer has demonstrated that B6, together with the mineral zinc, can cure some forms of schizophrenia.

BIOTIN : An enzyme that carries CO during certain biochemical reactions involved in carbohydrate metabolism. Also acts as a co-enzyme in the assimilation of other B-complex vitamins. Biotin is destroyed by eating raw egg whites and some kinds of raw fish.

COBALAMIN or B12 : The most difficult of all vitamins to obtain from vegetable sources. Bio-Algae Concentrates is extremely rich in this rare vitamin, containing 250 percent more than beef liver, previously thought to be nature's richest source. A single serving of BAC easily exceeds the Recommended Daily Allowance of 1.5 to 3 mcg daily. B12 deficiency results in pernicious anemia, nerve degeneration, premature senility, pronounced fatigue and mental illnesses resembling schizophrenia.

PANTOTHENIC ACID : The "stress" vitamin, used by the adrenal glands, along with cholesterol and vitamin C, to manufacture cortisone and other steroids in response to physical and mental

stress. Deficiency encourages sensitivity to allergies, infections and degenerative diseases such as arthritis and rheumatism. Ulcers and hypoglycemia have also been associated with a shortage of this vitamin.

FOLIC ACID : Essential to proper hemoglobin formation in red blood cells. Deficiency results in anemia, poor growth, skin pigmentation disorders and premature graying of the hair.

INOSITOL : Vital lipotropic nutrient that sustains liver health and helps detoxify carcinogens, particularly excess female hormones. Helps normalize blood cholesterol levels. With choline, inositol is used by the liver to manufacture lecithin. Inositol is the second most abundant vitamin in the body after niacin. Recent studies indicate that inositol, with biotin, reduces loss of scalp hair.

NIACIN : Also known as nicotinic acid, and niacinamide, and/or Nicotinamide – all names or forms of Vitamin B3 – which is an alternative form, niacin is essential to mental health. Dr. Abram Hoffer, a renowned pioneer in orthomolecular psychiatry, has completely relieved schizophrenic symptoms using niacin. The Physicians' Desk Reference, a pharmaceutical text used by doctors when prescribing medication, recognizes niacin as an effective cholesterol lowering agent.

RIBOFLAVIN or B2 : The most common vitamin deficiency is that of riboflavin and results in cataracts, failing vision, watery eyes and uncontrollable eczema.

THIAMINE or B1 : A co-enzyme in the breakdown of dietary carbohydrates. Maintains levels of glucose in the blood. Deficiency results in weakness, cardiac damage, abdominal distention and poor oxygenation. Severe shortage results in death; critical toxemia develops from unmetabolized carbohydrate fragments.

VITAMIN C : Essential for healthy teeth, gums and bones; helps heal wounds, scar tissue and fractures; prevents scurvy; builds resistance to infection; aids in the prevention and treatment of the common cold; gives strength to blood vessels; aids in the absorption of iron. Vitamin C is required for the synthesis of collagen, the inter cellular "cement" which holds tissues together. It is also one of the major antioxidant nutrients. It prevents the conversion of nitrates (from tobacco smoke, smog, bacon, lunch meats, and some vegetables) into cancer-causing substances. According to Dr. Lines Pauling, the foremost authority on Vitamin C, Vitamin C will decrease the risk of getting certain cancers.

VITAMIN D : Improves absorption and utilization of calcium and phosphorous; required for bone and teeth formation; maintains a stable nervous system and normal heart action.

VITAMIN E: or TOCOPHEROL – Algae in Bio-Algae Concentrates contains more vitamin E per gram than pure wheat germ. Its biological activity is 49% greater than synthetic vitamin E. Vitamin E protects heart and vascular health, promotes oxygenation of cells, and retards aging.

BAC Contains the Most Complete Offering of Minerals

Although proteins are the building blocks of life, humans need dozens of essential trace minerals in order for its many enzyme and physiological systems to function. In the typical diet, deficiency of minerals is thought to be widespread across many minerals and trace minerals which can profoundly affect health and metabolism.

BAC contains natural minerals as opposed to inorganic minerals

The algae contained in BAC come from a volcanic water source, which was chosen for its high content of minerals and trace elements deposited from ancient soils and mountains where no other plants can live. Algae thrive in alkaline waters such as these. The mineral content of algae varies depending on where it is grown and what minerals are contained in the water. Algae can incorporate and synthesize many minerals and derivative compounds into their cell structure and these minerals are well assimilated by the human body as they come from a natural plant source.

Transformed into natural organic forms by the algae, these minerals become chelated with amino acids and are therefore more easily assimilated by the body. Often times people ingest large amounts of inorganic minerals without any benefit to their health because the body does not know what to do with these incompatible forms. In fact, evidence is accumulating that inorganic minerals can block absorption of the organic forms, ultimately leading to mineral deficiencies.

BAC contains all essential minerals and all known trace elements absorbed from its growth medium into chelated, easily absorbed forms.

Find here a partial list of these important minerals:

POTASSIUM : A crucial mineral that regulates the body's electrolyte balance. Deficiency can cause heart arrest, hypertension, adrenal exhaustion and muscular collapse.

CALCIUM : The most abundant mineral in the body; it is especially important to bone and dental health, but is also involved in neural transmissions to the muscles, pH and several other energy related metabolisms. Deficiencies can lead to osteoporosis. BAC is a concentrated calcium food, supplying more, gram for gram, than milk.

ZINC : The pivotal point of over thirty vital enzymatic reactions with profound effects on mental health, skin tone, prostate function and healing capacity.

MAGNESIUM : Deficiency can lead to spasmodic muscle disorders including cardiac irregularities. Helps assimilation of vitamins C & B and protein. Magnesium facilitates absorption of calcium and helps regulate blood pressure. Gram for gram, BAC is one the most concentrated magnesium foods.

MANGANESE : Activates enzyme systems along with zinc. Promotes activity of the neurotransmitter acetylcholine and helps stabilize blood sugar.

SELENIUM : Originally believed to be a toxic heavy metal but now known to be necessary for health. It retards aging, harmful oxidation and free radical formation, reduces the toxic effect of carcinogens, and improves cardiac efficiency.

IRON : BAC is one of the best natural iron supplements. Iron promotes formation of hemoglobin, the oxygen-carrying blood pigment found in healthy red blood cells. Iron deficiency is the most common mineral deficiency worldwide, especially for women, children and older people. Women on weight loss diets typically do not get enough iron and can become anemic. Iron is essential for strong red blood cells and a healthy immune system. BAC is rich in iron, much more so than common iron foods. BAC's iron is easily absorbed by the human body. In one theory, blue pigment phycocyanin, forms soluble complexes with iron and other minerals during digestion making iron more bioavailable. Hence, iron in BAC is over twice as absorbable as iron found in vegetables and most meats. Typical iron supplements are not well absorbed and are often not recommended by MD's for many blood conditions. Many studies show that iron from spirulina is 60% better absorbed than iron supplements such as iron sulfate.

PHOSPHORUS : The second most abundant mineral in the human body; it is found in practically every cell. Functions with calcium to maintain bone density. Helps to digest carbohydrates and the B vitamins, niacin and riboflavin.

SODIUM : Sodium is an element that the body needs to function properly. The body uses sodium to regulate blood pressure and blood volume. Sodium is also critical for the functioning of muscles and nerves. Some people are concerned about too much sodium in their diets and have therefore avoided seaweed foods such as nori, wakami and kombu. These kelp foods are very nutritious, but they do contain significant amounts of sodium. The microalgae in Bio-Algae Concentrates contain very small amounts of natural sodium and thus serve the important need of the body while avoiding the danger of too much sodium.

CHROMIUM : Important in the metabolism of fats, carbohydrates and insulin. It stimulates the synthesis of fatty acids and cholesterol, which are necessary for brain function and many other body processes.

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Iron in BAC and the Prevention of Anemia

Affecting over half a million people worldwide, the most common type of dietary deficiency is iron deficiency. This problem especially affects women and children. A growing child needs additional iron as they are increasing their red blood cell mass. Women of reproductive age who are menstruating require double the amount of iron that men do, but normally the efficiency of iron absorption from the gastrointestinal tract can increase to meet this demand. If this does not occur, the end result of decreased dietary iron, decreased iron absorption, or blood loss is iron deficiency anemia.

The algae in BAC contain a great mix of non-toxic iron as it occurs as a whole food, unlike that of isolated iron supplements that can be toxic. Iron is essential for healthy red blood cells and a strong immune system, but typical iron supplements are not well absorbed by the human body.

The spirulina contained in BAC is known to have a very high iron content and for this reason, it was tested in a study against a typical iron supplement. Spirulina-fed rats absorbed 60% more iron than rats fed the iron supplement, suggesting that there is a highly available form of iron in spirulina.¹ In an earlier study, spirulina was shown to correct anemia in rats.²

In a study conducted in Japan, eight young women had been limiting their meals to stay thin, and showed hypo chronic anemia & lower than normal blood hemoglobin content. After the women consumed four grams of spirulina after each meal for 30 days, blood hemoglobin content increased 21% from 10.9 to 13.2 – a satisfactory level, no longer considered anemic.³

Athletes in intensive training often suffer from non-anemic iron deficiency, with clinical symptoms such as exhaustion and muscle fatigue. A 1998 study with Macedonian male and female athletes taking spirulina for two months showed a distinct rise in iron reserves. This simple dietary modification can eliminate iron deficiency symptoms and optimize athletic health and physical capacity.

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The Thousands of Enzymes in BAC

BAC contains more than 4,000 enzymes! No other food or combination of foods contain so many naturally occurring and live enzymes. Some of these enzymes are critically important for health, such as superoxide dismutase (SOD). SOD is an iron-containing enzyme that supports important body-cell processes and also protects the cells from free radicals.

Fruits and vegetables contain just enough enzymes to support self-breakdown, like what occurs when an apple turns brown after falling from a tree. These enzymes are critical in order for them to be properly digested by the humans and animals that consume them. Without these naturally occurring enzymes, our digestive system would have to work much harder to break down food to obtain its nutrients. Often our food goes on being undigested due to a lack of enzymes.

Very few foods contain more enzymes than required for self-breakdown. Papaya is one exception with its large amount of papain enzyme. But as far as enzymes go, nothing comes close to certain microalgae, which contain inexplicably large amounts of enzymes.

Further to aiding with digestion, many enzymes found in food are stored, transformed and used by our body for other important life-sustaining functions.

The combination of microalgae in BAC boasts over 4,000 such life-sustaining enzymes including DNA, RNA, SOD, glycolipids and many more.

In BAC, spirulina is one such alga that contains as many as 2,000 enzymes. Among other important enzymes identified in spirulina are restriction enzymes. Restriction enzymes (endonucleases) work like scissors to cut the DNA of invading enemy microbes. Researchers in genetic engineering use restriction enzymes to cut DNA at precise locations. A unique restriction enzyme in spirulina called Spl-1 is not found in any other microbe, bacteria, fungi or algae. Japanese scientists extract Spl-1 from living spirulina and use it as a reagent for genetic research in laboratories and institutes.

A theory proposed to explain spirulina's long life is the role of restriction enzymes. By cutting the DNA of invading enemy microbes, restriction enzymes may have been good weapons against microalgae's ecological enemies for 3.5 billion years.

Spirulina in BAC contains numerous characteristic peripheral inclusions associated to thylakoids. Those are: cyanophycin granules, polyhedral bodies, polyglucan granules, lipid granules, and polyphosphate granules (Balloni, et al., 1980; Ciferri, 1983).

The cyanophycin granules, or reserve granules, are important due to their chemical nature and series of pigments. The polyhedral bodies or carboxysomes mainly contain the enzyme ribulose 1,5-diphosphate carboxylase that allows the fixation of CO₂ in photosynthetic organisms and probably carry out a reserve function. The polyglucan granules or glycogen granules or a-granules are glucose polymers, small, circular and widely diffused in the interthylacoidal space. The lipid granules, b-granules or osmophile granules form the reservation deposit, constituted by poly-b-hydroxybutyrate (PHB), found only in prokaryotes. PHB acts as a carbon and energy reserve (Vincenzini, et al., 1990).

Many other enzymes present in BAC and their health benefits have not been identified or explained yet.

BAC – A Rich Source of Essential Fatty Acids (EFAs)

Essential fatty acids (EFAs), or “the good fats that heal,” are the fats you have been increasingly hearing about in recent years. Your body cannot live without them. They are necessary for a healthy heart, a healthy nervous system, a healthy immune system and especially a healthy brain (the human brain is around 80% fat).

The essential fatty acids sometimes called vitamin F, include linoleic, linolenic, arachidonic acid and many more. Some are used by the body to manufacture prostaglandins, which are localized tissue hormones that aid in the regulation of blood pressure and capillary resilience.

The human body uses fatty acids from food for building tissues and for specialized functions such as the production of prostaglandins. Essential fatty acids are one major group of fatty acids, which are polyunsaturated and include two major groups, omega-3 and omega-6 fatty acids. They are called “essential” because the body cannot make them but must obtain them from food.

The terms omega-3 and omega-6 actually designate two families of fatty acids; the former has the first double bond on the third carbon from the end of the fatty acid chain and the latter has the first double bond on the sixth carbon from the end of the fatty acid chain. The first fatty acid in the omega-6 family is called linoleic acid. It contains 18 carbons and has 2 double bonds.

The essential fatty acids are involved in respiration in all the cells, and are especially important to oxygen transport. They affect the health of the hair, skin and nails, and help break up cholesterol in the blood stream. They are not dangerous fat but are absolutely vital to health.

If you have read anything about low-carb dieting or the “Mediterranean Diet,” you know that the consumption of healthy oils which contain these fatty acids produces astounding health benefits in the human body. Heart disease and various cardiovascular disorders respond quickly and positively to EFAs. Brain function is improved, diabetes is brought under control, blood sugar is regulated, and cancer risk soon plummets.

Most of us think of these oils as coming from fish or seeds. That is why I was pleasantly surprised to learn that Bio-Algae Concentrates contain Omega 3, 6, 9, GLA and several more EFAs, including some yet undocumented or undiscovered. It is especially high in GLA, which is a critical nutrient that is universally lacking in the American diet.

Gamma Linolenic Acid in BAC Stimulates Master Hormones

Perhaps you have heard of gamma-linolenic acid (GLA) and docosahexaenoic acid (DHA). Human breast milk is high in GLA, probably due to the infant’s need for brain-building fats. However, since many infants never gained the important nutritional benefits of their mother’s milk, they have been GLA-deficient for their entire lives. The American diet of processed foods contains virtually no GLA and low-carb dieters are not getting any either, unless they specifically supplement it.

BAC has a high content of two types of spirulina algae that are rich in GLA and also provide alpha-linolenic acid (ALA), linoleic acid (LA), stearidonic acid (SDA), eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA) and arachidonic acid (AA).

GLA is the second fatty acid in the omega-6 family. It has 18 carbons and three double bonds (with the first double bond positioned six carbons from the end). The third fatty acid in the omega-6 family is dihomo-gamma-linolenic acid (DGLA) with 20 carbons and three double bonds. Next comes arachidonic acid (AA) with 20 carbons and 4 double bonds. The Series 1 prostaglandins are made out of DGLA and the Series 2 prostaglandins are made out of AA. Thus, GLA is an important transition product for the synthesis of these prostaglandins.

GLA as occurring in Bio-Algae Concentrates exhibits impressive immune stimulating and boosting properties. GLA is not only known for regulating blood sugar and providing important nutrients to the brain; it also exhibits immune-boosting properties. In fact, according to Dr. Hass, author of *Staying Healthy With Nutrition*, GLA has been shown to be effective for the following health conditions:

- Cardiovascular disease – anti-inflammatory effect; reducing platelet aggregation, thereby reducing clotting; lowering blood pressure by decreasing vessel tone; cholesterol-lowering effect.
- Arthritis (rheumatoid arthritis and other inflammatory disorders) – anti-inflammatory effect; immune support; correcting possible EFA and GLA deficiency.
- Skin disorders (eczema, acne, dermatitis) – anti-inflammatory effect; EFA functions; immune support.
- Allergies, asthma – anti-inflammatory effect; EFA function; immune support.
- Multiple sclerosis – nerve conduction; correction of possible EFA and GLA deficiency; immune support; decreased platelet aggregation; balancing prostaglandins.

Essentially, GLA helps support the immune system through a variety of mechanisms, and its benefits go far beyond mere immune system function. Many studies on the health effects of GLA have been conducted and they show stunning results for this beneficial nutrient. In the 1980's, GLA was studied more intensively than any other nutrient. About 200 clinical trials took place in university hospitals and medical schools throughout the world. One of these researchers, Dr. Horrobin, states that his studies have led him to believe that "a lack of essential fatty acids could turn out to be one of the most common defects in human biochemistry and a significant factor in many diseases". Essential fatty acids are especially important in the function of the nervous, muscular, endocrine and immune systems, for when people lack the proper balance of EFAs, these systems have been shown to be adversely affected.

GLA has proven to be effective in the treatment of many serious diseases. Double-blind, placebo-controlled studies for atopic eczema demonstrate that GLA improves skin conditions, relieves itching, and reduces the amount of steroid medication required. In a large, placebo-controlled trial at the University of Bristol in England, both adults and children showed substantial improvements. In clinical trials for diabetes, GLA has reversed neurological damage and lowered plasma cholesterol and triglycerides. GLA has also been shown to be beneficial in the treatment of Sjogren's Syndrome.

– Innocent Casualties: The FDA's War Against Humanity by Elaine Feuer

It is important to point out, however, that many of the studies conducted on GLA used evening primrose oil as their source for this essential fatty acid. GLA from evening primrose oil is an isolated nutrient in a high concentration. Since Bio-Algae Concentrates is a whole food containing a full spectrum of proteins, minerals, vitamins, fatty acids, and other nutrients, its GLA occurring with other EFAs and co-dependent nutrients will be significantly more nutritionally functional and beneficial to overall health.

The richest whole-food sources of GLA are mother's milk, spirulina micro-algae, and the seeds of borage, black currant, and evening primrose. GLA is important for growth and development, and is found most abundantly in mother's milk; spirulina (as contained in BAC) is the next-highest whole-food source. We often recommend it for people who were never breast-fed in order to foster the hormonal and mental development that may never have occurred because of lack of proper nutrition in infancy. (A standard 10 gram dosage of spirulina contains a good daily source of GLA.)

– On spirulina in Healing With Whole Foods by Paul Pitchford

Foods high in saturated fats, typical of the American diet, may block the beneficial work of essential fatty acids in the human body, leading to disease.

Gamma linolenic acid (GLA), an essential fatty acid, is a precursor for the body's prostaglandins: master hormones that control many body functions. The prostaglandin PGE1 is involved in many tasks including regulation of blood pressure, cholesterol synthesis, inflammation and cell proliferation. PGE1 is usually formed from dietary linolenic acid, and the GLA progresses to PGE1.1 Dietary saturated fats and alcohol and other factors may inhibit this process, resulting in GLA deficiency and suppressed PGE1 formation.²

Numerous studies have shown that GLA deficiency may figure in degenerative diseases and other health problems. Clinical studies show dietary intake of GLA can help arthritis,³ heart disease⁴, obesity⁵ and zinc deficiency.⁶ Alcoholism, manic-depression, aging symptoms and schizophrenia also have been ascribed partially to GLA deficiency.⁷ A source of dietary GLA may help conditions of heart disease, premenstrual stress, obesity, arthritis and alcoholism.⁸ In Spain, the GLA in spirulina and evening primrose oil is prescribed for treatment of various chronic health problems.⁹

The few known sources of GLA include the plant seed oils of evening primrose plant, black currant and borage seeds, fungal oils, certain algae and human milk.

But you can also get it from BAC every day of your life! A few grams of BAC contain at least 100mg of EFA. This is well documented. 10,11,12. That is about 5% essential fatty acids, 20% being GLA.

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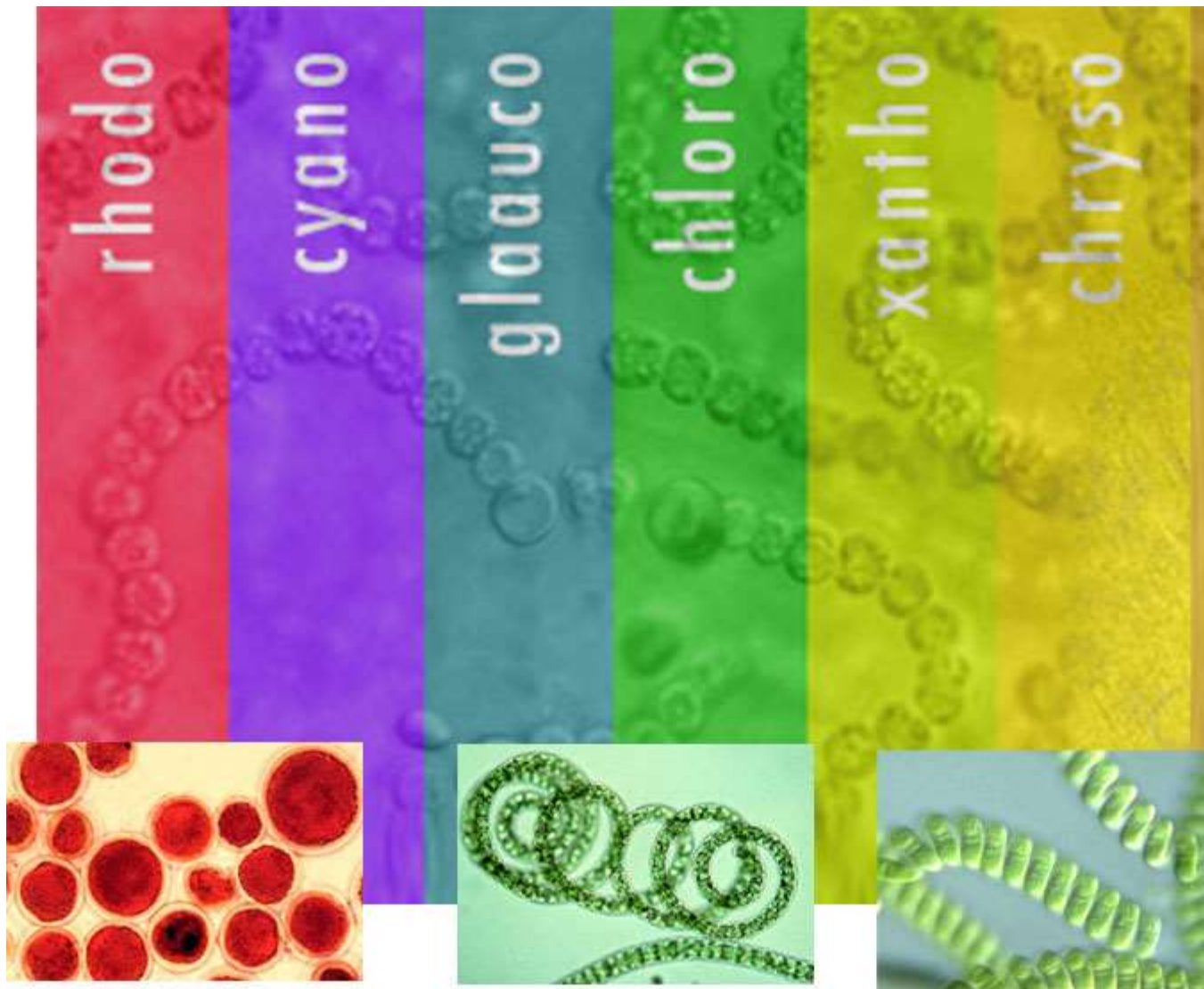
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The Photosynthetic Life-Giving Pigment

Content of BAC

Pigments are colorful chemical compounds that reflect only certain wavelengths of visible light. This makes them appear “colorful”. Flowers, coral and even animal and human skin contain pigments which give them their colors. More important than their reflection of light is the ability of pigments to absorb certain wavelengths.

Because they interact with light to absorb only certain wavelengths, pigments are useful to plants and other autotrophs – organisms which make their own food using photosynthesis. In plants, algae and cyanobacteria (blue-green algae), pigments are the means by which the energy of sunlight is captured for photosynthesis. However, since each pigment reacts with only a narrow range of the spectrum, there is usually a need to produce several kinds of pigments, each of a different color, to capture more of the sun’s energy.



Haematococcus Spirulina Pacifica Spirulina Platensis Dunaliella
 The spectrum of colors in BAC's algae offers energy and protection

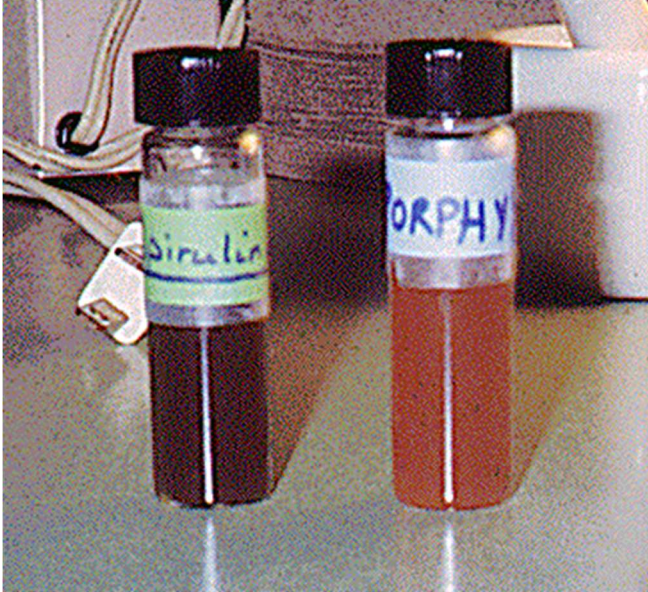
There are three principle classes of pigments.

Chlorophyll is the most important chelate in nature. It is capable of channeling the energy of sunlight into chemical energy through the process of photosynthesis. Chlorophyll is a greenish pigment that contains a porphyrin ring. This is a stable ring-shaped molecule around which electrons are free to migrate. Because the electrons move freely, the ring has the potential to gain or lose electrons easily, and thus the potential to provide energized electrons to other molecules. This is the fundamental process by which chlorophyll "captures" the energy of sunlight.

Carotenoids are usually red, orange, or yellow pigments, and include the familiar compound carotene, which gives carrots their orange color. These compounds are composed of two small six-carbon rings connected by a "chain" of carbon atoms. As a

result, they do not dissolve in water and must be attached to membranes within the cell. Carotenoids cannot transfer sunlight energy directly to the photosynthetic pathway, but must pass their absorbed energy to chlorophyll. For this reason, they are called accessory pigments. One very visible accessory pigment is fucoxanthin: the brown pigment that colors kelps and other brown algae as well as the diatoms.

Phycobilins are water-soluble pigments and are therefore found in the cytoplasm or in the stroma of the chloroplast. They occur only in cyanobacteria (blue-green algae) and rhodophyta (red algae).



Phycobilins in BAC

The picture above shows the two classes of phycobilins which may be extracted from these “algae”. The vial on the left contains the bluish pigment phycocyanin, which gives the cyanobacteria (blue-green algae) their name. The vial on the right contains the reddish pigment phycoerythrin, which gives the red algae their common name. BAC contain both blue-green algae and red algae to take advantage of the extraordinary benefits of their pigments.

Phycobilins are useful to the organisms that use them for soaking up light energy. Both phycocyanin and phycoerythrin fluoresce at a particular wavelength. That is, when they are exposed to strong light, they absorb the light energy, and release it by emitting light of a very narrow range of wavelengths. These pigments chemically bond to antibodies and as such, have been found to prevent tumorigenesis.

Pigments in BAC

BAC is a whole food. The selection of algae in BAC make up for an extraordinary offering of pigments and their resulting health benefits.

“The thousands of vitamins, minerals and phytochemicals in whole foods act synergistically together to create a more powerful effect than the sum of their parts, producing a result which cannot be recreated by supplements.”

– Jeff Prince, Vice President for Education at the American Institute for Cancer

The green algae of BAC are rich in phycobilins and are one of the greatest sources of chlorophyll that contain high levels of magnesium for photosynthesis and calcium spirulan, well-known for its antibacterial, anti-fungal and anti-inflammatory benefits.

BAC's red algae, Haematococcus and Dunaliella, contain high levels of nature's special pigments: carotenoids and phycobilins. BAC contains astaxanthin, beta-carotene, alpha-carotene, lutein, lycopene, Zeaxanthin, quercetin, b cryptoxanthin and many other pigments that offer a powerful immunity and toxin shield against continuous pollution, toxins and stress. Haematococcus in BAC is the greatest source of astaxanthin on Earth. astaxanthin is a red pigment clinically proven to have hundreds of times more anti-oxidative power than vitamin E and vitamin C, and dozens of times more than that of beta carotene.

Chlorophyll in BAC – The Shepherd of Light

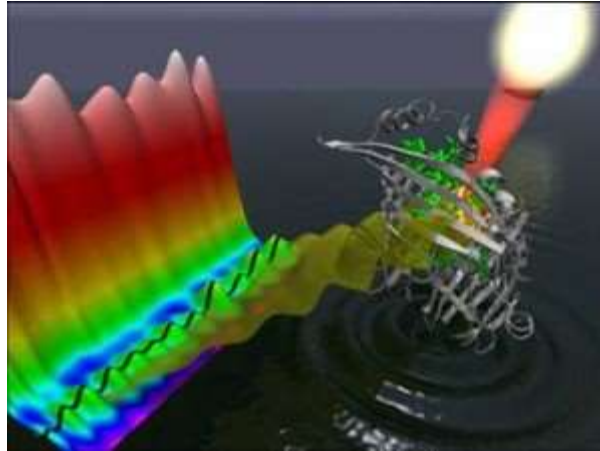
Because of its high chlorophyll content (higher than most foods), BAC is useful for treating health conditions that could benefit from the energizing, purification, renewal, and anti-inflammatory properties of chlorophyll. For example, control of energy-draining viruses and fungi such as candida-overgrowth, Epstein-Barr virus, chronic fatigue immune deficiency syndrome (CFIDS) and AIDS, is enhanced by the immune-enhancing and antiviral qualities of chlorophyll.

Many important natural substances are chelates. Chelates are composed of a central metal ion bonded to a large organic molecule comprised of carbon, hydrogen and other elements such as oxygen and nitrogen. One such chelate is chlorophyll: the green pigment of algae and plants. In chlorophyll the central ion is magnesium and the large organic molecule is a porphyrin. The porphyrin contains four nitrogen atoms that form bonds to magnesium in a square planar arrangement.

There are several kinds of chlorophyll, the most important being chlorophyll “a”. This molecule is what makes photosynthesis possible. It passes its energized electrons on to molecules that will manufacture sugars. All plants, algae, and cyanobacteria (blue-green algae) that photosynthesize contain chlorophyll “a”. A second kind of chlorophyll is chlorophyll “b”, which occurs only in green algae and plants. Green algae are the most diverse group of algae, with more than 7000 species growing in a variety of habitats.

BAC's Chlorophyll for the Metabolism of Light / Energy

Energy is a vital force that we need for life. By liberating the sun's forces from carbohydrates and lipids, we can get energy from light.



Through photosynthesis certain microalgae like cyanobacteria are able to transfer sunlight energy to molecular reaction centers for conversion into chemical energy with near 100% efficiency.

Energy from light is received somewhat directly as sunlight, but it is received in much greater amounts from our food. The chemical energy stored by photosynthesis in carbohydrates drives biochemical reactions in nearly all living organisms. Releasing the forces of light from food requires a balanced disassembly of starches, sugars, and fats, which are the bearers of light.

Chlorophyll is the shepherd of light energy. In the central atom of the chlorophyll molecule is magnesium, which is where the sun's light is gathered for releasing the sugars, starches, and fats from which we will eventually get our energy. Magnesium is omnipresent in the Krebs (citric acid) cycle: the catabolic steps in which we disassemble sugars and fats.

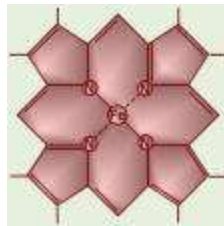
In the Krebs cycle, which is a photosynthetic reaction, carbon dioxide is reduced by water, meaning that electrons are transferred from water to carbon dioxide. Chlorophyll assists in this transfer. When chlorophyll absorbs light energy, an electron in chlorophyll is excited from a lower energy state to a higher energy state. In this higher energy state, this electron is more readily transferred to another molecule. This starts a chain of electron-transfer steps, which ends with an electron transferred to carbon dioxide. Meanwhile, the chlorophyll that gave up an electron can accept an electron from another molecule. This is the end of a process that started with the removal of an electron from water.

Thus, chlorophyll is at the center of the photosynthetic oxidation-reduction reaction between carbon dioxide and water.

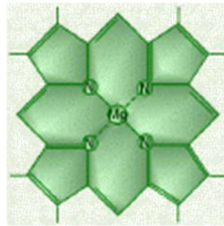
Chlorophyll and Blood Regeneration

Chlorophyll is sometimes called “green blood” because of its similarity to the hemoglobin molecule found in human blood cells. In fact, both have an almost identical molecular structure called pyrrole rings, and both substances are chemically known as porphyrin pigments.

The difference between them is that chlorophyll contains a magnesium ion at its core, while hemoglobin contains an iron molecule. Magnesium imparts a green color to the chlorophyll molecule and is involved in synthesis of other materials, while iron gives hemoglobin a red coloration and changes the function of the porphyrin molecule to respiration and breakdown of materials. But perhaps the most interesting connection between green foods and blood is the similarity in the structures of the two colored pigments heme and chlorophyll.



Heme Molecule in Blood



Chlorophyll Molecule

There are many reasons why cereal grass and other dark green plants can be considered “blood-building” foods. The vitamins and minerals in cereal grass are essential to the synthesis and function of the components of healthy blood.

The biological relationship between these two molecules, though studied for over 60 years, is still not completely clear. It does appear, however, that small amounts of the digestive products of chlorophyll may stimulate the synthesis of either heme or globin or both in animals and humans.

What’s so good about the chlorophyll in BAC?

The algae contained in BAC are the richest source of chlorophyll on Earth. BAC’s most visible pigments are chlorophyll. There is nothing more cleansing and detoxifying than chlorophyll and people who follow Western diets (high in processed foods and animal foods) are in desperate need of cleansing and detoxifying.

Chlorophyll releases ions when struck by the energy of sunlight. These free ions proceed to stimulate the biochemical reactions that form proteins, vitamins and sugars.

It is believed that if chlorophyll is ingested with sufficient iron, its magnesium can be displaced to yield a hemoglobin molecule. Experiments in Japan and Russia have demonstrated that algae have a marked positive effect on leukemia and anemia, possibly due to the conversion of chlorophyll into hemoglobin. Of course, the high nutrient density of spirulina alone, especially its blood-building vitamin B12, folic acid and amino acids, is also useful in treating cases of anemia.

Chlorophyll has other positive benefits for the body. It increases peristaltic action and thus relieves constipation and also normalizes the secretion of digestive acids. It also soothes inflammation and reduces excess pepsin secretion associated with gastric ulcers.

During World War II, the drying action of chlorophyll and its antiseptic qualities made it a common first-aid measure to prevent festering of wounds. In addition, chlorophyll soothes swelling and promotes granulation, the process that regenerates new tissue over injuries.

Chlorophyll appears to promote regeneration of damaged liver cells, and also increases circulation to all the organs by dilating blood vessels. In the heart, chlorophyll aids in transmission of nerve impulses that control contraction. The heart rate is slowed, yet each contraction is increased in power, thus improving the overall efficiency of cardiac work.

Another interesting point is that chlorophyll is known to help remove heavy metals from your body that have accumulated due to the ingestion of contaminated food products. Certain types of seafood are especially known to contain dangerous levels of heavy metals like mercury, but these contaminants are also found in animal products and even non-organic crops. If you have been eating refined foods, you undoubtedly have mercury, cadmium, arsenic, lead, PCBs and other contaminants in your body. The chlorophyll in BAC actually helps remove those heavy metals from your body, which can have seemingly miraculous benefits to your health.

Another common source for contaminants is mercury fillings used by dentists. They call them “silver fillings,” since they don’t want to openly admit they are still putting mercury — one of the most potent nerve toxins on the planet — into the mouths of patients. These mercury fillings emit a steady stream of mercury vapor that gets absorbed into your body. Frequently, small bits of these mercury fillings crack, break off, and are swallowed with your food. In this way, nearly all dental patients in America and other “civilized” countries are subjected to routine mercury poisoning at the hands of their dentists.

BAC can help protect you by escorting the mercury out of your body before it can do damage. If you take BAC before and after receiving dental work, you will help protect yourself from the toxic effects of mercury fillings. This is especially important if you decide to have your mercury fillings removed, as more and more people are doing. The very process of drilling them out results in a tidal wave of mercury exposure in your body. Consuming BAC offers considerable protection against the mercury bits you inevitably swallow during this procedure.

For example, many people undergo full-scale mercury filling removal, which requires several sessions in the chair. For this type of procedure, we recommend using more BAC before and after each session. As a result, you will be much more protected from the ill effects of mercury removal.

Chlorophyll does much more than protect you from mercury, however. It is also a general detoxifier that supports liver function so that your body can do a better job of eliminating toxins from your system.

The Incredible Arsenal of Antioxidants in BAC

While the protein, mineral and vitamin value of Bio-Algae Concentrates is impressive, these minute organisms are also rich in pigments that are bio-chemically important to life. Without pigments, organisms could not synthesize many of the enzymes necessary for balancing metabolism.

Bio-Algae Concentrates contain a high level of enzymatic pigments and mixed carotenoids. In recent years, these pigments and carotenoids have received a tremendous amount of attention as potential anti-cancer and anti-aging compounds. Carotenoids are powerful antioxidants, protecting the cells of the body from damage caused by free radicals. Carotenoids, and specifically beta-carotene and alpha-carotene, are also believed to enhance the function of the immune system.

Carotenoids represent one of the most widespread groups of naturally occurring pigments. These compounds are largely responsible for the red, yellow, and orange color of fruits and vegetables, and are also found in many dark green vegetables. The most abundant carotenoids in the North American diet are beta-carotene, alpha-carotene, gamma-carotene, lycopene, lutein, beta-cryptoxanthin, Zeaxanthin, and Astaxanthin.



True vitamin A is found in the pre-formed state only in animal sources, such as liver. This is the

form of vitamin A sometimes associated with toxicity and overdose, since it is fat-soluble and is not readily excreted from the body.

Some substances in plant foods are not true vitamins, but provide the precursors from which the body can then synthesize the appropriate vitamins. The carotenoid compounds of Bio-Algae Concentrates are of this nature, since they are used to produce vitamin A.

In contrast to animal source vitamin A, the carotenoid complexes found in Bio-Algae Concentrates are converted to vitamin A only as it is needed, thus minimizing the dangers of toxicity. In nature, algae are a primary source of vitamin A precursors – it is from algae carotenoids that fish livers derive and concentrate vitamin A.

Until late in the 20th Century, the functions of these carotenoids were discussed only in terms of their potential vitamin A activity. But since then it has been discovered that certain members of the carotenoid family, approximately 50 carotenoids of the known 600, are called “pro vitamin A” compounds because the body can convert them into retinol, an active form of vitamin A.

Bio-Algae Concentrates contain several of these “pro vitamin A” compounds and especially some compounds like alpha-carotene known as “pro-pro vitamin A” for their capacity to not only traverse the cell membrane but to span across the cell membrane.

Bio-Algae Concentrates contain many of these yellow/orange pigments from which pro and pro-pro-vitamin A can be made :

- Alpha-carotene
- Beta-carotene
- Phycocyanin
- Xanthophyll
- Cryptoxanthin
- Echinenone
- Zeaxanthin
- Lutein
- Lycopene
- Astaxanthin

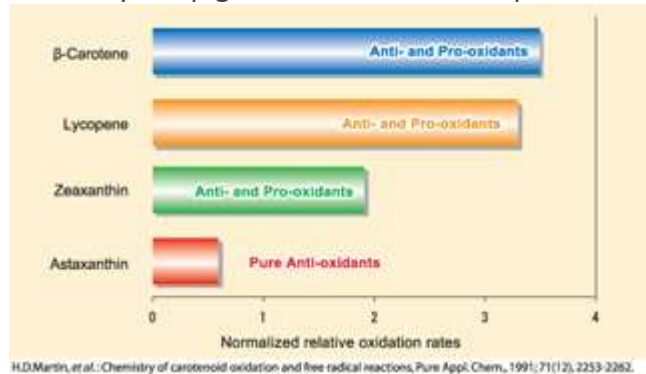
Etc.

These and several lesser pigments such as phycoerythrin, tetrapyrrole, phytonadione and the carotenoids are not just the “color” of living organisms, but are used to carry on metabolic processes throughout the body. Without them, enzymatic reactions would be reduced until cellular disintegration occurred. To illustrate my point, I will discuss a few of these lesser pigments in the next pages.

BAC Contains High Levels of Astaxanthin, the King of the Carotenoids

Astaxanthin is a pigment of the carotenoid complex found in the microalgae *Haematococcus pluvialis* present in Bio-Algae Concentrates. It is an oxygenated pigment called a xanthophyll. Its unique molecular structure gives it a superior antioxidant capacity.

I will describe this extraordinary red pigment to illustrate the power of Bio-Algae Concentrates.



Astaxanthin is most effective against Lipo-peroxidation in membrane models

Astaxanthin is 20 to 40 times more effective as an antioxidant than beta-carotene, up to 500 times more effective in inhibiting lipid peroxidation than Vitamin C, up to 1000 times more effective in inhibiting lipid peroxidation than Vitamin E, has greater anti-inflammatory capability than Vitamin E, has almost 4 times the antioxidant capacity of lutein, provides superior protection against UVA and UVB light-induced oxidative stress, is more stable in scavenging and quenching than beta-carotene, canthaxanthin and Zeaxanthin, is highly potent in enhancing T1 and T2 helper cells and IgM and IgG (secondary immunity) production, is more effective than

lycopene and lutein in enhancing liver microsome detoxification activity (enzymes that metabolize drugs), enhances the actions of Vitamins C and E in the body, and enhances the release of retinol (Vitamin A) from the liver when needed.

Those benefits described so far warrant astaxanthin's nick name "the King of Carotenoids", but there is more, read on.

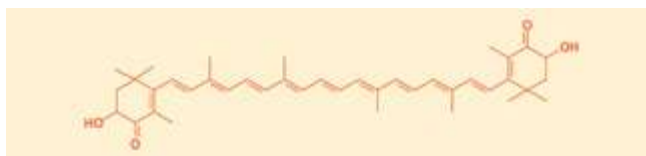
There is a substantial body of literature including in vitro studies, preclinical studies and several human clinical trials that show that astaxanthin, with its unique molecular structure and resulting potent antioxidant activity, may be an effective therapeutic modality for a variety of conditions, including cardiovascular, immune, anti-inflammatory, and neurodegenerative disorders.

Independent of the Soviet studies, there have been numerous preclinical in vivo and in vitro studies and several human clinical trials to evaluate the efficacy of astaxanthin.

A double-blind, placebo-controlled study demonstrated that astaxanthin was found to significantly increase strength and endurance. Another clinical study shows that astaxanthin alleviates symptoms in patients with *Helicobacter pylori* (pre-ulcer indigestion). A third clinical study demonstrated bioavailability in humans. Additional human clinical studies are in progress.

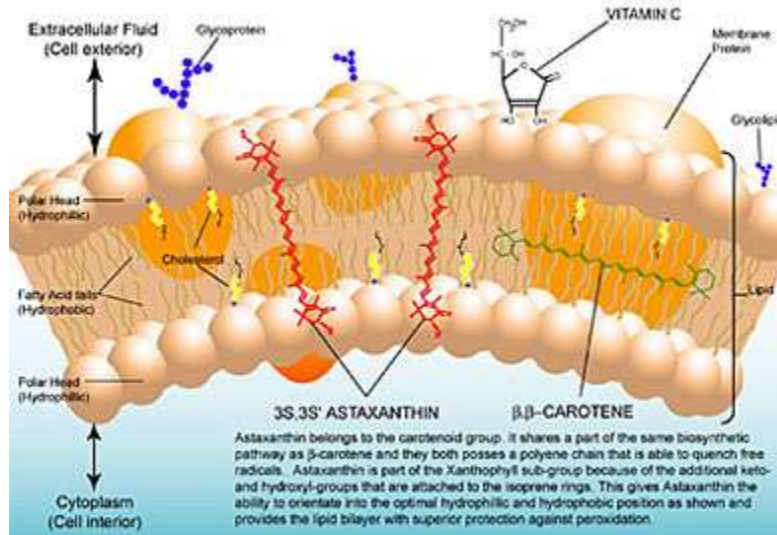
Astaxanthin has been shown to inhibit lipid peroxidation at the cell level, thus protecting the cell membrane and the mitochondrial membrane within the cell. It is able to cross the blood-brain barrier which makes it available to the eye, brain and central nervous system to alleviate oxidative stress that contributes to ocular and neurodegenerative diseases such as glaucoma and Alzheimer's. Astaxanthin has also been shown to provide significantly more antioxidant capacity than other carotenoids and antioxidants, such as beta-carotene and Vitamin E.

Astaxanthin entraps free radicals by adding them to its long, double-bonded chain.



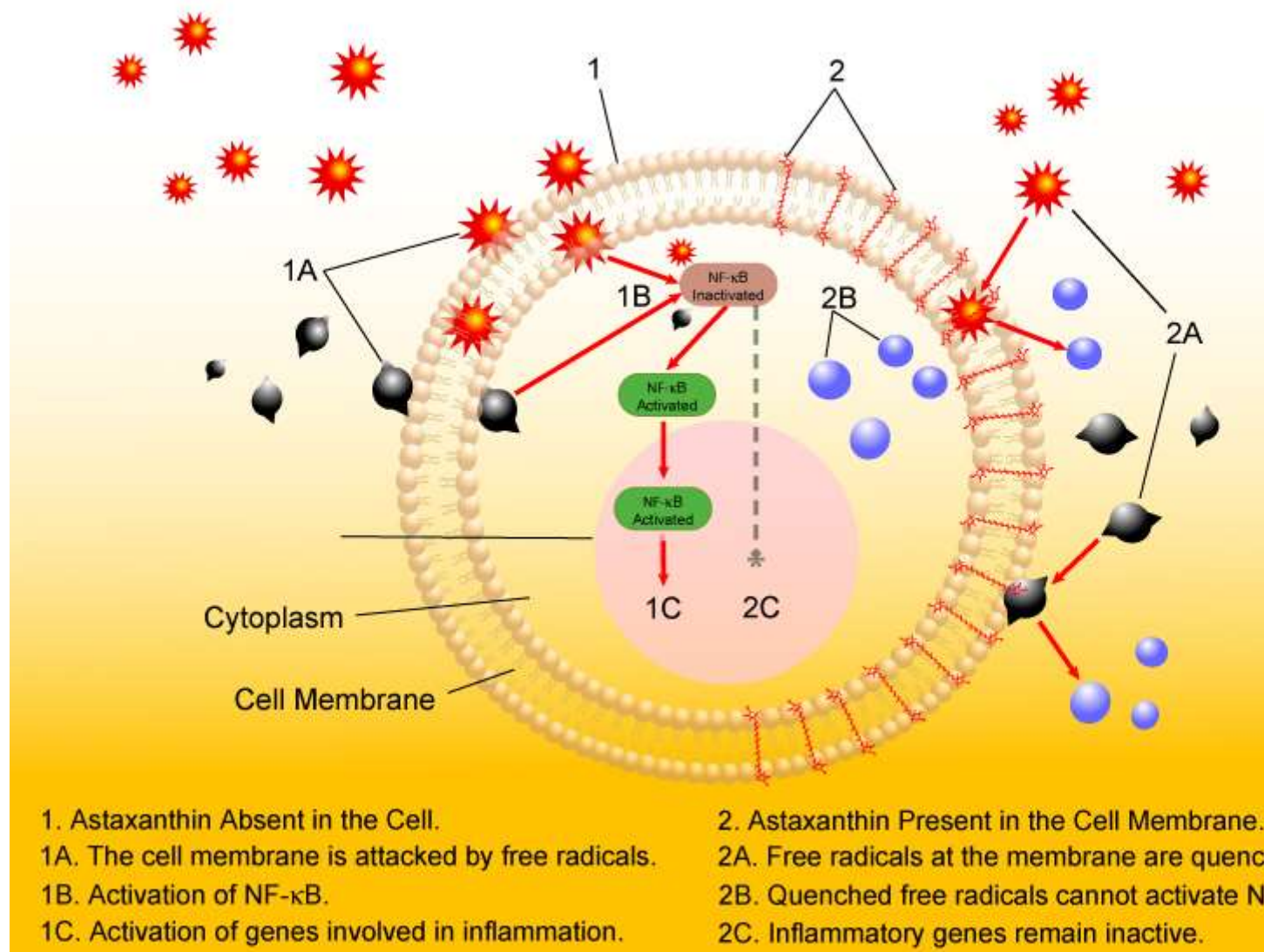
Chemical Structure of Astaxanthin (free form)

Rather than donating an electron, astaxanthin stabilizes the cell membrane like a bridge, in that its polar end groups span the cell membrane thus increasing its rigidity and mechanical strength. This allows astaxanthin to neutralize singlet and triplet oxygen generated by UVA and UVB radiation and other sources, to bind to lipoprotein, an efficient transport vehicle, making it more bioavailable, and to increase immune system function, including heightened production of antibody-secreting cells and Interleukin 2 and suppression of Interferon-gamma.



Astaxanthin spans the cell membrane bilayer

Newer studies have shown that astaxanthin inhibits reactive oxygen species that cause inflammation, enhances the antioxidant actions of Vitamin E and Vitamin C, and encourages the release of Vitamin A from the liver when needed.



Astaxanthin has 500-1000 times the antioxidant capacity of Vitamin E and 40 times the antioxidant capacity of beta-carotene. Many laboratory studies also indicate astaxanthin works better than lutein, lycopen and tocotrienols.

Following ingestion, astaxanthin is absorbed by the duodenal mucosa and transported to the liver where it binds with a lipoprotein for transport through the body and to the cell site. Because it is oxygenated, a xanthophyll has greater antioxidant capacity than many other carotenoids.

Within the xanthophyll's, the astaxanthin molecule contains the longest conjugated, double-bond polyene chain along with both hydroxy and carbonyl groups at each end. This configuration supports the greatest antioxidant capacity, peroxy radical chain-breaking abilities, the incorporation of free radicals into its polyene chain thereby more effectively trapping them, and the enhancement of Vitamin C as an antioxidant.

While other carotenoids and antioxidants may perform one or two of these functions, astaxanthin does them all and, in most cases, does them better. In addition to entrapping free radicals, astaxanthin also de-charges singlet and triplet oxygen and inhibits reactive oxygen, giving its anti-inflammatory properties.

ANTIOXIDANT POTENCY

With its unique chemical structure as a carotenoid with superior positioning and orientation in the cell membrane, astaxanthin has been shown to be:

- 550 times stronger than Vitamin E (α -tocopherol)
- 40 times stronger than Beta-Carotene
- 17 times more potent than Grape Seed Extracts
- Potent antiperoxidative membrane activity
- Inhibits NF- κ B inflammatory gene expression
- Suppresses DNA damage (8-OHdG)

COMPARISON TO OTHER “Well-Known” ANTIOXIDANTS

(Natural Vitamin E, Vitamin A, Vitamin C, Beta-Carotene, Lycopene, Lutein)

- Excellent Prevention of Lipid Peroxidation
- Strongest Free Radical Scavenger
- Immune Response Enhancer
- Effective Anti-Inflammatory

ULTIMATE SYNERGISTIC PROTECTION

- Astaxanthin when combined with Lycopene shows significantly stronger oxidation resistance than when lycopene, lutein, or astaxanthin are taken alone
- Various increases in antioxidant power are shown in combination with lipoic acid, resveratrol, ergothioneine, ascorbic acid, ginseng, garlic, ginkgo biloba
- Tests results show better antioxidant protection in combination with tocotrienols

ULTIMATE SAFETY: CAROTENOIDS & PRO-OXIDATION

Astaxanthin has been classified as a "Pure Anti-oxidant" unlike certain other carotenoids such as β -carotene, lutein and lycopene that may show "Pro-oxidative" characteristics under certain conditions. This causes carotenoids to become a free radical that is capable of attacking the cells and constituents. Air pollution, exposure to ultraviolet light, radiation and smoking are also examples of pro-oxidants.

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MECHANISM OF ACTION

- Spans the cell membrane bilayer (fat/ fat) because of its polar end groups near the fat/water surface where free radical attacks first occur
- Attaches to a lipoprotein to travel in the bloodstream for improved bioavailability and enabling it to cross the blood- brain barrier (lipid transport mediated)
- Inhibits the destruction of the fatty acids and proteins in cell membranes and mitochondrial membranes in cells caused by peroxidation of fats
- Stabilizes free radicals by adding them to its structure (long double- bond chain) rather than donating an atom or electron
- More resistant to the chain reaction that can occur when a fatty acid is oxidized, thus allowing it to scavenge or quench longer than an antioxidant that cannot stop this chain reaction
- Neutralizes singlet and triplet oxygen by de-charging them
- Traps more types of free radicals (alkoxyl, hydroxyl, peroxy, singlet and triplet oxygen) than any other antioxidant
- Spans the cell membrane bilayer with its polar end groups increasing cell membrane flexibility and mechanical strength (improved membrane function)
- Anti-inflammatory capabilities: Inhibits reactive oxygen species that cause inflammation to the cells
- Transports alkoxyl radicals along its long chain to the fat/water interface, where a hydrophilic antioxidant such as Vitamin C can scavenge them
- Enhances gap-junctional communication and xenobiotic metabolizing enzyme activity
- Promotes secondary immune responses against pathogens and transformed cells
- Augments tumor immunity

ASTAXANTHIN HAS BEEN SHOWN TO:

- Increase strength and endurance (2.8 times greater increase over baseline versus placebo in human study)*
- Alleviate symptoms in patients with H. pylori (pre-ulcer indigestion)*

- Protect cell and mitochondrial membranes from oxidative damage, thus protecting the cell from oxidative damage**
- Boost the immune system by increasing the number of antibody-producing cells**
- Prevent the initiation of cancer cells in the tongue, oral cavity, large bowel, bladder, uterus, and breasts**
- Inhibit lipid peroxidation that causes plaque formation, thus reducing risk of cardiovascular disease**
- Alleviate oxidative stress, thus more easily crossing the blood brain barrier.**
- Assist in the support of neurodegenerative conditions such as AMD, Alzheimer's, Parkinson's, ALS**
- Protect the eyes and skin from UVA and UVB damage by quenching singlet and triplet oxygen**
- Reduce the number of new and abnormal cells in the liver**

* Confirmed in human clinical study

** Confirmed in preclinical studies

Preclinical studies demonstrate that astaxanthin is safe, with no known side effects: On August 11, 1987, Roche Vitamins and Fine Chemicals (a division of Hoffman- La Roche, Inc.) submitted a petition to FDA concerning approval of synthetic astaxanthin as a feed additive for pigmentation in Salmonid fish. These studies were done to evaluate toxicity, mutagenicity, teratology and embryo toxicity, reproductive performance and tolerance.

- The studies were performed on rats, rabbits and dogs
- No observable anomalies in any study could be attributed to astaxanthin dose.
- It was concluded that the doses of astaxanthin tested had no effect on toxicity, mutagenicity, teratology, embryo toxicity, reproductive performance or tolerance.
- The entire petition is on file at La Haye Laboratories, Inc., consisting of seven volumes.
- It is also concluded that a natural astaxanthin should be safer than a synthetic version.

Phycocyanin in BAC Enhances the Immune System

One unusual phytonutrient in blue-green algae such as spirulina is the natural blue protein pigment called phycocyanin. This is the pigment that gives blue-green algae its blue color. It may be found in concentrations as high as 7 percent in certain blue-green algae, as compared to 1 percent chlorophyll content most commonly found. Phycocyanin is related to the human pigment bilirubin, which is important to healthy liver function and digestion of amino acids.

Part of the global effort to identify natural substances with an immune system boosting or anti-cancer effect focuses on algae because of its important quantity of phycocyanin.

In one Japanese study, phycocyanin was given orally to mice with liver cancer. The survival rate of the treatment group was significantly higher than the control group not given phycocyanin. After five weeks, 90% of the phycocyanin group survived, but only 25% of the control group survived. After eight weeks, 25% of the phycocyanin group still survived, yet none of the control group was alive. This suggests that eating phycocyanin may increase the survival rate of cancer stricken organisms. In another study, after two weeks of being administered phycocyanin, the white blood cell count (lymphocyte activity) of the phycocyanin group was higher than the control group and higher than or equal to a normal group without cancer. This suggests phycocyanin raises lymphocyte activity.¹

The lymph system's general function is to maintain the health of other body organs and protect against cancer, ulcers, bleeding piles and other diseases. These results suggest phycocyanin acts not by a limited attack on local cancer, but by strengthening the body's resistance through the lymph system. Phycocyanin may be active in preventing a host of degenerative organ diseases by increasing immunity.

Chinese scientists documented that phycocyanin stimulates hematopoiesis (creation of blood), emulating the hormone erythropoetin (EPO). EPO is produced by healthy kidneys and regulates bone marrow stem cell production of red blood cells. They claimed that phycocyanin regulates white blood cell production, even when bone marrow stem cells are damaged by toxic chemicals or radiation.²

The algae present in Bio-Algae Concentrates have a high and naturally occurring phycocyanin content. This means that with a regular intake of BAC, you would not need to consume an isolated supplement to get this essential and rare phytonutrient.

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Porphyrin in BAC Supports Healthy Red Blood Cells

Porphyrin as found in BAC, is a member of a class of water-soluble, nitrogenous biological pigments (biochromes), derivatives of which include the hemoproteins (porphyrins combined with metals and protein). Examples of hemoproteins are the green, photosynthetic chlorophylls of higher plants; the hemoglobins in the blood of many animals; the cytochromes, enzymes that occur in minute quantities in most cells and are involved in oxidative processes; and catalase, also a widely distributed enzyme that accelerates the breakdown of hydrogen peroxide.

Porphyrins have complex cyclic structures. All porphyrin compounds absorb light intensely at or close to 410 nanometers. Structurally, porphyrin consists of four pyrrole rings (five-membered closed structures containing one nitrogen and four carbon atoms) linked to each other by methane groups ($-CH=$). The iron atom is kept in the center of the porphyrin ring by interaction with the four nitrogen atoms. The iron atom can combine with two other substituents; in oxyhemoglobin, one substituent is a histidine of the protein carrier, and the other is an oxygen molecule. In some heme proteins, the protein is also bound covalently to the side chains of porphyrin.

Green chromoproteins called biliproteins are found in many insects, such as grasshoppers, and also in the eggshells of many birds. The biliproteins are derived from the bile pigment biliverdin, which in turn is formed from porphyrin; biliverdin contains four pyrrole rings and three of the four methine groups of porphyrin. Large amounts of biliproteins, the molecular weights of which are about 270,000, have been found in red and blue-green algae; the red protein is called phycoerythrin, the blue one phycocyanobilin. Phycocyanobilin consists of eight subunits with a molecular weight of 28,000 each; about 89 percent of the molecule is protein with a large amount of carbohydrate.

Evidence indicates that, in various animals, certain porphyrins may be involved in activating hormones from the pituitary gland of the brain, including those concerned with the period of sexual heat in certain female animals. Porphyrins in the integument (skin) of some mollusks and cnidarians are regarded as being photosensitive receptors of light.

Related to this structure is the polypyrrole molecule of B12 also found in BAC, which is essential to the formation of healthy red blood cells.

The Fats, Sugars, Salts and Calories of BAC

It is probably hard to imagine that a concentrated source of nutrients such as Bio-Algae Concentrates is not also loaded with fats, starches and calories. Amazingly, its lipid content is very low, and most of it is in the form of essential fatty acids that promote cholesterol normalization.

Bio-Algae Concentrates contain very little starch or sugar. What carbohydrates it supplies, roughly 5 to 10 percent, are primarily in the form of rhamnose, glycogen and other polysaccharides. These polysaccharides are easily absorbed by human cells with minimal intervention by insulin. Hence, these sugars provide speedy energy without taxing the pancreas or precipitating hypoglycemia. In fact, sugar levels are frequently better after consuming Bio-Algae Concentrates.

From a caloric standpoint, Bio-Algae Concentrates are extremely economical. There are only approximately 2 to 3 calories per gram of protein obtained from Bio-Algae Concentrates. You would have to consume about 65 calories of beef to obtain the same amount of protein.

Differences Between BAC and Other Algae

Bio-Algae Concentrates are made up of four distinct types of algae, each selected for its unique nutritional profile. Although it is possible to find each algae in its individual form, BAC is a specially crafted and synergistic blend of the four. I strongly recommend using Bio-Algae Concentrates as a whole and not eating its algae separately.

Over 20 years and more than 20,000 person years of research have been devoted to achieving the characteristics that make Bio-Algae Concentrates a nearly “magic” food: Completeness, Balance and Synergy.

So here are some of the differences between Bio-Algae Concentrates and other algae products:

Completeness:

- Over 5,000 known nutrients, thousands more than in any single algae.
- A complete amino acid makeup: all known essential plus 12 non-essential amino acids.

- All known macro and micro minerals and all known essential and non-essential minerals. Additionally, certain rare trace elements that are only available in certain volcanic regions of the world.
- Over 4,000 algae enzymes. The largest amount known in any combination of natural whole food. Spirulina taken alone, for example, may contain only 2,000.
- The largest amount of naturally occurring mixed carotenoids: the solution to preventing cancer as recommended by the American Cancer Society.

And many more not listed here...

Balance:

- For a food to be bioavailable there are bio-chemical co-dependency requirements. Why do you think that you are told to take certain vitamins with a meal? It took the research team several years to discover that spirulina alone was not fully bioavailable. This is because by itself, spirulina is too low in zinc and vitamin C to be able to fully deliver its trace elements and other nutrients.
- Bio-Algae Concentrates contains high level of phytonutrients! Taken alone, spirulina (like chlorella and blue-green algae) is too low in antioxidant factor (ORAC) and too large in protein content (65%) to make a truly perfect and “magic” food. These algae contain too much “green pigment” nutrients and not enough of the “red pigment” phytonutrients like beta carotene, alpha carotene, lycopene, lutein, etc.

Synergy:

The interaction of two or more agents so that their combined effect is greater than the sum of their individual effects. For example: the effect of lycopene in combination with vitamin E is greater than that of lycopene alone plus that of vitamin E alone.

- The previous characteristics of completeness, availability of required co-dependent nutrients, balance, timing, etc. all contribute to Optimum Synergy in Bio-Algae Concentrates.
- When consumed and subjected to the enzymatic breakdown process of digestion, 5,000 bioavailable nutrients found in Bio-Algae Concentrates easily explode into 50,000 sub nutrients that are distributed throughout the 100 trillion cells of our body. This is called Optimum Cellular Nutrition.

Bioavailability:

Refers to the availability of a nutrient to the body. Nutrients that are bioavailable are absorbed by the organism, digested and distributed to the various parts of the body where they are required to support good health.

- The protein in Bio-Algae Concentrates is rated 95% NPU (Net Protein Utilization)
- Calcium spirulan found in the Chlorophyll of Bio-Algae Concentrates has a 90% NCU (Net Calcium Utilization)
- Within twenty minutes of consuming Bio-Algae Concentrates, people and tests report digestive ease, blood sugar stabilization, cell count normalization, etc.

As you can see, Bio-Algae Concentrates offer a vast range of nutraceutical advantages over other simpler algae. The health benefits and the strengths of each algae in Bio-Algae Concentrates overlap. That is why I recommend Bio-Algae Concentrates over single algae.

If you are suffering from a particular health condition, you should increase your consumption of Bio-Algae Concentrates as best suited for that condition. When it comes to serious health conditions, it is always best to consult your healthcare professional. Some health conditions are discussed in more detail in the following pages. Recommended dosages of Bio-Algae Concentrates are also covered in more detail in the 'How to Take Bio-Algae Concentrates' section.

Now we will take a look at the use of Bio-Algae Concentrates for specific health conditions and dietary patterns.

BAC for People on a Low-Carb Diet

As hinted earlier, high-protein (low-carb) dieters have a special need for Bio-Algae Concentrates. This is primarily due to the fact that the way most people follow low-carb diets is nutritionally imbalanced (low-carb dieting in theory is not imbalanced, but the way most people follow it certainly is). Most followers of low-carb diets lack sufficient intake of specific vitamins, minerals and phytochemicals necessary for optimum human health.

The vast majority of low-carb dieters are deficient in calcium, magnesium and zinc, for example. Bio-Algae Concentrates offer naturally balanced minerals that help bring a low-carb diet back into the proper mineral ratios.

Low-carb diets also tend to be highly acidic, thanks to the heavy reliance on acidic foods like animal proteins and even diet soft drinks. These acidic foods are effectively countered by the alkaline nature of Bio-Algae Concentrates. In other words, these micro-algae help support the healthy pH balance of the body, which protects against loss of bone mass while giving the kidneys a much-needed rest.

High-protein diets are typically lacking in the B vitamins as well. Micro-algae supply all the B vitamins, bringing the body back into balance with this all-important category of nutrition. The

B vitamins are critical for proper immune system function, hormone balance, brain function, and literally thousands of biochemical processes that support the body.

Essentially, micro-algae help correct virtually every nutritional deficiency brought on by high-protein / low-carb diets. People pursuing high-protein diets need to seriously assess their intake of vital nutrients and, very likely, supplement with Bio-Algae Concentrates.

I tend to be a high-protein / low-carb dieter myself. I consume large quantities of proteins and fiber-rich foods during the day (like broccoli and other vegetables) but I also know that these foods, as healthy as they are, cannot supply the nutrient density of micro-algae, so I supplement with Bio-Algae Concentrates.

Also, unlike most high-protein dieters, I choose not to consume large quantities of animal meat or dairy products. I do eat a considerable quantity of eggs, but very little meat. Instead, I rely on Bio-Algae Concentrates for my dietary protein. (And I have put on pounds of lean body mass by doing so, so do not let anyone tell you that you cannot build muscle by eating plants.)

High-protein diets have been (and sometimes still are) considered a cure for hypoglycemia, because protein digests slowly, supplies energy gradually, and does not trigger excess insulin production. But a high-protein diet causes other serious problems, as we have seen earlier in the Protein and Vitamin B and Calcium chapters. The high-protein foods that seem to work best over time are the chlorophyll-rich types recommended in diabetes—spirulina, wild blue-green, and cereal-grass products.

– Healing With Whole Foods by Paul Pitchford

BAC for Dieting and Weight Loss

In various clinical studies, micro-algae have been shown to be remarkably effective for weight loss. There are primarily two documented factors for this: the correction of nutritional deficiencies and the addition of GLA to the diet. Let me quote one study next.

Researchers in Germany used fifteen human volunteers to test the appetite reducing effect of spirulina. Obese outpatients who were following a weight reduction diet took spirulina tablets before each meal three times a day for four weeks. In this double blind crossover study against a placebo, about 6 tablets three times a day over four weeks showed a small but statistically significant reduction of body weight. There was also a significant drop in serum cholesterol levels. ¹

But let me add some other important factors next.

The restoration of weight metabolism as regulated by the master glands

It is important to note that obesity is not only caused by over-consumption of calories, but more importantly, it is also caused by the gradual breakdown and resulting dysfunctional endocrine system. This results in excess secretion of insulin, subsequently creating intense cravings for refined foods. That is why people become overweight even when they do not want to: the cravings are simply too strong to ignore.

By supplying the body with the nutrients it needs, however, those cravings can be dramatically reduced and the endocrine system can be brought back into a state of balance. These nutrients are best provided by Bio-Algae Concentrates. That is how these superfoods help people lose weight.

Of course, true weight loss will not happen by simply consuming these superfoods: they only create the proper environment for weight loss. The person must still alter their diet by removing refined foods, hydrogenated oils, sugars, and other weight-promoting substances. Without that step, the weight will never come off. Just as importantly, a person who does not take up the habit of regular physical exercise will rarely lose body fat, no matter what their diet is.

The second factor that supports weight loss is the presence of GLA in spirulina.

This essential fatty acid helps regulate blood sugar and control insulin, which naturally leads to reduced carbohydrate binding, and spirulina is the richest natural source of GLA on planet Earth. There is simply no better way to get GLA than to make spirulina part of your daily diet.

The third and most important factor of Bio-Algae Concentrates that will help with weight loss is the gradual restoration of the endocrine system balance which includes weight metabolism.

When the hypothalamus (the central master gland which governs all other glands) is nutritionally satisfied it will command via pGH (precursor human growth hormones) the pituitary which in turn will direct the para-thyroid which will direct the thyroid and so forth down to the liver for a full spectrum natural weight metabolism.

Clearly, rather than using diet pills or aggressive diets that simply further disturb endocrine balance, Bio-Algae Concentrates should be supplemented as part of the nutritional approach to any weight loss effort. BAC can greatly reduce cravings, provide much-needed nutrition to the body and serve as an outstanding source for obesity-busting substances like GLA. But they cannot get up and do your exercises for you!

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BAC for Vitality and Intestinal Health

Bio-Algae Concentrates have been shown to be quite effective for people suffering from leukemia, anemia (blood deficiencies), poor spleen function, weak digestive absorption, chronic fatigue, and other similar “lack of vitality” disorders.

If you or someone you know is anemic, has low blood pressure, suffers from dizziness, or shows obvious signs of lack of vitality (such as having infrequent bowel movements), then Bio-Algae Concentrates is something that I strongly recommend. Within a short period of time, most people find that it builds vitality, improves digestion, enhances energy, improves mental clarity, and basically helps people regain their youthful energy and start rebuilding the strength of organs and tissues.

Bio-Algae Concentrates for intestinal health

The subject of intestinal health deserves an entire book. The vast majority of people on the Western diet (high in refined foods, low in fiber, low in natural vitamins, high in animal protein, high in dairy products, high in sugars) suffer from dismal bowel function. Irritable Bowel Syndrome, Crohn’s Disease, constipation, frequent diarrhea – these are all obvious symptoms of dietary imbalances. There is nothing wrong with your colon! It is the food you are eating that causes these effects.

Bio-Algae Concentrates offer considerable help in the area of intestinal health, and perhaps not in the ways you might suspect. What they do best is support healthy intestinal flora – the “friendly” bacteria in your digestive tract that protect you from disease and aid in digestion. This ability is thought to be provided in part by mucopolysaccharides in the spirulina and the other algae in BAC:

I have seen what Bio-Algae Concentrates can do in many people I have worked with. One person who suffered from chronic constipation (one bowel movement every three days, if you can believe that!) rapidly improved until she was having one every day. This was due to Bio-Algae Concentrates only, with no other dietary changes. Another man following surgery for colon cancer began to have two to three bowel movements every day, after having been constipated for years.

People with Crohn’s Disease, diarrhea or IBS, however, should be careful when starting Bio-Algae Concentrates, since it can actually promote diarrhea in some people. In these cases, start slowly at first, and then increase gradually.

Bio-Algae Concentrates are rich in many phytochemicals, some of which have been identified but many of which are still unknown. Many groups of nutritional elements referred to as

bioflavonoids and other factors are believed to be compounds that give it its health-promoting ability. Bio-Algae Concentrates stimulate the growth of friendly bacteria, which in turn has the probiotic effect of strengthening gut flora and resisting disease.

BAC for Nervous System Disorders

The phytonutrients and nutrients in Bio-Algae Concentrates are most useful for improving growth patterns in children, maintaining health in old age, healing injuries, and initiating growth, repair and regeneration where it has been stunted from disease or degeneration, including Alzheimer's disease, sciatica, palsy, seizures, multiple sclerosis, nervousness, and other nerve disorders.

One of the most remarkable healing properties clinically recorded for Bio-Algae Concentrates is its ability to significantly increase the body's capacity to repair nerve tissues throughout the body. People suffering from degenerative nerve disorders typically report positive results from using Bio-Algae Concentrates. This is because nutrients in Bio-Algae Concentrates so efficiently reach the cells of the brain master glands, which in turn activates innate healing ability to grow and repair nerve tissue.

It is unfortunate that more research is not available in this area, because I think this represents an exciting and promising area of nutritional research. If the phytochemicals found in these billion-year-old plants can actually help human beings repair nerve tissue, what extraordinary uses might they be put towards? Could they help people with spinal cord injuries? Could they help stroke victims? Could they actually prevent Alzheimer's Disease in patients who are high risk?

Unfortunately, these questions have not been addressed by mainstream researchers and since nobody can patent Bio-Algae Concentrates, it is unlikely that any drug company is interested in sponsoring the necessary research to answer these questions. After all, consumers can buy algae anywhere and even grow them given significant effort. Drug companies have no way to control the market and, therefore, no way to profit from Bio-Algae Concentrates.

For now, the best evidence we can go on is anecdotal evidence and a growing number of case studies, which is actually quite substantial. BAC may hold tremendous promise in treating autism, ADD/HD and the mental disorders now ravaging modern society:

In the developed countries where nutrient starvation takes place as a result of excessive refined food, intoxicants, and a glut of animal products, micro-algae (such as those found in Bio-Algae Concentrates), used in conjunction with unrefined vegetable foods, are proving helpful in healing the many prevalent disorders of the nerves and brain.

– Healing With Whole Foods by Paul Pitchford

BAC for Suppressing Appetite and Reducing Cravings

Bio-Algae Concentrates are known to satisfy many nutritional deficiencies. As soon as people start consuming them they start to notice a reduction in cravings for carbohydrates and sweets.

I have engaged in hundreds of hours of nutritional research over the years. Here is my educated guess at the factors at work here:

Magnesium content: These micro-algae contain high levels of magnesium and other minerals that are frequently deficient in modern diets. Magnesium deficiency is known to produce intense cravings, especially for chocolate sweets (which contain magnesium). By eating micro-algae, the body is supplied with magnesium, and so the cry of “feed me magnesium” is silenced.

Protein content: The protein content of these micro-algae (especially spirulina) provides for steady levels of blood sugar that counteract any tendency for a hypoglycemic response, which would of course induce severe cravings for sweets. In other words, the high quality protein in these superfoods blocks the hypoglycemic appetite response.

Fatty acid content: The healthy fatty acids found in these micro-algae promote steady blood sugar levels through their slow digestion as with any good fatty acid. GLA, for example, helps regulate the insulin response of the pancreas, and therefore eliminates the primary cause of sugar cravings even before they can occur!

Vitamins: Some part of the cravings experienced by people consuming a modern “Western” diet are due, I believe, to deficiencies in the B vitamins. Without adequate supplies of these vitamins in their natural form, the body’s hormonal signals get distorted, and the body orders the person to keep eating. What the body really craves, most likely, is adequate nutrition, not empty calories. Once this nutrition is supplied by the micro-algae, the body’s hunger signals quiet down.

If you begin to supplement with these micro-algae, the appetite suppressing effects of Bio-Algae Concentrates will take very little time to be noticed. You can sometimes expect to take Bio-Algae Concentrates for one day and suddenly notice a reduction of your cravings. Now that is not a permanent and stable situation. It is a taste for what is to come. It may take weeks or months for your body to adapt and adjust to your new nutritional habits. Hormonal changes, especially, take considerable time, since your body is probably in “the habit” of releasing excess insulin in response to the refined foods you have been consuming.

And this brings up another point: a few grams of Bio-Algae Concentrates cannot counteract hundreds of grams of white flour, corn syrup, soft drinks, cookies and bread. While micro-algae can certainly help, the fact is that you probably will not eliminate your intense carbohydrate

cravings until you manage to remove those carbohydrates from your diet in the first place. Bio-Algae Concentrates will help you make that decision, but they cannot override a tidal wave of poor nutritional choices.

BAC for Enhancing Brain Function

An interesting study published in 1995 (Author: Sevulla) reported an 81% improvement in the academic scores of children who took one gram of spirulina algae daily for six months.

I am not aware of other studies examining the link between micro-algae and intellectual function, but this study alone is interesting enough to warrant a closer look. An 81% improvement is dramatic, to say the least. And the dosage of spirulina used — a mere one gram — which is only 1/10th the recommended standard dosage is remarkable. What results could be achieved with Bio-Algae Concentrates? We have many testimonials from parents and teachers of children that tell of positive academic and behavioral changes after they begin consuming BAC. I will discuss the likely causes for these results below. Later on in this book, I will also discuss how BAC can benefit children and adults affected with autism or ADD/HD.

Anecdotal results abound from people that feel more focused and have better clarity of mind after using Bio-Algae Concentrates. Many share with us that they find their short term memory has improved, they remember telephone numbers, recall their dreams, etc. These results are very likely due to the presence of several nutrients and phytonutrients in BAC that have close affinities with the brain. Orthomolecular medicine has shown that there is a clear connection between nutrients, brain function, mood and even mental disease. Several nutrient deficiencies are linked to depression and mental disorders such as autism and ADD/HD.

Many micro and macro minerals and vitamins such as pro-vitamin A and the B complex are required daily in order for the brain to function optimally. To some extent, all of us have nutrient deficiencies as some nutrients are not easily obtained from our diets or delivered to the brain due to poor assimilation.

Bio-Algae Concentrates contain all known required nutrients and phytonutrients. In addition, large clinical and industrial trials with animals and human and shown that these nutrients are extremely bioavailable as they occur in BAC. These characteristics set it up to be an incredible brain food. Of the many phytonutrients contained in BAC, let's take a look at two that have been linked to brain function: Gamma Linoleic Acid (GLA) and phycocyanin (a blue pigment).

Phycocyanin is known to enhance the performance of the brain and nervous system. However, it is difficult to obtain from an average diet since the presence of this pigment in plants and food is extremely rare:

Important to note in the area of prevention, spirulina is richly supplied with the blue pigment phycocyanin, a biliprotein which has been shown to inhibit cancer-colony formation.

Predominant blue pigmentation in food is rare. The chemical reality of spirulina's blue color is demonstrated by its effect in the brain. Here phycocyanin helps draw together amino acids for neurotransmitter formation, which increases mental capacity.

– Healing With Whole Foods by Paul Pitchford

The GLA content of food is another important factor to brain nutrition. As I mentioned previously, the human brain is around 80% fat. Nerve tissues in the brain need “healthy” fats in order to function properly, and GLA is one of the healthiest fats you can consume. Human breast milk contains high quantities of GLA. In fact, breast milk is the number one source of GLA on the planet and spirulina algae is number two.

Breast milk contains GLA because human infants need to quickly build brain mass in order to boost their chances of survival. A bigger, better brain allows a child to more quickly comprehend language, social interactions, environmental cues, interpret sensory input and so on. So mother's milk provides precisely the nutrients needed by infants to help them survive.

Cow's milk, on the other hand, is designed to help baby cows survive. That has a lot less to do with brain function and a lot more to do with helping grow a baby cow to several hundred pounds and enabling it to run more quickly. Cow's milk, not surprisingly, has virtually no GLA. Baby cow brains simply are not as important to their survival as the brains of human infants.

That is also one reason why cow's milk is a terrible nutritional choice for humans. Cow's milk is the perfect food for baby cows, but a gross mismatch for the nutritional needs of baby humans. Even worse is the fact that adult human beings consume the mother's milk of another species. This is a truly unique and even bizarre habit. No other mammal on Earth consumes the milk of other species and every mammal manages to wean itself off milk entirely except humans. When I see adult humans drinking cow's milk, I always wonder why they are drinking baby food.

Back on the topic of brain food, the phycocyanin content of Bio-Algae Concentrates combined with its GLA content (the good fats that heal) provide a compelling reason to consume these micro-algae. The GLA provides your brain and nervous system with the nutrients it needs to be healthy, while the phycocyanin inhibits tumorigenesis and increases brain functionality. It is a powerful combination and it is one reason I recommend that people consume Bio-Algae Concentrates every day of their life.

BAC for Proper pH Balance

Most Americans consume diets that are far too acidic. Nearly all refined foods – made with sugars, white flour, and other unwholesome ingredients – are acidic in nature. Soft drinks and most processed fruit drinks are especially acidic. These acidic foods, when routinely ingested, create a pH imbalance in the human body.

pH balance is critical for human health and the pH of your blood must be kept at a precise level (around 7.2 on the pH scale). Consuming highly acidic foods and beverages causes an imbalance in the pH of the body. The body responds by countering the acidity with behavioral and biochemical strategies that eliminate these excess acids. There is a cost to all this, however, as you will see below.

One such strategy for countering excess dietary acids is to increase respiration, since carbon dioxide is acidic and oxygen is alkaline. By breathing in more oxygen and exhaling more carbon dioxide, the body works to regulate its own pH. This is exactly why diabetics with high blood sugar frequently hyperventilate: their blood is too acidic and their bodies are simply trying to get back to the proper pH balance.

Another strategy pursued by the body is to pull alkaline minerals out of the bones, which are great stores of calcium and other alkaline minerals, and use those minerals to counter the acidic foods and beverages that have been consumed. This is why the consumption of soft drinks is well known to cause the depletion of minerals from the body's bones, which can result in loss of bone mass density and the onset of osteoporosis. The more soft drinks you consume, the weaker your bones get.

Micro-algae offer a convenient solution to the pH problems of most diets. Bio-Algae Concentrates are alkaline, which means they counter acidic foods and help raise the pH level towards the alkaline side of the scale. This, in turn, promotes increased bone mass (since your body does not have to sacrifice calcium to balance its pH), and vastly improved metabolic functions. Consuming more alkaline foods has been strongly linked with improved immune system function, mental function, kidney function and higher levels of energy, among other important benefits.

High-protein / low-carb diets are also known to be highly acidic, since meat is squarely on the acidic scale. That is why some of the weight loss on a nutritionally poor low-carb diet actually results from loss of bone mass, not body fat! By replacing some meat with protein from spirulina, low-carb dieters can improve their overall pH balance while still getting their protein (and from a more nutritionally sound source, too).

Bio-Algae Concentrates can be used as a pH balancing food. Of course, your best results will come when you add this superfood to your diet and avoid consuming acidic foods and beverages like soft drinks.

BAC for Assisting the Body in Preventing Cancer

Some micro-algae have very favorable nutritional profiles for preventing cancer and successful immune therapies. Spirulina, chlorella, and wild blue-green are all known to provide cellular protection because of the presence of exceptional amounts of beta carotene (provitamin A) and chlorophyll. Spirulina, the algae to emphasize in those with the greatest deficiency, stimulates immunity in the treatment of all degenerative diseases has been proven to increase killer T cells that combat cancer cells. Spirulina is rich in phycocyanin, a pigment with anti-cancer properties. Spirulina is also the highest plant source of gamma-linoleic acid (GLA), a fatty acid which strengthens immunity and inhibits excessive cell division.

– Healing With Whole Foods by Paul Pitchford

As you can see from the quote above, the anti-cancer properties of the algae contained in BAC are rather remarkable. Of the few key phytochemicals that have been identified in these micro-algae, their known anti-cancer properties are nothing less than astonishing. And yet this food probably works on many other levels to combat cancer, going far beyond the handful of phytochemicals that have been identified. Remember: BAC contains thousands of phytochemicals, and very few of those have been identified or clinically tested.

Overall, however, micro-algae have been subjected to a fair amount of anti-cancer testing. The results of those tests have earned spirulina a rather impressive reputation.

Hundreds of studies have shown it to exhibit truly miraculous anti-cancer effects. At risk of wearing out this metaphor, I have to say that if the pharmaceutical companies had a name-brand drug that demonstrated the same effects as plain spirulina, it would be heralded as a “cure for cancer” and would undoubtedly receive an endless parade of positive press on all the news networks. When it comes to cancer, imagine what BAC can do.

Bone marrow cancer

I was diagnosed with Waldenstrom’s Macroglobulinemia or cancer of the bone marrow. In February 2003, after receiving four treatments of antibodies and one blood transfusion, I took MGN3 for a while and my condition did not improve. In January of 2004 I started taking BAC F3 and after only one month, my hemoglobin went up ten points. I felt a new surge of energy and wellbeing I had not felt in years. By July 2004, my oncologist declared I was in remission. BAC was my miracle pill. It is indeed a fabulous cellular food! For you to have discovered this formula denotes a very loving, caring person, on the road to help mankind stay alive and well. God bless you and your family. Sincere and grateful thanks.

Cecile Jalbert, Montreal, Canada
February 2, 2006

Update

Last month, I visited my oncologist for a control exam. He declared my blood "perfect". Since January 2004, I have only used BAC in my regiment. Thank you Dr. Kiriak for your magnificent research that has saved my life.

Cecile Jalbert, Montreal, Canada
July 26, 2006

I'm able to LIVE WELL with stage IV breast cancer

Bless you for The Magic! BAC is a major part of my health and wellness regimen, and one of the main reasons I'm able to LIVE WELL with stage IV cancer despite weekly chemotherapy. Many people tell me that I don't look like a cancer patient... perhaps I'm part of a new wave of people who are changing the face of cancer! Be well,

Wendi P.
June 2007

Alertness and more energy

After only 3 radiation treatments post-op from cancer, I felt exhausted as expected. I tried to line dance after radiation treatment, which I was not able to do as I felt exhausted. I began BAC F2 for 3 days then increased my capsule intake on that Wednesday on your advice. I again tried to line dance after radiation treatment, and after 4 hours there is no exhaustion. Respiratory allergies almost disappeared, blood pressure going down and blood sugar easier to control. I noticed mental alertness during line dancing. Never felt so good. Sleeping well! I am sharing information with other cancer patients that I've met as well as other elderly (seniors) who are my line-dancing friends and family.

Nellie Ramsey, Albuquerque, New Mexico
May 2004

Studies Show BAC Can Help the Body Reverse Cancer

There have been many animal studies done involving Bio-Algae Concentrates and the body's immune response to cancer. These studies were performed in the context of a fifteen year multi-million-dollar research project involving hundreds of researchers, sponsored by the Academy of Science and the Ministry of Nutrition of the former Soviet Union.

One such study involved a large poultry farm in Moldova that was affected with an epidemic of Marek's disease. This tumor-causing disease is transmitted virally and is extremely prevalent in chickens. Birds afflicted with Marek's disease develop tumors, become emaciated and eventually die, with the mortality rate being nearly 100%. It is recommended to vaccinate all chicks when they are one-day old to prevent the spread of Marek's, but vaccination only prevents the formation of tumors and not infection. Traditionally, there is considered to be no treatment for Marek's disease.¹

The study in question went on for eleven years. The research center housed 600 farm workers, 200 researchers and up to 1½ million egg-laying chickens. The study's primary mandate was to eradicate Marek's disease and prevent future cases of it on the farm. Within the first year, the project achieved complete eradication of Marek's disease while saving 100% of the animals and returning over 50% of the animals to egg laying productivity. All of this was achieved by supplementing a diet of organic grains with Bio-Algae Concentrates. No antibiotics, growth hormones or other artificial means were used whatsoever.

The farm gained an astounding 20% in overall productivity and the following results were observed:

- Eradication of Marek's disease and less disease overall
- Larger, leaner animals
- Larger eggs with stronger shells due to more calcium
- Birth survival increased by 8%
- 24 vs. 17 months of egg laying due to diminished bone loss
- 301 vs. 250 eggs per year per chicken
- Absence of pathogenic bacteria, such as salmonella
- Better tasting meat and eggs

- Higher concentration of curative nutrients in the eggs even when eaten raw

Another Russian study involved an epidemic of various cancers that was decimating a large farm of 54,000 pigs in Voronege near Moscow. Following the resounding success of the poultry experiment in Moldova, the prestigious Moscow Academy of Sciences became very interested in Bio-Algae Concentrates. It was suggested to form a team in Voronege and build a second research center. Voronege was the premier biological research center and the largest and most influential scientific health center in the former USSR and in all of Europe. Shortly after, exact Bio-Algae Concentrates blends were formulated for pigs and within one year, the epidemic was under control and the cancers had subsided.

Another Russian study involved an epidemic of various cancers that was decimating a large farm of 54,000 pigs in Voronege near Moscow. Following the resounding success of the poultry experiment in Moldova, the prestigious Moscow Academy of Sciences became very interested in Bio-Algae Concentrates. It was suggested to form a team in Voronege and build a second research center. Voronege was the premier biological research center and the largest and most influential scientific health center in the former USSR and in all of Europe. Shortly after, exact Bio-Algae Concentrates blends were formulated for pigs and within one year, the epidemic was under control and the cancers had subsided.

In a study done at the Osaka Institute of Public Health in Japan, scientists found that spirulina algae promote the activation of natural cancer-fighting substances in the body.

In this clinical study, cancer patients over 40 years of age were given 50 ml of Lina Green 21 (a spirulina extract) and the level of natural cancer-fighting substances, such as natural killer cells (a type of cytotoxic lymphocyte critical to the immune system) and interferon gamma, was measured in their blood. The results showed that the tumor killing ability of natural killer cells and interferon gamma was significantly increased 1-2 weeks after administration of spirulina and continued for a surprising 12-24 weeks even after stopping administration. These findings lend further support to the strong body of research that suggests spirulina algae have an immune boosting effect.²

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The Nutrients in BAC Help the Body Fight Cancer

As we have seen, the anti-cancer properties of Bio-Algae Concentrates are hard to argue with. These amazing results are directly related to the impressive array of nutrients contained in BAC and their ability to be efficiently assimilated by the body. The following information will highlight this.

Albumin

A study on algae published in Japan in 1992 showed impressive effects on blood chemistry. It increased red blood cells, white blood cells, platelets, and albumin. The ability to increase albumin is vitally important because so many people with cancer have a decreased level of albumin. This decreased level correlates with a poor prognosis.

– Herbal Medicine, Healing & Cancer by Donald R. Yance

BAC is a truly important supplement for anyone whose albumin level is low, since algae have been shown to increase albumin levels in the blood. The healing properties of these micro-algae are, of course, best obtained from their whole food form and not from isolated or extracted chemicals.

Carotenoids

Hundreds of animal studies have shown that mixed carotenoids from algae such as spirulina and Dunaliella have significantly greater tumor-killing ability than beta-carotene alone. No antioxidant vitamin or flavonoid should be taken alone.

– Health And Nutrition Secrets by Russell Blaylock, M.D.

Phycocyanin

I have already discussed many of the immune-boosting and anti-cancer properties of phycocyanin, the phytochemical in spirulina that gives it its dark blue-green hue. One of its most striking properties is its ability to inhibit cancer colony formation. A Japanese patent states that a small daily dosage of phycocyanin maintains or accelerates normal control cell functions that prevent generation of malignancy such as cancer or inhibits its growth or recurrence. 1

In summary

Spirulina contains concentrations of nutrients unlike any other single grain, herb, or plant. It contains gamma-linoleic acid (GLA), linoleic and arachidonic acids, vitamin B12 (needed, especially by vegetarians, for healthy red blood cells), iron, a high level of protein, essential amino acids, the nucleic acids RNA and DNA, chlorophyll, and phycocyanin, a blue pigment that is found only in blue-green algae and that has increased the survival rate of mice with liver cancer in laboratory experiments.

– A-to-Z Guide To Supplements by James F. Balch, M.D.

The anti-cancer properties of Bio-Algae Concentrates make this superfood an absolutely necessary dietary supplement for anyone who is battling cancer or who may be at risk, and if you eat processed food or follow the standard American diet, you are definitely “at risk” for cancer, since so many of the foods that make up the American diet are, themselves, promoters of cancer.

Every doctor should be aware of the anti-cancer properties of Bio-Algae Concentrates, and this superfood should be “prescribed” as both a cancer prevention food and as cancer therapy for patients currently battling the disease. In my opinion, any person suffering from cancer should immediately begin introducing it into their diets, even if they choose to undergo other anti-cancer procedures such as chemotherapy and radiation.

Furthermore, any person who knows someone with cancer has, I believe, a social responsibility to at least make them aware of this information so that they can make their own informed decision about how to nutritionally support their body in reversing cancer.

Bio-Algae Concentrates is one of those things that falls into the “can’t hurt” category when it comes to battling cancer. No matter what form of therapy you choose to undergo – radiation, chemotherapy, surgery, or something more holistic – Bio-Algae Concentrates can only improve your results.

We have way too much cancer in the world, and the answer to many cancers is available right now in the form of these remarkable water plants. It is time that we put nature’s gift to work in healing diseases like cancer that are ravaging our population.

References

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How BAC Boosts Immunity

Immunity, as it relates to human or animal health, is a state of having sufficient biological defenses to avoid infection, disease, or other unwanted biological invasion. Immunity involves both specific and non-specific components. Besides this generic definition of immunity, there are dozens of other definitions that focus on particular functions related to viral defense, defense against specific disease, etc.

I have chosen the “broader” definition as it fits with my holistic belief that each cell in the human or animal body carries its own immune protection system and when each cell is in a state of immunity, the entire body is better protected.

Bio-Algae Concentrates exhibit impressive immune-boosting properties. Like the other properties of this superfood, its immune boosting powers are due to a variety of nutritional and energetic factors that contribute to cellular vitality and immunity.

Let’s examine a few of these one at a time:

BAC awakens the genius within

When the cells of the body receive the nutrients and the resulting energy that they need, they will perform their multitude of cellular metabolic activities: growth, repair, cleansing, regeneration, protection and much more. When each cell of an organ performs its job well, then the organ will have a fighting chance to perform its metabolic activities. But let’s not forget that cellular and organ functions are governed at the glandular level, which is overseen by the master gland: the hypothalamus.

The hypothalamus, however, is located in the brain, which is protected by a tightly packed barrier of cells called the blood-brain barrier. Several phytonutrients and pigments found in BAC, such as beta carotene, alpha carotene and astaxanthin, have been proven to be able to cross the blood brain barrier. This means that they are able to reach parts of the body that are “out of bounds” for most supplements. There is no doubt that BAC’s nutrients efficiently nourish all the cells of the body including the cells of the brain and hypothalamic region. And by nourishing the hypothalamus, the governing organ of the body, BAC awakens the “genius” within.

Read the full details in “How BAC Awakens the Genius Within”

BAC’s chlorophyll protection powers –

Because of its high chlorophyll content (higher than most foods), BAC is useful for treating health conditions that could benefit from the energizing, purification, renewal, and anti-inflammatory properties of chlorophyll. For example, control of energy-draining viruses and fungi such as candida-overgrowth, Epstein-Barr virus, chronic fatigue immune deficiency syndrome (CFIDS) and AIDS, is enhanced by the immune-enhancing and antiviral qualities of chlorophyll.

Read more in “Chlorophyll in BAC: The Shepherd of Light”

BAC’s nucleic acid protection powers

Another immune-boosting element in BAC is its nucleic acids, RNA and DNA. These nucleic acids are critical for health and longevity:

Nucleic acids are responsible for directing cellular renewal, growth, and repair. The amount of nucleic acid in the body decreases with age; in fact, insufficient nucleic acid causes premature aging as well as weakened immunity. Nucleic acid is depleted by lack of exercise, stress, pollution, and poor diet.

Replenishing RNA/DNA is therefore important to every aspect of bodily health and longevity. In addition, nucleic acid strengthens immunity by improving the activity of T- and B-cells, which defend against viruses and other invading microorganisms, and macrophages, which destroy cancer and cellular debris in general.

Learn about “The Remarkable Protection Powers of BAC’s Nucleic Acids (RNA/DNA)”

The photosynthetic life-giving pigment content of BAC

BAC’s red algae, *Haematococcus* and *Dunaliella*, contain high levels of nature’s special pigments: carotenoids and phycobilins. BAC contains astaxanthin, beta-carotene, alpha-carotene, lutein, lycopene, Zeaxanthin, quercetin, b cryptoxanthin and many other pigments that offer a powerful immunity and toxin shield against continuous pollution, toxins and stress. *Haematococcus* in BAC is the greatest source of astaxanthin on Earth. Astaxanthin is a red pigment clinically proven to have hundreds of times more anti-oxidative power than vitamin E and vitamin C, and dozens of times more than that of beta carotene.

Read more in “The Photosynthetic Life-Giving Pigment Content of BAC”

The incredible arsenal of antioxidants in Bio-Algae Concentrates

While the protein, mineral and vitamin value of Bio-Algae Concentrates is impressive, these minute organisms are also rich in pigments that are bio-chemically important to life. Without pigments, organisms could not synthesize many of the enzymes necessary for balancing metabolism.

Bio-Algae Concentrates contain a high level of enzymatic pigments and mixed carotenoids. In recent years, these pigments and carotenoids have received a tremendous amount of attention as potential anti-cancer and anti-aging compounds. Carotenoids are powerful antioxidants, protecting the cells of the body from damage caused by free radicals. Carotenoids, and specifically beta-carotene and alpha-carotene, are also believed to enhance the function of the immune system.

Read more details in “The Incredible Arsenal of Antioxidants in BAC”

BAC contains high levels of astaxanthin

Astaxanthin is a pigment of the carotenoid complex found in the microalgae *Haematococcus pluvialis* present in Bio-Algae Concentrates. It is an oxygenated pigment called a xanthophyll. Its unique molecular structure gives it a superior antioxidant and immune-boosting capacity.

Astaxanthin is 40 times more effective as an antioxidant than beta-carotene, 500 to 1000 times more effective in inhibiting lipid peroxidation than Vitamin E, has greater anti-inflammatory capability than Vitamin E, has almost 4 times the antioxidant capacity of lutein, provides superior protection against UVA and UVB light-induced oxidative stress, is more stable in scavenging and quenching than beta-carotene, canthaxanthin and zeaxanthin, is highly potent in enhancing T1 and T2 helper cells and IgM and IgG (secondary immunity) production, is more effective than lycopene and lutein in enhancing liver microsome detoxification activity (enzymes that metabolize drugs), enhances the actions of Vitamins C and E in the body, and enhances the release of retinol (Vitamin A) from the liver when needed.

Read more at: “BAC Contains High Levels of Astaxanthin, the Star of the Carotenoids”

Phycocyanin in BAC enhances the immune system

One unusual phytonutrient found in the algae of BAC, is the blue protein pigment, phycocyanin. This pigment gives blue-green algae its blue color. It can be found in concentrations as high as 7 percent in certain blue-green algae, as compared to 1 percent in the green algae, chlorophyll.

Phycocyanin has natural immune system boosting and anti-cancer effects. As a result, many studies have been done on blue-green algae to study the effects of phycocyanin.

One Japanese patent states that a small dosage of phycocyanin daily maintains or accelerates normal control cell functions that prevents generation of malignancy such as cancer or inhibits its growth or recurrence.

Chinese scientists documented that phycocyanin stimulates hematopoiesis (creation of blood), emulating the hormone erythropoietin (EPO). EPO is produced by healthy kidneys and regulates bone marrow stem cell production of red blood cells. They claim phycocyanin regulated white blood cell production, even when bone marrow stem cells are damaged by toxic chemicals or radiation.

These results indicate that phycocyanin may be active in preventing a host of degenerative organ diseases by increasing immunity.

Find out why “Phycocyanin in BAC Enhances the Immune System”

The Important Polysaccharides Found in BAC

The algae found in Bio-Algae Concentrates have a unique cell wall structure that imparts additional immune-enhancing properties. Their cell walls are made of complex polysaccharides, which have been shown to stimulate interferon production and exhibit strong anti-tumor activity. This was shown in a series of studies conducted over the last several decades.

The results of the Baojiang study, given at the Second Asia-Pacific Conference on Algal Biotechnology, 1994, concluded that polysaccharides of *spirulina platensis*, at the dosage of 150-300 mg/kg by injection or taken orally, can increase the percentage of T-lymphocytes in the blood. The results demonstrate that spirulina polysaccharides can improve cellular and humoral immunity.

In another study, the effects of spirulina platensis extract exposure on chicken macrophages were examined. Sephadex-elicited abdominal exudate macrophage monolayers were exposed to varying concentration (10 to 40 mcg/ml) of spirulina for 1 to 16 hours. Spirulina treated macrophages exhibited phenotypic changes in terms of increased spreading and vacuolization with minimal cytotoxicity. Percentage of phagocytic macrophages for unopsonized sheep red blood cells (SRBC) and average number of internalized SRBC was significantly higher in spirulina treated macrophages as compared to the sham treated controls. However, phagocytosis of opsonized SRBC was not affected by spirulina treatment. Macrophage cultures exposed to spirulina produced a factor in their culture supernatant with tumoricidal potential which was similar in reactivity to the one produced by macrophages after exposure to lipopolysaccharide. The ability of splenic natural killer cells to kill tumor cell targets was not affected by spirulina treatment. These findings suggest that spirulina exposure enhances selected effector functions of cells of the chicken immune system after in vitro exposure.

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The Remarkable Protection Powers of BAC's Nucleic Acids (RNA/DNA)

There is yet more natural immunity support in BAC as found in its nucleic acids, RNA and DNA. These nucleic acids are critical for health and longevity.

The nucleic acid in the human body is responsible for directing cellular renewal, growth, and repair. The amount of nucleic acid in the body decreases with age; in fact, insufficient nucleic acid causes premature aging as well as weakened immunity. Nucleic acid is depleted by lack of exercise, stress, pollution, and poor diet.

Replenishing RNA/DNA is therefore important to every aspect of bodily health and longevity. In addition, nucleic acids strengthen immunity by improving the activity of T- and B-cells, which defend against viruses and other invading microorganisms, and macrophages, which destroy cancer and cellular debris in general.

-Paul Pitchford – Healing with Whole Foods

When it comes to immune boosting function, BAC is the best there is. If you want or need to boost your immune system function, then I suggest adding BAC to your diet.

BAC for Cardiovascular Health

“Human metabolisms function from cellular levels to organ levels, as in the great example of the cardiovascular system. The regulation of these metabolisms depends entirely on the neuro-vegetative system: directly via hormones and peptides and indirectly via myriads of other bio-feedback interactions. Efficient cellular nutrition for the brain master glands is indispensable for optimization of this grand complex.”

– Dr. Michael Kiriak, PhD

During a short break at a live presentation in Wisconsin in 2004, Dr. Kiriak handed me a piece of paper with these three sentences above written in French and asked me to translate them to English in order to present the concept to our audience that night.

At that time, I had only a general understanding of what he was explaining, but a few years later, after more talks with Dr. Kiriak, reflections and other research of my own, I have come to understand what he meant. Today I have a clearer “cause and effect” comprehension of this “grand complex” and I want to share it with you next.

The conventional medical view of cardiovascular disease:

Let me start with an example that briefly describes the conventional medical view of cardiovascular disease.

First, let us look at just two numbers.

Heart failure – Also called cardiac failure, left-sided heart failure or right-sided heart failure. Heart failure is a condition in which the heart cannot pump enough blood throughout the body. Heart failure is not a heart attack and it does not mean that your heart has stopped or is about to stop working. It means that your heart is not able to pump blood the way it should. About 5 million people in the U.S. have been diagnosed with heart failure and millions more are undiagnosed. It contributes to at least 300,000 deaths each year.

Heart attack – Also called myocardial infarction. A heart attack occurs when blood flow to a part of the heart is obstructed for a prolonged period of time, resulting in damage or death of that part of the heart muscle. Each year over a million people in the U.S. have a heart attack and about half of them die from it (500,000). Many people get permanent heart damage or die because they do not get help immediately.

And in millions of more cases, drastic measures are taken to treat cardiovascular disease, such as coronary bypass surgery, placing mesh tubes (“stents”) inside the arteries to keep them open, or replacing the heart entirely.

While it is incredible that modern medicine allows us to perform these operations, we tend to ignore the fact that in most cases, they leave the patient heavily medicated with severe side effects, paralyzed, weak and non-productive for the rest of their life.

The current conventional medical model for atherosclerosis (arterial plaque) blames high cholesterol, or excess LDL (low density lipoprotein) caused by oxidation of LDL as a result of a diet rich in saturated fats. The focus of prevention in conventional medicine is to use drugs: drugs to reduce the LDL level in the blood, aspirin or Plavix to inhibit clotting and prevent heart attacks, and many more. The relationship to diet and exercise is usually secondary and only considered after the fact.

The popular view of cardiovascular disease:

High blood cholesterol is often accompanied by signs of chronic sugar elevation in the blood. This shows a disturbance in fat metabolism as well as the metabolism of carbohydrates and protein.



Cholesterol is a major component of good circulation and good health. It is a fat-like substance required to provide lubrication in the lining of the arteries. In addition to the cholesterol we obtain from our food, the liver also manufactures cholesterol, which is used by the cells that make up the arterial lining.

When arterial cells break down, they are excreted by the body and new cells grow to absorb the cholesterol in the blood. The concentration of cholesterol in the blood increases when the breakdown (death) of arterial cells exceeds the building up (birth) of new cells.

Problems with cholesterol start with a diet rich in altered fats. When natural fats are overheated and cooked with starch as in fried potatoes, donuts, pie crust, pastries, potato chips, etc., they are altered and they become defective. Defective fats are brought to the liver, which, as you recall, manufactures cholesterol. However, when the liver manufactures cholesterol from defective fats, the cholesterol is also defective and breaks down quickly in the arteries. This leads to degenerative atherosclerosis (plaque), which is usually accompanied by elevated cholesterol in the blood.

Natural fats do not lead to arterial disease. Many diets, such as that of some Eskimos, include large amounts of fat from seal and walrus, but the arteries remain normal and healthy.

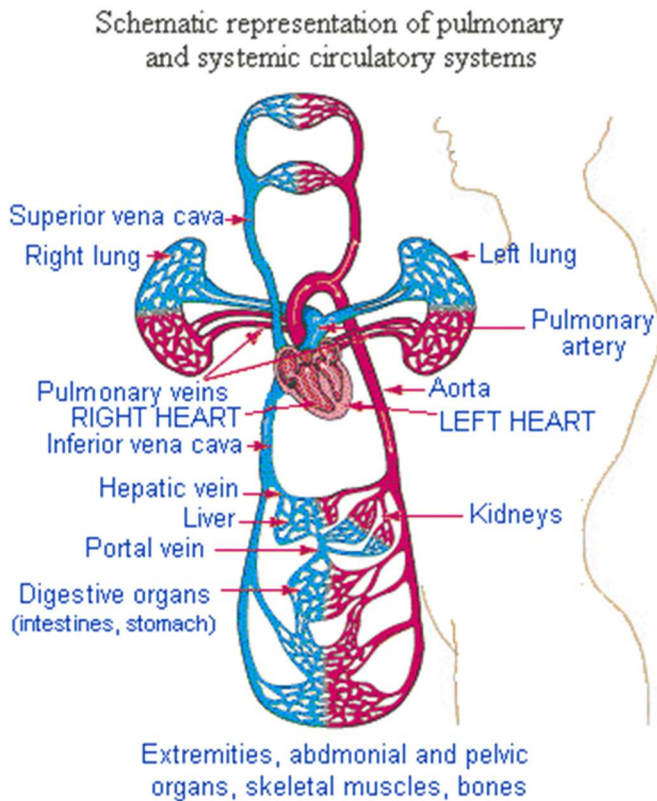
The arteries supply blood to the heart. When the blood has too much fat content it loses fluidity and the supply to the heart is reduced. This causes the heart to work harder and eventually become damaged. As the heart deteriorates, its muscles and valves lose strength and elasticity, and blood vessels harden. The walls of the heart dilate, its timing mechanism is disturbed and this magnificent organ fails.

The holistic view of cardiovascular disease:

In the above dramatic look at heart disease, much of the reality is left out. The fact that the arteries, the blood, and the heart itself are made up of trillions of intelligent and self-regulating

cells is completely ignored. And what of the regulating and feedback metabolism of the heart: the pericardium, the vagus nerve, the thyroid and adrenal glands, the master pituitary and its overseer hypothalamus? They too are made up of trillions of cells.

If you really want cardiovascular health, you should not only look at the conventional and/or the popular view, but also at the holistic and systemic view. We humans and animals are self-regulating organisms made up of trillions of cells that are each self-regulated. These cells make up organs that are somewhat self-regulating while all cells and organs are also subject to the regulating glands and overseeing organs: the thalamus and hypothalamus.



Of course we cannot ignore the relationships between the heart and other organs, between all organs and the endocrine system, and between the endocrine system and hypothalamus. Yet all of these organs and systems are made of cells, hence the importance of cellular health and vitality.

If we compare the heart to a motor, the adrenal gland pumps out adrenaline hormones as gasoline and the thyroid gland with its regulating hormones is like the carburetor. The pericardium and vagus nerve are the electrical pulse and spark that lead the heart to pump harder and pump more oxygen. When the thyroid, which controls the rate of the metabolism, is overactive, it causes the heart to beat more rapidly. When it is not active enough, the heart beats slowly and the person feels tired. The pituitary is the steering mechanism while the hypothalamus is the driver. The hypothalamus receives feedback from all the systems and monitors and regulates all metabolisms.

Acutely involved in cardiovascular health are the pancreas, the liver and the kidney. Chronic blood sugar elevation is a risk factor for coronary artery disease. Both the liver and the kidneys are involved in filtering the blood and when these organs are exhausted and cannot cope with the toxic load in the blood, it places a great strain on the heart. When the glomeruli (small filters) in the kidneys become clogged, the arterial blood pressure goes up. When the liver is congested, pressure builds up in the veins. The heart must work harder to push the blood through the kidney filters and the liver.

So you see that in the conventional medical model, too much attention is placed on cholesterol or the heart itself while abnormal liver and kidney conditions are ignored. In order to have good cardiovascular health, one must take care of not only the heart and arteries, but also the liver, kidneys, endocrine system and hypothalamus.

The shortest route to achieving overall cardiovascular health is by prevention and repair through optimum cellular nutrition. The importance of avoiding fatty foods and junk foods, not overeating and introducing exercise into your daily life is critical.

In the following sections of this book, you will find out how adding BAC to your diet can directly improve your cardiovascular health. Here is a preview:

BAC awakens the genius within

When the cells of the body receive the nutrients and the resulting energy that they need, they, like a good virtuoso will perform their multitude of cellular metabolic activities: growth, repair, cleansing, regeneration, protection and much more. If each cell of the organ performs its job well, then the organ will have a fighting chance to perform its metabolic activities. But let us not forget that cellular and organ health functions are governed by the glandular level, which itself is overseen by the “master gland” – the hypothalamus.

There is no doubt that BAC’s nutrients efficiently nourish all the cells of the body including the cells of the hypothalamic region. In the words of Dr. Michael Kiriak, it is in that sense, that BAC awakens the “genius” within. Several phytonutrients and pigments found in BAC such as beta carotene, alpha carotene and astaxanthin have been proven in human clinical trials to penetrate the blood brain barrier and furthermore penetrate the blood iris barrier.

Read the full details: “BAC Awakens the Genius Within”

BAC can help reduce bad cholesterol

In several studies done on spirulina, it was concluded that spirulina lowers serum cholesterol and is likely to have a favorable effect in alleviating heart disease. Benefits may be a result of its effect on the metabolism of lipoproteins.

Learn more: “Reducing Bad Cholesterol with BAC”

BAC supports the heart and blood vessels

There are a few specific nutrients present in BAC that are effective at improving elasticity of heart tissues, increasing protection of the vascular system, preventing and reducing “bad” cholesterol and preventing atherosclerosis.

Beta-carotene, GLA, iron, and mucopolysaccharides are credited with:

- improving elasticity of heart tissues
- lowering of blood pressure
- increasing protection of the vascular system
- preventing and reducing “bad” cholesterol
- preventing atherosclerosis
- strengthening body tissues, especially connective tissues
- making body tissues more elastic and resilient
- possessing strong anti-inflammatory effects
- reinforcing the tissues of the heart
- guarding against arterial deterioration
- protecting the vascular system by lowering blood fat

Find out more: “Supporting the Heart and Blood Vessels with BAC”

Reducing Bad Cholesterol with BAC

By now, Americans are well aware of the need to maintain healthy cholesterol levels in order to prevent heart attacks and strokes, two of the leading causes of death in America. The best way to lower cholesterol is to make dietary improvements and as such, the search is underway to identify natural foods that have a cholesterol-reducing effect, such as fish oil and oat bran.

BAC is one of these foods.

In a study conducted by the Department of Internal Medicine of Tokai University in Japan, it was concluded that spirulina (as contained in BAC) lowers serum cholesterol and is likely to have a favorable effect in alleviating heart disease.

Thirty males with high cholesterol, mild hypertension, and hyperlipidemia showed lower serum cholesterol, triglyceride and LDL (undesirable fat) levels after eating spirulina for eight weeks. These men had not made any changes to their diet apart from adding spirulina.

The first group consumed 4.2 grams of spirulina daily for eight weeks. Total serum cholesterol dropped a significant 4.5% within four weeks from 244 to 233. The second group consumed spirulina for four weeks and then stopped. Serum cholesterol decreased but shortly returned to the initial level. Researchers found triglyceride levels decreased slightly and LDL cholesterol decreased a significant 6.1% within four weeks. The reduction of serum cholesterol was even greater in those men with the highest cholesterol levels. The study did not speculate on how spirulina lowered cholesterol. No adverse effects were noted. 1

In another study done with rats, researchers attempted to find the method by which spirulina lowers serum cholesterol. They discovered that it might have an effect on the metabolism of lipoproteins. The oil soluble portion was found to suppress cholesterol levels in the serum and liver of rats. 5

Researchers in West Germany had previously discovered cholesterol reduction during a weight loss study with spirulina 2, while the Japanese research showed lower cholesterol without weight loss, suggesting that cholesterol reduction was not related to weight loss. Spirulina had been chosen in this study because it had previously been shown to lower serum cholesterol in rats. 3,4

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Supporting the Heart and Blood Vessels with BAC

BAC contains many nutritive agents that are known to contribute to the prevention and reversal of cardiovascular health problems. I will enumerate a few here, but not before reminding you that nutrients and their benefits cannot be singled out as being “good for the heart”, since in reality, all nutrients that contribute to cellular health are necessary and good for the heart. Let us not forget that the heart is made up of cells. When the cells of the heart are doing well, then the heart will have a fighting chance.

BAC is rich in fatty acids such as gamma-linolenic acid (GLA) and also provides alpha-linolenic acid (ALA), linoleic acid (LA), stearidonic acid (SDA), eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA) and arachidonic acid (AA). Consuming fatty acids is beneficial to lowering LDL cholesterol and reducing the risk of coronary disease.

BAC is also rich in vitamins A, B1 (thiamine), B2 (riboflavin), B3 (nicotinamide), B6 (pyridoxine), B9 (folic acid), B12 (cyanocobalamin), vitamin C, vitamin D, and vitamin E.

Without adequate minerals, there can be no health for the heart. BAC is a rich source of minerals that are tied in to cardiovascular health; potassium, calcium, chromium, copper, iron, magnesium, manganese, phosphorus, selenium, sodium, zinc, and many more.

Let us not forget the magic of the photosynthetic pigments in BAC including chlorophyll-a, xanthophyll, alpha-carotene, beta-carotene, echinenone, myxoxanthophyll, zeaxanthin, astaxanthin, canthaxanthin, diatoxanthin, lutein, lycopene, 3'-hydroxyechinenone, beta-cryptoxanthin, oscillaxanthin, phycobiliproteins c-phycocyanin and allophycocyanin, and others.

“Beta-carotene is just one of the many nutrients in spirulina. This alga also provides iron and is the most concentrated plant source of gamma-linolenic acid (GLA),” according to the World Review of Nutrition and Diet (1995, vol. 77)

There have been thousands of clinical, in vitro and field trials done with algae and the majority of them were done specifically with spirulina. I hope you have read about some of the field studies Dr. Kiriak has conducted with livestock earlier in this book. Next you will read about a few specific nutrients present in BAC that have been demonstrated in independent research to

be effective at improving elasticity of heart tissues, increasing the protection of the vascular system, preventing and reducing “bad” cholesterol and preventing atherosclerosis.

Lowering blood cholesterol levels and improving lipid profiles

In a study conducted at the Avinashilingam Institute for Home Science, Deemed University in Coimbatore, India, Dr. Ramamoorthy and his colleagues tested the effects of spirulina on patients with a combination of high cholesterol (above 250 mg/dl) and ischemic heart disease. They concluded that spirulina played a key role in lowering blood cholesterol levels and improving lipid profiles.

Read more: “Reducing Bad Cholesterol with BAC”

Cardio-protective agent dissolves deposits

Spirulina’s cell wall is unique too. It is made up of mucopolysaccharides that provide numerous health benefits. Many heart ailments may be caused by a build-up of low-density lipids (bad cholesterol). Gamma Linoleic Acid, as found in BAC, has been shown in many studies to be a good cardio-protective agent; it dissolves these deposits. Of special interest is the ability of these mucopolysaccharides to lower blood fats. This was also brought to light in a 1976 study that showed that spirulina controlled the tendency and ability of cholesterol and other lipoproteins to bond with arterial receptors and attach to artery walls.

Lowers blood pressure

In other studies, spirulina was able to cause a significant change in vascular tone by increasing the synthesis and release of nitric oxide and by decreasing the synthesis and release of a vasoconstrictive substance from the endothelial cells.

GLA dissolves arterial deposits

“GLA, an essential fatty acid, is key to the body’s ability to make vital prostaglandins, substances that control body functions and help alleviate health problems such as arthritis and heart disease, according to one preliminary report.” – Journal of Applied Phycology, 1993, vol. 5

“GLA supplementation results in blood’s becoming more “slippery” since prostaglandins reduce blood platelet adhesion so that cholesterol deposits in arteries have less chance to build up and create arterial blockage.” – Prescription for Nutritional Healing by James Balch, M.D., and Phyllis Balch, C.N.C.

BAC may prevent heart damage caused by chemotherapy

In animal research, Khan (2005) demonstrated that spirulina helps prevent heart damage caused by chemotherapy using Doxorubicin, without interfering with its anti-tumor activity. He

also claimed that spirulina reduces the severity of strokes and improves recovery of movement after a stroke.

When put together, several ingredients in BAC are a mighty force against cardiovascular health problems. Beta-carotene, GLA, iron, and mucopolysaccharides are credited with:

- improving elasticity of heart tissues
- lowering of blood pressure
- increasing protection of the vascular system
- preventing and reducing “bad” cholesterol
- preventing atherosclerosis
- strengthening body tissues, especially connective tissues
- making body tissues more elastic and resilient
- possessing strong anti-inflammatory effects
- reinforcing the tissues of the heart
- guarding against arterial deterioration
- protecting the vascular system by lowering blood fat

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BAC for Heavy Metal Detoxification

have already discussed several of the remarkable properties of the algae cell walls of Bio-Algae Concentrates in "The Important Polysaccharides Found in BAC" . These mucopolysaccharides have yet another fascinating property: they bind with environmental toxins and carry them safely out of the body.

What kind of environmental toxins?

- Heavy metals including aluminum, mercury, cadmium and arsenic
- Pesticides
- PCBs (polychlorobiphenyls)

Many studies regarding algae and the removal of heavy metals were conducted following the nuclear catastrophes of Hiroshima and Nagasaki in 1945 and Chernobyl in 1986. In a study done on animals, Ichimura (1973) reported that algae increased elimination of cadmium threefold in feces and sevenfold in urine. Horikoshi et al. (1979) showed that algae helped detoxify uranium and lead. Certain algae have detoxification potential for similar compounds, such as dioxin and polychlorinated biphenyls (PCBs). PCBs are chemical compounds used in plastics, insulation, and flame-retardants that have the potential to cause cancer and liver damage.

Spirulina may help ADHD by removing aluminum, carbon tetrachloride, and other toxins from the body (Torres-Duran et al. 1998; Vadiraja et al. 1998).

– Herbal Medicine, Healing & Cancer by Donald R. Yance

It is well known that the buildup of heavy metals in the body leads to disastrous effects on health and some rather frightening diseases such as Alzheimer's. Due to its cell wall structure and many other factors, Bio-Algae Concentrates can help detoxify the body of heavy metals.

BAC for Hypoglycemia and Diabetes

Today, it is universally acknowledged that most hypoglycemic, diabetic and other blood sugar related conditions manifest from the abuse of food (eating too much), a poor diet that leads to nutritional deficiencies, and the abuse of sugars and carbohydrates. These three habits weaken the pancreas, which is the organ that regulates blood sugar by producing insulin. When the pancreas is weak, it is unable to control blood sugar levels, eventually leading to disorders such as diabetes and hypoglycemia.

Millions of adults (and millions of children joining them every day) choose to use medication to control these disorders. However, medication treats only the symptoms of the disease and does not address the cause. The best way to treat blood sugar related conditions is to stop the abuse, start exercising, and improve the diet.

BAC can help regulate blood sugar

Many people consuming BAC have easily reduced and even stopped using medication to control their blood sugar disorders. This is possible because BAC contains several nutrients and phytonutrients that can help control blood sugar levels in the body by addressing the root of the problem, which is poor nutrition.

Do not forget that our bodies and organs are made up of trillions of cells. When the cells of the body receive the nutrients that they need, they will perform their multitude of cellular metabolic activities: growth, repair, cleansing, regeneration, protection and more. When each cell of an organ, such as the pancreas, performs its job well, then the organ will have a fighting chance to perform its metabolic activities, such as blood sugar regulation.

In addition, cellular activities and organ metabolic functions are governed by the glandular level which itself is overseen by the master gland: the hypothalamus. The hypothalamus monitors blood sugar levels and issues the hormonal command to the pancreas to regulate blood sugar with insulin. BAC's greatest quality is that it efficiently nourishes ALL the cells of the body, including those of the hypothalamus. So you see, by taking BAC, you are not only nourishing the pancreas, you are nourishing the entire chain of command that oversees the process of blood sugar regulation.

Amongst other nutrients and their mechanisms of action, BAC has the added benefit of providing a full spectrum of essential fatty acids (the good fats that heal) like omega-3 and non-essential fatty acids like omega-6 and omega-9, including the important Gamma Linoleic Acid (GLA), which has been shown to be effective at controlling blood sugar levels.

Since much of the reason for carbohydrate, junk food and sugar cravings is founded in nutritional deficiencies, BAC also helps to reduce cravings by providing rare nutrients and certain trace minerals that are difficult to obtain in our regular diet, such as magnesium. After

these nutrients are finally provided to a body that has been missing them for a long period of time, cravings tend to calm down.

A good example of how cravings work is when a pregnant mother craves specific foods, such as chocolate. During pregnancy, a woman requires higher levels of several nutrients in order to adequately nourish herself and the fetus. Chocolate cravings are signals from the body that are saying “eat more magnesium.” If the woman gets the magnesium she needs from better sources in the first place, her chocolate cravings will stop.

Many people that consume BAC also notice that their appetite for better foods returns, they have less blood sugar related jitters, they experience less drowsiness after meals and they notice appetite suppressant benefits. When you consume BAC, its proteins and carbohydrates provide a steady stream of energy to the body without spiking insulin secretion. As a result, cravings are satisfied. Remember, BAC contains a near-perfect ratio of high-density proteins and complex carbohydrates.

Astaxanthin, as contained in BAC, has also been studied for its efficacy in addressing the conditions imposed by type II diabetes. One study demonstrated that astaxanthin was capable of reducing blood glucose levels by nearly 40% in laboratory mice administered with an Intraperitoneal Glucose Tolerance Test (IPGTT), as well as preserving pancreatic beta-cells from oxidative damage and increasing insulin sensitivity. A later study, also done with laboratory mice, revealed that astaxanthin aided in the prevention of diabetic nephropathy as measured through the inhibition of urinary albumin loss and DNA damage – by 67% and 50% respectively.

TESTIMONIALS

No longer pre-diabetic!

I started taking BAC F2 and F3 almost exactly one year ago.

I informed myself about the products by reading the Bio-Algae Concentrates website after my vet recommended BAC F2 for my aging cats. I then decided to try BAC myself.

For the past 15 years I’ve been told I’m pre-diabetic. Because of that, I’ve tried to change my diet and take supplements according to recommendations by various naturopaths and healers. But, despite everything, I remained pre-diabetic. I also take synthroid and liothyronine supplements, as prescribed by my physician.

Now, one year later, I see great improvement in my health; my lab tests in September, 2006 indicate that I’m no longer pre-diabetic, and my thyroid dose was cut in half last May. I also have very little plaque on my teeth after decades of deposits that required cleaning every 4 months. My dentist is surprised because teeth and gums usually deteriorate more at my age (63) as opposed to becoming healthier.

After a year of taking 4-6 F2 and 8-12 F3 daily and getting these results, I feel comfortable recommending BAC to others.

Sincerely,

– Ingrid Eisenman, Seattle, WA, October 2006

Blood sugar control

“...My 11 year record of Type I Diabetes has never shown the degree of control of blood sugar that I am now experiencing since I began using BAC 6 weeks ago. I am using less insulin and showing much better control. Stay tuned for further results...”

– Norma Gimlin, 83 Years Old from Carrizozo, NM

Type I Diabetes

“My insulin intake has measurably decreased over the past 2 months as I have been taking the Bio-Algae Concentrates F3. Throughout 2002, my daily insulin usage has averaged 42 units, including a basal rate of 10-15 units of Lantus and the rest short acting Novolog. Since starting use of Bio-Algae Concentrates F3, my average has dropped to 34.1 over the past 90 days, measuring on July 1. The average is 34.1 for the past 60 days, 34.3 for the past 30 days, 31.2 for the past 14 days, and 27.4 units for the past 7 days.

I have been eating lighter the past 10 days, which shows up as decreased insulin requirements. I also notice more consistent energy and need for about 1 hour less sleep compared to before I began using Bio-Algae Concentrates F3 in March.”

– Jeff Myers, Loveland, CO – July 2003

Diabetes Type II

“I am diabetic, on multiple medications and recently reached such a low that I could barely function. In 3 weeks on BAC, I quit taking anti-depressants, stopped eating any sugars, began working out twice a day, and have dropped my blood sugar from 250 to 125. I’m sure the diet and exercise was a big part, but I never could have even begun without that BAC boost.”

– Karl Martinez / Denver, CO – February 2002.

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Seeing is Believing – Visual Health with BAC

“Unless man duplicates a blade of grass, nature can laugh at his so-called scientific knowledge. Remedies from chemicals will never stand in favor compared with the products of nature, the living cell of the plant, the final result of the rays of the sun, the mother of all life.”

– Thomas A. Edison

Good vision and eye health is a concern for both young and old. Blurred vision, eye strain, eye fatigue and irritations are just a few of the common ailments we experience. More serious conditions include cataracts and age-related macular degeneration (ARMD), which develop due to degenerative cellular health and accumulated free radical damage. Studies have shown that antioxidants play an important role in maintaining ocular health and preventing serious conditions such as cataracts and ARMD.



A cataract is the clouding of the transparent lens of the eye. Cataracts can be caused by oxidative stress, which damages the lens protein. Antioxidants repair the damage caused by oxidative stress, hence antioxidants could prevent vision impairment caused by cataracts and halt the process of cataract formation.

ARMD is one of the leading causes of irreversible vision loss around the world. During our lifetimes, normal metabolic processes and the absorption of UV light generates free radicals and oxidants, which cause damage to photoreceptors in the eye. This leads to impaired function and, overtime, to the degeneration of the macula, a central part of the retina. Antioxidants can eliminate these free radicals and oxidants, which will help to prevent further cellular damage to the macula.

Antioxidant research is one of the pillars in the study of life extension and general health. Some antioxidants, such as R(+)-lipoic acid and full-spectrum Vitamin C, have merited greater scientific interest than others. These antioxidants form an elite subset of antioxidants due to their unique properties, mechanisms of action, central importance and/or exceptional potency.

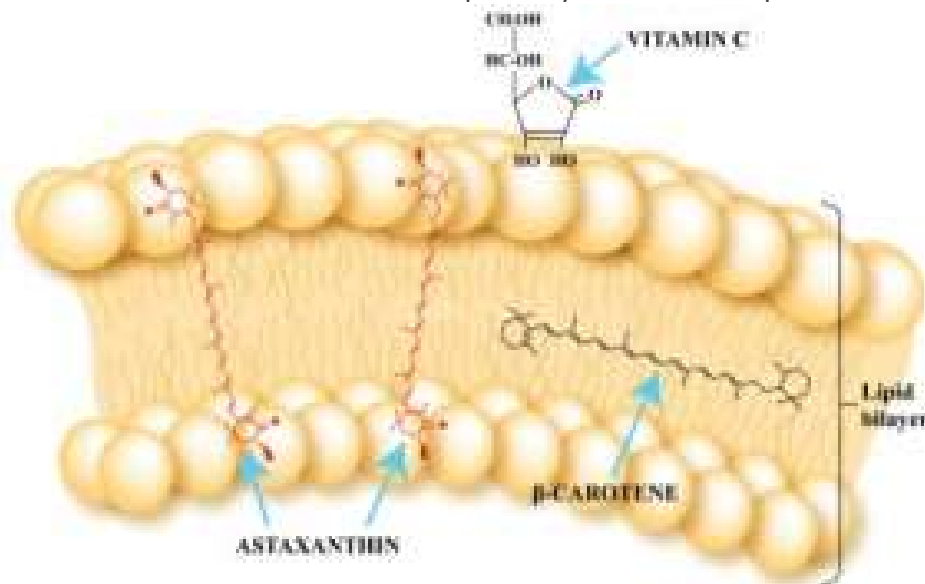
The antioxidants in BAC

So why do the antioxidants in Bio-Algae Concentrates merit admittance into this exclusive subset? There are only three carotenoids (a type of antioxidant) that are able to transverse the blood brain barrier and the blood retinal barrier, thereby allowing them to alleviate oxidative stress in the brain, eyes and central nervous system. These three carotenoids are lutein, zeaxanthin and astaxanthin. Bio-Algae Concentrates contains all three in addition to many more known beneficial carotenoids and even some that have not yet been identified.

Studies done on lutein and zeaxanthin carotenoids show that they help reduce the risk of age-related macular disease in the elderly. Astaxanthin has been shown to reduce the risk of ARMD as well as protect the ciliary body, the part of the eye that controls the lens, from harmful oxidative stress.

Astaxanthin is found in abundance in marine environments, particularly among algae and plankton. The algae *Haematococcus pluvialis*, as contained in BAC, contains the highest level of astaxanthin.

Astaxanthin has a unique molecular structure: its polar end groups have the distinct ability to attach themselves to both sides of the lipid bilayer that make up the cell membrane.



From this position, astaxanthin inhibits oxidation of the cell membrane, thereby protecting the rest of the cell from potentially damaging oxidation. Astaxanthin can also eliminate free radicals by adding them to its structure rather than sacrificing an atom or electron, meaning that unlike most antioxidants, astaxanthin is far less likely to become a mild free radical right after eliminating one. This also allows astaxanthin to be more biologically active, enabling it to trap and eliminate more free radicals – and of a greater variety – than most other antioxidants.

Read more about astaxanthin in: “BAC Contains High Levels of astaxanthin, the Star of the Carotenoids”

Eye coordination for high performance sports

Astaxanthin’s benefits to eye health include increased ciliary body accommodation, increased retinal blood flow, and anti-inflammatory properties. The ciliary body includes the ciliary muscle, which stretches between the lens and the pupil. Accommodation refers to the ability of this muscle to adjust lens thickness in order to focus light on the retina. If the eye focuses on a fixed object for extended periods of time, muscle spasms and other signs of fatigue may occur. Accommodation response is evaluated by measuring the speed at which the ciliary body reacts to a change in visual focus. The faster the ciliary body can refocus, the better the accommodation response.

Two studies conducted in 2005 measured accommodation response in people taking astaxanthin supplements. The astaxanthin group was approximately 46% faster than the placebo group. This means that those taking astaxanthin were able to spot moving objects 46% faster than those who were not. Furthermore, two other studies separately determined that astaxanthin increased retinal blood flow (providing more nourishment) by approximately 11% in humans and reduced ciliary cell inflammation by nearly 80% in rats.

In another double-blind randomized placebo controlled study, 20-year-old male hand-ball players received an oral dose of 6mg of astaxanthin per day during a period of 4 weeks. Improvements were noticed in their depth perception and critical flicker threshold. Based on this preliminary study it is shown that astaxanthin may be effective for improving vision in sports.

To conclude, let me remind you that BAC is much more than just antioxidants. I personally have more faith in “BAC awakens the genius within” than in its anti-oxidative powers. I believe that when our cells recover from exhaustion, they will perform their metabolic activity better and this will heal the body.

TESTIMONIALS

My vision is improving very much

“I have found for myself that I am getting so much more done now than ever before... forget those help-yourself manuals! Just get yourself on the right track and watch out! My vision is improving very much and I just realized that my astigmatism is not so noticeable, wow.”

– Jacqueline Chapman, Bozeman, ID – July 2007

The pressure (glaucoma) in my right eye has dropped from 16 to 11

“Dear Roland, I am now on my fourth bottle of the Bio-Algae and still taking nine capsules a day, as you advised.

The eye doctor checked the pressure for the glaucoma yesterday. I was most curious to see if there would be any difference since taking the BAC. The pressure in my right eye (which they have been unable to bring down for years) has dropped from 16 to 11. The left eye is even a bit lower!!

Even more strange: I noticed that the vision in my left eye had improved.....I have a few blind spots from the glaucoma, and when I read the chart I find that every third letter in a line is a total blur. This time I was able to read many more letters.

I am really happy about it and now feel justified in spending that much every month! Thank you again so much for all your help and advice.
Sincerely”

– Gail Gallagher, June 2007

Eyesight

“Thought you would like to know that I have had a pretty favorable eye checkup. Especially compared to declining eyesight. This time only a little of the retina damage was seen by the optometrist. Very good news for me. Was also thinking about my cat. He seems to have less breathing problems. He has been taking two capsules to my twelve. Hope that this reaches you in the greatest wealth, good health!”

– Franklin & B.B. – June 2007.

Glaucoma

“After observing the success my wife was having using BAC for her fibromyalgia I decided to try BAC for my energy and general declining health. I also suffered from Glaucoma experiencing intense pressure and pain. Now after two months of using BAC, my Glaucoma pressure has declined radically, my doctor wants to talk with you folks about BAC for his other patients. I feel better overall with my health and have lots more energy like my wife”

– Bud Woody (male 58), Denver, Colorado – August 2002.

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BAC for Cleansing and Detoxification

If you are engaged in physically intense activities (strength training, cardiovascular training) or heavy metabolic processes (high-protein dieting, chemotherapy, exposure to toxins), you will find tremendous support in the chlorophyll of Bio-Algae Concentrates. This chlorophyll cleanses the liver, kidneys and blood of toxins and metabolic impurities such as excess uric acid for example.

When the liver and kidneys are working more smoothly, everything improves in the body.

This cleansing effect is especially important for people who follow any sort of low-carb diet (Atkins diet, South Beach diet, etc.) since such diets are well known to place a heavy burden on the liver and kidneys. Eliminating excess ketones from the blood and body takes work. I believe that refined carbohydrates have no place in the diet of healthy human beings. As a protection for those who follow these diets, I recommend taking plenty of Bio-Algae Concentrates to make sure their system gets the support it needs.

People who engage in substance abuse of any kind — smoking, drinking, drugs, and so on — have a very strong need for Bio-Algae Concentrates. Their habits place enormous stress on their organs (especially the liver), and if they do not do something to support and cleanse those organs, they are undoubtedly headed towards some very undesirable results.

Bio-Algae Concentrates can help these people, but of course they cannot counteract the overwhelming toxicity of smoking cigarettes, for example. A smoker who takes Bio-Algae Concentrates will be far healthier than a smoker who does not, but a person who does not smoke at all will be far healthier still.

The cleansing effect of Bio-Algae Concentrates is not limited to those who engage in substance abuse. Due to environmental toxins, air pollution, water pollution and other contaminants, we are all exposed to toxic substances, even if we avoid the worst habits like smoking. As a result, we could all benefit from the cleansing and detoxifying effects of Bio-Algae Concentrates.

Fertility, Fecundity and Viability with BAC

What are fertility, fecundity and viability?

Fertility would not be without fecundity and viability. Their interaction will become apparent in the text that follows, but let me first define these terms.

Fertility is a measure of reproduction: the number of children born per couple, person or population. In all species, fertility displays astounding mechanisms and depends on many factors such as nutrition, sexual behavior, instinct, endocrinology, timing, way of life, and emotions. Human fertility is a little more complex as economics and culture are also added.

Fecundity, derived from the word fecund, generally refers to the ability to reproduce. In biology and demography, fecundity is the potential reproductive capacity of an organism or population, measured by the number of gametes (eggs), seed set or asexual propagules.

Viability means in general “capacity for survival” and is more specifically used to mean a capacity for living, developing, or germinating under favorable conditions. In pregnancy, viability refers to either an early stage pregnancy that has a chance of reaching full-term and live birth, or the shortest length of pregnancy after which a new born prematurely has a chance of survival.

Russian Research

During several animal research projects sponsored by the former Russian Academy of Science and Ministry of Nutrition, the effect of BAC on fertility, fecundity and viability was evaluated in small and large species. Some of these trials were very large, comprised of thousands or even millions of animals.

Overall, when consuming BAC, most species were observed to be more energetic, to have more vitality, and to have increased energy and strength. From the hundreds of resulting health and productivity benefits, I will concentrate on those having to do with fertility, fecundity and viability.

Poultry: In Moldova, a poultry farm with 1.5 million egg-laying chickens was selected as a main center for algae research from 1985 to 1995. This farm had been afflicted with cancers and low productivity for many years. After a decade of BAC supplementation, the cancers were resolved, many productivity benefits and results were observed and an overall productivity increase of 20% was estimated. Some of the observed benefits were:

Increased number of eggs per year per chicken, from 250 to 300
Increased viability of the newborn chick from 90% to higher than 98%

Increased egg laying period from 16 months to 24 months
Increased fertility

Pig: A 54,000 heads pig farm near Voronege was affected with cancer and low productivity. During this project sponsored by the Ministry of Nutrition the following results were observed:

Increased spermatozoid count and motility (4 times)
Increased pig litter size
Increased viability of piglets
Increased fertility

Dairy cow: A 15,000 heads dairy cow farm was plagued with some cancer and low productivity. During this project sponsored by the Ministry of Nutrition the following results were observed:

Increased viability of donor's embryos and resulting fecundity
Increased spermatozoid count and motility (4-5 times)
Increased instances of multiple births (twins)
Increased viability of newborns
Expected increases in lactation period from 45 months to 80 months
Increased fertility

Mink: In Siberia, hundreds of mink farms totaling more than 10,000 animals were affected by various cancers and low productivity for this important Soviet industry. During this project sponsored by the Ministry of Nutrition the following results were observed:

Increased viability of donor's embryos and resulting fecundity
Increased spermatozoid count and motility (4 times)
Significant increases in size of litter
Increased viability of newborns
Increased fertility

Dog: In this informal study, hundreds of dogs, the majority being German Shepherds, were observed over a period of several years. The dogs were used in Moldova to guard the poultry research farm from foxes and other predators.

Increased dog litter size
Increased viability of puppies
Increased fertility

North American BAC Research

Since BAC was introduced in North America in 1999, there have been several instances of fertility reported with animals, in some cases as anecdotal reports, in other cases as part of semi-formal research projects. Find a few listed here:

Increase of 8% in survival rate of new chicks in a 28,000 egg laying poultry research project conducted in Quebec

Instances of larger egg size on a small ranch in Colorado

Increased survival rate of newborns on a goat farm in Quebec

Twelve of thirteen cows dropped their placenta by themselves after giving birth, when previously assistance from a vet or the farmer was required in most cases and...

Increased number of calves per cow per year observed during a formal research project on a Quebec farm

Other Animal Research

In other clinical research conducted at the University of Hawaii, spirulina caused the fertility levels of quail to increase to 96.1 %, significantly higher than fertility levels on a standard breeder diet.

In other research, spirulina was reported in many Aviaries to nearly double production of finches, canaries and hookbills.

BAC, People and Fertility

There have been many cases of fertility or other benefits reported anecdotally by people using BAC:

Couples having difficulty getting pregnant reported successful pregnancy and resulting birth

Women that had entered menopause reported returning menstruations

Women and men report increased libido

Men report increased erectile function

Normalization of the level of testosterone and other hormones

BAC, Energy and Spermatozoid motility

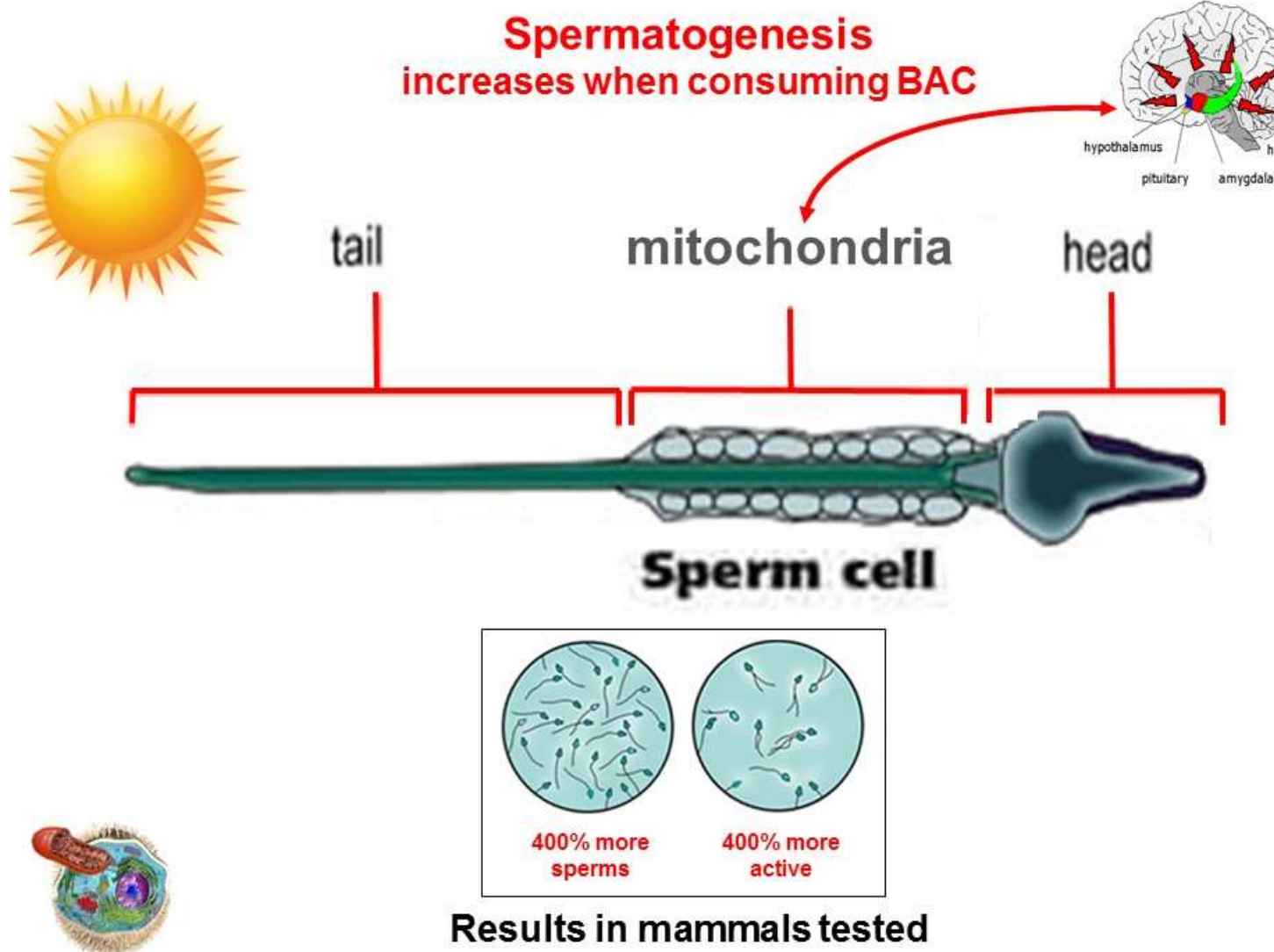
Rather than detailing the physiological mechanisms of fertility, fecundity and vitality, all of which can be found in many books, I will describe only one physiological example to illustrate the relationship between nutrition (and BAC) and fecundity.

The animal research done with BAC often resulted in elevated spermatozoid count and motility across species.

Spermatozoid count is a function of testosterone, cell splitting and other energy and metabolic factors.

Motility is a biological term that refers to the ability to move spontaneously and independently. In terms of fecundity it describes the capacity of the sperm to reach the egg.

One partial explanation of these results is associated with increased ATP energy resulting from a better mitochondria Krebs cycle metabolism. By looking at the structure of a spermatozoid, you can understand the importance of energy required for its flagellum to propel it towards the egg. The key to spermatozoid motility is in its middle section (see diagram). This middle part, immediately behind the head, contains numerous mitochondria, which generate the energy required for movement of the tail.



The Mighty Mitochondria: The Energy Capsules

Mitochondria are tiny sausage-shaped organelles that float in the cytoplasm of the cell. Besides being abundant in the spermatozoid, there are trillions of these tiny powerhouses in the body.

Mitochondria are present in all human and animal cells and play a central role in sustaining aerobic cellular energy functions. In the body, the cells that require the most energy contain

the most mitochondria. The cells of the brain, skeletal muscles, heart muscles and eye contain the highest number of mitochondria (as many as 10,000 per cell) while the skin cells, which do not require much energy, contain only a few hundred of them.

Mitochondria look and function like “tiny energy capsules.” They carry ATPase, which is the principal energy enzyme, and cytochrome enzymes, which are the principal enzymes involved in detoxification.

ATP: The Energy Molecule

This energy molecule is called adenosine triphosphate (ATP), the principal energy molecule in the human body. ATP molecules are produced in the cells by the oxidation of carbohydrates, proteins and fats. The energy carried by ATP molecules is used or stored depending on the needs of the body.

These processes are regulated by several factors including the efficiency of enzymes, the extent of enzyme inactivation by intracellular enzyme poisons and the metabolic needs of the cells at the time.

How does BAC positively affect the energy capsules?

When tabulating the range of health results obtained in the Russian studies, it becomes obvious that all physiological metabolisms of the body are benefited when consuming BAC.

There is no doubt that BAC with its 5,000 nutrients does a magnificent job supporting a healthy cellular metabolism.

Furthermore, with its high content of green chlorophyll, nicknamed the “shepherd of light” due to its critical role in the photosynthesis process, BAC significantly contributes to the energy process that occurs in thousands of mitochondria in trillions of cells of the body.

But BAC’s greatest value is that it is extremely efficient at reaching the cells of the brain, resulting in the energetic awakening of the hypothalamus/pituitary cortex that is responsible for the balance (homeostasis) of all metabolisms of the body, including the critical ATP energy cycle that occurs in mitochondria.

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The Many Benefits of Consuming BAC

BAC energizes the body, the brain, the mood and the spirit!

– Anonymous consumer of BAC

Research in health and fitness has brought about new attitudes to diet and lifestyle. Longevity is real! As we live longer, we want to remain strong and healthy. Because we lead such busy lives, it is not always a priority to prepare healthy meals, so we prepare our meals in a hurry. Environmental pollution, stress, hereditary uniqueness and a variety of other factors also significantly increase our need for protective nutrients. This problem can be solved by using BAC, a concentrated and complete superfood, full of essential and rare nutrients that are lacking in our daily diets.

Here is a partial list of benefits that people may obtain or observe when consuming Bio-Algae Concentrates. Many of these benefits have been proven in clinical or industrial trials with millions of livestock, while others have been proven in human clinical or pre-clinical research and trials.

Below, you will find an index to help you navigate quickly to the benefits you are interested in, or you can also scroll down to browse through them all.

List of Benefits

BAC Promotes Full Spectrum, Comprehensive Health Benefits

BAC Promotes and Enhances...

BAC Helps Fight and Heal...

Potent, Energizing Nutrition

Completeness

An Unparalleled Concentration of Protein

EFA's – Essential Fatty Acids – The "Fats that Heal"

Natural Active Enzymes

Vitamins and Minerals

A Wealth of Natural Trace Elements

Powerful Immunity and Toxin Shield

Target: Brain

Viruses Blocked

Chlorophyll

Prostaglandins

Toxin Shield: Radical War

Toxin Shield: Antioxidant Arsenal

Arthritis and Allergies Reduced

Natural Weight Loss and Muscle Building

Dieting and Weight Loss

Safe, No-fast Fasting

Bodybuilding and Fitness

Optimum Digestion and Cellular Absorption

Stimulate and Tone Digestion in a Gentle, Pleasant, and Invigorating Way

Critical pH Balance

Pancreas

Restored Micro Life

Detoxification

BAC "Fires" Ordinary Food

Peak Brain Function and Emotional Balance

Dynamic Metabolic Rejuvenation and Healing

Miraculous Human Body

Lazy Metabolism and Immune System

Anti-Aging

BAC is Easy and Practical

Safety and Success of BAC

History and Development of BAC

The Endocrine System

BAC Promotes Full Spectrum, Comprehensive Health Benefits ▲

Potent, energizing nutrition

Powerful immunity and toxin shield

Natural weight loss and muscle building

Optimum digestion and cellular absorption

Peak brain function and emotional balance

Dynamic metabolic healing and rejuvenation

BAC promotes and enhances ▲

Youthful metabolism, energy, mental health and clarity, sleep, digestion, sexual function, weight loss, muscle gain, fast healing, heart and lung capacity, healthy blood pressure, vascular health, immunity, bone density, hair growth, cleansing of the blood, kidneys and gall bladder and liver detoxification.

BAC fights and helps heal ▲

Depression, arthritis and joint problems, allergies, skin diseases, fibromyalgia, asthma, pancreas problems, diabetes, thyroid imbalances, intestinal problems, high cholesterol, anemia, cardiovascular problems, leukemia and cancer.

Potent, Energizing Nutrition ▲

Completeness ▲ BAC is a whole natural superfood, full of nutritional wonders that stimulate the body's own abundance for balanced, total wellness. This rich nutritional content is complete with proteins, carbohydrates, unsaturated fatty acids, enzymes, and vitamins.

An Unparalleled Concentration of Protein ▲

The body assimilates 90-95% of the proteins found in BAC while 60% are complete proteins, including all essential amino acids.

EFA's – Essential Fatty Acids – The “Fats that Heal” ▲

Rich in Omega 3, Omega 6, Omega 9, and GLA, BAC's high gamma linoleic acid content has similar benefits to mother's milk. This fatty acid has pro-immune anti-inflammatory properties as well as positive effects on the vasodilatation of blood vessels. It supplies an array of vitamins such as B vitamins, including B12 and vitamins A, E and C. Regular use of BAC reduces the level of saturated fatty acids in the liver and increases the level of unsaturated fatty acids, enabling distribution and delivery of nutrients where they are most needed for peak metabolism.

Natural Active Enzymes ▲

BAC provides more than 4,000 types of natural active enzymes that contribute to the efficient digestion of fats, carbohydrates and proteins, permitting greater assimilation of nutrients and total elimination of toxins. It is also one of the richest sources of chlorophyll, a well-known agent for its antibacterial, anti-fungus and anti-inflammatory benefits.

Vitamins and Minerals ▲

BAC contains vitamins A, B complex including B12, C, and E, with high levels of alpha-carotene, beta-carotene, chlorophyll, phycocyanin and astaxanthin.

A Wealth of Natural Trace Elements ▲

Along with iron in a form more readily absorbed than that found in beef liver, BAC contains no less than 92 trace elements including calcium, phosphorus, copper, sodium, chromium, selenium, magnesium, and zinc, as well as calcium spirulan, which has anti-viral action and inhibits cancerous cells.

Powerful Immunity and Toxin Shield ▲

Target: Brain ▲

BAC targets the brain glands in particular – the pituitary, hypothalamus, and pineal – because only they and the central nervous system they control are able to powerfully wake up our sleepy immune system.

Viruses Blocked ▲

BAC is an excellent source of phycocyanin (the protein pigment in blue-green algae). It inhibits virus replication and intensifies the cellular and hormonal mechanism of the immune system, reducing the presence of viral diseases. BAC strengthens the immune system, improving the body's capacity to produce new blood cells and to regenerate liver and spinal cord cells.

Chlorophyll ▲

BAC is one of the richest sources of chlorophyll, a well-known agent for its antibacterial, anti-fungal and anti-inflammatory benefits.

Prostaglandins ▲

BAC contains precursors to prostaglandins, which act like hormones, supplying our central nervous system and stimulating the immune system to make maximum use of what we eat.

Toxin Shield: Radical War ▲

Artificial and processed foods, environmental pollution, stress, and heredity all join in a toxic assault of free radicals, bringing accelerated aging and an epidemic of degenerative diseases. Nature's best antioxidants, known as flavonoids and carotenoids, can provide a shield against toxins and radicals.

Toxin Shield: Antioxidant Arsenal ▲

Perhaps the most formidable arsenal of superior natural antioxidants ever assembled, BAC's free radical exterminators have properties unavailable in their synthetic forms. Astaxanthin alone can be as much as 1,000 times more nutritionally functional as an antioxidant than vitamin E. An exceptional source of beta-carotene (pro-vitamin A) and several other carotenes, BAC provides almost 40 times the protective nutritional power of carotene found in carrots.

Arthritis and Allergies Reduced ▲

BAC's free radical protection improves inflammatory conditions like arthritis and reduces negative effects of allergic diseases by sparking our autoimmune system.

Natural Weight Loss and Muscle Building ▲

BAC contains spirulina algae, which is one of nature's greatest sources of leucine. Leucine is one of only three branched-chain amino acids that have a special capacity to boost protein synthesis and inhibit protein breakdown. It is used by athletes to get lean, recover more quickly from intense work outs and create muscle mass while preserving the muscle tissue which is already in place.

Dieting and Weight Loss ▲

BAC taken 30 minutes before meals helps relieve hunger and cravings. With BAC, you get more out of everything good you eat, right down to the cellular level and appetite naturally subsides, giving you more energy with less food.

Safe, No-fast Fasting ▲

Ideal for general detoxification and improved blood circulation, BAC is also great for fasting and suppressing appetite while providing concentrated nutrition and vitamins.

Bodybuilding and Fitness ▲

BAC taken after workouts helps rebuild, repair, and grow lean muscle mass. The more intensive the training, the more effective BAC seems to be, promoting fat burn, toning, lean mass building, increased stamina and strength. BAC contains no steroids, but will help the body produce natural steroids.

Optimum Digestion and Cellular Absorption ▲

Stimulate and Tone Digestion in a Gentle, Pleasant, and Invigorating Way ▲

Critical pH Balance ▲

Poor foods and environmental toxins conspire to acidify the body, bathing it in damaging free radicals and setting the stage for cancer and a host of degenerative diseases. A more alkaline balance is crucial to long life.

Pancreas ▲

BAC stimulates the pancreas to efficiently alkalize the digestive system, which promotes:

Regeneration of intestinal lining, allowing it to hold more water and less salt

Removal of carcinogenic buildup of old matter

Balancing of both extremes of bowel activity

Restored Micro Life ▲

Processed food and antibiotics deplete and unbalance the vital friendly microbes necessary for healthy intestinal function. BAC rapidly restores beneficial flora, so food, nutrients, and supplements are more completely digested and assimilated.

Detoxification ▲

With regular use, the liver is cleansed, nourished, and stimulated to regenerate and fully function.

BAC “Fires” Ordinary Food ▲

Most of us assimilate only a portion of the food we eat and the supplements we take. BAC promotes full absorption of nutrients and vitamins into the blood for maximum availability to the body’s cells. Cell membranes are often incapable of full assimilation of vital nutrients and enzymes. With BAC, cells get all the oxygenation and nutrition they need from enhanced transfer across cell membranes.

Peak Brain Function and Emotional Balance ▲

BAC is so effective for brain function that many people experience quick psychological improvement, motivation, balance and relief of depression and anxiety. Psychological improvement leads to naturally strong but calm resolve, the will to eat better, exercise or be active, and to grow and deal with the stress of change, to create, to actualize, to achieve, and to be your true self at full potential.

Dynamic Metabolic Rejuvenation and Healing ▲

BAC triggers rejuvenation of the entire endocrine system; the interactive network of glands, which is the master control system for metabolism, mood, mentality, and youth.

Led by the pituitary, these executive regulators of all bodily systems include the thyroid, hypothalamus, pineal, adrenals, gonads, and pancreas, all of which produce critical hormones, enzymes, and vitamins.

Evidence of the power and importance of hormones and other natural steroids in health and longevity is overwhelming. Labs around the world are intensely focused on unraveling the incredibly complex web of biochemical compounds that seem to make us or break us – mentally, emotionally, and physically.

Miraculous Human Body ▲

A genetically sound, healthy young human body in its prime can live on bad food, go without sleep, withstand stress, deprivation and toxins, and still rebound, combat thousands of diseases, heal and thrive magnificently, all without a single vitamin pill. How? With a perfectly functioning metabolism and strong immune system.

Lazy Metabolism and Immune System ▲

Age, pressures of modern lifestyle, poor foods and poor eating habits all allow our body's metabolism and immune system to become lazy, which leads to prematurely accelerated aging and system breakdowns. Even with great advances in medical science and availability of many products for healthy living, instances of degenerative and heart diseases are increasing every day. What is going wrong?

Only by restoring our metabolism to a more youthful state can we hope to counteract the ravages of aging and degenerative disease. Good diet helps and exercise helps, but what if that is not enough, and what of the majority who do not get the best diet and exercise for whatever reason?

We need a "superfood," a concentrated and comprehensive revitalizer to trigger our body to feed us smartly (as it did when it was younger), making the most from our daily food intake. This superfood needs to nourish and stimulate the brain, nervous system, and glandular network, while at the same time cleansing and eliminating toxins. This is the essence of anti-aging rejuvenation.

Anti-Aging ▲

BAC achieves the dual purpose of restoring vibrant anabolic (tissue building) metabolism and reducing catabolic (destructive) breakdown. BAC maximizes natural and balanced production of:

HGH (human growth hormone)

DHEA (the "super hormone")

Melatonin (the "sleep master")

Insulin, steroids and prostaglandins thereby restoring a younger, more vigorous metabolism, the basis of anti-aging. Live "well" today as well as live longer.

BAC is Easy and Practical ▲

Hormones and enzymes are part of an intricate and delicate web of substances that only the natural miracle of a healthy, young, fully functioning body can optimally produce, assimilate, manage and balance. BAC takes away the complexity, confusion, and risk of supplementation by balancing and restoring the body's natural hormone and vitality producing network.

Safety and Success of BAC ▲

BAC is the result of hundreds of clinical tests and practical applications. BAC was used successfully with hundreds of children and adults affected with cancer, leukemia and other serious maladies in the Ukraine, in Chernobyl, and in Canada. With BAC, there are no dangers of overdose or any known adverse side effects or drug interactions. Compare this to the nearly 100,000 annual deaths in the USA alone which result from complications due to prescription drugs taken as prescribed.

History and Development of BAC ▲

BAC is the culmination of three decades of intensive work by a pioneer in biotechnology (a "bioneer"), award-winning Russian scientist and professor Michael Kiriak, now living in Canada, where BAC is made under his authority, supervision and strict quality controls.

In his early years, Dr. Kiriak was tasked by the demanding Soviet empire to discover nutritional ways to improve production of poultry and livestock. Instead of relying on supplementation with dangerous hormones, chemicals and antibiotics, Dr. Kiriak turned to nature's wealth and researched the embryonic field of microalgae for answers. Soon, the animals were growing larger, living up to 20% longer, in better health, and with more lean muscle and less fat, all from carefully composed algae added to their diet.

After losing five members of his immediate family to pancreatic cancer due to family genetics, Dr. Kiriak oriented his research and application of BAC to humans. Today, thanks to BAC, Dr. Kiriak and the remaining seven members of his family are healthy and without any trace of pancreatic cancer.

By 1986, when the Chernobyl disaster struck, Dr. Kiriak was ready to help people with BAC. BAC was given to several hundred children and adults suffering from radiation illness in a controlled experiment. Dangerously imbalanced cell counts rapidly rose to normal counts, leading to extraordinary improvements in the health of treated children compared to a control group. This success led directly to the founding of BioNutrition and the development and perfection of BAC for full-spectrum human health.

BAC is now sold around the world. It is distributed in hundreds of natural food and vitamin stores and used by hundreds of health professionals in their practice.

The Endocrine System ▲

Dr. Michael Kiriak says “BAC Helps Restore The Inner Genius of The Body”. BAC is an extremely efficient food that easily reaches the hypothalamic/pituitary cortex of the brain. The hypothalamus is the regulator of the endocrine system and its glands. In turn, the glands of the endocrine system and the hormones they secrete influence every cell, organ, and function of our bodies. As the body’s chemical messengers, these hormones transfer information and instructions from one set of cells to another.

How to Take BAC

How much BAC should one consume? The following recommendations are for an average healthy adult. Adjust proportionally to your own body weight or state of health. For a nutritional program in support of specific conditions or diseases, it is best to consult a health professional that may have experience working with BAC.

BAC comes in a capsule containing less than 200mg of powder. Start with one capsule twice a day for the first five days, then adjust the dose up to one capsule six times a day, starting early in the day. BAC can be taken with or without food.

You can take anywhere from six to twelve capsules daily, but it is highly recommended to adjust gradually as directed above, or as instructed by the health professional that recommended the product to you.

Results are best when taking one or two capsules frequently throughout the day, rather than taking more capsules less frequently. It is generally recommended to take one or two capsules every 2-3 hours throughout the day.

Combining: BAC is a micro-food and essentially a food. As such, it will combine well with other foods, vitamins, herbs, green foods and any diet. There are no known contra-indications with pharmaceutical drugs, other foods or other alternative remedies.

Support: When consuming BAC, it is recommended to eat wholesome food, exercise at least three times per week, and drink plenty of water throughout the day. When you consume BAC, your body’s cellular activity will increase as it is getting more efficient nutrition. When your cells are more active they need more water to transport nutrients and toxins.

Caution: As is the case with any dietary change such as becoming a vegan or vegetarian, fasting, adopting a new diet, etc., it is recommended to exercise caution. If you are pregnant or have a

fragile health condition such as hypertension, Alzheimer's or varicose veins, you should consult with your health professional before consuming BAC. With these fragile conditions, the recommendation for taking BAC is to begin more slowly than usual, taking only one capsule at a time and starting with one capsule per day while increasing progressively every 5 to 10 days, adding one capsule more per day until you reach six to eight capsules.

Results The results can be different for each person when taking BAC. Often people will take too little and wonder why they are not getting results. I have seen people take one or two capsules — about 300mg of food — and declare that they have taken their BAC for the day. That is like eating one bite of celery and expecting to receive the full health benefits of a large salad of greens.

In order to see results, you need to ramp up and take at least the quantity suggested above. It does not matter if it is off by a few capsules. Remember: BAC is not a drug. You do not have to be exact about it, just make sure you are getting at least six capsules per day. With usage you will notice the benefits and you will become a good judge of how much you should take within reasons.

There is no harm in taking more than six per day of course. Aside from the health benefits I have described in these pages, the main thing you will notice is that you will have more, and maybe a little too much energy. This is an indication that you are getting a good amount of BAC in your diet. If it feels like too much, just cut down and ramp up again more slowly.

Effects of Consuming BAC

When consuming BAC results and reactions are normal and different for each person. Adjust accordingly. People who take the course of natural healing through dietary and other lifestyle changes like exercise, may experience, what is labeled a “HERXHEIMER RESPONSE”, “detoxification reaction or healing crisis”. These experiences can be regrouped as follows: energizing, detoxifying, fortifying, immunizing, protective, restorative and regenerative. Within these groups, the list of symptoms of changes is long and unique to each user. A few examples are: energies, blood sugar, blood counts, assimilation and absorption, better elimination : urines, stools, bowel movements, physical strength and stamina, lactic acid threshold, endurance, oxygen conversion, reduction or stoppage of tremors and seizures, reduction of pains, quicker recovery from injury and injury prevention, pH levels, polarity, frequency, alertness, mood, focus, clarity, emotions, intellect, appetite, skin, nails and hair, sport performance, muscle gain and kept, weight loss or gain, hormone levels, shrinking of tumors, of the prostate, near sight and night sight, reduction of pressure and degeneration of the eyes, normalizes inflammation, breakdown of calcification and plaque, normalization of cholesterols, quenches free radicals, anti-bacterial, anti-tumorigenic, anti-fungal, restores intestinal linings, cardiovascular strength, increased libido, fertility, and more.

The results can be perceived sometime as positive and other time as negative. As per the discussion in "Healing Crisis" below, when the results appear as negative it can usually be managed by reducing the quantity of capsules until the situation remedies itself, usually within a few days. Note that drinking the recommended amount of water will often alleviate the negative symptoms. In order to achieve good health, the natural way, a healing crisis may occur. A healing crisis is the result of the whole body acting in unison to eliminate the toxins that have accumulated in the body over the years. These toxins may be from previous toxic substances and medicine taken to "end" a cold or flu, or to stop an infection, rash, etc. Today, health practitioners agree that using a drug to stop an illness only "masks" the symptoms, pushing the problem inside the body, only to manifest itself years later as cancer and other health problems. The healing crisis symptoms can often appear identical to those of the disease that the body is eliminating.

A cleansing reaction may indicate that the body is readily absorbing and responding to the vital nutrients. This Healing Crisis usually comes in the form of changes at the skin, high and/or low energy, headaches, pains, constipation or its opposite, colds, flu's, and many more. Some people take this as a sign that the products they are taking or the life style change they are now following is causing them harm, and they quit this new path they have chosen. Other people understand that when you follow a natural healing path and they come down with flu's and colds, that it may actually be part of the healing crisis, the elimination of toxins from the body.

An average person on a natural healing path usually develops a healing crisis within three months, and rarely some crises can be more severe than other. These crises usually manifest themselves in the reverse order in which they initially affected the person. People often feel the best they have felt in a long time just before the healing crisis occurs and right after. The human body is governed by the law of nature. What we feed ourselves determines our well-being. We are what we eat. The choice is ours. If we eat good healthy foods, we live good healthy lives, physically, emotionally and spiritually.

The crisis will usually be only as severe as the body can handle. During the height of the crisis, a person should minimize the intake of food, if not completely ceasing the intake of food. It is possible to go on a short fast to alleviate a healing crisis and speed recovery. A crisis usually lasts for one to three days for a person with average health; it may last longer for people with low energy levels. Water and fresh squeezed vegetable juices are the best things to consume during a healing crisis. People should not stop the intake of water, as water helps carry in nutrients and carry out toxins.

It generally takes at least 90 days for any permanent change in the body to take effect. This includes changing personal habits, quitting smoking, dieting to lose weight, benefiting from natural supplements, and other. Some people notice dramatic changes the first week of taking BSF, while others notice gradual changes over several months. Healthy people may notice subtle positive changes such as more energy, better concentration capabilities, and improved digestion. Some notice a general feeling of wellness, while others have not gotten sick. Athletes report improved performance and faster recovery. Some people notice that they are in need of

less medication. Keep a health diary for 90 days and see for yourself if you can boast any improvements.

Human Use – Cases

I could describe nutritional and physiological science in thousands of pages and hundreds of books. However, I would certainly not be the first to do so, as plenty of these books already exist. I also believe that reading these books would not help you understand how Bio-Algae Concentrates work as vividly as examples of real results obtained by real people as shared by themselves. As such, I will relate a few cases in which people using BAC experienced tremendous results and improvements in their health. They have willingly offered to share their stories in the hopes that someone else may read them and become inspired to get better as they have. In most cases, these people are still enjoying the benefits graciously shared in their own words below. In some instances, I have added comments or observations for clarification.

Cases:

[BAC and Epilepsy](#)

[BAC and HIV](#)

[BAC and Cerebral Vasculitis](#)

[BAC and Epilepsy ▲](#)

In February of 2006, Brenda G., a 32-year-old woman from southern California, shared her experience using BAC as follows:

“I have had no seizures in five months – I have suffered from epileptic seizures since I was a child. When taking medication, I would get seizures 3 to 4 times per week. Without medication I could get them daily. With Bio-Algae Concentrates and without medication I have not had one seizure since the first day I started taking Bio-Algae Concentrates five months ago now. Because of my success I recently gave some Bio-Algae Concentrates to my cousin and he has not had a seizure in seven weeks.”

Brenda has now been seizure-free for 10 months.

Just a year earlier, Brenda was frustrated with her condition and hopeless of ever finding a cure. However, she and her family had witnessed her dad’s successful recovery from pancreatic cancer using BAC as an alternative nutritional support. This motivated Brenda to try BAC. When she first

shared her story, it had only been two months since she had started using BAC, and although she was seizure-free, I must admit that I was somewhat skeptical. Knowing about the powerful healing potential of our beliefs and the strong placebo effect of seeing her father doing well, I remained hopeful, but waited. However, after Brenda reported six months without seizures, I was elated for her and scientifically curious. I too, had thought that a cure for epilepsy was hopeless. As a teenager, I had a friend that suffered from frequent seizures, which left me sad and confused each time I witnessed them. Now I was intrigued to hear that BAC seemed to help epilepsy symptoms, and wanted to learn why.

Epilepsy and its causes

Epilepsy is a disorder characterized by spontaneous and recurrent seizures (convulsions). These seizures arise from abnormal electrical activity in the brain, which may be secondary to a brain abnormality or neurological disorder, or may not have a clear cause at all. Since epilepsy is not associated with any particular disease, it should not be understood as one disorder, but instead as a group of disorders for which recurrent seizures are the main symptom.

Normally, electrical activity in the brain occurs in an organized way. A nerve cell transmits a signal within the brain either by altering the concentration of salts with the cell or by releasing neurotransmitters. This allows for a smooth flow of electricity to pass between nerve cells. However, if this pattern gets disrupted by an improper concentration of salts or by the over activity of neurotransmitters, it can trigger seizure activity.

Certain areas of the brain are more likely than others to be involved in seizure activity. The motor cortex, which is responsible for body movement, and the temporal lobes, including the hippocampus, which is involved in memory, are particularly sensitive to biochemical changes (e.g., decreased oxygen level, metabolic imbalances, infection) that provoke abnormal brain cell activity.

Common causes of epilepsy include:

- Stroke or transient ischemic attack (TIA)
- Dementia, such as Alzheimer's disease
- Traumatic brain injury
- Infections, including brain abscess, meningitis, encephalitis, and AIDS
- Brain problems that are present at birth (congenital brain defect)
- Brain injury that occurs during or near birth
- Metabolism disorders present at birth (such as phenylketonuria)
- Brain tumor
- Abnormal blood vessels in the brain
- Other illness that damage or destroy brain tissue
- Use of certain medications, including antidepressants, tramadol, cocaine, and amphetamines

Despite the above list, about 35% of all cases of epilepsy have no clearly definable cause. The Center for Diseases Control (CDC) reports 2.3 million Americans suffering from epilepsy.

How does BAC help with epilepsy?

In early 2005, returning from an annual visit to Chernobyl, Ukraine, the site of the 1986 nuclear explosion, Dr. Michael Kiriak, PhD and leading authority on Bio-Algae Concentrates shared with me some positive results of children using BAC. The repercussions of this nuclear disaster are still manifested in thousands of people of the region. For example, many children are affected with seizures and other symptoms of epilepsy. During his visit, he gave BAC to some local clinics and families of friends. When he returned to Canada a few weeks later he received several happy telephone calls and messages from doctors and parents. They were reporting a reduction in the frequency of seizures of children who had been taking BAC.

At the time, I was curious, but I left it at that. I knew a lot about the nutritional power of BAC for the brain. BAC contains hundreds of nutrients that are required for brain health and brain healing: the magnificent fatty acids omega 3, omega 6, omega 9 and mighty Gama Linoleic Acid (GLA), the critically beneficial B vitamins, folic acid and mighty vitamin A occurring as pro-vitamin A from the rich content of beta and alpha carotene in BAC. Some of these nutrients, like pro-vitamin A and other antioxidants such as astaxanthin and beta carotene, are proven to traverse brain barriers and even span across the cell's membrane delivering nutrition, protection and energy. Based on this incredible array of nutrients, I knew that BAC resulted in ultimate brain and cellular nutrition.

But after hearing about Brenda's results, I became interested and wanted specific answers. I asked Dr. Kiriak about the mechanisms of action between BAC and Brenda's amazing results. As usual, his answer was simple and holistic. He said:

“Roland, we don't know much about brain diseases. We know there are billions of brain cells and synapses and on/off electrical connections and requirement for nutrients and resulting cellular energy, growth, protection and regeneration. We know there are parts of the brain that regulate rational thoughts and others that regulate basic motor controls. We know that certain areas of the brain are more likely than others to be involved in seizure activity.”

In Nutrition 101, we learn that certain nutrients such as those contained in BAC affect the brain positively. In more advanced and holistic nutrition, we now know that many more nutrients such as certain trace elements and phytonutrients are critical for healthy brain function. We know that BAC contains thousands of nutrients and many more than those currently recommended in the most advanced medical and nutritional sciences.

But more importantly, the greatest “value added” by BAC is its direct influence on the hypothalamus / pituitary relationship. This glandular cortex is responsible for all metabolic activities in our body. When this life-critical cortex is properly nourished and energized it holds the power to command the body metabolisms back to balance and health via a myriad of

hormones and peptides. For example, one important metabolism is the nutrients to energy conversion (Krebs cycle/ATP) for which the balance in salt/sodium, potassium, magnesium and calcium is critical. This electrical and atomic energy generation occurs unceasingly in each mitochondria of every trillion cells of our body including those at the root of epileptic seizures”

We have since witnessed new success with BAC and epilepsy in children and adults of all ages. BAC is so easy to use; there are no known medical contraindications as it is a food!, it is non-toxic and it has no negative side effects.

BAC and HIV ▲

The August 2006 International AIDS Conference in Toronto, boasted of progress in the fight against AIDS, when really, the fight against AIDS, just like the fight against cancer are billion dollars sinkholes. At the time, the boasting motivated me to share an alternative solution, the “handful of dollars” story of Daniel and his successful “fight against HIV/AIDS”.

In February 2004, Dr. Nita D., MD, a Boulder Colorado physician and holistic practitioner had shared with me the case of Daniel and suggested we followed his progress together. Daniel had been diagnosed HIV positive several years earlier and was seeing his condition worsening alarmingly. His regular MD was suggesting medications. Instead, Daniel decided to look for an alternative solution and met Dr. Nita. Following her recommendations to use BAC and to change his eating habits, Daniel saw his viral load dropped significantly in a few weeks. Daniel agreed to send me copies of his lab reports. Let me show you a perspective of continued progress in his own words:

“I am HIV positive. I just got my latest lab work back and it’s great! My viral load is stable at about 10,000 (the nurse practitioner said she was very surprised at just how stable it is), and my T-cells are up! To over 400. That’s the highest they’ve been in over a year. If you will recall, exactly one year ago my viral load was at 139,000 and the T-cells barely over 250, prompting the docs to want to start me on meds. But then I started the BAC.

I am especially impressed with the numbers because since October, when I returned from Brazil, I’ve been dealing with some very difficult emotions like grief, sadness, and some depression. There has been a lot of stress as I’ve tried to find a job (still looking). Also, I haven’t been very strict nutritionally as that has been difficult as well. Given these factors, I’m so thrilled that my numbers are so good. It gives me new energy and motivation to eat right, and continue trying to make good lifestyle choices. But I think if it weren’t for the BAC, the picture would look very different right now. Thank you!”

– Daniel R.R., Colorado USA – February 2005.

UPDATE – February 2006 –

Daniel wrote again in February 2006 following a visit to his regular MD for lab work (his results showed a viral load of 17,000 and CD4 at 447):

“I just received my results from my regular MD. He says ‘Dan, numbers look good. Get the test done again in 3 months’.”

UPDATE – May 2006 –

Following another test, Daniel sent this note on May 5, 2006.

“My latest results show a drop in viral load to just over 5,000. My CD4s are stable at about 414. Interestingly, my numbers continue to look good despite huge amounts of stress at my work. Additionally, my relationship broke up 3 months ago which has also been very difficult emotionally and psychologically. But I continue to take the BAC and the numbers are either stable or have actually improved.”

What does all this mean for Daniel?

First, let us discuss what the test results mean. Viral load tests are reported as the number of HIV copies in a milliliter of blood. If the viral load measurement is high, it indicates that HIV is reproducing and that the disease will likely progress faster than if the viral load is low. A high viral load can be anywhere from 5,000 to 10,000 copies and can range as high as one million or more. A low viral load is usually between 200 to 500 copies, depending on the type of test used. This result indicates that HIV is not actively reproducing and that the risk of disease progression is low. A viral load result that reads “undetectable” does not mean that you are cured. It may mean that the level of HIV virus in your blood is below the threshold needed for detection by this test.

Daniel has managed to reduce or stop the progression of his disease without any medication and its nasty side effects and with just a few capsules of BAC per day along with easy changes to his diet. As commented by Daniel, he is doing well even if he has not been “perfect” in his diet and has been under a lot of stress.

How does BAC help with HIV?

Let me set the record straight. **A)** It would be unfair to Daniel and to natural health to claim that BAC is a remedy for HIV. It would ignore Daniel’s “self-healing power” and the power of “Let thy food be thy medicine”. It would remove Daniel’s responsibility to stop eating badly, to eat well, exercise, rest and sleep well. Applying these few simple disciplines alone will reduce his viral load. **B)** BAC is not a remedy for HIV nor for any specific disease such as diabetes, Alzheimer’s, fibromyalgia, etc.

So how does BAC help more than broccoli and parsley?

BAC is pure food: the raw materials that the body needs for energy, growth, repair, protection and self-healing from ALL diseases or conditions. Rather than re-explain BAC and the potential of its ingredients and mechanism of actions specific to HIV, let me remind you that the proper use of BAC will deliver via nutritional support similar health protection and healing results in all viral conditions like herpes, hepatitis A, B and C, West Nile virus, etc., and all of the thousands of “named” diseases for anyone consuming it.

On the other hand, I want to invite you to read the sections “Phycocyanin in BAC Enhances the Immune System”, and “BAC Awakens the Genius Within” so that you understand the relationship between BAC’s extraordinary nutritional power and efficiency and the body’s innate capacity to heal.

BAC and Cerebral Vasculitis ▲

In 2005, I was blessed with hearing first-hand the extraordinary health recovery story of Janice K, who had been suffering from cerebral vasculitis, an inflammation of the blood vessel walls in the brain and sometimes the spinal cord. Janice called me and wrote to me frequently when she began using BAC. Within weeks of starting to use it, she was elated at some early positive changes that she was experiencing, and from there it got even better. Read her results in her own words next:

“Dear Dr. Thomas, I cannot thank you and Dr. Kiriac enough for making this fabulous product available to me. In May of 1995 I was diagnosed with Cerebral Vasculitis. It is a very rare and deadly disease in which the arteries in the brain become inflamed and weakened. Most doctors are not even aware that such a disease even exists. I was fortunate to have one who did know about this disease. However, my prognosis was very grim as my disease had progressed to a very dangerous state. After a Cerebral Angiogram confirmed my diagnosis in 1995, my doctor told my family I would be lucky to live 5 days.

After 7 years of total bed rest with severe headaches, nausea and vomiting, and 4 ½ years of Chemotherapy and massive doses of Prednisone; which gave me osteo-arthritis and other debilitating problems, I am still here. My blood pressure was through the roof at 250/150 most of the time during those years; even while being on 3 blood pressure medications. I did regain some ability to function; but never to the extent that I was able to enjoy my life and plan time with family and friends. The Lord was helping me through the long and very difficult days of suffering; but I still had a long way to go to ever get back to being my old self again.

In February of 2005, I began to have the same symptoms again and had an MRI of my head; to find the vasculitis was far more severe than it had ever been in the beginning in 1995. My doctor was very worried for me when I told him I was not going to go the route of chemo and Prednisone

again and go through a living “hell” every day. I had already started taking the BAC as a good daily supplement. I knew it was a terrific product; as I felt good in just a few days of taking it, not knowing I was getting very sick again. I called you and told you my problem and we set up a regimen of the algae and I started that; plus, I have eaten nothing but all organic foods, including my eggs, flour, sugar, milk, spices, etc. There is nothing to eat in my house that is not totally organic. I was determined to keep my body as clean and pure as possible so as to allow this amazing product to have every chance to cleanse my body of every toxic chemical and waste product so it could heal itself with the help of the powerful nutrients in the algae. (As a Registered Nurse I know a bit about how the body functions and what it needs to repair and keep itself healthy.) I thank my Lord every day for creating algae and causing Dr. Kiriatic to persevere until he got the formula right. Then he instilled in you a desire to help with what He had provided that was helpful and not hurtful.

Believe me; I know how hurtful medications can be. I required 4 medications to treat my Vasculitis the first time around; but wound up taking 12 in the end. The extra 8 were to treat the side effects of the original medications or the debilitating diseases they caused; such as my osteoarthritis.

After my diagnosis in February of 2005, I have felt really well after just a few days on the algae. After 3 weeks my blood pressure normalized and I was forced to go off my 3 blood pressure medications, because it would get too low and I would want to pass out. It has continued to be normal. My osteo-arthritic knees improved rapidly and the swelling and pain were non-existent within a month of taking BAC. My migraine headaches; which I have had for over 42 years are no more (I was taking 4 hypos a month for those awful headaches). Hallelujah! Don't I love being free of those! Remember when I called and asked you if there was a natural anti-histamine for my cottonwood allergy this year? You said I had it in the algae. Guess what? No cottonwood allergy.

The greatest news of all—I'm alive!!! My MRI on 5/30/2005 shows no signs of active vasculitis. Just 3 months and 13 days after being handed a death sentence; with no chemo, no horrible Prednisone, and no side effects. What more could a girl ask for?

My doctor is having a very hard time believing it; even though he has seen me out of bed and looking very well this time around, and not running into his office to get a couple of IV's every other week, because I couldn't keep anything in my stomach, and would get dehydrated.

That was how it was for years last time around. I know this is awfully long; but I wanted you to know how absolutely miraculously the algae has worked to save my life this second time around, and I didn't even feel sick. How much better does it get when you are supposed to die, and the cure is so simple and so easy to tolerate. Sorry if I sound like a commercial. I am a living commercial. I tell everyone I know. If they don't take it, they are the world's biggest fools, as far as I am concerned. I want my husband, children and grandchildren around for a very long time, so they will all be on algae very soon. My daughter is coming from Macedonia in a couple of

weeks and I plan to send it back for her, my son-in-law and four grandchildren. Nothing is more precious than your health. We don't realize that until we lose it. How sad is that?

Thank Dr. Kiriak for me next time you see him. May my Lord bless both of you richly in every area of your lives; but mostly may He give you peace, joy, happiness, and a great sense of satisfaction knowing you are helping sooo many people take back their lives, and a chance to smell the roses for years to come.

Most sincerely, Jan Khatibi, Sammamish, WA "

Two years and 3 months later Jane writes this update. What can I add?

Dear Roland, I want to thank you for all the helpful information and support you have given me the past 2 years and 3 months since I was given a certain death sentence by my Dr.

I started the algae and saw results in just a few days. I was out of bed after 10 years of being bedridden with Cerebral Vasculitis. My blood pressure normalized in 2 weeks and hadn't for all those years on 3 blood pressure meds. The massive doses of Prednisone had destroyed my stomach and my knees. Within the first month those problems were eliminated and have given me no trouble since. My Raynaud's Disease in my fingertips and toes was gone in the first month. My migraine headaches, which I had had since I was 21 years old, disappeared sometime during the first month and a half. I am not sure just when as I was so busy celebrating the lack of all my horrible symptoms, I forgot to notice the absence of the migraines which had gotten very severe with the vasculitis. I am truly a walking miracle and my doctors have been amazed that my recovery has lasted.

I thank you for telling me to go all organic right away, as it certainly helped me detox fast and remain detoxed. I know it made a big difference in how fast and how well the algae worked for me. Being a nurse, I understood the importance of keeping the chemical toxins in our food chain out of my body then and forever. Thankfully, we have Whole Foods stores in my area and I can get everything organic.

I am living life to the fullest extent possible. I work out with weights and aerobic exercises and that amazes even me.

My prayer is that people will give the algae a chance to help them recover from an illness and remain healthy and strong. If they have no illness I pray they will recognize how blessed they are to be healthy and will take the algae to help them stay that way. My family members take it to stay well.

My 44-year-old daughter was diagnosed with Crohn's Disease last summer (2006), and after talking with you, she increased her algae intake and within a month she was significantly better

and now has no symptoms. My two granddaughters' asthma is gone after taking the algae. They were on steroid inhalers and medications that were not good for them.

I have told my story and shared the algae with many people with varying diseases and I can honestly say they have all found an incredible amount of relief with the algae. They were all surprised there were no serious side effects. A couple of people got a little diarrhea, but it cleared up quickly. One is a two-year-old boy with very serious allergy problems and he has tolerated it well and is doing well.

You shared my original letter of my miraculous healing in your November 2005 newsletter. I often forward that newsletter to people I have told about the algae. Not only is my amazing story in there but the wonderful stories of many others who had received a miracle with the algae as well.

Sorry this got so long. I just want you to know how grateful I am for you, Dr. Kiriak, and God's creation of algae.

Always, – Jan Khatibi, June 2007, Washington State, USA

The Cost of BAC

With these sorts of dosages, the monthly cost of taking Bio-Algae Concentrates can be a bit steep, or at least it appears to be at first. But I would like to challenge that belief system: what is the cost of getting cancer? What is the cost of getting a major disease? What is the cost of having low energy, clinical depression, or a degenerative nerve disease?

An entire month's supply of BAC is less than a single day's stay at a hospital. That makes BAC the bargain of a lifetime in my book. In my opinion, any substance that can extend my life, prevent me from having to go to the doctor's and keep me away from prescription drugs is a real bargain, no matter what the cost.

And remember to subtract the cost of all those other vitamins and supplements that you will not have to take anymore when you take BAC. I factor in the simplicity of taking only one whole food supplement instead of several isolated supplements. I myself used to take twenty-three supplements before switching to BAC, and you can imagine how much it cost to continue that lifestyle.

The trick, of course, is to look at the total cost of your actions. The cost of smoking cigarettes is far more than what a person pays for the cigarettes. It also includes a loss of lifespan, sky-high medical bills and a lifetime of suffering from the damaging health effects of cigarettes.

The cost of BAC, on the other hand, is only a few dollars a week. In exchange, a person experiences greater health, greater mental clarity, longer lifespan, prevention of a long list of diseases and in many cases, even the reversal of major diseases. You cannot put a price on these benefits, but if you could I have no doubt that they would greatly outweigh the few dollars spent on BAC.

Eating this superfood is an investment, not an expense. Spend a few dollars today, invest it in your own good health, and the payoff will last you a lifetime. Or at least for as long as you keep eating this superfood. Which takes me to the next section...

Taking Bio-Algae Concentrates For Life

Do not make the common mistake of thinking, "I'll just take BAC until I get over this cancer," or, "I'll just take it for three months to get better and then I'll stop." BAC is a superfood that should be regularly consumed as part of your lifelong diet. Plan on taking it at every meal for the rest of your life. That is exactly what I do, and I have every intention to continue doing it for as long as I live.

I cannot imagine a day without Bio-Algae Concentrates. In five years I have used it every day except for a few times when I did not take it as an experiment. On those days, I felt less energy, I was less focused and I was sluggish for most of the day.

Here is something to consider: If BAC helps you conquer a major disease such as cancer, you should never stop taking it just because the symptoms are no longer obvious. With all diseases, but especially cancer, you are not out of the woods just because the tumors or other symptoms have disappeared. Cancer is a systemic disease, and unless you continue to give your body the nutrients it needs to stay healthy, that cancer could very easily return. It is poor dietary habits that cause cancer in many people. If they return to those old habits, it is only reasonable to assume their cancer will return.

The bottom line: Put Bio-Algae Concentrates at the top of your priorities list. Make a budget for it. You have got a house payment, perhaps, and a car payment, insurance payment and a grocery budget. Add Bio-Algae Concentrates to the top of this list and make it a part of your budget. Decide that you are going to be healthier from now on, and to achieve that you need to get this food into your diet. In the long run, you will probably save a fortune on prescription drugs and medical costs anyway, which makes Bio-Algae Concentrates essentially free.

Where to Get BAC

Bio-Algae Concentrates are a relatively new product and unlike plain algae, such as spirulina and chlorella, are not commonly available on the Internet or in vitamin stores.

Because of the advanced technologies involved and the proprietary aspects of the exact blends of algae utilized, I recommend that you ensure that you are buying from a legitimate distributor or health professional.

A relatively good way to find one is to search for resellers of Bio-Algae Concentrates (BAC) on the internet.

FAQ

Why do algae smell like fish?

The BAC algae are grown in bio reactors away from any fish. And actually it is not the smell of fish, it is the smell of the sea. The familiar smell is caused by the molecule dimethyl sulfide (DMS), which algae produce in large amounts. The DMS sulfuric compound is thought to play a major part in cloud formation above the seas, and is also used by various birds and marine animals to navigate.

What are Bio-Algae Concentrates (BAC)?

Bio-Algae Concentrates (BAC) are a whole food product composed of four of the most nutrient and phytonutrient dense algae found on earth. Each BAC formula has a different nutritional value. The formulas are presented in capsules that are easy to swallow and practical to use.

What are the ingredients in BAC?

Please see: [The Ingredients in BAC.](#)

What are the nutrients in BAC?

Please see: [Detailed List of Nutrients in BAC.](#)

What is the difference between the formulas F1, F2 and F3?

The nutritional formulas F1, F2, F3, F2+ and F3+ were developed in order to accommodate individual biochemistry. For example, a developing child has different resilience, immunity and

nutritional needs than an adult, an athlete, a vegan, or someone with a severe degenerative condition. All formulas contain some amount of the green algae *Spirulina Pacifica*, *Spirulina Platensis*, and of the red algae *Dunaliella* and *Haematococcus Pluvialis*. Together these algae provide thousands of nutrients with proportioned nutritional and protective values. The green algae contain a broad spectrum of proteins, minerals and chlorophyll that have a great nutritional value, while the red algae contain a large amount of mixed carotenoids / antioxidants, phytonutrients and fatty acids that have a much higher protective value, and have a greater ability to cross the blood brain barrier and there nourish and protect the hypothalamus-pituitary axis.

The carotenoids in the red algae of BAC are known to cross the blood brain barrier without causing toxicity.

The main difference between the formulas are their potency, which is derived from larger amounts of red algae as you go from F1 to F2 to F3. The red algae are also stressed with LUX (light) to increase their carotenoid content, just like apples become more red when they are stressed by sunlight.

Due to a larger proportion of red algae from F1 to F2, and from F2 to F3, the formulas have increasing brain reaching nutritional and protective efficiencies.

What is the difference between BAC for humans and BAC for animals?

The BAC people formulas are specifically designed for humans, though our animal companions can also consume them. They have the same nutritional makeup as BAC for animals, except that they are freeze dried at a warmer temperature in order to achieve a slightly coarser powder. This was done to adjust uptake assimilation for humans as we have long digestive tracts unlike dogs and cats.

The BAC animal formulas were originally designed for animals, though we humans can also consume them. They have the same nutritional makeup as BAC for people, except that they are freeze dried at a colder temperature in order to achieve a slightly finer powder. This was done to increase uptake assimilation for the relatively short digestive tracts of animals like dogs and cats.

Why should I take BAC?

First, for general nutrition and health support and maintenance: The proteins, vitamins, minerals, antioxidants and other nutrients in the blends are known to be supportive in the maintenance of overall health and of a healthy immune system. It is a natural whole food solution known to help your body maintain good health. It is also great for intestinal health in

increasing the efficient digestion of food and absorption of nutrients, which may result in fewer cravings and less food consumed. Much independent research shows that high quality nutrients awaken your body's natural ability to heal. The American Cancer Society informs us that antioxidants and other carotenoids promote optimal health by boosting the immune system and protecting our cells from free radicals.

For sports, athletics and fitness: BAC is ideal for the active, athletic individual who wishes to maintain peak performance, prevent injuries and promote recovery without using dangerous synthetic products, whether it is bodybuilding, biking, swimming, or any other fitness activity that stresses your body.

For vegans and vegetarians: Each veggie capsule is composed of over 50% complete vegetarian proteins with a net utilization greater than 95%. The algae also contain the rare vitamin B12. Consuming algae was proven to increase the uptake of proteins and other nutrients from the daily diet in large animal studies.

How can BAC help with my specific medical condition?

If you have any concerns regarding your health or a specific medical condition it is always best to consult with your healthcare professional prior to consuming BAC. For case studies and testimonials describing the use of BAC with specific medical conditions including epilepsy and HIV, please see BAC People Cases and BAC People Testimonials.

How frequently should I take BAC?

With every meal, every single day. You do not need to "cycle off" these superfoods. You can eat them every single day for the rest of your life.

How long should I take BAC?

Only take Bio-Algae Concentrates for as long as you wish to be healthy. Plan on taking them for at least one year in order to experience their full health benefits, since it may take time for these superfoods to detoxify your system, remove heavy metals, support immune function, fight pre-cancerous cells, improve digestion, regulate blood sugar, and so on.

How much BAC should I consume each day?

For most people, we recommend starting with one or two capsules per day, increasing to six per day. Follow the directions on the bottle, work your way up at your own pace and also trust your intuition. No two people are alike.

Please see How to Take BAC for more information.

How do I take BAC?

BAC comes in vegetable capsules that are easy to swallow and practical to take at regular intervals throughout the day.

The two-part capsule can be twisted open to get to the powder inside. Some people like to mix the powder in juice, water or in a smoothie. Some people like the natural taste of algae and they let it dissolve slowly in their mouths or sublingually.

Can I feed BAC to my pets?

Absolutely. Animals and pets love it. Many veterinarians successfully use BAC with dogs, cats, birds, reptiles, horses, and other animals that have nutritional deficiencies. BAC can especially benefit older animals, bringing back youthfulness and a higher quality of life. See a list of animal testimonials here: [BAC Animal Cases and Testimonials](#).

Is BAC a raw food?

While BAC is freeze dried, it remains 100% raw food, uncooked and consider live food as recent research shows that under gradual exposure to light, the algae can grow again.

Does BAC contain yeast or gluten?

BAC contains ZERO yeast or gluten.

How do I keep BAC to preserve it best?

BAC is freeze dried at a low temperature and is crystallized in the process. As such, it will keep for many years at normal room temperature. It is best to keep it away from hot stoves or direct sun exposure. Keeping it in a drawer or cupboard is best. It can also be kept in the refrigerator. We recommend not keeping it in the freezer as repeated thawing may initiate loss of enzyme and nutritional strength.

Is BAC affordable?

The short answer: BAC costs between \$45 a month and \$250 a month depending on the Formula (F1, F2, F3) and how much is consumed (1 or 2 bottles per month).

Many people report that they are able to reduce or stop using other supplements as well as consume less food (because their body is more efficient) – so they end up better off financially.

The long answer: [Please read The Cost of BAC.](#)

Where do you recommend I purchase these supplements?

I recommend searching for a BAC reseller in your area by typing “Bio-Algae Concentrates” into a search engine. There are resellers all across the United States, Canada and various other parts of the world.

How is the consistent quality of BAC products assured?

All BAC formulas are certified by Health Canada for their purity and exact content. Health Canada imposes that each lot is analyzed for its nutrients content and verified for heavy metals and other pollutants.

Some algae contain toxins; how do you know that BAC does not?

The BAC formulas are certified by Health Canada for their purity and exact content. Health Canada imposes that each lot is analyzed for its nutrient content and verified for heavy metals and other pollutants.

There are over 25,000 different species of algae in the world. Most are found growing in the wild and some beneficial to all living creatures are cultivated by man for consumption; unfortunately, many are toxic to some degree due to their habitats or pollutants.

Dr Kiriac believes that there is no natural body of water on Earth, including the Arctic and Antarctic oceans, that is not polluted to some extent. Contaminants such as polychlorinated hydrocarbons (PCHC), aldrin, heptachlor, heptachlorepoxyde, lindane, DDE and PCB are found in tissue samples of arctic seals, polar bears, polar foxes and sheep from southwest Greenland.

For those reasons, Dr. Kiriac will not use any open lagoon, lake, ocean or wild grown algae in his formulas. Other manufacturers may claim that they test their lakes or wild grown algae for commonly known toxins and contaminants, but what about the uncommon, the unknown and those pollutants for which no tests exist?

In order to avoid airborne pollution including sun ultra violet damage, the sensitive algae in BAC are grown in covered facilities called bioreactors where temperature, turbulence and light can be controlled and enhanced. And to further avoid toxicities from oceans, lakes, or open lagoons, pure and mineral rich water is obtained from geysers stemming from two thousand

feet below a Siberian volcanic peninsula. The algae are grown without the use of synthetic fertilizers, pesticides and without antibiotics, growth hormones or any additives.

What are the ingredients of the capsules?

To be more specific, here is the exact question that triggered my answer.

“I’m a health care practitioner and was referred to your site. I’m interested in finding out the exact ingredients in your formulation, including the flow agents, excipients, etc., used to allow for machine encapsulation, as well as the composition of your capsule itself.

My clients are mostly educated individuals who, like me, are interested in only whole food products with no harmful fillers such as maltodextrin, magnesium stearate, microcrystalline cellulose, and so on.”

The short answer – Since we are not naming a specific product in this book, let me say that I always recommend the use of vegetable capsules.

There are many manufacturers and providers of veggie capsules. You want those where the manufacturer strives to use only as close to 100% vegetable derived sources as possible. Minimally you should expect the capsule to be HPMC (Hydroxy, Propyl, Methyl, Cellulose) standard, and free of starch, sugar, corn, syrup, wheat, dairy, and other potential irritants and preservatives. Some are also Kosher and Halal certified.

Another option is to open the capsule and eat the powder.

The long answer – What prompts me to write this longer answer is the above question along with a suggestion I recently received from Gary, a user of BAC. Gary suggested that in order to avoid pollutants in the water, only distilled water should be used in our diet.

These two topics made me think about our futile attempts at striving for perfection. For example, with veggie caps, unless YOU are the manufacturer you can never be 100% sure that it is 100% vegan, Kosher, etc. Even with distilled water (if that is your choice of filtration) you are at the mercy of the provider or of the equipment used for distilling.

Striving for perfection is an endless pursuit. One would have to analyze and filter each ounce of food and beverage that one consumes. Each breath that you take, besides some oxygen, contains thousands of microscopic particles, trace elements and parasites. Take into consideration that our body may derive as much as 80% of its subtle atomic energy along with oxygen from the air that we breath.

So as a consumer what are you to do?

Don't sweat the small stuff. I suggest that rather than striving for perfection, you get busy increasing your vital energy and healing force. When the body is in a state of balance, homeostasis and energetic coherence, it is highly capable of dealing with the small stuff. Once you have shopped for the best veggie capsule possible, then the small stuff may be some small irritant remaining in the capsule. This small irritant may make up barely 1/1000 of the total content of the powder and capsule. Just like each breath you take contains irritants, so does every food or beverage you eat.

Are you going to miss out on BAC for the sake of perfection? The BAC powder contained in the capsule will contribute to regaining your healing forces significantly more than the small irritant in the capsule will deprive you of them.

As with the short answer, the option to open the capsule and just eat the powder remains.

What's the difference between BAC and the many nutritional supplements on the market today?

BAC are made from whole, organic water plants that contain thousands of both discovered and undiscovered nutrients. These nutrients are fully assimilated by the body without causing toxicity or burden. Often, only fractions of the content of "health food vitamins" are actually absorbed by the body. Additionally, man-made supplements only contain what the formulators choose to include, and there is no control over mixing with other supplements or the daily diet.

How does BAC compare to other algae?

- The truth is that it cannot compare with single algae or any other multi-vitamin, multi-mineral, supplement or green superfood product; BAC is in a league apart. It is miles ahead of basic algae like Spirulina or Chlorella. And because of extreme efficiencies achieved in the blend, BAC has powerful, nourishing and regenerating effects on the body and brain. These results were proven without a doubt in 20 animal species. Let me describe why I think BAC is a breed apart:
- Of thousands of algae on earth, few are human friendly (as in nutritionally efficient). In the making of BAC, hundreds of algae were investigated and four were selected for their individual and complementary values.
- Algae, like vegetables are only as nutrient-rich as the soil/water/base in which they are nurtured; the best algae thrive near volcanic regions because of the abundance of minerals and trace elements brought to the surface during eruptions. The algae in BAC are nurtured in the Russian peninsula of Kamchatka, one of Earth's richest volcanic regions.

- We have all heard the expression “the whole is larger than the sum of its parts,” as in $1 + 1 + 1 = 111$. This law of synergy applies well with food and nutrition. For example, two ounces of alfalfa with a few nuts easily surpasses a large meal of potatoes and steak. In the microscopic world, this law applies a thousand fold. The synergistic values of the four algae of BAC when blended together result in EXTRAORDINARY nutritional efficiency and nutraceutical power.
- BAC complements the whole rather than supplements specific symptoms and deficiencies. In the words of Dr. Michael Kiriak, “BAC awakens the genius within.”

The spectrum and thousands of nutrients in BAC are not matched in any multi-vitamin, supplement, algae or green superfood on the market at this time. BAC as a natural food has “extraordinary” nutritional constituents:

- High protein content: 45% average with 90% net utilization
- Nature’s special forces (phytonutrients): Phycocyanin, chlorophyll, polysaccharides, sulfolipids and many more
- Extraordinary EFA’s (Essential Fatty Acids): Omega 3, 6 and 9, linoleic acid (GLA) and several other
- More than 4000+ active enzymes: More than in any other known natural product
- Earth’s most powerful antioxidants: Astaxanthin for example has hundreds of times more antioxidative power than vitamin E and dozens of times more than beta carotene
- Vitamins: A, B-Complex (B1 to B12), C, D and K
- All known essential amino acids plus more
- All known minerals and trace elements (over 100 in total): Calcium with a 80% net assimilation, zinc, sodium, iron, phosphorus and potassium

Otherwise, I do not know of any algae product that has undergone such “thorough” research, with hundreds of researchers working more than 20 years testing and field testing with hundreds of animal test groups involving more than one million animals. The product/concept was introduced in America by Professor Michael Kiriak, PhD and Academician of Merits. For 22 years, Dr. Kiriak was the lead researcher and director of the effort to develop nutritional solutions to various diseases in the USSR. A bioneer, he is the author of scientific papers and patents in the science and technology of growing and enhancing micro algae concentrates. He is the recipient of gold medals for the invention of BAC and its use to help some victims of

Chernobyl. Dr. Kiriac continues to lecture and promote nutrition all over the world to alleviate health conditions and problems. Dr. Kiriac received several other awards:

- Nominated Moldova Person of the year, 1985, for achievements in algae research and its local application resulting in the economic success of the poultry center for Moldova. National television aired a two-hour documentary of Michael Kiriac's achievements with introduction by the Prime Minister of Moldova and his Minister of Finance.
- Gold Medal – New Technology for Algae Production – asi, Romania – This innovation was applied in the largest poultry farms of Moldova and was recognized at the International Exhibition For Research In Industrial Invention, 1994.
- Silver Medal – Element of Protein Synthesis – Pittsburgh USA – This innovation was well received and recognized during the Show Management Index sm IX., 1995.
- Gold Medal & Special Award – Earth Ecology – for innovative new technology for recycling of poultry waste. (Brussels, Belgium 1995)
- Nominated Professor (Education and Human Rights to Health) by the International Association of Educators for International Peace (AEIPM), and the International Consultative Organization (UNESCO, UNICEF, ECOSOC/ONU).
- Awarded Honorary Diploma in recognition of his international activities, in the social, humanitarian, cultural, scientific, health, education and philanthropic domains. Award given by the International Association of Educators for International Peace (AEIPM), and the International Consultative Organization (UNESCO, UNICEF, ECOSOC/ONU).

If I take BAC on a regular basis, should I continue to take my vitamins, supplements and herbs?

We recommend starting to take BAC gradually while continuing to take your previous vitamins, supplements and/or herbs. Over time, you will be able to reduce and even completely eliminate these supplements as BAC supports increased absorption and utilization of the vitamins, minerals, amino acids, enzymes and essential fatty acids that you obtain from your diet. As BAC awakens the genius within, your body will become more efficient thereby requiring less nutrient supplementation.

We suggest not introducing any new supplement or dietary change at the same time as introducing BAC into your diet. It is a good idea to do one thing at a time in order to monitor the results. In addition, it is not a good idea to start a cleansing program at the same as starting BAC, which is very cleansing itself. Starting a colon-cleansing program or some detoxifying herbs at the same time as BAC could produce too much cleansing, which can lead to adverse effects such as headaches, dehydration and fatigue.

If you choose to continue taking other supplements, it is safe to take BAC alongside them as BAC has no contraindications with any other medicine, multi-vitamin or food.

Can BAC be taken in lieu of Aspirin for headaches or Pepto Bismol for acid burn?

There is no doubt that taking a Pepto Bismol will ease stomach burns, or other temporary discomforts of the gastrointestinal tracts and chances are good that taking an aspirin will alleviate a headache.

With this approach, you may alleviate your headache or acid burn, but it is important to know that these drugs will carry negative effects as well. Aspirin taken frequently will cause liver damage depending on your diet and other factors; forcing your pH to change with Pepto Bismol will leave your pancreas even more lazy.

So the smart question is “Are you resolving the cause of the problem?”

When there are frequent digestive problems, or headaches, rest assured that there are bigger metabolic issues that need to be addressed.

Now with the direct answer.

Though it is not the intended way to use BAC, as a short term solution, taking a capsule of BAC and a couple glasses of water will alleviate the headache and often the stomach burn too. By the way, water alone may alleviate these symptoms.

Understand that the way BAC alleviates these symptoms is vastly different than the way aspirin or Pepto Bismol do so. The nutrients in BAC are assimilated and delivered to the cells of the body within 15 minutes of ingestion with resulting nutritional influences on the brain glands in charge of all metabolic activities, including producing alkalizing liquid via the pancreas, and regulation of the heart rate and vascular flows.

But the best way to use BAC is as a regular part of your diet in your quest for health, and avoidance of not just headaches and acid burn, but also the myriad of other potential health problems.

To reduce or avoid headaches and acid burn or more serious health problems, maintain an overall preventative discipline with:

- reduced quantity of food
- increased quality of food
- regular exercise to increase vitality and prevent disease
- maintained flexibility of the vertebral column

When will I notice results?

The beneficial effects of consuming BAC can be experienced within hours of consumption, while the more subtle benefits work to provide long-term protection and well-being. Some people may experience noticeable changes within a few weeks of use – others may notice differences right away or, conversely, notice no effect whatsoever.

While the benefits of consuming BAC may not always be tangible, there is no doubt that its nutrients are working at the cellular level throughout your entire body. As with any other health pursuit, it is important to maintain a healthy diet and exercise regularly in order to reap more of the full, long-term benefits of BAC.

I have been taking BAC for a month or two and haven't noticed any results so should I stop taking it?

Studies show that it generally takes at least 90 days for any permanent change in the body to take effect. This includes results from changing personal habits, quitting smoking, dieting, exercising, taking natural supplements, and other changes. When taking our algae, some people notice dramatic changes within the first week, while others notice gradual changes over time. Healthy people may notice more subtle positive changes such as more energy, better concentration capabilities and improved digestion while others may notice a general feeling of wellness. Since these changes can be very subtle, we recommend keeping a health diary for 90 days to see if you notice any improvements.

In addition, taking BAC is not like taking medicine... taking BAC is like changing the oil in your car—preventive maintenance. If your doctor told you to eat more fruits and vegetables, would you stop if you did not see a dramatic improvement in your health?

However, Bio-Algae Concentrates are better than fruits and vegetables since they are not only a whole food but also are a highly concentrated superfood delivering much more nutrients, antioxidants, etc. per gram when compared to other foods. Dr. Michael Kiriak, states that “one jar of microalgae concentrate equals 12 truckloads of alfalfa”. Therefore, the benefits from taking this concentrated product cannot be equaled by simply eating a healthy diet or taking normal supplements.

I am not getting the spectacular results that your testimonials profess. What can I do?

There could be many reasons why you have not noticed any results. Listed below are the two most important and easy ways to get the most out of taking Bio-Algae Concentrates. These

suggestions come from research done with BAC and from our nutritional experience with the products.

1. Take the capsules on a regular basis—Just like eating fruits and vegetables once in a while won't make you healthy, taking BAC just when you have symptoms or whenever you remember will only produce marginal results. It is important to take BAC on a regular basis and even when you feel well, since BAC is preventative healthcare.

2. Spread out the total daily amount—research has shown better results are obtained by spreading out the total daily amount evenly in many smaller amounts rather than 1-2 daily amounts. In other words, two 3-capsule amounts is better than one 6-capsule amount, three 2-capsule amounts is even better and six 1-capsule amounts per day is best. In extreme cases, clients have taken twelve ½-capsule amounts per day. One can get more benefits and not have to take more capsules.

I have been experiencing negative effects after taking BAC. What should I do?

Negative effects such as headaches, dizziness and constipation can sometimes be experienced in the early stages of taking BAC. This is usually due to a detoxification effect and can be alleviated by drinking more water or by reducing the number of capsules and ramping back up more slowly. If more serious side effects are noticed, please contact your health care professional. More information about detoxification and other effects of BAC can be found at: Effects of Consuming BAC.

Why does BAC procure more energy?

In most people, that sensation of more energy, or physical reality is true. There is a combination of factors involved with energy. The most important is called “energy coherence” or the efficient transformation of some nutrients in our foods into “ATPhase”.

ATPhase is our principal source of energy that is generated by the “Krebs cycle” metabolism that occurs in thousands of mitochondria in all 60 to 100 trillion cells of our body. With coherence, this transformation operates at maximum efficiency. BAC supports coherence first in “awakening the genius within”. Otherwise, as a direct food energy source, the green in BAC is also good for you.

BAC contains large quantities of magnesium balanced chlorophyll and phycocyanin. Chlorophyll, when well balanced with magnesium, is nicknamed “the shepherd of light” because it can trap sunlight to create energy and give that energy back to you. If you find you need a little extra energy to get through the day, do not be surprised if eating a few more capsules of BAC is the answer for you.

How does BAC help with digestion and absorption in the body?

There is one particular microorganism in the human intestine called lactobacillus, which helps digest and absorb food, prevent infection and activate the immune system. With its enormous offering of nutrients and resulting natural intestinal health, BAC is a great substitute to a lactobacillus supplement. BAC can activate our natural lactobacillus in the intestine and help improve the absorption of vitamins B1 and B2 and many other vitamins and nutrients.

Will eating these superfoods turn my stools green?

Maybe yes maybe no. It largely depends on how much you eat. Unlike eating lots of plain spirulina however, you do not have to eat very much BAC because it is extremely nutritionally efficient. Whether or not your stool turns green, all is well.

Can BAC help me lose weight?

Please see BAC for Dieting and Weight Loss.

Can we eat only BAC as food?

BAC is rich and full of nutritious value, yet the human body should consume different kinds of food and should not consume only one type of food to prevent any lack of nutrient. BAC should be consumed together with food or as a food supplement to enhance and protect body health.

Is there any research related to BAC?

Algae in general have been researched by more than 4,000 scientists worldwide in the past 60 years. The BAC blends have been initially researched and formulated during 15 years totaling more than 20,000 person years (when taking into account all personal involved including supportive farm workers, etc.) . This research was done under the sponsorship of the Academy of Sciences, then under the Nutrition Department of the Ministry of Agriculture of the former Soviet Union. Find additional research here: [Supporting Research](#).

Are there any probiotics in BAC?

There are no probiotics in BAC, but when consuming BAC, instead of allopathically supplementing probiotics for life, your natural intestinal bacterial balance will be restored along with many other vital health metabolisms.

Bacteria are naturally available in our intestinal tracks by the trillions. There are more bacteria in our guts than cells in our body.

Poor foods, environmental toxins, and stress conspire to acidify the body bathing it in damaging free radicals. The ratio of friendly to bad bacteria in our digestive tracks is typically 85% / 15%, while in America this ratio is reversed to 15% / 85%, setting the stage for exhaustion, acidity, chronic pain, rapid aging and a host of degenerative diseases.

Probiotics are dietary supplements containing potentially beneficial bacteria or yeasts. According to the currently adopted definition by FAO/WHO, probiotics are: "Live microorganisms which, when administered in adequate amounts, confer a health benefit on the host".

However, this definition does not tell you that there are many natural ways to maintain or regain your own intestinal beneficial microorganisms, as opposed to supplementing for life, nor of any other natural sources to replenish them. The issue with taking probiotics is that you do not resolve the problem, you simply patch the symptoms for a while.

The smarter way to return the critical pH balance is to stop overeating, change the diet, stop consuming junk food, sugar, alcohol, cigarettes, etc., and to add fresh fruits and vegetables, exercise, and make other good life style changes.

When using BAC, you support the body's return to intestinal vitality in a natural and holistic way. BAC stimulates the pancreas to efficiently alkalize the digestive system, which promotes the return of a healthy intestinal flora and bacterial balance. Instead of just "patching" the symptoms, BAC via efficient cellular nutrition invigorates and tones the entire digestion in a gentle, and even pleasant way.

With the return of the critical pH balance comes: reduction of pain; regeneration of the intestinal lining, allowing it to hold more water and less salt; removal of carcinogenic buildup of old matter; vitality of both extremes of bowel activity; and soon there is restored micro bacterial flora of your digestive tracks.

Processed foods and antibiotics deplete the friendly microbes necessary for healthy intestinal function. BAC rapidly restores beneficial flora so food, nutrients and supplements are more completely digested and assimilated.

With regular use of BAC, efficient detoxification takes place and the pancreas and the liver are cleansed, nourished, and stimulated to regenerate and fully perform their critical functions.

Enzymes in BAC?

Note the full question was: "In Dr. Jensen's Guide to Body Chemistry & Nutrition, I read '...enzymes are proteins, which, like other food proteins, are partly broken down by pepsin in

the acidic environment of our stomachs. Once they are partly broken down, their value for assisting in digestion or any other activity is gone, and their only value to us is nutritional – not bad, but not especially important.’ If this is true, then what is the importance of BAC containing thousands of enzymes — if they are all simply broken down into nutrients like other proteins during the digestive process?”

Let me provide a simple answer. Dr. Jensen was quite right; any food enzymes broken down by pepsin, and especially when the stomach pH level is too acidic (in America, 1.8, 1.7 and even 1.5 are the new norm, while a healthy stomach pH should be 2.0), will often not assist in the digestion of food.

But as also observed by Jensen, the broken or separated enzymes in BAC will contribute to cellular nutrition as micro-proteins/amino acids, and for those people with a healthy stomach pH of 2, the enzymes will also assist with the digestion process.

But that is not why one takes BAC... remember we consume BAC to “awaken the genius within”.

Viewing the enzymes of BAC as one sees “supplementation of digestive enzymes to ease digestion” is the allopathic view... it would only “patch” a weak digestive system as opposed to the holistic way, which is to “heal the weak digestion at the source”... the way of BAC.

For poor digestion of food, BAC’s contribution is to “awaken the genius within,” which it achieves by efficiently nourishing the cells that make up the hypothalamus / pituitary axis. When awakened, this critical axis will stimulate the entire endocrine system including the principal gland of digestion, the pancreas, which in response synthesizes digestive enzymes and delivers alkalizing juices for proper pH. This stimulation also reinforces the intrinsic factor, and with adequate intestinal pH, you will benefit from more efficient re-absorption and synthesis of nutrients like vitamin K, vitamin B12, and proper bacterial balance.

Vitamin B12 in BAC?

“I read that the B12 from algae and other plants cannot be absorbed well and therefore needs to be supplemented if not eating much meat.”

The long answer: These days the vitamin B12 deficiency myth continues to surface. There are many non-scientific rumors about B12 and its relationship with certain algae. Usually, these rumors are preached by old doctors, marketers, or talk radio shows dominated by heavy recommendations for drugs, meat and dairy products, but the question still comes up. In reality, a very small number of people may develop a B12 deficiency, and interestingly most of them are not vegetarian or vegan.

Yes, vitamin B12 is a critical vitamin, and it helps in proper formation of red blood cells, manufacturing of DNA, formation of fatty insulation surrounding nerve cells, detoxification of cyanide from cigarettes and food, cancer prevention, nervous system health, proper growth, prevention of PMS, posture and balance, memory and concentration, proper cell division and sperm production and motility.

Also known as cobalamin due to its central cobalt atom, vitamin B12 is a water-soluble vitamin with a low daily requirement of 2 to 3 micrograms (that's micrograms, not milligrams!). In addition to having extremely low intake requirements, vitamin B12 is stored in the liver, kidneys, and muscle tissue, and 65% to 75% of our B12 is reabsorbed by the body instead of excreted.

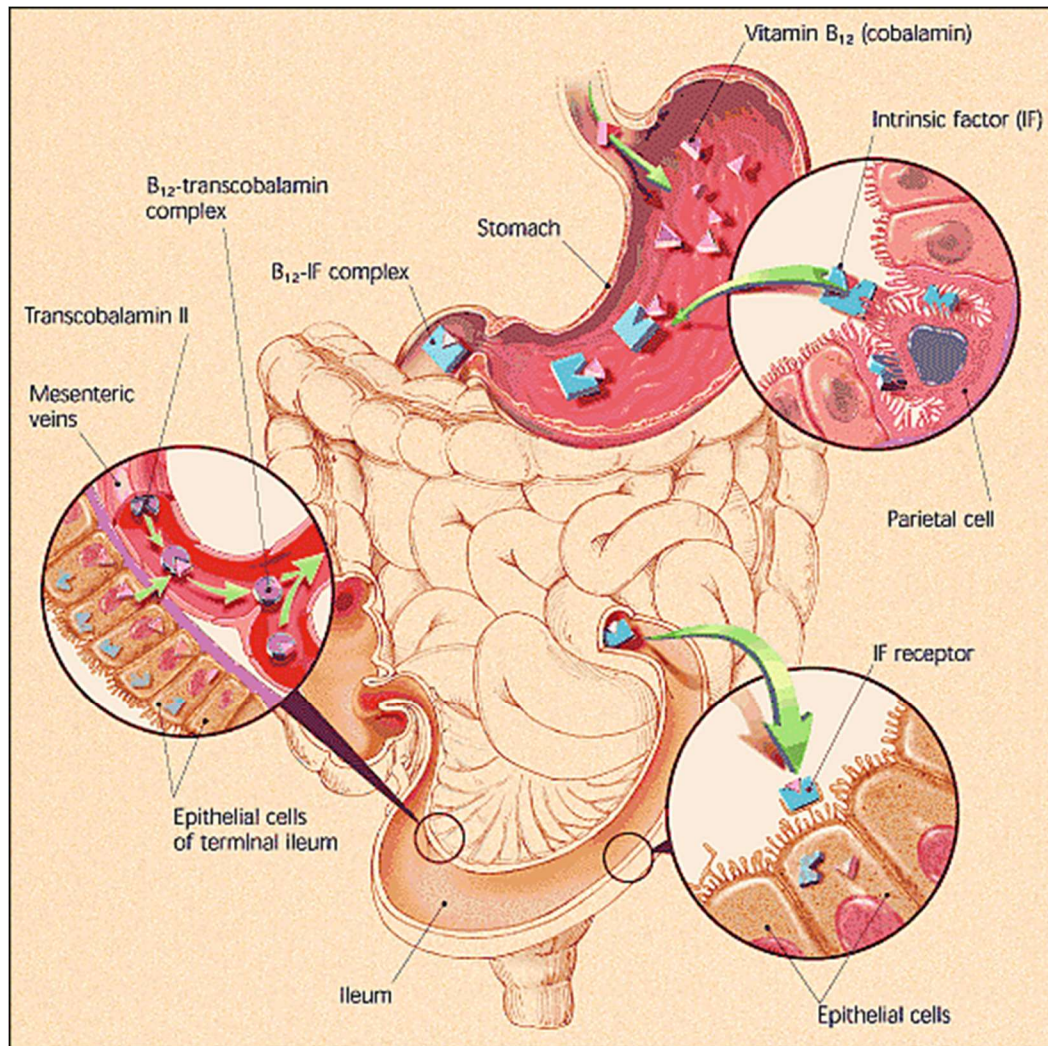
“All of the Vitamin B12 in the world ultimately comes from bacteria. Neither plants nor animals can synthesize it. But plants can be contaminated with B12 when they come in contact with soil bacteria that produce it. Animal foods are rich in B12 only because animals eat foods that are contaminated with it or because bacteria living in an animal's intestines make it.”

— The Vegetarian Way: Total Health for You and Your Family (1996), Virginia Messina, MPH, RD, & Mark Messina, PhD p. 102

Human absorption and distribution of vitamin B12

The human physiology of vitamin B-12 is complex, and therefore is prone to mishaps leading to vitamin B-12 deficiency. The vitamin as it occurs in food enters the digestive tract bound to proteins, known as salivary R-binders. Stomach proteolysis of these proteins requires an acidic pH, and also requires proper pancreatic release of proteolytic enzymes. Even small amounts of B-12 taken in supplements bypasses these steps and thus any need for gastric acid, which may be blocked by antacid drugs.

The free B-12 then attaches to gastric intrinsic factor, which is generated by the gastric parietal cells. If this step fails due to gastric parietal cell atrophy (the problem in pernicious anemia), sufficient B-12 is not absorbed. At this point it is critical to restore this metabolism through a proper diet, exercise and a good dose of BAC.



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The conjugated vitamin B-12-intrinsic factor complex (IF/B-12) is then normally absorbed by the terminal ileum of the small bowel. Absorption of food vitamin B-12 therefore requires an intact and functioning stomach, exocrine pancreas, intrinsic factor, and small bowel. Problems with any one of these organs makes a vitamin B-12 deficiency possible.

Once the IF/B-12 complex is recognized by specialized ileal receptors, it is transported into the portal circulation. The vitamin is then transferred to transcobalamin II (TC-II/B12), which serves as the plasma transporter of the vitamin. Genetic deficiencies of this protein are known, also leading to functional B-12 deficiency.

For the vitamin to serve inside cells, the TC-II/B-12 complex must bind to a cell receptor, and be endocytosed. The transcobalamin-II is degraded within a lysozyme, and the B-12 is finally released into the cytoplasm, where it may be transformed into the proper coenzyme, by certain cellular enzymes (see above).

After reading this description of human assimilation of B12, I hope you realize the futility of supplementation of a mega dose of B12 in any form. A B12 deficiency could take from 5 to 20 years to develop from inadequate intake, but most likely from degenerative mal-assimilation. Eventually a B12 deficiency manifests as nerve damage and pernicious anemia, a type of anemia where red blood cells are improperly formed and white blood cell count is low. It is clear that you will be served 1000% better if you focus on re-enforcing your overall cerebral and endocrine health through diet and exercise, which in turn will restore your efficient assimilation and absorption of B12, and of a myriad of other nutrients.

So how could anyone develop pernicious anemia when B12 intake requirements are so low, and when the liver stores so much that it takes years for a deficiency to develop? The reason touted for the B12 myth is that B12 is found primarily in animal foods. Very few plant foods provide good sources of B12, they say (in reality several plants and algae food contain good level of B12). So that statement is only partly true anyway, because the real source of B12 is not plants OR animals; neither manufacture their own B12. In the B12 arena, it is bacteria that are the B12 producers on which both plants and animals rely. And in humans, bacteria do not necessarily come from plants — our mouth, upper intestine, and lower intestine all contain bacteria that produce B12.

Another cause of B12 deficiency could be its destruction due to dietary or environmental factors. For example, smoking, high protein diets, alcohol consumption, chlorinated water (disruption by chloroform), and diarrhea may deplete B12. But the most common causes of B12 deficiency are absorption or re-absorption problems due to poor intrinsic factor production, a metabolic deficiency that is extremely prevalent in America.

B12 health the right way! – Allopathic mega dosing of B12 is not a solution. Today it is well known that large amounts of isolate nutrients over what the body would normally obtain from food does not resolve the deficiency, but actually may lead to further imbalances, and as new research is proving, may even cause cancer and cardiovascular problems. Rather than buying into the “B12 deficiency” myth, a better way to feel secure about B12 is to restore your vitality overall. This holistic approach is achieved with proper diet and exercise; a high energy diet rich in mixed whole foods, the majority being fruits and vegetables due to their high mineral, vitamin and phytonutrients content.

B12 and BAC? – As mentioned above, B12 is manufactured by bacteria and much of Bio-Algae Concentrates are bacteria in the form of cyanobacteria, the scientific name for spirulina, the algae well known for its high quality B12 content. In summary, YES, BAC supplies a certain amount of extremely efficient B12 as present in three of its four algae, and that is a good thing. BUT, the much more important benefit of consuming BAC in regards to B12 requirements, is its “BAC awakens the genius within” action of efficiently nourishing the hypothalamus / pituitary axis, which in turn restores the metabolisms involved in B12 assimilation and B12 synthesis,

including that of a healthy pancreas and intrinsic factor. This in turn results in a dramatic increase of your assimilation of B12 from your food and of its absorption and re-absorption in your digestive tracks.

The short answer: The cause of B12 deficiency has to do more with the individual's metabolism than the lack of animal protein or B12 in the diet, severe B12 deficiency included.

You have heard the quantum truth "the whole is greater than the sum of its parts". This applies particularly well to human and animal nutrition, like whole foods versus synthetic separates and isolates. If you took all of the parts of a human body and laid them out on a table, would you get a thinking man? Grandfather's pocket watch, with its complex set of gears and mechanisms, gives you time, yes? But if you take out a bunch of gears, or even just one, will you still get time, either from the watch or from the separate gears? The answer is no. If you eat a whole apple you will get life. If you extract just the vitamin C or another vitamin from the apple, will you get life?

One must restore overall metabolic balance (homeostasis) instead of trying to address each imbalance one at a time. The usage of BAC and restoration of animal metabolism of energy, digestion, elimination, immunity and all metabolisms was proven undeniably in large research projects. This process is explained in BAC Awakens the Genius Within.

I personally would never eat separates or isolates chemicals with a name like methylcobalamin. I will eat wholefoods, algae, fruits and the many other wonderful food on earth for the rest of my life.

Is there any antioxidant glutathione in BAC?

I assume here that this question is inspired by the glutathione deficiency theory and those that have a supplement just for it. This theory proposes that "by providing a supplemental mega dose of the amino acid cysteine from pharmaceutical-grade milk serum protein isolates, this will allow cells to synthesize and replenish their glutathione stores".

What is not shared with this theory are other relevant facts. For example, many other foods or lifestyle changes will stimulate glutathione production; a simple jog and a good meal will stimulate glutathione production, as will meditation and a good salad. No one stimulant can take credit for natural human metabolisms.

Glutathione is produced in the human liver and plays a key role in intermediary metabolism, immune response and health, though many of its mechanisms and behavior await further understanding. It is also known as gamma-Glutamylcysteinylglycine and GHS. It is a small protein composed of three amino acids: cysteine, glutamic acid and glycine. Glutathione is

found in two forms; a monomer that is a single molecule of the protein, and a dimer that is two of the single molecules joined together. The monomer is sometimes called reduced glutathione, while the dimer is also called oxidized glutathione. The monomer is the active form of glutathione. Oxidized glutathione is broken down to the single molecule by an enzyme called glutathione reductase.

In response to the deficiency theory; a typical capsule of BAC is comprised of ~50% amino-acids including all known amino-acids, including cysteine. More importantly BAC is a holistic approach “aimed at the whole being” (BAC nourishes all the cells of the body) rather than a palliative approach “aimed at the symptom/deficiency” (cysteine stimulates glutathione). BAC nourishes/stimulates efficiently all the cells of the body including those of the brain glands which in turn increase all metabolisms of health in the body including the production of glutathione at the cellular level.

In ending, let me point out that when BAC is fed to dairy cows (and other species) it allows them to reduce their daily protein (amino acid) intake by 1.25lbs while increasing productivity by ~20%. That is due to better protein uptake and more importantly better protein synthesis and utilization at the cellular level.

You would soon be taking hundreds of supplements if you fell for each deficiency theory. It is smarter to stimulate the producer glands of the brain rather than supplement all the deficiencies of the body.

Is COQ10 (Coenzyme Q10) available in BAC?

Let me give you a short and a long answer.

The short answer – All live foods contain one form or another of Coenzyme Q-1 to Coenzyme Q-10¹. This compound is so ubiquitous that it was first named ubiquinone (Idebenone as synthetic COQ10). Humans require COQ10. Our body can even make COQ10 out of the other coenzymes Q-1 to Q-9, or we can absorb it from our food. Bio-Algae Concentrates contain not only all CoQ’s, but they contain an extraordinary amount of naturally occurring enzymes and coenzymes; totaling more than 4,000. No other food on earth contains as many enzymes as some microalgae, and none contains as many as BAC. But even better than relying on one source to get your COQ10 is to eat a variety of fresh whole foods. Also remember that when you consume BAC, your assimilation, absorption and utilization of nutrients (like COQ10) are awakened. That is the way nature meant it.

The long answer – COQ10 is currently a star in the supplementation industry just like Vitamin C was a star in the 40’s, lycopene in the 90’s, etc. The reason is that it is a critical nutrient that becomes depleted as we age. But so do hundreds of other critical nutrients! If you followed this

palliative model (one supplement for each ailment) you would soon be taking hundreds and eventually thousands of supplements as scientists continue to identify and elevate them to stardom until the next one is discovered. Based on this model, why not take a supplement for each coenzyme or enzyme (of which there are thousands) and for that matter for each known nutrient? The vitamin industry is already enjoying billions of dollars of profit every year from this model.

The first solution to the deficiency theory is to start eating fresh whole and organic foods. As mentioned earlier, enzymes and coenzymes are metabolized in our body as well as supplemented from fresh and whole foods. BAC serves this approach 100% in that it is a whole food that contains thousands of food enzymes. But more importantly, BAC also contains the full spectrum of human active proteins and essential and non-essential amino acids that support the body in synthesizing even more proteins, enzymes and co-enzymes.

The proteins and amino acids in BAC are disassembled in our stomach and duodenum by our protease digestive enzymes and then assimilated and absorbed by our cells. Subsequently, based on our body's needs, each of our more than 60 trillion cells have the potential to synthesize from these absorbed and available amino acids more than one hundred thousand different types of proteins, enzymes and co-enzymes² including COQ10 as explained above.

Finally, remember that BAC "awakens the genius within". When you consume BAC all metabolisms are stimulated including absorption of nutrients from food, usage of nutrients and synthesis of co-nutrients within the cells.

1 – Dr. Karl Folkers of the University of Texas at Austin – "Father" of CoQ in the United States
2 – Biology of Belief, Bruce Lipton, PhD.

How much vitamin D is there in BAC?

These days there is so much talk and controversy about vitamin D, I am glad to address this recent question. The full question was:

"I was talking to a nutritionist, and he said that one of the big nutritional issues in people is vitamin D deficiency due to lack of sun exposure. To supplement, he said, requires huge doses to make up for the lack of sunshine. What is the vitamin D content in BAC?"

Before answering your question, I want to expand on the current "craziness" about vitamin D. Vitamin D has become a "star" in the health industry as a result of recent and not so recent rumors, propaganda and "just" marketing intended to increase sales of this vitamin.

The controversy with supplementing vitamin D

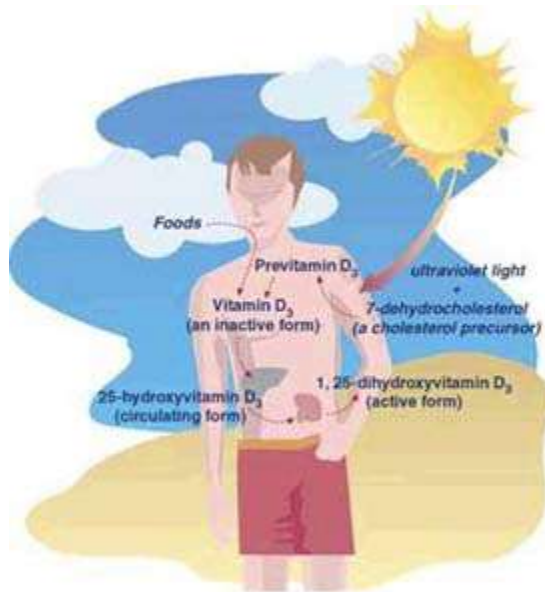
“At no time, ever, from any source, could the human or animal body have gotten the massive doses of vitamin D being used today in research, in medicine and as additives in feed in animal husbandry.”

~ Krispin Sullivan, CN 2003

Many companies are selling vitamin D in doses from 400 IU to as much as 5,000 IU. Supplement companies periodically send newsletters continuing to report the benefits of vitamin D and harmful effects of having too little vitamin D. One might assume buying and taking one of these supplements will make sure you are sufficient in vitamin D.

But following much research and published (old and new) papers on vitamin D the ‘facts’ remain the same. Each person absorbs and/or produces vitamin D differently. One person may simply expose arms and legs several times a week and have adequate levels of D, others may take a supplement of 4,000 IU daily and not see an increase of their vitamin D at all. While still others, by simply increasing their calcium intake, or changing their diets, will see their level of D rise without taking supplemental D.

Getting enough of the so-called sunshine vitamin (the skin makes it from ultraviolet rays) is vital for strong bones and other metabolisms. But vitamin D has made headlines in recent years because of research saying it may be a powerful cancer fighter, sparking a push for people to get more than currently recommended amounts, either through diet or sun exposure.



Experts are cautious because other vitamins and nutrient supplements once widely thought to prevent cancer did not pan out when put to rigorous testing. With vitamin D, there is now a lot of research showing the potential dangers of vitamin D supplementation.

National Cancer Institute researchers analyzed vitamin D levels measured in almost 17,000 people as part of a national study that tracked their health. About a decade after enrolling, 536 of those people had died of cancer.

Whether people had low or high vitamin D levels played no role in their risk of dying from cancer in general, they reported in the Journal of the National Cancer Institute.

The first-of-a-kind government study released Tuesday shows the issue is far from settled.

“Supplemental vitamin D is commonly found in multi-vitamin and single-nutrient preparations. Evidence for vitamin A and D toxicity as a result of dietary supplementation was more commonly seen in clinical practices in the earlier part of this century. More recently, vitamin D toxicity has been documented in several accidental situations that have usually involved food fortification errors, but it is rarely seen. In this issue, Adams and Lee report several cases of vitamin D toxicity in older adults who reported consumption of vitamin D supplements. The sources and doses of the supplements differed, but all patients regularly consumed (in addition to their diets) single-nutrient sources of vitamin D, other supplements that contained vitamin D, and multi-vitamin supplements.”

What are the health risks of too much vitamin D?

There is a high health risk associated with consuming too much vitamin D. Vitamin D toxicity can cause nausea, vomiting, poor appetite, constipation, weakness, and weight loss. It can also raise blood levels of calcium, causing mental status changes such as confusion. High blood levels of calcium also can cause heart rhythm abnormalities. Calcinosis, the deposition of calcium and phosphate in soft tissues like the kidney can be caused by vitamin D toxicity. Consuming too much vitamin D through diet alone is not likely unless you routinely consume large amounts of cod liver oil. It is much more likely to occur from high intakes of vitamin D in supplements.

References:

Norman AW. Vitamin D. In: Ziegler EE, Filer LJ Jr, eds. Present Knowledge in Nutrition. 7th ed. Washington, DC: ILSI Pr; 1996:120-9.

Adams JS, Lee G. Gains in bone mineral density with resolution of vitamin D intoxication. Ann Intern Med. 1997; 127:203-6.

The better question is: How does one resolve vitamin deficiencies?

Let me start with addressing vitamin D in the context of cancer prevention. Vitamin D is a very small player as far as cancer fighting goes. There are hundreds of nutrients that are much more

active when it comes to quenching free radicals and tumor growth. Will you start taking a supplement for each one of those hundreds of nutrients? Did you know that it has already been established and published in cancer research that the best cancer prevention is the powerful nutrients obtained from eating many colorful fruits and vegetables?

“The thousands of vitamins, minerals and phytochemicals (beneficial plant compounds) in whole foods act synergistically together to create a more powerful effect than the sum of their parts, producing a result which cannot be recreated by supplements.”

– Vice President for Education at the American Institute for Cancer

The concept of measuring and supplementing individual, isolate or separate nutrients (vitamins, minerals, antioxidants, etc) is of the chemical (as in Chemist) domain, that deals with inorganic, as in unorganized molecules, known as chemicals. While with natural sciences the bio-chemist works with bio-chemicals, those molecules that are organic, or organized together naturally and only as they occur in whole foods. These organized molecules with their natural balance and synergistic proportions that carry ZERO toxicity can never be found or replace with supplements that are isolate and separates.

Vitamin D is not a vitamin!

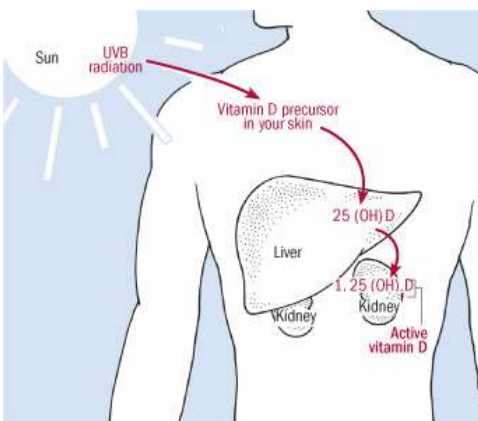
A “vitamin” by definition is a substance regularly required by the body in small amounts but which the body cannot make and is, therefore, required to be supplied in the daily diet. Technically the molecular species classified as vitamin D is not really a vitamin because it can be produced by exposure of the skin to sunlight. However, for unknown reasons, vitamin D3 continues to be classified officially as a vitamin. (History of vitamin D). In natural science we know that “vitamin D” is a complex metabolism involved in many aspects of human health, from bone formation, to hair growth and cancer prevention, and that the best source is its natural source, the sun. When the sun hits your skin, vitamin D metabolism is triggered.

Vitamin D: the sun vitamin

The sun is an important source of vitamin D. Our bodies make vitamin D when sunlight touches our bare skin. Despite the rumors about harmful effect of too much sun, in the United States and Canada, adequate amounts of vitamin D can readily be obtained from the diet and from casual exposure to sunlight. It has also been proven that at least 10-15 minutes of sunlight per day, depending on your skin sensitivity, is actually good for you.

But how much is too much? Here is the answer, according to The Center for Science For the Public Interest: Exposing non-sun screened hands, face and arms to the sun for about ten to fifteen minutes (depending on skin sensitivity to sun burning, latitude and time of day) two to three times a week between 8 am and 4 pm gives the body its vitamin D requirement.

Food for thought regarding deficiency



Vitamin D Metabolism

In most cases when a deficiency such as that of vitamin D is diagnosed, there are other deficiencies and/or degenerative conditions in your body. Supplementing to deficiencies as they are diagnosed will not solve the cause of those deficiencies. One cannot view human health as a series of separate events or as a multitude of separate parts like that of your car. It is much more important to resolve the causes of deficiencies. For example, when you are exhausted from stress or poor diet choices, then you will not be efficient at metabolizing vitamin D, converting your food into energy, synthesizing proteins and enzymes, or many other health giving functions of your body. It is a vicious cycle and supplementing to each deficiency is like chasing after your own tail.

The best secondary food sources of vitamin D

Until you resolve the potential causes of your deficiencies, a much healthier solution to supplementing your vitamin D is the natural way. The best natural sources of vitamin D are some foods. Our need of vitamin D is very small and can easily be found in several foods. A partial list of foods high in Vitamin D₃ include Cod liver oil, several micro algae, salmon, mackerel & sardines, egg yolks, and beef liver. Note that this list of foods does not constitute dietary recommendations by BioAge or Roland Thomas.

The ultimate solution to vitamin D deficiency and other deficiencies

A much better solution to supplementing vitamin D, and by the same token addressing your other known and unknown deficiencies, is the restoration of your general vitality, particularly that of your brain organs, thus restoring your natural capacity to efficiently synthesize vitamin D from your exposure to the sun wherever you reside. You will be surprised how easily you can progress by simply applying some of the following life style changes:

stop overeating and stop eating the wrong foods
eat lots of fruits and vegetables and drink mostly water
exercise, exercise and exercise
find peace of mind, get informed about the health and diet connection

Let me repeat and be clear regarding deficiencies of nutrients such as vitamin D or all the others; If you eat a “proper” diet and follow the above recommendations on life style changes, there is no need for additional supplementation with isolated vitamins or supplements (unless there is an acute deficiency, immediate infection, or a life threatening condition).

And now let me address your question as it relates specifically to BAC

In all of BAC’s formulations, there is less than 1.0 µg/g of vitamin D3. In essence, it is below the quantitative limit (BQL) or too small to be measured precisely. But do not stop reading; let me shed some light on the benefits of taking BAC as it relates to vitamin D deficiency and any other deficiency.

So how does BAC fit in as a solution to vitamin D deficiency?

BAC as a solution fits right in with the “eat fruits and vegetables” recommendation, but BAC is no ordinary food; BAC is an extremely efficient food. In the words of Dr. Michael Kiriak, PhD, “BAC is the culmination of cellular nutrition”. BAC contains many more nutrients than a diet of 30 exotic foods gathered from around the world. Some of its nutrients occur in amounts more than what is required for the day, others that are just ok, some that are not enough for the day, and some that are a complete “bonus” to the body and could never be obtained other than with BAC.

BAC awakens the genius within

Besides supplying an “extraordinary” array of nutrients, the principal value of consuming BAC is its power to “awaken the genius within”. When fed efficiently by BAC, the cells of the mission critical brain organs that regulate all metabolisms such as nutrient assimilation, will function much better and you will assimilate vastly more nutrients from your food, or synthesize them better from the sun (as in the case of vitamin D). This “awakening” is the most important value of consuming BAC.

In natural sciences it is well known that there are no better nutrients than those naturally occurring from the sun, the air we breathe, and in whole foods, NONE. When consuming BAC, because of its positive influence on the brain organs that regulate digestion, you will assimilate significantly more nutrients out of any diet, and certainly out of a good diet. And with most people that should be enough.

There are over 5,000 individual nutrients in BAC, including over 4,000 enzymes, vitamin A, B-complex, C, D, E and K, all ten essential amino acids plus ten more, all known trace minerals and elements, Omega-3, Omega-6, Omega-9, GLAs (Gamma-Linolenic Acids), ALAs (Alpha-Linolenic Acids), DGLA (Dihomogamma-Linolenic Acid), DHA (Docosahexaenoic acid) and more fatty acids, etc. Here are some links: [The Ingredients in BAC](#) and [Detailed List of Nutrients in BAC](#).

Is there too much iodine in BAC?

I have a thyroid problem and I am told to avoid algae due to its high iodine content. Is there too much iodine in BAC?

There is a great lack of knowledge about algae, which leads to rumors, misconceptions and fear. It is true that some macro-algae like kelp, also called sea vegetable, contain high levels of iodine. And because of this, people throw everything about algae in the same “algae” bucket. This is quite unfortunate as some algae and particularly the blend of algae as it occurs in BAC can be beneficial to resolve many health problems.

And let us not forget that iodine is a required nutrient for humans. Besides sea vegetables, there are many other sources of iodine that we consume daily, for example; fish, yogurt, cow’s milk, eggs, strawberries and mozzarella cheese amongst other.

As far as iodine versus algae goes, the reality is that of more than 65,000 known algae, most do not contain high levels of iodine.

The iodine content of BAC amounts to ZERO toxicity potential, and there are no known contra indications with medications or other foods or supplements. On the contrary, expect positive health support from adding BAC to your diet.

Is the amount of nutrients in BAC too low a dose?

“I have used BAC for most of this year, and I believe it is helping me. I was diagnosed with Testicular Cancer in January and had it surgically removed. I have been cancer free since then (it had not spread), but I have been trying to maintain a good diet to prevent any reoccurrence. I asked my doctor (a Naturopath) what she thought of your micro algae product and she said she thought it was good but that the nutrients were present only in very low doses. I am a big

believer in algae as a food/supplement, but was not sure how to respond. Could you elaborate on this topic for me? I'd like to understand more about BAC."

That is a frequently asked question and I may not be politically correct here, but I have to tell it like I see it.

The vitamin industry, like the pharmaceutical industry, is failing... as more people are taking supplements, more people are getting sick. The endlessly growing multibillion dollar vitamin industry has not made a dent in the epidemic of diseases in America; those are the statistics. The research at best is their "marketing" best effort to make more sales. With most supplements there is no credible research supporting the claims.

But more importantly, the philosophy and approach to supplementation is wrong right off the bat... it mimics the pharmaceutical model that is allopathic in approach, which means treating "one" symptom with "one" supplement, as opposed to the holistic natural model of treating the root cause of the symptom.

Fundamentally most diseases are caused by abuse (too much) of the wrong foods or substances and the lack of cleansing the debris.

Over years and decades this leads to major problems manifesting as symptoms, and then people revert to a drug or a supplement for each symptom; Lipitor for cholesterol, antioxidants for the immune system, calcium for osteoporosis, saw palmetto for the prostate, vitamin E for cardiovascular health, vitamin D for cancer, etc. The theories abound and there seems to be no end to the discovery of new ones. Yet people go on being sicker than ever.

How about stopping the abuse (too much) of the wrong foods, exercising and fasting?

It is well known that applying these lifestyle changes will redress 90% of most symptoms and diseases.

I find that smarter than reverting to drugs or supplements; don't you? Why take 23 supplements year after year like I used to, see no results, and yet continue chasing the next one or trying yet another doctor's recommendation?

And now in answer to the specifics of your question

First I invite you to read another question and answer Is BAC enough?

It is true that BAC contains a small dose of some of its nutrients. But it is also true that BAC contains "some of" just about all known nutrients. Some occur in amounts that would not be sufficient for the day, some that are enough for the day, some that are more than the daily

requirement, while some are a complete “nutritional surprise” to the body, nutrients that you cannot find in exotic foods from all over the world.

The starting premise of the concept of BAC is that whole foods should be the source of all our nutrients.

The concept of BAC, unlike various deficiency theories, is not one of “supplementing” a deficiency using a megados of a vitamin, a mineral, an antioxidant, or some other substance that will alleviate that deficiency. The concept of BAC is a holistic “let thy food be thy medicine” approach, that of “awakening the genius within” frequently throughout the day with a small amount of “extremely efficient” nutrients found in BAC; the culmination of cellular nutrition, a concept documented here: [BAC Awakens the Genius Within](#).

Extensive animal research over 2 decades including millions of animals proved prevention of diseases (including cancers) and increases in productivity in 20 species tested. That is research that I personally have relied on for my personal health and that of my family for 9 years.

We now know that there are as many as 15,000 nutrients/phytonutrients in certain micro-algae. We can safely say that there are over 15,000 individual nutrients in the BAC blend, including over 4,000 enzymes, vitamin A, B-complex, C, D, E and K, all ten essential amino acids plus ten more, all known trace minerals and elements, Omega-3, Omega-6, Omega-9, GLAs (Gamma-Linolenic Acids), ALAs (Alpha-Linolenic Acids), DGLA (Dihomogamma-Linolenic Acid), DHA (Docosahexaenoic acid), other fatty acids, then those thousands of other too small and/or unknown yet nutrients. Here are some links: [The Ingredients in BAC](#) and [Detailed List of Nutrients](#)

Is BAC enough?

Note the full question was: “I try as hard as I can to feed my cat well, and to have her eat the canned foods but I also don’t want to make eating a stressful time for her. So, will the bio-algae provide enough of the nutrients for her? Do I still need to give the salmon oil for omegas? Are there any other areas that the bio-algae will not cover?”

With a regular intake of BAC there is no need for additional supplementation with isolated vitamins or supplements, unless there is an acute deficiency (immediate infection or life threatening condition), provided a pet owner feeds premium quality canned or raw food. It is also important to remember not to feed the same flavor or brand of food every day to a pet. If that is the case, they may become intoxicated from the same proteins, and/or become nutrient deficient. One must vary foods and have patience; one cannot open a new flavor canned food and just give up if the cat snubs it.

BAC has more organic nutrients than any exotic diet of 30 different foods. Some of its nutrients occur in amounts that may be more than enough for the day, others that are just ok, some that are not enough for the day, and some that are a complete surprise to the body and could never be obtained other than with BAC. One should eat a proper diet in order to obtain nutrients, and one will obtain significantly more nutrients out of any diet, and certainly out of a good diet, than when consuming BAC. And normally that is enough.

The concept of measuring and supplementing individual, isolate or separate nutrients (vitamins, minerals, antioxidants, etc) is the chemical (as in Chemist) domain that deals with inorganic, as in unorganized molecules, known as chemicals. While with natural sciences the bio-chemist works with bio-chemicals, that is molecules that are organic, or organized together naturally as they occur in whole foods. These organized molecules with their natural balance and synergistic proportions that carry ZERO toxicity can never be found or replaced with supplements that are isolate and separates.

Besides supplying an “extraordinary” array of nutrients, the principal value of consuming BAC is its power to “awaken the genius within”. When fed efficiently by BAC, the mission critical organs of the brain that regulate all metabolic activities will operate better and the animal or person will assimilate “vastly more” nutrients from food, whatever their diet may be. That is the most important value of consuming BAC. In natural sciences it is well known that there are no better nutrients than those naturally occurring in whole foods, NONE.

There are over 5,000 individual nutrients in BAC, including over 4,000 enzymes, Vitamins A, B-complex, C, D, E and K, all ten essential amino acids plus more, all known trace minerals and elements, Omega-3, Omega-6, Omega-9, GLAs (Gamma-Linolenic Acids), ALAs (Alpha-Linolenic Acids), DGLA (Dihomogamma-Linolenic Acid), DHA (Docosahexaenoic acid) and more fatty acids, etc. Here are some links. The ingredients in BAC: [The Ingredients in BAC](#) and [Detailed List of Nutrients in BAC](#).

Does the process of freeze drying the algae lead to a loss of nutritional value?

“I was listening to a presentation about phytoplankton and it was claimed that the freeze drying process leads to a major loss of the nutritional properties and that a liquid form was far superior than capsules. Do you have any info on this topic?”

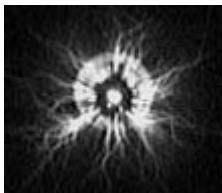
One has to be smart about this. Some marketers will say things to promote their products right? But in regards to phytoplankton or algae, the optimal way to obtain their nutrition would be to eat them when they are raw and ripe, and straight out of their natural habitat. But the reality is different. Here are a few things to think about.

1. Was it a marketer or a scientist that said that?

2. Did they know or specify which freeze drying technique they were talking about? How can they make such a claim when we know that even just freezing food is an excellent way to preserve it? Even embryo cells can be freeze dried.
3. Then one has to ask the more important questions such as where are these phytoplankton grown? All waters up to the Arctic Ocean are now polluted with thousands of new chemicals.
4. One HAS to demand to see the empirical non-biased, independent and non-placebo influenced research about a product. You have to be smart and look under the hood... you cannot simply trust a good sales pitch.
5. Dr. Kiriatic is likely the world leading authority on algae technology. In 1985, he was already supervising five USSR bio-reactors that produced more algae than any other company in the world.
6. After 12 years of working with thousands of humans and animals and hundreds of clinics and professionals here in America, Dr. Kiriatic has witnessed countless extraordinary results. He has conducted several trials with animals in the USA and Canada and obtained Kirlian photography ([see the testimonial and image below](#)) that showed the exploding energy and magnitude of the reflecting light of BAC. We are 100% certain that its life force, its photosynthetic charge, is preserved.
7. Our product analysis and its various ORAC, HORAC and SOD test results are extraordinary. These results come from Brunswick Labs and an independent New Jersey lab.

Impressed with its energy

...Here are the Kirlian pictures of the Bio-Algae Concentrates. Frankly, I'm impressed with its energy...



Kirlian photography is a high voltage, contact print photography. Sheet film is placed on top of a metal plate, and then an object to photograph is placed on top of the film. High voltage is applied to the plate momentarily to make an exposure. The corona discharge between the object and high voltage plate is recorded onto the film. When the film is developed you have a Kirlian photograph of the object.

– Jason M., Utah – January 2004

I thought that phytoplankton were the first food responsible for creating our planet's oxygen and that contain the most powerful antioxidant power?

Actually the cyanobacteria blue-green algae were the first living organisms dating back 3.5 billion years. Life on earth originated from blue-green algae; they invented cellular split and cellular hormones. Their membranes secrete hormones in order to communicate with neighboring cells.

Phytoplankton are one link up the food chain as they consume microalgae to live. Microalgae are the first link, then comes phytoplankton, crustaceans, small fish, big fish, animals and human. The microalgae in BAC are the densest food that also carry the least toxicity. As you travel up the food chain you begin to lose nutrient density and gain toxicity. A good example of progressive loss of density is with the red pigment astaxanthin of which the red microalgae haematacoccus pluvialis is its largest carrier on earth. From there you find astaxanthin in declining amounts in phytoplankton, krill, lobster, etc.

Bio-Algae Concentrates are a blend of blue-green and red algae that carry the highest antioxidant power naturally occurring from their mixed carotenoids. The ORAC value (free radical quenching and anti-oxidative power) of some of its alpha-carotene and astaxanthin is clinically proven to be near 1000 times more than that of vitamin E, 500 times more than vitamin C and 20 times more than beta-carotene as found in carrots.

Will BAC increase stem cell growth?

Note the total question was: “Yesterday somebody shared with me information about a product that claims to increase stem cells by 25%-30%. Do you know if BAC would increase stem cell output to any extent like this product? How many of the BAC do you think it would take to increase it this much?”

Let me give you my frank opinion on this currently popular topic.

1) Nobody has a patent on enhancing stem cells; a good diet, exercise, yoga, meditation and even prayer will increase stem cell production in the same manner that a good run will increase hormone production, energy and cellular metabolism – stem cells are continually being born in the process of life even when sleeping or plain doing nothing.

2) Treating stem cell stimulation as a separate event from the total biochemical human metabolism is yet another allopathic false approach – one should always work holistically with human health. Stem cell enhancement is a current “hot” topic, just like vitamin C used to be and acai berries just a few years ago. I call stem cell stimulation and other modern allopathic concepts such as these “single deficiency theories”. And by the way, most “hot” new products nowadays are often offered by MLM (Multi Level Networking) companies.

3) Often, biased clinical tests can be easily reproduced with a simple change in diet (as in introducing fruits and vegetables) and shown to deliver similar results – while real research is when you work with thousands of people or even better, with animals first because there is no placebo effect. Also, true research is done by an independent body and not hired by the MLM company.

4) One current product on the market consists of an extract of mostly the beta carotene portion of the AFA (a plain blue-green alga) with little else in the product. In essence it is a mega dose of beta carotene, and in my natural book, that becomes a separate/isolate; a chemical product rather than a natural whole biochemical one. It is a choice in life to use bio-chemical (live food – let thy food be thy medicine) versus chemical (chemist model – pharmaceutical) approach. There is recent research that clearly shows mega doses of beta carotene contributing to colon cancers instead of protecting from it (if you are interested I can dig it out for you).

Before committing to any product, you should look for real, substantial and unbiased research.

BAC will stimulate not only stem cell metabolism, but all metabolisms of life. BAC will protect you from the negative effects of a mega dose of beta carotene (which tends to cause imbalances). I suggest that 6 to 9 capsules per day will significantly increase your total cellular and metabolic regeneration potential.

In ending, let me point out that when 20 different animal species were fed BAC, there was general overall productivity increase averaging 20%. It is smarter to stimulate the producer glands of the brain rather than supplement one specific deficiency or metabolism. You will soon be taking hundreds of supplements if you fall for each allopathic theory.

I'm about to undergo chemotherapy. Should I stop my chemotherapy and take BAC instead?

The first thing you should do is educate yourself about chemotherapy. I recommend the book "Questioning Chemotherapy" by Ralph W. Moss, who used to work as a lead researcher at the National Institute of Health. Ralph will give you the straight story on chemotherapy. Whether you decide to undergo chemotherapy or avoid it, Bio-Algae Concentrates will improve your results. There are no known contra indications while taking BAC, although some oncologists may want to discourage you from using them during your treatment, thinking that they are like other isolated supplements and/or not knowing that they are a well-balanced and naturally synergistic whole food.

Can BAC help with HIV?

BAC is pure food: the raw materials that the body needs for energy, growth, repair, protection and self-healing from ALL diseases or conditions. Rather than re-explain BAC and the potential of its ingredients and mechanism of actions specific to HIV, let me remind you that the proper use of BAC will deliver via nutritional support similar health protection and healing results in all viral conditions like herpes, hepatitis A, B and C, West Nile virus, etc., and all of the thousands of “named” diseases for anyone consuming it.

I encourage you to read the account of Daniel, who reduced his viral load from 139000 to 5000 in two years using BAC, at [Read more about BAC and Epilepsy at: BAC People Cases](#).

Can BAC help with epilepsy?

The greatest “value added” by BAC is its direct influence on the hypothalamus / pituitary relationship. This glandular cortex is responsible for all metabolic activities in our body. When this life-critical cortex is properly nourished and energized it holds the power to command the body metabolisms back to balance and health via a myriad of hormones and peptides. For example, one important metabolism is the nutrients to energy conversion (Krebs cycle/ATP) for which the balance in salt/sodium, potassium, magnesium and calcium is critical. This electrical and atomic energy generation occurs unceasingly in each mitochondria of every trillion cells of our body including those at the root of epileptic seizures.

We have witness many successes with BAC and epilepsy in children and adults of all ages. BAC has no known medical contraindications as it is a food, it is non-toxic and it has no negative side effects.

Will BAC prevent macular degeneration?

“Will BAC help to prevent macular degeneration? I take calcium, D3, Vitamin C, Preservation (preventative for macular degeneration), and Omega 3’s. I would like to not have to take any of them... I want to know if the vitamins can be stopped and the BAC used solely.”

The BAC F3 contains the greatest amount of red algae, which has the highest levels of many carotenoids like astaxanthin, lutein, zeaxanthin, beta-carotene and others that are capable of crossing the Blood Retinal Barrier (BRB) and Blood Brain Barrier (BBB).

Most BAC users have found that they feel better and no longer need any of the other supplements that they took previously. All of our formulas contain well over 15,000 nutrients, including some of all known vitamins, minerals, trace elements, essential amino acids, fatty acids (Omega 3, 6, 9 and more) etc. And consuming BAC helps the body get more nutrients from your daily diet as well.

For optimum eye health we suggest between 8 to 16 capsules of F3 per day to make a significant difference. You should start out with just 1-2 capsules per day and gradually increase your intake level over the course of several days or weeks. You should also be sure to eat the healthiest possible diet, including lots of colors of fruits and vegetables – preferably organically and locally grown, and limiting animal products and of course processed foods.

Human Use – Testimonials

Dog goes from stumbling to running

I have a amazing cat, Pippin who recently didn't want to get out of his snuggle bed in the am. Although he has never been sick, and about 15 years old, I assumed he just didn't feel well and let him rest. By dinner time he tried to come out of his bed, which was up on a chair, and instead of jumping down he literally stumbled onto the floor. His head was twisted to the right and he proceeded to fall to the right with every few steps as if his legs we kicked out from beneath him. He would then look behind himself as if someone was pushing him and making him fall. He would fall trying to get in a bed on the floor, trying to jump on any furniture, looking up or turning in any direction.

I took him to the vet as he now was showing signs of torticollis and his eyes were not focusing correctly. Veterinarians thought it could be an inner ear infection or a stroke. They could not find any signs of inner ear infection and said the only way to determine if he had a stroke was to do an MRI. And even then there was no definitive treatment. They wanted to keep him that evening to administer steroids, antibiotics etc.

I decided to take him home and do what I do, Advanced Energy Therapy, BioPreparation every 3 hrs, with some homeopathic and flower remedies. I fed him his raw food diet and BioPreparation through a dropper as the food was falling out of his mouth.

As the days progressed I saw gradual changes. On day 2 he was eating a bit. Day 4 he lifted his paw to wash and didn't fall over in his bed. Each day I would see small signs of his balance returning.

It has been 2 months and if you know Pippin you might notice a slight head tilt and minor balance issue but he is now RUNNING, chasing his treats, and his tail, is able to jump up on all the furniture and is one happy boy.

To Dr. Roland, Dr. Kiriac and BioPreparation, we are forever grateful.

Thanks for all you do.

Constantina & Pippin

I agree 100% that we get healthier by taking your PRODUCT

I agree 100% that we get healthier by taking your PRODUCT

WE LIVE IN A WORLD OF SICKNESS – YOUR PRODUCT KEEPS US ON OUR FEET — IN TURN WE FEEL BETTER AND HAVE A GOOD MEASURE OF HEALTH . DO WE NEED YOUR PRODUCT? YES!

THANK YOU AGAIN FOR ALL YOUR HARD WORK KEEPING THIS PRODUCT COMING OUR WAY— AS ALWAYS

PATRICIA V. AZ, USA

I've been less fatigued already!

I've been diagnosed with the Epstein–Barr virus. After only three weeks on BAC, I've been less fatigued already! I've noticed, too, that my nails, which have always been weak, are much stronger now. I'm also experiencing improved immunity against colds.

~ Jennifer S., Lanoka Harbor, New Jersey, October 2017

Since taking BAC, I have no problems with regularity

I was having severe problems with regularity. I stopped taking the medicine because I was afraid of the side effects. Since taking the BAC, I have had absolutely no problems. Thank God.

~ E.S., Toms River, New Jersey, October 2017

Improved immunity

The bio-algae seems to have improved our immunity, even at a maintenance level of 1-2x a day. I'd like to increase to 3x a day for further healing.

~ Eve M., Reno, NV, October 2017

Lifelong nervousness and anxiety had disappeared!

My mother began taking the bio-algae for a digestive health condition that cleared up within weeks. As amazing as that was, I also noticed that her lifelong nervousness and anxiety had disappeared!

~ Jen S., Santa Maria, California, October 2017

The energy level...is just like my tank was full

I am feeling really good. I forgot to take a capsule this morning and felt like I was lagging all day. Over the last two weeks, I worked 120 hours doing a lot of physical labor, and I think the supplements were a big part of me getting through that with the energy level I had. It didn't feel at all like a caffeine rush; just that my tank was full all day.

~ Katie S., Nashville, Tennessee, November 2017

No headache, no sinusitis aches, except this really happy SMILE

My order was received yesterday and very timely too, as I went down with high fever, sore throat and flu aches and some sinusitis that I must have picked up while gardening on Sunday. Having recently worked up to 4 capsules a day of F2, and feeling pretty grim, I popped the just received bottle of f3 and took just one capsule and went to bed.

This morning well, I am in amazement at the freedom from ALL symptoms. No headache, no sinusitis aches, nothing, except this really happy SMILE. My next e-mail will be cc'd to all my contacts saying "Get BACs, we all needed them yesterday!" And all this in just ONE WEEK. I can now look forward to health and life again at 65! All is just so naturally falling into place physically. I love my fresh attitude, having almost given up on myself. Amazed delighted, resurrected!

In occult terminology, the Hypothalamus is known as the "Dweller at the threshold or guardian at the door" and plays a vital role in our consciousness, and when dysfunctional, lack of. Indeed as an aware observer for over sixty years, I can say this product can help make a paradigm shift, and Dr. Kiriatic should be nominated for Nobel Prize for service to humanity. I feel certain you have that same superfood smile, and isn't it wonderful that all can have better lives from this cellular nutrition. I really love my smile, it is such a gift for me after years of stress and physical overextension.

Thank you and bless you

– Shavante Derek Hasdell aka Sha, Japan – September 2011

Cancer Survivor, 15 years later still alive with the support of BAC

At the time, I was home in the Republic of Moldova, and my children's paediatrician had recommended BAC to me. She had visited Canada years earlier and had discovered BAC for her mother (her mother has cancer). She had brought some back home, gave it to the laboratory (to a friend, a professor who studied algae) and they confirmed how good the BAC algae is. Back then, the doctors had told her mother that she had 4 years maximum to live. Now 15 years later with the help of BAC, she is still alive. – Jelena Druca

HIV – CD4 count, higher than it had ever been

Back in 2004, I became seriously ill. It started with flu like symptoms, fever, nausea, night sweats, and severe headaches. After a week of these symptoms, I wasn't able to eat solid food, I wasn't able to leave my apartment, or barely get out of bed.

I discovered about three weeks later that my body was actually trying to fight the H.I.V. virus and that I had become H.I.V. positive. I went through an initial period of depression and anxiety. After about six months of feeling like my life was over, I decided to change my attitude and my outlook. I began doing online research into different ways I could help my body fight the virus and maintain overall health to the best of my ability and means. The simple, and often inexpensive changes I began to make were things like drinking lots of clean water, getting outside to get sunshine and fresh air, sleeping well, clearing out my emotional baggage and bad attitudes, exercise, making healthy human connections, and becoming consciously aware of everything I was putting into my body. I began buying organic foods and products when I could afford to and bought myself a juicer and began juicing lots of fruits and vegetables.

Fast forward to 2007. I then began to narrow down my search for one or two supplements I could add to my life to optimize my health, help my body fight the virus, and something that would not interact negatively with my antiretroviral medications which I occasionally went on as directed by my doctor. After a lot of trial and error, a friend of mine suggested microalgae as a great way to help my body on many different levels. I discovered that there were many options and products, but of course being the person that I am, I wanted the most effective, strongest, the purest product I could find. This led me to a discussion with one of the staff at SimplyRaw Express who explained some of the science and history behind the F3 product. I did a bit of online research and the person I talked to also gave me a DVD to watch that explained what the product was all about. I decided that this was the product that would really help my body, and I was right. Within the first three weeks of taking F3, there were already noticeable changes taking place. Up to that time, I had very puffy eyes with dark circles underneath my eyes. The puffiness and the dark circles cleared up and people started telling me that my eyes looked so blue that they thought I was wearing colored contact lenses. I believe a lot of the puffiness and dark circles around my eyes were symptoms of toxicity build up in my system

from taking H.I.V. meds over the years. The medication can really help suppress the H.I.V. virus, but often put a huge strain on other major organs due to toxicity. After about a month of taking F3 I also noticed that my overall energy level was much higher. I didn't feel the need to take afternoon naps. I didn't feel lethargic while going through my day. I also noticed that there were positive mood and brain function changes while on F3. I felt my stress level go down, and an overall feeling of optimism starting to establish in my outlook on life. I often had a general brain-fog hanging over me while on H.I.V. meds. This brain fog cleared up altogether while I was on F3. I was able to think clearly, multitask, and concentrate with much more ease. One very real confirmation came when I went for my blood work results after taking f3 for a couple of months. My doctor told me that my immune system, they call it my CD4 count, was higher than it had ever been, and that my liver was extremely healthy as well.

From 2007 until now, I have purchased F3 pills whenever I could, knowing that I was investing in my health. I've recommended the product to many people and encouraged them to do their own research into the product. I believe that the planet we live on has many wonderful and powerful ways of helping us, helping our bodies, to live in optimal health. I really feel that the BAC products are a part of that vital connection between humans and our home planet. I don't think I stumbled onto this product accidentally. I would place that discovery under "seek and ye shall find". I was seeking for a powerful way to improve my health and I found it.

– Jeffrey C.

It is amazing how powerful and stable I feel

I just receive the product you sent...THANK YOU. It is amazing how powerful and stable I feel. I am still literally working 12+ hours a day, 7 days a week. I couldn't do it without the BAC Superfood. Not a chance! – Jeff Rense, radio host at Rense radio.

I still can't believe what it does for recovery after intense physical exertion

As you know, I've been committed to the product for such a long time now ... since Diane first introduced it to me when my dog Gerry was suffering from liver cancer. The product gave us more than two additional years with him, and his quality of life improved so much. F3 became invaluable to me in my athletic undertakings, too, as you are familiar. I still can't believe what it does for recovery after intense physical exertion.

Andrea L., (Fastest female runner in a state for her age group)

Natural Sunscreen

Not having to use sunscreen or be literally scared of being in direct sunlight as I have been all my life (I would burn super-easily), has been the most liberating 'side-effect' I could have wished for.

JBW

Surprised to discover she was pregnant (fertility)

I would like to thank you for a miracle in my life.

My younger daughter (36 yrs) and her partner weren't able to conceive for the last 3 years. It was very difficult to convince them to take BAC, but after 3 months on F2, they were surprised to discover she was pregnant. On July 26th of this year, Sasha A. was born. (Mom continued on F2 and still continues to take it while nursing.) Needless to say, Sasha is very bright and at two months, very communicative. We are all delighted and thank you all very much for your creations and dedication.

With Love and Blessings,

Valentina, USA

Fighting off a virus that quickly and painlessly is practically unheard of for me!

We met briefly at the conference in Colorado this past August. I wanted to share with you that I believe my immune system is responding very nicely to the BAC F3 formula (history of breast cancer) since beginning to take it back in April of this year. In fact, my partner has just been sick for the past week, complete with fever and chest and head congestion, as well as a few other people we know. I typically will catch EVERYTHING that everyone else has, especially if we're under the same roof! This time around, though, I felt only the very slightest signs from my body that I was fighting something off, a bit of increased mucous drip in the back of my throat occasionally, not excessive, just sort of "there" and making itself known. I took a couple extra BAC capsules that day, a bit more water, took it easier exercising, went to bed early, and by the next morning, VOILA! I felt fine with no further problems whatsoever! It never developed into anything more than what I just described!

Fighting off a virus that quickly and painlessly is practically unheard of for me! I have to think that taking the F3 faithfully now at 6 capsules per day for the past 6 months does have something to do with it.

I will close here as I need to get back to work but was just so happy that I didn't come down with what everybody else was getting this past week that I had to share the good news.

It's time to order another bottle of BAC, and that's #1 on the to-do list today!

Best, Theresa, Longmont, CO

I have easily lost much unwanted-weight

Thanks for the great product. I have been using the F2 Product for about 6 months now. Since I have been taking this product, I have easily lost much-unwanted weight. Also, I have noticed a significant difference in my skin tone color and as a substantial increase in cognitive functions! I currently take 3 F2 capsules in the AM and 3 in the afternoon.

Alan Aubin, USA

Knee pain is gone since taking BAC

God bless you. I have been taking Forte F3 since November 24th and feel a wonderful transformation of my mental state and attitude since taking it. I look forward to great physical changes, too. Oh, BTW, my horrible knee pain is gone since taking BAC!! I love it and I'm telling others about it.

Thanks again, Barb Korthals

ALS (Lou Gehrig) Survivor

I am benefiting tremendously already from your product. During the night I took two doses of 3 capsules of BAC and felt more rested <http://gicisbac.com/testimonial/als-lou-gehrig->



[survivor/als-survivor/](http://gicisbac.com/testimonial/als-survivor/) and balanced and did two additional doses of 3 capsules today and I have such a good feeling about it. BAC is remarkable and I have high hopes for the coming months! I have so much work.

I had a film crew coming Monday and my speech and energy on Friday was terrible. I had a good feeling from the BAC, and I decided to attempt two capsules three times daily to see if it could save the day of 12 hours of filming because the documentary could change my life. I developed remarkable energy by the end of the night and felt the best I have in many months. I continued to do the same thing the next two days, and my energy and speaking were no doubt at a level that was due to BAC. I feel the happiest I have in nine months. I am not attributing all the happiness, but the BAC helped make it physically possible.

My breathing is better and so is my mood. I am deepening in my clarity and peace. I am getting deeper sleep. My morning caregiver says my torso looks thicker and my standing has been stronger.

Gratefully, *Craig Oster, ALS Survivor*

BAC and Epilepsy

“ I have had no seizures in ten months – I have suffered from epileptic seizures since I was a child. When taking medication I would get seizures 3 to 4 times per week. Without medication I could get them daily. With Bio-Algae Concentrates and without medication I have not had one seizure since the first day I started taking Bio-Algae Concentrates five months ago now. Because of my success I recently gave some Bio-Algae Concentrates to my cousin and he has not had a seizure in seven weeks. “

Brenda G., a 32, California, 2006

Recovery of Guillain Barre Syndrome

” It was Easter weekend 2010 when several of my friends I got together for a daylong hiking excursion. As usual between some of us, a little competition takes over. The youngest in the group decides to take off running to get a good head start on us. I pursued him. In doing so I tripped over a root and landed on my ribs against a root. I cracked the two lowest ribs on my left side. I did finish the hike/race in great pain.

About 10 days later I developed a very short cold. It lasted at best 3 days and was over. That is common for me. Approximately 2 weeks later I started developing weird stinging sensations on my legs and abdomen. It was just like getting stung by a bee but no whelp or redness just crazy pain. About the same time I develop increasing back pain directly center between both scapula’s. It was about a 6-inch square. The pain became so bad I would just rock back and forth. It felt like someone holding dry ice in the center of my back. I also had numbness in my

feet and hands and greatly reduced energy and strength in my hands and legs. My ability to workout became very difficult. I knew when I had trouble climbing stairs I was in trouble.

All these symptoms began within a week of each other. I went to see an orthopedist because I thought it had to be spinal damage. Deep in my knowing I had thoughts of GBS but suppressed them. I just didn't want to even consider that nightmare. The orthopedist did an MRI and said no back damage but was highly specious that it was GBS. The following day I had a 9:00 PM appoint with a neurologist. After hours of testing he was 99% positive I had GBS. He said the positive news was I could breath and could still get around although I was losing strength every day. He explained that most of the damage happened in the first 4 weeks and I was about 3 weeks into the attack from his calculations.

The next day my blood pressure plummeted and my heart rate became unstable. It was attacking my autonomic system, which controls my pulse rate and blood pressure. I was admitted to the ICU and spent 4 days there. I was given 5 rounds of IVIG treatments which seemed to help slow the attack on my autonomic system. It took several months for my heart rate and pulse to retune to normal. I would have spells where it would go a little crazy but then stabilize. As time went on the frequency of the intervals grew further apart.

I spent 8 days in the hospital. By the time I left I could no longer walk or use my hands and fingers. The paralysis had worked its way up to my diaphragm and stopped before attacking it. I could feel it tightening but not so much that I could not breath fully. The sensation was like a tight belt around my lower ribs. Now it's a waiting game to see how long the body is going to wait to begin repairing the damage. GBS is totally different for each person and the repair response can be shorter or longer.

I wasn't going to wait on my body to decide when it was going to heal. I knew I had to do two things to make my body speed up the process. I had to push my body to heal. Our body responds to stresses we put on it. Our body adapts to the stresses of physical activity by increasing our fitness to meet the demand we have been creating. To heal my nerves I knew I had to push firing them to get the body to recognize they were not working so it would see a need to fix them. This was difficult and painful. I also knew I had to nurture my body with the best nutrients I could get to push my body to rebuild and repair the damage. This process worked.

I was already using BAC F2 for daily maintenance. At the forefront of my recovery was BAC F3. It would help my body see the damage and provide nutrients vital for the brain and central nervous system (CNS) to begin to repair the damage to the myelin sheath. BSF is rich in thousands of different nutrient compounds necessary for nervous system health including essential sugars (glycoproteins), fatty acids, powerful antioxidants and B Vitamins necessary for

the healing process. BAC also repairs DNA/RNA, cellular wall membrane and much more. I slowly worked up to taking 12 per day.

I ate a very clean diet absent of inflammatory toxic chemicals but high in nutrient and antioxidant value. F3 woke up the glands in my body necessary to direct the healing process. F3 was like the Conductor leading a very complex orchestra of hormones, enzymes, immune compounds, and nutrients building, and repairing my peripheral nervous system. It was amazing. I know my recovery would have been much slower and not as complete without F3.

I was back to walking without support within 5 months. My neurologist was very impressed with my progress. It took me 3 years to get to about 80 to 90 percent recovery. Today I am 99% healed and a very active and healthy man. I regularly bicycle 100+ miles weekly. I have no health issues and I am on no medications of any kind. I have minor residual tingling in my hands and feet and was left with some slight trembling in my hands. I consider myself blessed.

Thank you Roland for your guidance during this very difficult time. After all of the many consultations we have had together regarding our clients, I never dreamed we would be applying our strategies for me. “

W.B. C.N.C., USA, Nutrition Health Coach

BAC safely stops my strong Lyme's pain

I use BAC F3 daily for multiple reasons. BAC F3 safely stops my strong Lyme caused spine shoulder & neck pain due to systemic inflammation, also helps some energy. I avoid synthesized (pharma) NSAIDS of all types as they risk damaging the liver, and also can be hard on the stomach. And they don't really help the disease condition OR systemic inflammation anyway, and in the long run can make things worse. Instead, BAC helps the body's detox organs (liver & digestive tract), plus it is anti-inflammatory at a systemic level, and provides vital supportive nutrients... and without contaminants or heavy metals. The difference is really felt, and I now have some productive functionality while fighting Lyme whereas before I did not, with all other factors being the same.

Z.E.W. – United States

Quick results in a happy and grateful, clear-headed 89-year old!

I just want to share with you that I gave some of my BSF F3 to my 89 year old grandma to try. She has been very ill the last year with some kind of crazy dizziness that had her even fall out of bed one night. At times the whole world was spinning. The doctors didn't find anything wrong with her. She has been taking BSF for two weeks now and since the first day of taking them she have had no problems. She is so happy and grateful and feels she is back to how she used to be before she got ill, a happy clear-headed 89 year old with a rather healthy body. I didn't expect such a quick result and is surprised she is responding so wonderfully.

Thank you so much!

Jennie Andrén, SWEDEN, January 2016

Off armourthyroid – completely medicine free

“ I wanted to share my story beyond my family and friends, so more people would know about how amazing the bio-super-food is!

After a relative of mine had unbelievable results with his serious blood disorder, I had to contact bioage and find out more about the f3. I was glad to learn that it could help me with my hypothyroid, digestive issues, hormones etc... and also be used as a “multi vitamin” for my husband and kids. Within one week my digestive issues were gone, which made me even more confident that I could actually get off my thyroid medication (I was taking armourthyroid, one grain daily). I gradually decreased the armourthyroid until I was completely medicine free, and have been for over a year now!

I am forever grateful for restoring my health and for completely eliminating our family's need for a pantry full of different vitamin bottles. I am now feeling better than ever, and my recent blood/urine tests confirmed it again with their perfect results. My husband and kids are also enjoying optimal health these days. My son's acid reflux is gone and all our immune systems seem to have benefited tremendously: we never get sick anymore!

Thank you again so so so much, for there is no greater asset than good health. ”

– Hannah ,40 years old, FL, USA

She is 84 and the trembling in her voice went away!

Hi, I wanted to let you know about the great results my mother is having with the BAC F3. She is 84 and her voice has been trembling for a few years now, her head bobbing and she was starting to get very confused or angry about things she used to know how to do. She started taking one pill a day of F3 and stopped because she told me “they are very strong!” ... a little more probing and I realized she was getting detox diarrhea from it. So upon your suggestion, I opened the capsules and prepared a 14 days supply of 1/2 capsule of F3 for her to take. She started taking those and continued on (with a little fear on her part) to taking a full capsule a day. Low and behold, the trembling in her voice went away! She is also in an overall better mood and is not getting confused anymore. I have had to explain to her that she is still way below the recommended minimum dosage and that it would be a good idea to increase the dosage. It’s been a slow process of lots of hints, suggestions and explanations so that she would understand why it would be a good idea! She is now realizing that she just might get her head shaking to stop (she doesn’t like to be like an old lady), have more energy and vitality, lose weight... I’ve had to explain to her that if you don’t change the oil in a car, it will soon stop running. Since we both know she won’t do any cleanses, taking the F3 pills is the next best option as it helps her body detoxify. I am finally getting through to her and now her latest was that she didn’t want to use too many for fear of running out... so I just bought a year’s supply! Besides, I wouldn’t want to run out myself, as I’ve had a lifelong history of depression, despite all the diet changes and emotional work I’ve done on myself. Depression and bipolar affect pretty much every member of my family. Taking the F3 is an easy way to feed my brain directly and keep it functioning. Thank you for a great product! With much love and gratitude,



Tamara, New York, NY – May 2015

BLOOD CELL COUNT NOW OK!

A while back I spoke to you Roland, about my son’s low white blood cell count and health concerns. I wanted to let you know that he had gone to the Dr. and had more bloodwork done, and the results showed his blood is now normal! I calculated that he started taking 6-12 capsules of F3 per day sometime in January, but then stopped for a couple of weeks, but started up again and has since been “as diligent about taking it as any 19-year old can be”. I couldn’t be more thrilled, and we all LOVE BSF!

Tom, USA, May 2015

It's nice to have my brain back.

I started finally following instructions and taking a portion every 1/2 hour. damn! I'm thinking better than I have in years. It's nice to have my brain back.

M. S., Cancer advocate, CA, USA, May 2015

Chronic Fatigue and Nothing but BAC

" I entered a convent at 21 years old. One year later I contracted Chronic Fatigue Syndrome (CFS) and have suffered for the last 7 years. I had to leave the convent twice because the CFS symptoms were so bad. My doctors thought they had it all figured it out with chiropractor care, supplements and thyroid medication but no, I had a meltdown 1 year ago and had to leave the convent again. A Sister in the convent was using bio-algae concentrates to eliminate tumors on our German Shepherds. It worked so well she suggested I try balancing my body too. My CFS symptoms included extreme fatigue, bodily heaviness, labored breathing, 'flu-like' symptoms, pain and being depressed all the time. I have been taking Bio-Algae Concentrates f3 for 9 months now. Nothing has given me what this stuff has done. After spending a ton of money on supplements with only partial results, I take nothing else now but Bio-Algae Concentrates f3, not even my thyroid medication. I was at 20% functionality when I started Bio-Algae Concentrates f3 and now I feel I am at 80%. Thank you so much and thank God!!! May God Bless you abundantly. "

—Sister C.

My body is just in heaven, at peace

I am studying biology in Denmark. I started taking BAC 5 days ago and my body is just in heaven, at peace. I have never experienced that with ANY other nutrition.

Bente, Denmark, January 2015

We did not get the bug

We were recently exposed to Bronchitis by visiting friends. They were with us for a week (we took them to the clinic twice). We did not get the bug but our other friends who visited did. The infected friends now say they are going to get BAC. We are waiting!!

G.B., MI, USA 2014

Recommend BAC to cancer patients...

At Jesicha's Hope www.jesichashope.org we routinely recommend BAC to our client/patients suffering from cancer as a primary safe wholefood supplement, we feel it is a necessary part of their journey to health and healing. Wholefoods such as BAC offer a well naturally balanced form of nutrients that we wholly support and advocate.

thank you

Anonymous, 2014

More energy

I can eat occasional sweets without gaining pounds. Definitely have more energy in general.

AKR, MN, USA 2014

Use with intermittent fasting

When I fast and use intermittent fasting, BSF helps me get through the low energy and the headaches that sometimes happens with caloric restriction. Thank you BAC!

R.W., FL, USA 2014

Eyes are better

My eyes are better.

M.L., CA, USA, 2014

Look younger, minimal menopause!

I am 54 and look 40 or less so I am told...menopause has been very minimal also! 😊

Suzanne N., NJ, USA 2014

We notice her health improving daily

BAC helped my ASD daughter in some many ways. Increased her immunity, focus and short term memory. When we first started we saw an explosion of words and a better focus. As Candida

Albicanis flare back her focus got worse again. We notice her health improving every day and she on a maintenance dose now.

DCM, AB, Canada 2014

No colds or other illness

I have not had a cold since I started taking BAC – or any other sickness. Stephanie D., WA, USA 2014

Increased well-being...more vitality

I don't have any dramatic story to share ... I was fortunately already in good health when I began taking the product! I've noticed increased well-being and also the hormonal balance; elimination has also improved somewhat. I feel that I have more vitality.

S.E., ON, CANADA 2014

Better calcium absorption

my wife has much better calcium absorption

John M., CO, USA 2014

Decreases period pain

In addition to taking F3 on a regular basis for general health I up the F3 taken during times of period pain to 6-8 per day which greatly decreases the pain and allows me to function more normally in daily life rather than curled up in bed for several days. BAC is the only natural remedy other than heat that has ever had any positive effect when I have period pain. As such I have highly recommended this product on numerous occasions both to family and friends.

A.K. , Australia 2014

I love BAC

I love BAC. It helps me to feel more energy and not get so stressed about little things.

K.L., UT, USA 2014

Helps curb my hunger and...

I originally got interested in your product BAC as a supplement for my two small dogs. Since then, I have started taking BAC for myself. What I've noticed most since taking it is that it helps to curb my hunger and better mental clarity. I think it also somewhat helps with my pain, mostly from arthritis and TMJ. I was taking 3 or 4 per day but cut back to 2 usually because of cost. I also switched from F3 to F2 to save money.

Joan Cromer, PA, USA 2014

An awesome product

I think it is an awesome product. I love it most because I feel like it really feeds my brain and my vision to avoid brain fog and see clearly. I know it does so many things that I am not even aware of.

In traveling a lot with my work, it is a staple to carry with me.

S.J., CO, USA 2014

Stronger base of health

It has brought me to a stronger basis of health, in spite of have many food sensitivity layers that I've been working through.

B.G. 2014

We don't get sick!

My wife and I started taking this just under a year ago. Neither of us have gotten colds since taking this! Anytime we feel something coming on, we take extra and don't get sick!

N.V., ON, CANADA 2014

Her blood pressure is normal!

My mother had high blood pressure for 3 years. Since the first day of taking Biosuperfood F3 once a day, her blood pressure is normal!

MSL., QC, CANADA 2014

It's a whole new world

After not exercising for a considerable period of time, I went to the fitness center and proceeded to work out as if I was 35 years younger and fit.

Within in the same day my body started to react with the soreness one feels after a session of new muscle growth only this was total body and debilitating. I could barely get out of bed let alone function. I had to take ibuprofen (ugh) to function. For reasons I don't remember I had been off of supplements and immediately started taking 20-30 supplements a day. This started to relieve the symptoms gradually but effectively. I then became aware of bio-algae concentrates and this became my main complement.

Again at age 67 without exercising for years, I did the same thing, I began intense high-impact, short duration exercises, this time under highly trained and educated personal instructors. Absolutely normal body reaction, it's a whole new world.

S.B., MN, USA 2014

My entire family loves it!

I have been in fair health most of my life. I would get sick maybe once or twice a year and it was never long lasting. After I had my first child my immune system changed. For the first year post-partum I was sick literally 1-2 times a month. My baby was fine and so was my husband but I always felt awful. It was a state of health I had never experience before and I was eager to find a remedy. At first I started to use multi-vitamins and different kinds of supplements which made a difference. Then I discovered bio-algae concentrates through a local holistic nutritionist. Boy, am I ever grateful for that! Long story short. My entire family loves it! From my skeptic husband to my 2 small children who are now 2 and 4. There is an substantial difference during the times we are taking it regularly to when we are not. The body functions better when the right food is available for it. We experience less sickness, more clarity of mind, better digestion to give a few examples.

J.D., TX, USA 2014

300% increase in energy and clarity

Dr Benoit G. Bastien

I was sick and tired of being sick and tired caused by the toxins and low nutrient value of our present food supply. I realized a 300% increase in energy and clarity as every cell in my body was finally receiving the nutrition it required with the BAC formulas F1, F2, F3. Thanks again.

Dr B., FL, USA 2014

Improved my memory recall

BAC has improved my memory recall. When I took anatomy and physiology, I scored a perfect score in 6 out of 8 tests. Memory recall was instant and almost photographic, I never had that great of a memory, especially for such an intense class.

James H., NJ, USA

Keeps me from getting sick when traveling

I tour around the world often and it takes a toll on my body. I use BAC to help boost my energy and keep me from getting sick. Will be using it for a very long time!

David Choi, CA, USA 2014

MS signs...I believe this helped turn the tide.

This product was suggested to me by my chiropractor. I have had demyelination, and other signs of Multiple Sclerosis. I believe this helped turn the tide. I suddenly had a good amount of energy, and I believe this also helped me have a VERY healthy and happy baby (at 36 years old). I continue to use the product daily through nursing.

Theresa Lyons OH, USA 2014

Acid reflux & dysmenorrhea are gone plus...

My acid reflux is gone – My dysmenorrhea is gone – Regular bowel movements – Regular menstruation cycle –
Good sleep benefits – Clear eyesight Josephine A., 2014

I have RA but can exercise without fear of joint pain...

I have had RA for 26 years and take a weekly biological Injection as treatment. However, even though symptoms were greatly reduced, I never knew how much to exercise because, often, the next day, I would have a lot of joint pain. Now, I can exercise as much as I want without fear of joint pain the following day. Pretty amazing!

Thank you!

Gail B., TX, USA 2014

I keep a bottle in my purse

I had more energy and focus, I also fed it to my baby peacocks and they grew much healthier and larger than the average. At 3 months old they looked 5 months old. I found it handy to keep a bottle in my purse to prevent blood sugar drops when unable to eat regularly while working or traveling.

BMC, Hawaii USA 2014

After 2 days... I started noticing clarity

I have had problems with anxiety for years. It was getting to the point where it would affect me on a daily basis. It was affecting me at work, it was affecting my social life, and it was affecting my sleep. I would have panic attacks that would keep me from wanting to go anywhere outside of the house. I was not willing to take any prescription medicines for it, due to the negative affects I've heard (ie being dependent on the drug and inability to get off of the drug without experiencing withdrawals). My father heard of BAC through word of mouth, and said maybe it could help. I decided to purchase it, and see if it would work. At that point, I didn't have much confidence in anything working. After 2 days of taking BAC, I already started noticing clarity. I felt more energized and less groggy throughout the work day. I was gradually taking a little more each day. And ever since I've started, my anxiety is practically gone. BAC has helped so much.

Matthew Neiberger, CO, USA 2014

Helped me heal my GI tract

I am a celiac and feel like the F2 has helped me heal my GI tract . I also have so much more energy.

K.B., Evansville, IN, USA 2014

So many benefits I can't list them all.

I have always had skin problems and dark circles under my eyes as long as I remember. I couldn't have a cup of coffee (or anything with caffeine) or any nuts (anything with nuts and I love pastry) because within few hours i would be covered with brake outs of some sort after i started taking BAC I never had to worry about that again. It gives me energy and puts me in a great mood. I couldn't list all the benefits that I got from it, there is so many of them. My parents love it (they in their mid 50's). My mother also uses it as face mask and she loves it. I've tried to put it under my eyes and my dark circles where gone over night. I love this product and highly suggest it to everyone. Thank you so much!

L.A., MT, USA 2014

I highly recommend this product.

I've taken F3 for the past 5 years and have not had a cold or flu virus in all of that time. My energy is high, colors look more vibrant and I have a great sense of wellbeing. I highly recommend this product. I will say I feel my best when I am taking between 6 and 9 capsules daily.

Krystal Gray C.C.N. SC, USA 2014

A mainstay in my diet

Several years ago, I was suffering from severe heart-pounding episodes, along with fatigue and depression. Test revealed extreme hypothyroidism and adrenal burn-out. A friend recommended BAC. I began taking 12 caps/day of F3. Within less than 2 weeks, I began to feel better. The heart-pounding began to subside. I was sleeping better at night. Over time, I continued to improve.

Today, BAC is a mainstay in my diet. I am taking F2 because it is more affordable. If I could manage it, I would still be taking 12 caps/day of F3. With all that we are exposed to – radiation, EMF/RF, heavy metals, pesticides, and on and on – the concentrated and pure nutrition of BAC that directly addresses these challenges, is an absolute necessity.

Cathrine Hartwell, AZ, USA 2014

Breathing and energy is better

Breathing is better, energy better.

L.S., FL, USA 2014

Eliminated most supplements

I have more energy and like the fact that I have eliminated most of my supplements.

Anonymous, 2014

May single-handedly save the human race

The Radiation from Fukushima is a real issue, I believe the bio algae does help, along with all the other benefits, Many Thanks to Doc. C. for all his effort in developing BAC, this may single-handedly save the human race.

Robert M.,WA, USA 2014

Helped me lose weight and...

Helped me to lose weight and free from colds and flu

David T., MB, CANADA 2014

Both my mother and I benefit...

I have benefitted by more energy and cognitive ability has improved.

My Mother at 86 takes F2 and F3 and I think it has helped her tremendously with her overall wellbeing. Her congestive heart failure is chronic and since she does not eat or swallow many vegetables she is getting her greens w/ your products.

Though she is on blood thinner, i felt confident to have her take your products which was originally recommended by a holistic nutritionist.

thank you so much for keeping high quality supplements available.

I hope to stop other supplements but not sure if I will get the necessary calcium to help my bone density.

I have not yet taken more than two F 2 per day yet since I may not get to sleep since it gives me energy.

Pearl L., CA USA 2014

I feel 100% better, stronger, happier, focused and healthy

don't have such a testimony of any great healing, just that when I do have this product I feel 100% better stronger happier focused and healthy. So does my cat who is 16, she's like a kitten!

Signe D., CO, USA 2014

algae is part of my good health at 61

I'm 61 male and have not had to go to a doctor in 30 yrs. I feel great, and am thankful very much for my health! I think algae is a part of that, I wish more people could afford it, I'd like to be able to get them to try it.

C.S., OH, USA, 2014

Love the stuff...

Love the stuff.....Been taking it daily for last 4 years!

Chris L., CA USA 2014

I LOVE Bio-algae concentrates!

I love BAC! It is my #1 preference to take – ahead of other supplements.

Sherry M., CO, USA

BAC saved his life

I have used F3 for my dad which had pancreatic cancer (stage 3). I feel that bio-algae concentrates saved his life. He has been in remission for a year and a half. I am so thankful for F3s.

Patty C., 2014

Helpful in reducing head and neck pain

Was helpful in reducing head and neck pain.

B.G., FL, USA 2014

Works for Scleroderma sufferers

your product works for scleroderma sufferersAnonymous, 2014

My favorite product I have ever used

I owned a couple of natural food stores for 19 years, and I have used hundreds of products and helped a lot of people with their nutrition. I have to say that BIOSUPERFOOD is my favorite product that I have ever used: for increased mental clarity, boost to my overall health, and in making better-some health concerns. Thanks for a fantastic product!

Mark Courtman, Taos, New Mexico, USA 2014

Works for Scleroderma sufferers

Your product works for scleroderma sufferers

Anonymous, 2014

Felt more alive than I had in years

I definitely had more clarity of mind – that brain fog thing left me. I felt more alive than I had in years. My eyes began to clear up and I was not in such a down in the dumps mood every day, as I am now.

I just cannot afford supplements anymore, so I'm stuck.

Judy H., OH, USA 2014

A miracle in a capsule

Have experienced stronger nails, hair growth, much less knee pain, much more energy, more positive thinking, all around, for me it's like a miracle in a capsule,

EM, 2014

Good health in spite of prostate cancer

BAC is used by my husband who has prostate cancer. Even though all the cancer was not able to be removed in surgery, he is in good health 9 years later.

Jenny V., ONT, Canada 2014

Mental stamina boost from BAC

I started taking BAC after hearing about it on the Jeff Rense show. At first I didn't notice any change. Then, after a few weeks, it occurred to me that I didn't have the usual energy dip at around 4 pm. I could now work consistently throughout the day. Also situations that might have got me somewhat annoyed didn't seem to bother me as much, my response was more measured.

Digestion was also an area that has seen a big improvement. I had a bout of stress several years ago and my stomach has never been right since. Let's just say that things are like they used to be when I was a much younger man and I'm very grateful.

Recently I've had to retrain and put myself through an intensive course of study. I'm in my 50's and I know that I could not have undertaken such a task without the mental stamina boost provided by BAC.

Thank you!

GG, England 2014

Turned back the clock 10 years

I am not a sickly person. Have taken care of myself for over 67 years. BAC has helped me continue the excellent care I have been taking of myself. In the beginning, when I first started taking BAC it felt like I turned back the clock 10 years, that was 17 months ago. I guess now I am just used to feeling well all the time.

If you are looking to increase mental clarity and energy I strongly recommend taking BAC.

Dan Sapienza, Sedona, AZ, USA 2014

Great for athletics as well

my first experience was with my dog with hemolytic anemia. I could keep her levels in the normal range with the BAC. I wanted to try for myself and have always felt better using it. Great for athletics as well

Lucia C., TN, USA 2014

Help with overall health of many...

I have seen F2 and F3 supplements help with overall health of many people and I always recommend.

Some have great improvements with energy, digestion, stress, pains, etc

A.M., TX, USA 2014

I feel good on BAC

I don't really have a story – I feel great and no longer have a cupboard full of supplements. Other than the stressful time during my husband's illness and death, I have always enjoyed good health. I feel good on the product and believe it is very beneficial for me. I credit God with bringing BAC to my attention and thank Him for it.

M.G., BC, Canada 2014

Good quality...easy ordering

Very good quality and ordering was very easy.

Gordon M., CA, USA 2014

Knocked out pneumonia in 2 days

Wiped out walking pneumonia in both me and my husband in 2 days. I took approximately 20 F3 capsules for 2 days and my husband, who is 6'4, took approximately 30 F3 capsules for 3 days and we were able to mitigate the infection quickly. Taking it daily has also helped to mitigate my seasonal allergies. If I have forgotten to take my F2 and I feel allergy symptoms, I take 2-3 and within an hour, they are completely gone. I take F2 daily for maintenance, but if I get sick, I use F3.

Nicole B., CO, USA 2014

BAC will be a permanent part of daily routine!

I found bio-algae concentrates because I was looking for something to help my sister who is suffering from carbon monoxide poisoning. When I read all of the literature about BAC, I ordered it for my family as well! My family and I notice that we feel so much better when taking BAC. On the days when we run out, we can immediately tell there is a marked decrease in energy and overall feeling of well-being. BAC will be a permanent part of our daily routine!

Michelle B., GA, USA 2014

The most impressive product I have ever taken...

In my late 60's, I was often tired during the day, and needed to have an afternoon nap. My mental clarity was also declining, and I was getting colds. I had suffered a severely broken leg, which resulted in surgery, followed by the use of a lot of pain killers for many months. I just never seemed to recover from that, and I think that was the reason I was always tired and mentally dull.

I went on BAC to detox from all the painkillers and to recover my mental clarity and physical energy. I felt the effects of F3 right away. I told many friends that BAC is the most impressive product I have ever taken in my life. I have tried other green algae foods, but none has produced as dramatic an effect as BAC. Some of my friends and family are now also taking it regularly.

Lucida Garneau, Ontario, Canada 2014

Highly recommend for every autistic child

my son has been taking the products for 4 years. Is helped him greatly and would highly recommend every person who has a child with autism to try it. My wife also raves about the product for her uses for being hypoglycemic and going through menopause. we are so happy you get this product that were committed in using it for many many more years. Thank you

Scott D., NV, USA
2014

Fine tunes me

I am very healthy and look after myself anyway but BAC fine tunes me better than any other product.

John F., UK 2014

More alert, more energy, sleep better

More alert. More energy. Sleep better.

Mike S., IL, USA 2014

Stronger teeth, mental clarity and more

While using BAC I noticed an increase in the strength of my teeth. my mental clarity seemed to be sharper. I noticed my Game of chess Rating went up , not sure if the BAC had anything to do with that but i wouldn't be surprised , though i still have a ways to go to become a grandmaster hehe

Anonymous, 2014

If you could only afford one supplement, make it BAC!

If you could only afford one supplement, make it BAC! If you have the money take BAC and other supplements.

Anonymous, 2014

Hemangiomas gone...could it be?

7 years ago I suffered from a mild stroke caused by the bleeding of a cerebral cavernous hemangioma. I had to go through surgery to have it removed only to detect that 4 other hemangiomas had appeared.

in my last MRI they only found 2 hemangiomas out of the 4 that were initially in my brain. Could it be due to the fact that I had been taking BSF for a few months? Maybe...

Anonymous, 2014

Off her depression meds...

I have a customer who I started on F2 for health reasons. A few weeks later she told me she had been on depression meds and now was completely off of them and feeling great. She couldn't believe the difference in how they made her feel.

Cathy J., NC USA 2014

Eliminates need for many supplements

I have a few health issues that I come at from different approaches. Biosuperfood replaces and eliminates the need for many supplements. I appreciate a quality product.

Kristin E., MI, USA 2014

Cured of candida

I am cured of candida, and my vision is now clear with my night driving.

Cathy. Aurora, CO, USA 2014

BAC helped her colitis ... huge lift with adrenal fatigue

i put one of my clients on F3 who had colitis and she tried all kinds of medicines and supplements and the only supplement that gave her relief was the F3.

another client had adrenal fatigue as well as feeling listless, found it difficult to do much at all but finds F3 gives her a huge lift.

Tony Boutros ND, Murwillumbah/ NSW Australia 2014

Not getting colds or flu

I'm dealing with Type 2 diabetes, very high glucose levels combined with cardiac disease that resulted in double bypass surgery and replacement of aorta valve. I have been using BSF #2 & #3 which has seemed to keep me from getting a cold or flu like everyone else. Now if I can get my glucose readings to level out at an acceptable number with changes to my BSF dosage I'll be very happy. I'll keep you posted.

Larry Cole, OR, USA 2014

Effective for clearing radiation

I am a Quantum Biofeedback practitioner and I have noticed that in the last 6 months radiation poisoning is a prominent energy that is showing up on many of my clients as a huge stress factor. When I put myself up in my screens I do not show signs of radiation stress. I am blessed to be able to measure how effective this product is for clearing radiation. Most people do not realize how much we are being effected by the Fukushima Daiichi nuclear disaster and that they have to start doing some proactive support to clear this energy. I can see and rate the difference this product makes on a few clients too who are taking the BAC F3 product.

Thanks again!!

Jolin B., AZ, USA 2014

My health and body are at its best

I know while taking BAC my health and body are at its best. My weight was stable and excellent, my muscles lean and I had great vision and eye sight. My focus was also excellent at work. I look forward to continuing to supplement with F3 formula.

Thank you for this excellent Product and all your contribution to human and animal health and for making the product available to the public.

God bless,

Joanna W., Vancouver, BC, CANADA 2014

Has helped with my daughter's stunted growth

My daughter suffers from Stunted growth both of weight and height. This has helped her put on some good weight we are very pleased.

Troy W., KS, USA
2014

I just feel better

I just feel better

Suzanne D., AR, USA
2014

I would not be without it

I have used BAC for years and had wonderful results when I first started. I use it now just as an on-going supplement and would not be without it. I work with Dr Kiriatic and find him a wealth of information and help. I have referred many clients to him and provide them with the products.

Thanks you Roland for all the help you have given me over the years

Margarette Sheppy, Alberta, Canada 2014

I wish I could buy it by the case

It gave me great energy and stamina. I do estate sales and I am in my 60's. I can work circles around younger people when I take F3. I never have body pain when I am able to purchase the product. I wish I could buy it by the case.

Catherine M., TX,
USA 2014

Restored the spring in my step!

Upon trying the first bottle of bio-algae concentrates, could not really notice a difference. So, after finishing the first bottle, I decided NOT to continue using the BAC. BIG MISTAKE! The effect was immediate and found myself with a loss of drive, energy, stamina and had a difficult time processing simple tasks. At first I did not want to admit that a single supplement was responsible for restoring the 'spring in my step', but ordered the second bottle and have not looked back since. That was over nine (9) years ago and thanks to all for ensuring I have a steady monthly supply of BAC at the ready for myself and my family.

Javier Flores, Jr., TX, USA 2014

Nothing short of a life-line for mother

After using the BAC F3 for several months I found my cravings for tea/coffee/ alcohol/chocolate, etc had dramatically decreased. It was like my body just no longer wanted these things.

The biggest change from using the BAC F3 has been with my mother. After a life of persistent illness and constant sickness, she would be in hospital about 5 times a year. Due to numerous health problems, a normal diet would be difficult, to the point of not eating at all. As a consequence, she would constantly become weak and this would in-turn increase the chances of illness. The F3 capsules have been nothing short of a life line for her. In many ways she survives solely on the capsules. From taking one F3 capsule hourly, her energy levels would quickly return after any period of illness. Most of all she has not been in hospital for about two years, which is exactly how long she has been taking the BAC.

MG, Australia, 2014

Thank you for a most health providing product.

I find that health wise I am doing well on your product without the Multi-vitamin supplement I used to take. That immune and overall health support is quite notable. I use both your F2 and F3 on a daily basis. I use the F2 and F3 one of each in the morning and an F2 in the evening. I wish I could

afford to use more, but the 3 a day have been more than adequate in maintaining my health. With the onset of disease symptoms I have taken as many as 6 a day and have found quick recovery.

I have used other products herbal, etc to overcome attacks on my well being. Those have been products like herbal tinctures, Allicin C and Carnivora.

Thank you for a most health providing product.

Joy L., OR, USA

Dog made complete recovery from IMHA ...now we both take BAC too!

Well, our story began from the incredible success of BAC in saving our dog from autoimmune hemolytic anemia. His system was no longer creating red blood cells and was being kept alive by blood transfusions. However, the strong doses of prednisone and cyclosporine were not helping him overcome the disease. They were making him progressively sicker and weaker to the point that we were told by the vet there was nothing more they could do for him. Thankfully we came across your website and had ordered the F3 strength and gave him 7-8 a day and he slowly but surely got stronger and has made a complete recovery. In fact, he has so much energy now, we laugh at all the trouble he gets in. His recovery made me and my wife realize that the nutrition in the bio-algae would be very helpful to us. We began taking the BAC in Jan 2014 and we both made it through the winter with no colds or flus and we both have greater energy.

Sandy and Ted Mason, Ontario, Canada

EMF exposure

My husband is in medical school so I feel at peace knowing he is taking BIOAGE as he is being exposed to a lot of EMF's!

I use it for patients who have to get X-rays, MRI's CAT scans etc. I look forward to learning more about the product!

Anonymous, 2014

You don't know what you've got 'til it's gone!

I didn't realize how great it was until I couldn't get it anymore

Anonymous 2014

Excellent endurance on BAC

I participated in a very strenuous cycling trip in Mexico where I was challenged far beyond my skill level. I took my BAC regularly and found my endurance was excellent and there was no lactic acid build-up so I began each day fresh.

L.R., 2014

Carbon monoxide poisoning, depression, fatigue...

My son was suffering from depression, fatigue, and other symptoms as a result of ongoing exposure to carbon monoxide. Your product was recommended on another site so we gave it a try. I think it really helped him to recover and was worth the cost.

Linda E., MD, USA

Cancer free and good health due in great part to daily F3

Dear Roland,

I've been one of your customers for a little over a year now and take the F3 formula as a cancer survivor (now 5 years cancer-free this month!) and had the pleasure to meet you and Dr. Kiriak last summer at your Denver conference. I wanted to share some exciting news with you regarding my lab results and what I believe is a direct results of taking BAC daily now since April 2013.

I was admitted to the hospital this past weekend for an emergency appendectomy (!). I'm just fine now and completely on the mend and doing great. What I wanted to share was that my symptoms were quite atypical in terms of some of the presenting signs, i.e., fever, and also as measured by lab values, namely, white blood count. All my bloods came back perfectly normal with no elevation of white blood count. Additionally, I had no fever. I had "felt off" intestinally for a few days leading up to the night that I went to the ER, with a decrease in regularity that I was chalking up to the last few days of being on vacation, although I had been regular for the first 6 out of the 10 days with no major changes in diet or routine, so that had left me wondering. On the night that I took myself to the ER, I had had epigastric pain for about 6 hours that just wouldn't go away, unrelieved by movement, a heating pad, charcoal tablets, and Pepto Bismol, and thought perhaps it might be related to my gallbladder. I'd never had gallbladder issues in the past but given my age at 53, thought that might be a possibility. The pain worsened in the early hours of the morning and by the time I made the short drive to the ER, the pain started to migrate to the classic area for appendicitis in the right lower quadrant,

although was still diffuse enough that the docs ordered testing and ultrasound, the latter of which caught the problem and I was admitted and had a routine appendectomy with no complications.

What was remarkable to me is that those labs, all the bloods, were absolutely normal, and that, while obvious that an infection was brewing, it had been taking days to manifest. I have to believe that it was the fact that I take 6 capsules of F3 throughout the day, each and every day, that kept my symptoms from increasing dramatically and probably kept them at a very low level for days with just minor symptoms. While I'm glad they didn't send me home when I didn't have the usual fever or elevated white blood count, I really found it amazing that the labs were normal, and what is also wonderful about that news is that more than 6 months ago, I had stopped taking all supplements except for the F3, so the normal labs drawn was confirmation for me that the BAC is all my body truly requires to maintain optimal daily health.

I wanted to drop you a line to share that story and the good news with you. I thought you would enjoy hearing about the tangible evidence via blood work and entirely normal lab values, in particular during an acute health crisis, from someone who's been taking BSF/BAC daily for well over a year now. You have a lifelong customer!

I'm now 5 years out from cancer AND haven't had a cold since before April 2013, when I started taking F3, and I have to believe that my continued health is due in great part to my daily F3.

Many thanks! Theresa K. D., November 2014, Boulder, CO

Never missed a days work & never was fatigued

Tumors significantly decreased & not growing

BAC Formula F2 was recommended to me by a health professional when I was diagnosed with Neuroendocrine Cancer back in 2012. I have been using it ever since and have stopped taking multivitamins. Although I am still living with cancer, the tumors have significantly decreased in size after having radiation treatments and have not grown in size. I have also gone on a gluten free, dairy free, and sugar free diet so it is hard to know what specifically is helping but I am feeling fine and able to live a normal life with good energy and no pain.

EP, NC, USA 2014

More energetic with BAC

When I was taking the bio-algae concentrates I felt more energetic. That's a big statement since I was dealing with adrenals that were very weak.

JR, CA, USA 2014

Triglycerides & cholesterol numbers never better

My Triglycerides and cholesterol numbers are enviable, never better ...
Triglycerides .. 116 Total Cholesterol 137 HDL .. 46 LDL .. 70

Anonymous 2014

Mercury and other heavy metal poisoning

I came down with mercury and other heavy metal poisoning in 2005, had to leave my job, almost died, but was fortunate enough to qualify for social security disability. An acupuncturist was able to bring me back to life after losing the ability to walk, talk, move my body, eat, drink, and basically live. Bio-algae concentrates was introduced during this time from internet searches for help. I found the supplements to be of excellent help with all problems, even though I was not able to take the supplements as prescribed. I broke the capsules open and dusted my meals with the contents. I wish I could keep up with the supplements, but unfortunately they are just too costly for my income. Anyway, I am still here and functioning reasonably for my afflictions eight years later, and I thank the early use of these supplements for this. Dennis P., WI, USA 2014

Can't imagine living without (BAC)

I have regained and obtained an extraordinary amount of energy, focus, and clarity from the use of BAC products. I get much better sleep and find that I need much less sleep to recover from a challenging day. I can't imagine living without them.

K. Jeffries, NJ, USA 2014

Maintain my immune system

So far so good. Did not start taking bio-algae concentrates for any particular reason other than to maintain my immune system in as best shape as possible. Have no regrets. Will be seventy (70) years old come December 2014 and still am not in need of taking any medications. Can't guarantee it's attributed to BAC, but, what else could it be? You tell me.

JF, TX, USA 2014

BAC is my everything now

I love my bio-algae concentrates and my Shih Tzu, Prana, loves her BAC for pets. I feel good and it's wonderful to reduce the number of vitamins I was taking. The BAC is my everything now.

BH, HI, USA 2014

BAC has completely balanced my hormones

BAC F3 has completely balanced my hormones. I never had a regular cycle until i started taking it. This supplement has been a life changer for me! I would highly recommend this product for anyone with hormonal issues. It works amazing!

JS, NY, USA 2014

Not felt better in years...BAC is the answer!

I have not felt better in years. I know BAC is the answer!

JG, FL, USA 2014

alleviates my allergy symptoms

I am very happy with the results of using BAC to alleviate my allergy symptoms.

SH, NC, USA 2014

Loads of energy! Not been sick since using BAC

I love BAC! My oxidative stress is very low thanks to this supplement and it helps me detox and I have loads of energy! I have not been sick with colds or other sickness since using this.:)

Andrea Megna, WI, USA 2014

Signs my sluggish liver is improving...

I experienced increased stamina, energy, clarity which I believe came from better resistance to allergens. My crooked big toes started to straighten up after using the product for about 6 months. I have a slightly sluggish liver and the toes are supposed to be an indication of that, so I believe my liver is improving. My skin improved. My digestion improved to a degree and we are still using the BAC F3, so we will see what happens next.

F.W., CA, USA 2014

Regained health after brain injury

BAC has helped me to regain my health after a brain injury. It turned my brain back on for the first time after several months of walking around in a brain fog, and allowed me to regain mental clarity and focus. It has also given me new hair growth and stronger nails. I use it now to counteract ongoing radiation exposure from living between 2 cell phone towers. I couldn't be without it.S.L., OK, USA 2014

Helped my digestion tremendously

I love BAC. It has helped my digestion tremendously after years of trouble. I have used other brands and formulations of blue-green algae, but BAC is different and much, much more effective than the others. I would highly recommend it to anyone.

Max M., UT, USA 2014

Thyroid medication was reduced by two thirds!

After supplementing with BAC F3 for several months, my thyroid medication (Armour) was reduced by 2/3's!!!

Kathy Chiavola, TN, USA 2014

Almost never get a cold now

I used to get a cold twice a year. Now I almost never get one.

Barry B., CA, USA 2014

BAC F3 really helps me stay healthy

Our foods today do not have the needs our bodies need. We are constantly exposed to more and more toxins and I know we need to protect ourselves. I live in a chemical free home and property, but I am also exposed to toxins every day , no matter how hard I work at avoiding them. I use my own money to clean my bus with natural products, and it benefits me and the kids on my bus. I believe BAC F3 really helps me stay healthy.

Laurie D., WA, USA 2014

Increased energy, mental clarity and sense of well-being

I initially felt much increased energy and mental clarity and a sense of well-being. My kidneys cleaned out a lot of scale. I lost ten pounds initially. After a few months I adjusted to my new level of health but continue to take about 6 F3 daily, occasionally some F2.

Dan Butterfield, CO, USA 2014

Immediately lost weight & felt energized / Cat bitten by poisonous snake

My cat, Porkey was bitten but a poisonous snake. The vet wasn't able to find anything wrong but we witnessed a seizure/heart attack and odd behavior. Our local pet store recommended we give his BAC F2+ and he immediately perked up and recovered- within three days! We now give all our pets BAC and have started ourselves. I started taking BAC 2 in September and immediately started losing weight and feeling energized. I no longer needed coffee in the morning and most importantly, my hormones, which has been imbalanced since I was a teenager, were back on track and I felt amazing! Nellie K., CT, USA 2014

A little goes a long way...

I teach workshops and I am also a guest on many radio shows. Sometimes I find that during my late afternoon workshop sessions I feel too tired to teach. I take 2 of the F3 and after just a few minutes my I have great energy and clarity of mind. The same happens when I am a guest on a radio show. I take 2 F3s before the show and my mind gets very clear, and I find I can speak with a sense of clarity. When I am not in the public I only take 2 F3s in the morning and that is all I need for the rest of the day. But when I am stressed I increase my dose to 4 a day. Two in the morning and two in the afternoon. I have been taking BAC for about 10 years, and it always works consistently for me. But my body is sensitive so I cannot take too much. For me a little goes a long way. I can depend on BAC to get me through stressful times!

S.I., NM, USA 2014

Overall health improvement

My husband, Jim and I have noticed overall health improvement.

Karen S., CA, USA 2014

Decreased PMS symptoms...

Very satisfied with this product. As noted above, I have noticed dramatic decrease in PMS symptoms and overall pain during menstruation, have increased energy, and have seen an improvement in my digestion. I have only been taking the supplement for about 7-8 months and think that it will only get better over time.

W.R., TX, USA 2014

I feel 20 years younger...

I feel 20 years younger, I have great Health compared to my peers. I have more energy and brain function than my children. I am just waiting for them to believe me. So I demonstrate by proving how great your product is. I have to say more than once friends of my children think I'm a sister not their mother and grandmother or great grandmother. It's very cool. Love your products. When I tell someone about your products(which I have for years) they have sticker shock. I tell them consider it part of your food budget. I guarantee you won't find such superior nutrition in the grocery store. There isn't anything that will help you stay fit for life.

Lynn P., MI, USA
2014

For men...enhance your sex drive

For men, I guarantee you won't need anything more than BAC to enhance your sex drive. As far as libido goes, you'll feel like you're twenty years old again and I do not exaggerate when I say that.

Vincent C., CA, USA 2014

Health, muscle tone, skin & energy

As one ages and is busy with life, we need to maintain a full spectrum of nutrition. From age 54 through 66, I have used BAC F1s and F3s to ensure that my nutrition stays high, feeding my body and endocrine system, keeping my health, muscle tone, skin and energy at the levels of my 50s.

–Kenton H Johnson, Denver CO USA 2014

No pain & none of the diseases others my age have

2005, woke up, Couldn't move .Went to the Dr, they did nothing.....6 weeks of pain, went to ER, then to surgery.. My gall bladder was bad, when they took it out, they found a quarter size hole in my stomach...they made me a new stomach and did by- pass surgery. I woke up to not having a stomach like before and not knowing what to do....it was quite a shock I was told I had 10 days to 2 weeks to live before surgery.

Learning what to eat and when was hard...my stomach didn't react like before, some foods I just couldn't eat...I lost so much weight...I ate. Simple foods...first Keifer, yogurt, etc. I still had pain and no energy. That's when I was told me about your product, I ordered some that day...right away after taking them I felt them working in my stomach and healing....so I ordered more, I've never turned back I take less now, due to retirement

Have energy, no pain and none of the diseases others my age have...Thank you bio-algae concentrates!

Don Carlson, IL, USA 2014

I recommend (BAC) a lot...people have thanked me for it.

For certain situations it is the only supplement I would trust. I recommend it a lot. People have thanked me for it.First I took 6 caps a day in 3 doses. After 6 months and great improvement I take 2 caps a day. I plan to continue indefinitely. For me the lower dose is better. I do not tolerate much chelation at once.

R.P., NY, USA 2014

Pretty sharp in my thinking for my age

I feel that i have already answered this question. Although eleven years ago my life was on the line with Prostate Cancer and with Conventional cure rate at 2% it was time to go down a different road. Because i had been reading Dr. Julian Whitaker's monthly report is why it was a no brainer to accept Alternative Medicine to reverse my health situation.

My concern at this time is the PSA. But the way it looks all PSA test have been given incorrectly!

One added note: I just want to say that i am pretty sharp in my thinking for my age. It is not just me it is other people have made this statement. I can also contribute this fact for taking Bio-Algae for eleven years, and i can also thank Dr.Johnson for putting me on the right road.

Don Carlson, IL, USA 2014

Very pleased with my state of wellness...

I am very pleased with my state of wellness for my age and prior autoimmune problems.

John D., IL, USA 2014

Vitality at 60

I am a vibrant 60 year old active woman. Since taking F2 I have felt a consistency in my health and vitality. I would not want to be without this product. Thank you, Thank you, Thank you!

Linda F., NM, USA
2014

I am a happy user!

I have worked with children for the past 8 years and we all know that little ones are walking petri dishes. I have to say that I went from having 3-4 colds per year to maybe 1 per year which did not last very long and had minimally debilitating symptoms. I must say I am a happy user.

Thank you to Dr. Michael Kiriak for his dedication to developing and always ensuring BioSuperfood is the best product available. Thank you to Team BioAge for their efforts, diligence and true spirit of helping their clients.

Live healthy, stay strong and forge ahead!

MSL, CO, USA 2014

73 years old, no drugs, no doctor!

73 HEALTHY YEARS OLD, NO DRUGS, NO DOCTOR.

Janet Warner, FL, USA 2014

Couldn't be happier with this supplement.

On a cellular level, I gained 2.9 Liters of water in less than 3 months. This means my body is detoxifying itself, regenerating healthy cells and repair damaged ones. My naturopath regarded this as a very rare rate of recovery and was very surprised stating that the only supplement I was taking that was capable of this detoxifying effect was the Spirulina in BioSuperfood. It was exciting to see the actual proof, numbers, of the changes my body was undergoing. Couldn't be happier to find this supplement.

Ian Victor, OH, USA
2014

Cancer in remission...I take as preventative

We have a friend who recommended your product. She has a young boy who had a form of cancer. Since taking your product cancer is in remission. So I take the product as a preventive. So far so good.

Anthony M., IL, USA
2014

All I need and more ... for total well being

My quest for high nutrition started when I was very sick with diabetes, overweight and high blood pressure. After seeing a health food store nutritionist i was able to cure my issues with several nutrients and diet. I blew the doctors mind as he did not believe my healing. He tested me several times because my blood results indicated no more diabetes. However, I continued my research in finding the one product that I can take that gives me all I need and more nutrition for total well-being. Three years ago I found BIOAGE and read the Book, ATGW and ordered my first bottle. six months later I started my sons on BAC. All athletes at high levels of competition. Out of three sons, only two of my sons decided to take

BAC. One son played college basketball DIV.1 at UNLV and the other played two years of football for Notre Dame. He quit football this year to continue his Engineering studies. He will be a junior in the fall 2014. Both sons attribute the BAC for their athletic success/school.

Gerard M., NV, USA 2014

Greatly improved digestion & elimination!

Greatly improved digestion and elimination

Cameron D., AB, CANADA

More energy, vitality, stamina plus changes in my skin

When I started BIOSUPERFOOD I did not have any health problems, but I took it so I wouldn't have any. I could see changes in my skin, I felt much better, had more energy, vitality and stamina. I would highly recommend you giving BIOSUPERFOOD a try.

Sherry W., TX, USA
2014

More energy and free from colds

More energy, free from colds. I have good health so don't have huge story but I feel a difference on product and when I run out I'm tired and more lethargic.

Ruth F., FL, USA
2014

Nothing has come close to this fabulous product!

I had my blood work taken a few months before I started this product and again just a month ago..but I don't have the results until next week... then I give you more information..but as of now it has made me feel young again..seriously! I have the same vitality when I had when I was 30, I am 62. My 91 year old Dad swears by it and he hasn't had his yearly flu since (2 years) he has been taking the algae and his energy is amazing!

All my clients that are taking the algae swear by it and all of them feel that it has improved their quality of life as they feel a sense of well- besides the increase of energy.

It is a remarkable product, like NO other. I have been experimenting with products since I was in my twenties and NOTHING has come close to this fabulous product!

I have never sold any other product other than this algae. And I have been asked a multitude of times to sell products, but never have come even close to this remarkable product!

THank you!!

Lauree Moretto, FL, USA 2014

No colds or flu in last 3 years!

since adding this to my regimen I have not any cold or flu in the last 3 years

Kristin G., FL, USA
2014

A headstart and boost to eliminating MRSA!

I was very ill with MRSA (superbug/antibiotic resistant), Having strong IV antibiotics daily for about two months. During that time I found bio super foods and begin taking them. My goal was to build up my immune system so I could type this and get rid of it Forever. I heard of too many people who have had it had strong antibiotic treatment and then have it recur. I did not want that. I wanted it,. I began a regimen to eliminate MRSA I think my immune system. This included bio super foods, essential oils, copper bedsheets, diffusers with oils, Much rest, Altering my lifestyle. The bio superfood's gave me my head start and boost to begin this process. I'm so very thankful! My last intensive test showed I have no MRSA. I have not been sick a day since then, and others around me have been!

Ali C., MI, USA 2014

Carbon Monoxide Poisoning – after only 2 weeks...I felt better

I suffered for months with chronic low level carbon monoxide poisoning before the problem was detected and resolved. I was taking 9 different medications to alleviate the symptoms that persisted. I knew it would take 120 days for my red blood cells to turn over and I just had to wait for my symptoms to get better. I hoped it would get better and the damage wasn't permanent. After only two weeks of taking Bioage I felt better and was able to reduce my medications. Within a month I was completely off all of them. I stopped taking Bioage because I felt better and it is quite expensive, but I would have liked to continued taking it. It was very helpful when I felt terrible, I'm sure I would benefit from it when I feel good as well. Anonymous, IN, USA 2014

I take it to stay as healthy as can be.

I am not in need to treat any health issues. I just take it to stay as healthy as can be.

Renate G., TX, USA 2014

Chronic Fatigue Syndrome

I had been diagnosed with Chronic Fatigue Syndrome, neurally mediated hypotension, hormonal imbalances, migraines, vertigo and more. The combination of switching to a completely whole food, plant-based diet and supplementing with BioSuperfood F3 were the two primary drivers to regaining my health. There were several other things that I did, but those two actions were by far the most effective and expedient. I feel better than I ever have in my entire life, including when I was a child. My energy is fantastic and my already excellent health continues to improve every day. I have stopped all prescription drugs except for low dose Armour Thyroid 3x/week, which I am weaning off thanks to the support I receive from BioSuperfood. In addition, I have stopped most other natural supplementation, and am particularly happy about not having to take fish oil supplements any longer. BioSuperfood is one product I will be happy to take for the rest of my life.

Paula S., MD, USA 2014

Decreased allergy symptoms

It took me a while to give BioSuperfood a try. After a diagnosis of breast cancer, Formula 3 had been recommended to me by an intuitive who sells the product. I'm a single mom on a tight budget and at first I decided to research BSF a bit more before purchasing. A year or so later, I finally decided that I'd give it a try and am so glad that I did. I've been taking it for a little over a year now and have had no full-blown colds! I used to get colds at least 3x a year. A couple of times over the past year when I felt a cold coming on, I took 1-2 extra capsules of BSF daily for a few days along with some colloidal silver, nasal rinses, extra water, and some extra sleep, and it never developed into anything more than some increased congestion, which quickly resolved. This has been the most impressive noticeable benefit to me as well as a decrease in allergy symptoms and hugely simplifying my daily supplement regimen. I'm thrilled!

TKD,CO, USA 2014

Heightened immunity – not sick since 2011!

When I first heard of BioSuperFood on Coast to Coast AM, I was sick with strep throat at the time and immediately downloaded "Awakening The Genius Within". After finishing the book, I ordered BioSuperFood F1 and F2 for the whole family. While unsure what to do while on antibiotics, I emailed Dr. Thomas to ask if I should wait until the round of antibiotics were finished. On the

contrary, he recommended the full dosage of F2, which (I think) helped immensely. After the strep was gone (seemingly in two days), I have never stopped taking F2 and have not gotten sick since. This was in 2011, so I am very grateful for learning about BioSuperFood and all of the benefits it has. My family (including my kids) love BioSuperFood and all have heightened immunity because of it. Thanks for everything!

Ryan H., Ohio, USA. 2014

Allergies alleviated, skin tone improved ...

My friend was diagnosed with cancer & had called her friend who had severe rheumatoid arthritis. Her friend did not want to take chemicals to relieve her symptoms, researched the internet and located Roland. She was put on a regimen that helped her a great deal. My friend's friend recommended that we come to Denver and have her tested by Roland. We came to a meeting in Denver, Roland did some tests, she began taking BAC. I began taking it because of the testimonials I heard during the meeting and from my friend's friend. The first thing I noticed is that my allergies symptoms were alleviated, my skin tone improved, & my energy level increased. I have continued to take it for several years and many have commented on how young I look for my age. One called me her friend with no wrinkles. Unfortunately my friend no longer takes BAC. I have recommended BAC to my family, who continues to take it and to my friends whenever they share their conditions.

SB, NE, USA 2014

Cancer markers stabilized

When I first started BAC F3 I had low energy foggy brain and my cancer marker numbers were all over the board. After taking it for about a month my numbers stabilized my energy was back I almost feel "normal" again. I recently had an ultrasound of my internal organs and the technician commented that she hadn't seen such beautiful organs in a long time ! I believe that is due to BAC!

JTB, KS, USA 2014

Good source for general supplementation

I've tried BAC on and off for a couple of years. I have found BAC is a good source for general supplementation.

Anonymous 2014

More energy, focus, and stamina than I've had in years

When I can remember to slow down, listen to what my body is trying to tell me, and take my BAC throughout the day, I am so much more successful in everything else I attempt to accomplish. I have more energy, focus, and stamina than I've had in years. I love hearing how youthful I seem! I am really appreciating the revolution my body seems to be entertaining.

Mary M., TX, USA
2014

More energy – less brain fog

After being off bioage for a couple months noticed I felt like I was in a fog and had less energy which after getting back on it starting to get my energy back and less brain fog

Donna M., IL, USA
2014

Weight Loss – BAC is the core of my success

Hi Roland, I wanted to update you on my health and weight loss. I wanted to tell you I just broke 200 lbs, on Monday at 199.8. I have lost 40 pounds in about eight months. I work out 1 hour a day, some jogging/walking and trampoline.

I added BAC formulas F3 to my regime of the F2 and it is really allowing me the energy and recovery I need. My diet is lots of organic salad greens, organic fuji apples, organic grass fed NON GMO MEATS/PROTEINS. I meditate and practice wing chung / ti chi for help in my blood pressure which has lowered since the weight loss.

However, my goal is 180 lbs. I have taken on this regimen as a regular way of life not just a diet. I feel fantastic and very athletic at 56yrs. The Bio-Algae is the core of my success.

On another note. I started planting organic heirloom seed herbs and peppers several months ago. They are growing in small pots and getting bigger every day. I am feeding them with one capsule of Bio-Algae twice a month and I noticed the colors and thickness of stock is mind blowing. They grow in spurts especially when I feed them the algae. I thought you might find this interesting experimenting with growing food.

Well, thanks again for your help. An a big thank you to you and Dr. Kiriak for BAC.

Peace, Gerard Martinez, USA, November 2014

Immunity – Fighting off a virus that quickly is unheard of for me

“ I wanted to share with you that I believe my immune system is responding very nicely to the Bio-ALgae F3 formula (history of breast cancer) since beginning to take it back in April of this year. In fact, my partner has just been sick for the past week, complete with fever and chest and head congestion, as well as a few other people we know. I typically will catch EVERYTHING that everyone else has, especially if we’re under the same roof! This time around, though, I felt only the very slightest signs from my body that I was fighting something off, a bit of increased mucous-y drip in the back of my throat occasionally, not excessive, just sort of “there” and making itself known. I took a couple extra BAC capsules that day, a bit more water, took it easier exercising, went to bed early, and by the next morning, VOILA! I felt fine with no further problems whatsoever! It never developed into anything more than what I just described! Fighting off a virus that quickly and painlessly is practically unheard of for me! I have to think that taking the F3 faithfully now at 6 capsules per day for the past 6 months does have something to do with it. ”

– Theresa, Longmont, CO

My newfound energy and state of calm

“ I have been on the F3 for 5 months. I LOVE IT. I am a full-time fitness professional and I wake up feeling great every day of my life. In addition to taking care of my body, I used to attribute my sense of wellbeing to the pharmaceutical grade supplements I’ve been taking for 15 years. In my never-ending quest for the best possible health, I discovered Bio-Algae. The idea of eating real food (not laboratory chemicals) made good sense to me, so I decided to give it a try.

WOW– what a surprising difference! I hadn’t expected much, to be honest. But after three weeks had passed – BAM! Suddenly, I was feeling more energetic and alert, with greater mental clarity and a heightened ability to retain and process information. The best part? My newfound state of calm. What can I say? From my own great experience, I must HIGHLY recommend Bio-Algae! ”

– Brian Mirabella, USA – 2014

THANK YOU

Not suffered a cold, sore throat or earache – somewhat of a miracle!

“ Today marks the end of my second month on the BAC (Bio-Algae Concentrates) capsules. When I look back on my notes and symptom chart, I notice that I have not back-slid or gotten worse and having been under the worst and most prolonged stress for 15 years, plus the fact that I have stopped taking ANY supplements other than BAC, then I realize this is somewhat of a miracle. I also have not suffered a cold, sore throat or earache. ”

– Judith, USA, July 2014

Hemoglobin High Enough

The BAC formula F3 is still keeping my hemoglobin high enough. A wonderful product.

– Ann, August 2014, USA

Dog perkey makes it up the stairs with no help!

Biopreparation has been a miracle pill for our dog. He couldn't walk up stairs and had a hard time walking at all, but now he makes it up the stairs with no help, is perky when we take him on walks, and is more alert and happy than he's been in the last two years. We are SO grateful for Biopreparation++++!!!

Diane

Dog about to die recovers from lympanectascia with return of his youthful coat

Dear Roland,

Hello, I am Jeanne, one of your distributors in SC. I have been wanting to tell you about Kipper, my 10 year old Yorkie. Kipper was quite ill with a disease, lympanectascia, for the last 4 years. His vet told me there was nothing else to do, the meds had quit working.



Last September, I began giving him the Primal Defense, a probiotic formulation and that was the answer the entire time. He responded to the Primal powder really nice. He started doing well.

I started giving him bio superfood 2 months ago. His coat was a silver color and thinning with age. I am happy to tell you that Kipper looks younger than ever. His coat is turning dark on top. He used to have dark hair on top. Evidently, the bioage is returning him to youth. I would spend the rest of my life telling other pet owners about the miracle bioage product. I am amazed at his health these days. I will help you get the word out for sure.

I too am taking 6 to 8 a day. I feel great too!, Thanks, *Jeanne M St Clair*

A no-brainer

Even though I considered the Garden of Life whole food multiple supplement that I replaced with BAC to be a superb product, I still noticed improvement with BAC. Given how incredibly comprehensive, balanced, and bio-available it is, I don't know how anyone who reads all the material about BAC could not see it as a great find and a no-brainer. Dusty Dalton, Texas

My family has seen wonderful results

"I discovered BioSuperfood in October 2012 at the World Congress with Iquim University on Oahu. I was a bit hesitant because there are so many claims on the market boasting what different supplements can do. My family has seen wonderful results with this product.

My daughter who I have been working with using energetic medicine with Quantum Biofeedback started taking this product and I was amazed at the positive results that she experienced. Her energy increased. Her mood swings disappeared and she was able to integrate into the family with a lot more ease and grace. She has been suffering from the effects of a brain trauma and this product is wonderful for her and is increasing her healing capabilities.

I also have another daughter who has had huge toxicity problems and auto-immune issues ever since she was a little girl. The rash on her legs cleared up immediately which she has been dealing with for 5 years. Her quality of life and her mood has also increased.

My husband and I have so much more energy and have a brighter outlook on life. You really have to experience this wonderful product. We have eliminated all other vitamins and supplements from our diet. We have tried many other kinds of sea vegetables and spirulina but BioSuperfood micro algae is totally different. The only way you will know is to experience it for yourself."

😊 fan from Hawaii

– February 2013

My arthritis pain has diminished dramatically

I have been on BAC for 2 weeks. I have been taking capsules spread out throughout the day. My arthritis pain, which I have had for 25 years has diminished dramatically. A rash which has been driving me crazy is going away. My digestive system has also improved. I also have my wife and daughter taking BAC. Thanks for a great product.

– Marc – June 2011

Angina is now tolerable upon exertion

Been taking BAC now for 6 weeks. Angina is now tolerable upon exertion whereas in past was intolerable.

– George T., Florida – May 2011

Test results of her white blood cells were fine

We spoke on the phone a couple of times about my niece who is 20 with the large nodule on her thyroid gland. She is up to three pills going on four now. She started last May. She did get up to six in August. During the process she has had the runs, upset stomach and fevers so she had reduced to 2 per day. Lately as we began increasing again the capsules, because she felt ill she was concerned and went to the emergency room and the test results of her white blood cells were fine. He told her it was like her body didn't know she was sick. She started increasing the pills again in October and November.

But here are the extraordinary results for her nodule change in size:

Results from ultrasound August 2009 thyroid nodule size 9X11X11

Results from ultrasound August 2010 thyroid nodule size 6X4X4

Her Endocrinologist said she had never seen such a change without using medication. Thank you for your help.

– Sheryl – November 2010

My dad is starting to snatch 2 capsules when he needs a boost

My Dad is starting to snatch 2 capsules at a time when he needs a boost – and his helper says “no more after 3:00 or you become ‘antsy’ “! Camille loves them after listening to your website audio. She takes them at night to help with repair...and I love them because I know they are

cleaning up my brain! Thank you for the time you have invested in teaching/talking with me and others. Bob in Boise continues to be in remission from leukemia – he takes 8 + halves capsules a day – and eats well, and also uses homeopathy, etc...

– Christine – October 2010

Vision, cholesterol and blood sugar

Great Product. I am speechless. I also went to my eye doctor last month who gave me weaker lenses, because my vision has improved so much. In addition, my overall cholesterol level moved from 127 to 99 in six months. Can you believe it? My blood sugar A1C is stabilized now at 5.5 after reaching a 7.00 level two years ago. When you take the BAC with green vegetables and juice and with low, low carbs, you will see more positive effects. I have more energy now. That is true. Thanks to the inventor. God bless you. It is so good! Thanks!

– Frantzy – September 2010

A real catalyst for our bodies to heal properly

I love this stuff and as a side note my husband is off his blood pressure meds and his pressure is way down- even more than on the medication, without all the nasty side effects! I feel like a testimonial. My friend is taking it and she loves it and has every hope that maybe she won't need the liver transplant. I keep praying for her, but this algae is an answer to prayer, too. This stuff is a miracle- a real catalyst for our bodies to heal properly. I look at all the sick and suffering patients and wish I could give this to everyone.

– Diaura – February 2010

Clarity of mind

I received the package today and my wife and I started taking the capsules this morning. I also took each formula just after lunch. So far I have noticed a remarkable increase in concentration, focus, and mental state. I would describe it as a clarity of mind. I am looking forward to taking the product and seeing what happens.

– Dr. A.P., DC, USA – October 2009

Me and my family are stronger with BAC

Me and my family are stronger with BAC and are embracing life with open hearts.

One of our 64 year old clients taking BAC here asked me to inform you that for the past 2 years her immune system has been up, sleeping very well, stabilized blood pressure too.

Another parent here gives her 6 year old daughter BAC F2 because she notices improvement in the slight spine curvature.

– Dexter, Philippines – July 2009

Energy and digestion

We have been taking the Bio-Age capsules now for over a week. I find already that my energy level has increased and when I eat any food that is hard to digest and I take one of these afterwards then the symptoms decrease.

– Ruth, Canada – June 2009

Just 2 per day has made me content

Today was my first day, and already a noticed difference. Didn't feel a need for that 10AM coffee, or that nap after late lunch, or that 5PM coffee. And that was just 2 capsules!

UPDATE 2 WEEKS LATER

Just 2 per day has made me content and thrilled to have discovered your product. Thank you.

– Dusty – March 2009

I am feeling better subtly from my head to my toes

I have been taking Bio-Algae Concentrates for about 9 months now. I started taking it 9 times a day and alternating the two products. Then I went to the one, and have been taking that every day. I have noticed many changes in my body since taking this supplement.

My digestion is better, my mood is more stable, I've lost some weight, and I am feeling better subtly from my head to my toes. I've also changed my diet eliminating gradually the fats and processed sugars and am eating more raw vegetables and fruits instead. My progress is slower than it could be because I am only taking two capsules daily. I found that when trying to take more than that, with my busy life, I would forget. Then the capsules would be irregularly put into my body, sometimes more than others, and this seemed not to sit well. So now I take two in the morning, and am adding two at lunch and two at dinner now that I have quit one job and moved into another. This said, I am impressed at how many subtle changes have occurred while just taking two capsules daily.

Thank you for this wonderful food.

– Jaquith – August 2008

More energy and feeling calm after 7 days on BAC

I've only been on the BAC for 7 days. I have got more energy, feel less tired, calmer feeling and I am able to remember my dreams. My mother was dizzy and I gave her 1 pill, 15 minutes later, she was feeling much better. I am telling everybody I contact about it.

– Tommy Lee – April 2007

I have never been so impressed with a product.

I am a 67 year old woman. After breaking my leg last year, and undergoing 2 surgeries, I was always tired, and could not bounce back. My thinking was cloudy, and I had to take a nap every day. After 2 or 3 days of taking this product, I realized that I could work all day and not feel tired, and that my thinking was clear. I have been taking supplements for 40 years, and can honestly say: I have never been so impressed with a product. I plan to take this for the rest of my life. I think everyone should take it. The next bottle I buy will be the # 3 formula. Wow!

– Pierrette Garneau – October 2012

Carbon monoxide poisoning: My doctor has no explanations

I had multiple CO poisonings more than 10 years ago and my physical and mental health has been a brutal struggle since. One doctor after another had no answers or could even confirm or deny that poisoning was the cause.

I had HORRID HORRID reactions to medications for depression, anxiety, panic, numbness in hands and feet and the list goes on and on and on. And I had none of these problems before I was poisoned. Although I am by no means old (now in my early 40's), the last few years my health has continued to decline. Perhaps it's aging (as my doctor said 1st) but my symptoms have been like that of someone in their late 80's or 90's. Extreme physical weakness, extreme fatigue, loss of coordination/muscle control, numbness, massive brain fog, getting lost in the middle of doing things, dyslexia, and way more. I was then diagnosed with multiple sclerosis.

I started taking BAC six months ago and began seeing improvements to my health within 2 weeks. Things continued to improve: numbness went down, muscle control went up, brain fog went down. Then at about month 4, after feeling good for a while, I got strangely sick for about a week. Not a cold or flu but felt like my body was getting rid of something on a deep deep

level. I've never experienced anything like it before. And then I moved and noticed my body was suddenly flexible in a way it had not been since I was a teenager. It felt like my cells had shed their crusty skin in the same way a snake sheds its skin.

And I have been noticeably physically stronger since that point. Muscle tone has changed and become much more solid. I can now walk up and down stairs without the anxiety I had because I was so weak. Dyslexia is gone except for late at night if I let myself get too tired – but that too is becoming less and less.

I have never seen anything like this and I have tried a lot of different supplements and treatments. Nothing has worked like this has. It has given me a new body, a new brain and a new life (and my doctor has no explanation for how this turn around could have happened!)

– James, USA – July 2012

Results for the whole family

Skin not NEARLY as dry. Some sun spots (I have hundreds!) are fading. No need for the anti-depressant I was on. Bowels are continuing to improve. Total Cholesterol down 28 points after taking F3 for only 3 months. My husband has also seen results. Skin not so dry. Psoriasis is improving. Sleep, greatly improved. He had a stroke on Aug. 6th, so it has been very difficult to measure his improvements since the stroke knocked him down so low. As a result of the stroke, the Dr. had put him on a Statin drug. He decided to stop taking that since he has the F3 working in his system. Must mention my dog. No more red mange: rather, she has soft skin and a gorgeous coat of fur after being on F2.

– M.M., USA – February 2012

Emotional stability: This is a miracle food!

My wonderful girlfriend suffers(ed) from terrible anxiety attacks following a lifelong history of emotional abuse by her father. She would become enraged and hostile over the smallest of things. This product is amazing! We began taking your F3 formula and within 8 hours of the first capsule her emotional state began to stabilize. Over the next week we had not one argument! Her emotional state has become warm and cuddly. She even said "I don't know what has come over me. This is not like me to want so much affection." She is self-limiting her alcohol intake and cutting down from chain smoking. This is a miracle food! Thank you so much for doing what love, therapy, and emotional support could not do for this fine woman and for our relationship. P.S. The animals love it too.

– An anonymous product review for F3 – January 2012

Eczema: No more scratching!

My 4 year old son has had eczema since he was a baby. He always had stubborn patches of it on his legs and was constantly scratching them. When he was two, I started giving him small amounts of BAC (first the F2 formula and then the F3) mixed up with some applesauce. Over the course of a few weeks, I noticed that his eczema was completely gone. I thought it might be the BAC that was working, so I stopped giving it to him for a while and the eczema came right back. Then I went back to giving him the BAC and the eczema went away again.

Fast forward to a few months ago and my son had a large, deep stubborn patch of eczema on his leg. I had stopped buying the BAC because I thought it was too expensive and I still wasn't convinced that it had been responsible for getting rid of the eczema. I thought maybe he just outgrew the condition. I was treating the eczema with steroid cream prescribed by his doctor, but the cream was having no effect at all. I took my son to the doctor and the doctor said that there was now irreversible scar tissue in the eczema and he prescribed a different steroid ointment. I filled the prescription, but didn't use it. I thought I'd give the BAC one more try, so I ordered a small bottle of the F3 formula.

When it arrived, I started giving my son one capsule of F3 — opened up and mixed in with some applesauce — per day. After two days, there was a noticeable difference and after three days the eczema was gone! That patch of eczema had been on his leg for months, but after a week on the F3 I couldn't even find where the eczema had been. There was no scar tissue whatsoever. And the rest of my son's skin felt smooth and silky like a newborn baby's.

No more scratching!

— Carol Coates, Boulder, Colorado — September 2008

Weight gain after pregnancy: I am healthy again

I had 15 lbs. to lose after giving birth. I tried everything to lose them without success. I was often tired, I could not get a good night sleep, I was sad that I could not lose this extra weight. I exercised 3 to 5 times a week without change.

After being introduced to BAC F1 and F2, I managed to not only lose 10 of the 15 lbs., but my energy, my sleep are now as good as before I got pregnant, and my confidence is back again!

I am now certain that I will lose all the extra weight. I intend to have a second child. THANK YOU A THOUSAND TIMES TO BAC F1 and F2. I am healthy again and I am proud of it. I tell my family and friends about my excellent results and now they are also using BAC.

Claire, Montreal, Canada – December 2007

Symptoms of autism: BAC is truly a miracle food

My son, aged 6, is not yet speaking. Doctors think he is on autism spectrum based on the autistic-like characteristics he presents. He had 10 single words by 18 months and then he made no gains at all in his speech. His other delays include difficulty in sensory modulation and regulation, both fine and gross motor delays, and lacking age-appropriate play and social skills. He is a very friendly child and loves to socialize but does not know how, until I started him on BAC.

He has been on F3 since December 2011 and in that short span of time his school staff and I have both seen some startling positive changes. He is making a lot of sounds and vocalizing throughout the day. He is more aware of his surroundings; he is initiating more interaction with his peers and staff; he has become very good in using his communication book with at least 30 pictures on a single page; his responses to directives and commands have become quicker; his comprehension has improved dramatically and can follow 2-3 step directions; he is very eager to learn new things and learns fast. Anytime he catches a cold it would turn into a lung infection in a matter of days, but now he had a cold and it did not affect his lungs and he was able to fight the cold; he would startle at least 3-4 times daily at the time of going into deeper sleep but not anymore. Not since he started bio-algae.

Overall, there is a big change in his personality and his socialization skills are also improving. He has gained weight and height and last May when he had his routine blood work he showed signs of thyroid problem. This April when he had his blood work done again his thyroid levels were within normal range. BAC is truly a miracle food and I am looking forward to seeing more improvements.

C.R., California – August 2012

Bowel lump: BAC has got him eating and gaining weight again

My Dad had a lump in his bowel that was making him starve to the point of significant mental diminishment. He had it removed recently but was still ill and gaunt with no appetite and little energy. BAC has got him eating and gaining weight again. He's even back into swimming. I know that his progress is attributable to starting to take your BAC! Thank you for making this possible. He and we are stoked!

Pahl – August 2012

Rheumatoid arthritis and Lupus: Your blood work is too perfect!

At the suggestion of my Holistic Physician, I began a course of BAC Formulas 2 and 3 in mid-February, 2009. I had been diagnosed with lupus and rheumatoid arthritis in 2004, and refused traditional treatment until I was no longer able to care for myself. At this time I consulted with a specialist and was placed on a regime of oral methotrexate and a monthly chemical infusion (Orencia).

In May of 2009, I told the rheumatologist I was seeing that I had taken myself off the methotrexate (which I had done when I began taking the BAC products). After examining my improved lab reports, the doctor suggested we drop the monthly infusion of chemicals. If my condition deteriorated, we could always restart the treatment. During our most recent appointment in May, 2009, the rheumatologist said he could no longer find any RA. Your blood work is perfect—too perfect, he continued, the RA seems to have gone into remission.

– Deborah Reed-Downing, USA – 2009

ADD: Able to focus the entire day

I wanted to let you know I was able to help my cousin who has ADD using bio-algae concentrates. She is 22 years old and for the first day she took half a capsule of f2. She was able to focus the entire day at work and did not get upset when a very stressful situation arose. She was also able to carry on a conversation without stuttering after her long work day. Thanks again for all your help.

– Melanie Miller Moralez, USA – 2010

Macular degeneration: Much improvement

My sister-in-law, Glendia B. that you helped to get on a program for her macular degeneration, has had much improvement. Thank you so much.

– Marietta P., USA – December 2010

Massive difference in my breathing

Also to let you know that I have noticed a massive difference in my breathing since I have been taking F3. I seem to be breathing more deeply without it feeling or sounding labored and I have a lot more energy. I actually feel like exercising more readily now. It really was a struggle to motivate myself to exercise.

– Bridgid, USA – November 2010

Thyroid cancer: 6.5 years cancer free

I'm so glad I found you so many years ago! I am now 6.5 years cancer free without the radiation follow up they wanted me to undergo... and as you promised, I have just had my Thyroid meds cut in 1/2 AGAIN..... (at least, the active T3 Portion of my compounded Thyroid). Perhaps the day will come when I no longer require the meds at all.... I await the day. (Smiles)

Wishing you all the best the world has to offer, naturally!

– Annie Cunningham, Founder & CEO Dead Sea Warehouse, Inc., USA – November 2010

My energy is coming back

Roland my energy is coming back; I am so excited about it. I have been able to start running again and today I did 3 miles again, non-stop and I talked with my friend all the way! And I felt I could have gone on further. So Roland bless you and I will continue sharing these with my friends. I feel so lucky to have found you.

– Georgie, UK – October 2010

Energy, mental acuity and performance

As you know I take BAC F3 daily. I just re-ordered the aloe as it made a significant difference in my energy, mental acuity and performance. When I combined the aloe it was like an immediate eye opener to me. Both cleanse the blood and enable me to be who I am (RED WINE, entertaining, music, art, and lots of food)... I know personally that the combination is electric.

– Tom, Illinois – October 2010

My lower back is better

My lower back is better (about 40% less pain & stiffness). The most surprising thing is that I started feeling better when I was taking only 3 capsules a day. Also, I stopped feeling sluggish in early afternoons because of my long standing heart bradycardia. Heartburns are much less bothersome now, better urination during days & nights, better sex performance. Life is beautiful... I share my personal experience with many people around. Hopefully, they don't think I am getting senile. My best regards to Michael.

– Norman, M.D. (66 years old) Pennsylvania – September 2010

Menopausal symptoms: We don't ever want to run out of our BAC

The following are the improvements I have experienced with BAC F3 formula.

The ability to reason has significantly improved, I can think much more clearly and handle stressful situations much better than before. I am more “resilient” emotionally. My energy level has improved and I am able to stay up later in the evening while still being mentally alert, I feel I have a calmer nervous system with a better more relaxed attitude. I use to feel uptight, irritable, impatient and tense – remarkably these symptoms have for the most part gone away. My hair has improved by 50%, full healthy texture not seen since pre-menopause (I LOVE THIS) also my skin has improved 30%, a younger looking glow ... I still use some of my expensive skin care products, but this improvement is not due to these products that I was using prior to the BAC, a woman knows this!

As you know I am 48 years old and have been suffering from menopausal symptoms since early 2007, at the advice of my well intentioned girlfriends I requested (Hormone Replacement Therapy) from my Doctor. Now, being aware of the dangers of taking HRT, I have been looking for a way to gradually get off of them. For the first 2 months of taking BAC F3 8-9 capsules a day, I started decreasing my HRT to every other day with no noticeable problems what so ever. At the beginning of the 3rd month I decreased to taking the HRT every 3rd day, for the first 7 to 10 days it was a little rough going however, after that once again I am doing very well with this schedule.

These are amazing results for a product review of only 3 months; I can hardly wait to see what future benefits lay ahead. Also, Mom has her own great results to share with you like increased energy level and remembering things better than before We both don't ever want to run out of our BAC.

Much gratitude,

– Kathleen Conti, USA – June 2010

Energy and revitalization

I believe that the path to Wellness is firstly a journey within. Eating disorders, depression, Lyme; Olympians too have healing to do... Swimming in the vast sea of remedies, foods, and supplements available to us today can be very confusing. I've not found anything yet to bring me as much energy and revitalization as BAC.

I feel blessed to have come across Dr. Kiriac's formula to help give my brain and body the food that it needs!

– Catherine Garceau, Olympic Medalist, Sydney 2000

Autism: After one capsule my son began buttoning his shirt!

I am the mother of a boy who was labeled as autistic by the Chicago Public school system two years ago. Since then we have embraced a much healthier lifestyle including eating whole organic vegan foods, raw foods, fermented foods and high quality supplements. We have seen tremendous improvements. However, my son had remained behind in development during this period of time. I was happy that we were progressing but wanted something more.

Then, thankfully I was introduced to the work of Dr. Kiriac. We began BAC about 4 months ago. After one pill my son began buttoning his shirt — a fine motor skill he was unable to do ever before. After a week on the product he began balancing on balance beams at the park. Soon after, he was willing to try new activities including bicycling. He began to socialize with his peers more and his expressive speech became more clear.

My son just started school and is in a “regular” classroom. I have been able to remove most other supplements and my son continues to surprise us each day.

BAC has been a major step in our healing.

– Gina Laverde, Santa Monica, California – November 2009

Visit Gina’s blog at [Blissed Life](#)

Blood sugar rate went from 280 + mg/dl to 90 mg/dl!

Hello, I just wanted to pass along some of the fabulous results Samantha and I are enjoying with regular use of the F3 product.

I am a Type 2 Diabetic. My normal fasting blood sugar rates, with diet, exercise, and a host of daily vitamin, mineral and herbal supplements was brought down to a fairly stable 150 mg/dl or so. The supplements were costing me over \$300 a month. I now take no other supplement than F3 BAC! After starting with 15 per day for about 6 months, 2 years ago, I now take 6 capsules daily as a maintenance dose. I have dropped over 60 pounds in weight as well.

Now, my fasting blood sugar rate is 90 mg/dl. My doctor tells me that’s almost NORMAL (80 mg/dl being “healthy”). When I was first diagnosed, my fasting blood sugar level was 280 + mg/dl. Needless to say, I am very pleased with the real results of this miracle. THANK YOU !!

Samantha suffers from Herpes, Arthritis in her hands, and certain female hormone imbalances. She used to daily take L-Lysine, Vitamin B Complex, Vitamin C, Vitamin D, Glucosamine Chondroitin MSM, and many other supplements. She also used to supplement with a concentrated “green drink” mix. She experimented with several brands. She now also takes

nothing but 6 capsules of F3 BAC daily. And her health is fantastic! At 52, she no longer suffers from her joint pains, she no longer has the Herpes outbreaks on her skin, and she is as slender and fit as ever.

THANK YOU!!!

I hope this endorsement helps. I know that Samantha and I have tried many products, both “holistic” and otherwise, and we were both relatively skeptical at first. However, we have never obtained anything like these results, regardless of cost.

Thanks once again for this wonderful science!

– Keith M. and Samantha (“Janis”) P. – October 2009

I have found the perfect complement

I have searched for the perfect supplement. I have found the perfect complement. BAC!

– Master George Picard, October 2009

www.wuyijiehe.com

Autism: This has never happened before!

I spoke with you on the phone last Friday about my 2 boys that are challenged with autism. I received my supplements yesterday and immediately started giving them to my children. First, thank you for sending the book, *Awakening the Genius Within*. I immediately devoured it! Second, after giving each boy two capsules yesterday, my older son got out of bed and dressed himself this morning (similar to Dougie)! This has never happened before. He CAN dress himself, but I usually have to ask him over and over. Today, he did it without me even asking! I’m certain that we are just beginning to see wonderful things from BAC. I will certainly keep you posted!

– Allison L., USA, October 2009

Athletic Performance: Your product sure lives up to its name as a superfood!

Dear Roland, Just wanted to say thanks for all your support. It’s totally amazing how well Bio Algae works. My 2009 campaign is well under way. We have set a 50 and over Maine north to south record riding 390.2 miles in 31 hrs (Fort Kent Maine on the Canadian border to the New Hampshire border in Kittery Maine). I’d like to say the weather was perfect but we encountered rain and fog so thick that visibility was down to 10-12 ft for most of the first 8 hrs. Other than a brief thunderstorm and one wrong turn the rest of the ride was awesome. We raced in the

Saratoga 24 hr over the weekend finishing 3rd overall making it to “the podium”; we rode a total of 368.7 miles averaging 15.37 miles per hr.

Your product sure lives up to its name as a superfood. I’m able to recover quickly. I haven’t broken down staying healthy even when others around me are sick. My immune system stays strong, my joints and muscles recover quickly, and even in multi day rides where my daily sleep time is 2 hrs or less I stay mentally alert.

The big test this year will be in Ireland in September, when we try and win the Race Around Ireland (1350 miles in 5 days or less) averaging 275 plus miles per day with less than 2 hrs rest per day. Best Regards.

– Stephen Bugbee, Ultra Racer – July 2009
www.stephenbugbee.com

Leukemia and Down Syndrome: BAC is helping tremendously!

I would like to become an affiliate. My best friend’s son Jack has down syndrome and leukemia. BAC has been helping him tremendously while he has been doing Chemotherapy.

– William A, Colorado – July 2009

Glaucoma: He told me that I would never have glaucoma!

I want to let you know that late last year I went to a glaucoma specialist to get my eyes checked on since I was diagnosed five years ago with being a glaucoma suspect and the doctor was astonished to see how strong my eyes are. He was absolutely amazed. He told me that I would never have glaucoma. He said “your retina, cornea, and retinal blood vessels are incredibly strong.” I was absolutely grateful and relieved to know that I would not get glaucoma ever. I continue to take your product and my nails continue to grow as before my nails never grew. They were paper thin and just did not grow. I am ever grateful to your company. I am 27 years old and feel wonderful. Thank you.

– Vanessa, USA – May 2009

Osteoporosis: Ahead of the game building new bone!

I have great success with this product, and I reorder due to clients’ requests.

This lady was taking the product to help rebuild bone density, and couldn’t believe that an “all encompassing” product (rather than a specific calcium/bone oriented product) would make a

difference. She has been on it for 1.5 years after having a very bad bone density result 2 years ago.

She just came back from a bone density scan, and found that not only had she rebuilt all she had lost, but was ahead of the game building new bone. She was ecstatic. We had already muscle tested the new replacement product and knew it was biocompatible for her, but she decided not to change to that product due to the good test results. Why mess with results? So I had to reorder and I am so glad I did.

– Esther S, Holistic Allergist, Canada – June 2009

Arthritis pain: Clearly it works wonders!

In November 2007 my husband was experiencing increasing pain in his neck and head. It is a pain he's had before but on a much smaller level and very infrequently.

We had many doctors visits, even hospitalized him a couple nights with continued testing. When a surgical neurologist finally examined all the mri/ct scans, he determined the pain was caused by arthritis along his cervical spine and said it was not at all caused by the herniated cervical disc as others had believed may be the cause.

With no solution but prescription pain medication and “neck exercises”, neither of which were helping, he began using BAC F2 and F3 gradually increasing dosage; starting January 2008. Just 10 days into using the products, we realized he had gone several days with no debilitating pain. This was a huge relief for him and me, because it “hurt” me to see him in such terrible pain and unable to work and function normally every day.

I STRONGLY recommend this product to anyone suffering severe arthritis pains – clearly it works wonders.

– L. Gordon, Florida – December 2008

Arthritis: Within four months the symptoms were entirely gone.

A few years back I was suffering from arthritis so bad that I had great difficulty getting into and out of my car. Since I was a “heavy duty” commuter this was a major problem. I heard about the Bio-Algae Concentrates and began taking them. Within four months the symptoms were entirely gone.

– N. – December 2008

Rheumatoid Arthritis has largely moved into remission

I was introduced to your product by a friend of mine, and having taken it for a year I find that my Rheumatoid Arthritis has largely moved into remission. Seems like a great thing for me. Thanks.

– Anonymous – February 2009

Breast cancer: I believe many things, including BAC, aided my recovery.

When I was diagnosed with breast cancer I had heard of your product. I had a dream that indicated I would benefit from blue foods. After reading your info, I learned your product contained blue foods/agents. I did many things that would help me on the road to health. I went to the Ayurvedic Institute for detox and balance, prayer, meditation, a wonderful group of loving people, alkaline diet, and one chemo treatment. I believe all things (above) including bio algae, aided my recovery.

– Anonymous – January 2009

IBS for 40 years: Great improvement with my digestion

I have taken Formula 3 for several months and am still experimenting with dosages but so far I've noticed a great improvement with my digestion. I've had IBS for over 40 years and taken numerous digestive enzyme products and love the simplicity of taking one product rather than a dozen daily supplements.

– Anonymous

In two years, I cannot remember having a cold or viral infection

I am using BAC to prevent disease from starting; I see it as an insurance policy as I believe the scientific conclusions based on the research behind the product, to be true. In the time I have been using the product – about 2 years – I cannot remember having a cold or viral infection, so perhaps it is working as a “shield” for my health, placebo effect notwithstanding. I intend to continue using BAC.

– Anonymous

Glaucoma: I take bio algae and I have gotten better

I had mercury plus 17 other metals, 7 in my blood stream. My eyes were 1 point from glaucoma, vision 178 over 189. I take bio algae and I have gotten better, there are many reasons, but I believe in your product and it is wonderful. Thank you.

– L.D.

Within two weeks, my blood clotted normally

Being type O+, clotting has always been slower than normal. Within two weeks, my blood clotted normally.

– Anonymous

Last blood work came back very good

I'm still doing wonderfully and my last blood work at the Dr.'s came back very good. I have very little trouble with my stomach. I'm so thankful to you for this product and my quality of life. Thanks again.

– Cheryl Fehring, Issaquah, Washington

Endurance racer: I suffered no unusual soreness or inflammation

I used your products while training and racing across America. I rode 1200 miles in 5 days with less than 5 hrs of sleep. I suffered no unusual soreness or inflammation. I remain alert and for the most part mentally cohesive. I recovered quickly and within a month placed 5th in the North American 24hr Championships. I will be returning to RAAM (The Toughest Ultra Cycling Event in the World) to complete the total 3000 miles in twelve days or less in June of 09.

– Stephen Bugbee, North American Professional

I get back on it and feel “normal” again

I do not have a “story” but certainly when I was considering trying your product, the testimonials that I read had a huge influence on my decision to try your product. Periodically, I get lazy and do not take it, but when I realize that I'm not feeling as good as usual, I get back on it and feel “normal” again.

– Anonymous

Seasonal allergies: BAC almost immediately relieves the symptoms

Both my daughter and I take BAC 2 and 3 for seasonal allergies. Whenever we miss taking the BAC we can definitely tell – there's a lot of sneezing, nose blowing, and watery itching eyes. But taking BAC almost immediately relieves the symptoms.

– S.B., USA

Excellent replacement for joint, vitamin and mineral supplements

I found Bio Algae to be an excellent replacement for joint, vitamin and mineral supplements. I have less pain, more mobility and energy to do my physically demanding job at age 54, in fact I outwork many people younger than me!

– P.D., Montana

Irritable Bowel Syndrome to general feeling of wellness

I first heard of BAC from a friend who had IBS which was gone in three days of using BAC3+. I started using BAC and I notice new positive changes in/on my body all the time. The most prominent changes are contracting less viruses, the need for less asthma medication, less insomnia, an annual skin rash is extinct, the PH in my body is neutral versus acidic and a general feeling of wellness.

– Anonymous

My thyroid works again

I've already posted my amazing testimony, my thyroid works again, so the doctor told me that I would not have to be on medication for the rest of my life!!!! Now I use BAC not for my thyroid as it is working again but for my immune system. 😊 Have a blessed day.

– E.B.

I will never run out again!

Three times in the last few years I have run out of the F2 capsules. After being out three or four weeks, I developed an old fluid problem and was rushed to the hospital each time with heart problems. I will never run out again unless I just don't have enough money to buy them.

– Lee Brown, Cisne, Illinois

Mental clarity: Found my way out of the fog – upbeat, confident and empowered

BAC has helped me cope with stress during a stressful marriage relationship. It has kept my spirits high despite negative surroundings. Mental clarity would describe my thinking, and I

have found my way out of the former fog. I have been able to be upbeat, confident and feel empowered.

– L.M., Idaho

Very healthy pregnancy

Both husband and I were taking this as a general supplement when I got pregnant. Very healthy pregnancy and baby as I continued to use it through pregnancy. I have not had difficulty conceiving and we have had some good success.

– Anonymous

Congenital respiratory illnesses: The most effective nutritional supplement

I have struggled with congenital respiratory illnesses my entire life. By 18 months of age I coped with severe allergies, asthma, chronic bronchitis, bouts of severe tonsillitis and double bronchial pneumonia... The F2+F3 BAC Combo are the single most effective nutritional supplement I've ever used...and I've tried dozens... I've been off all medications for over 2 years. Even the worst summer pollutants no longer trigger asthmatic reactions. Thanks so much for the products you offer!

– Anonymous

Menopause: Greatly reduces hot flashes

My hands were falling asleep during the night, and I would wear wrist braces to prevent this. After taking BAC F2 and F3 for about 1 to 1 1/2 years, I was able to sleep without numbness and without the braces. Also, increasing the F3 has helped with menopause, greatly reducing hot flashes.

– D.O., Pennsylvania

Slept like a baby – more energy – better digestion and elimination

I noticed an immediate difference when I began taking BAC. The first night, and every night for weeks after, I slept like a baby. No waking up at 3am, unable to go back to sleep. I was sleeping better than I had in many, many years. My energy level began to improve within a couple of weeks and at the end of 3 weeks I had stopped falling asleep in my chair after dinner. Within 5 weeks my digestion and elimination are better.

– Anonymous

Lifting weights: Increase in weight and balance

I started using this product because I was going to a gym and using a very determined personal trainer. At 67 years old I was lifting weights, doing the treadmill with an incline of 5 and at the speed of 6, and doing core exercises of balance, planks, and abdomen. Unfortunately my trainer moved on. I was amazed during that year at what I was able to do and how fast I was able to increase in weight and balance, and I believe this is partly due to the product, and partly to the trainer. I'll let you know!

– Anonymous

Mental clarity, arthritis and energy

Phyllis has used the BAC 3 for over 6 months. It has helped her mental clarity, her arthritis and her energy. We would recommend the product.

– Anonymous

I am no longer suffering from symptoms of eczema and psoriasis

I have always suffered from skin conditions, (eczema, psoriasis, etc.) for most of my life. As the cold weather approaches, my skin becomes very itchy, red, and hot. By this time, I would be very uncomfortable. Taking a shower would be painful. But I am not suffering from these symptoms. I started taking your product this past summer. I am happy to be itch free!

– C.C., Illinois

Chronic back pain and prostate cancer

Initially I was skeptical, but having chronic back pain and being on pain killers for 4 years led me to try BAC. It took about a year but I am now off all pain killers and experiencing many other benefits as well. My husband had an aggressive form of prostate cancer 3 years ago. He had surgery, but not all the cancer was contained. With a change in diet, lifestyle and BAC, he is feeling great and is still in remission. We love BAC!

– Jenny VanderBerg

I feel better than I did twenty years ago

As a multiple cancer survivor I feel that taking BAC has improved my general sense of well-being. At my age one does not expect to feel better with the passing years but I feel better than

I did twenty years ago. Part of the reason must be that I am taking BAC although I am sure that Qi Gong and Tai Chi instructions by Sifu George Picard also earn plaudits.

– Charles Bernard, St. Catharines, Ontario, Canada

Great product

Great product. I feel much better with it than without it.

– Anonymous

I can now close hands that were swollen

When I first started to use BAC my hands were so swollen I was unable to close them. People now say my hands are beautiful and I have no problems closing them.

– Anonymous

Help with sugar cravings and energy is stronger

In talking with Dr. Roland Thomas, he told me what to do to help with my sugar cravings; and, it works. My energy is stronger, I am exercising for the first time in years and the scale is dropping; so far, in 2 months, I have lost 13 lbs. I can't say enough how absolutely that BAC 2 & 3 are healing all areas and creating well being. 125 years looks good; so, I can say I am just now in the prime of life at 65. Thanks for you and Dr. Kiriak, the team that continues to bring healing to the planet.

– M.J.M.

Glaucoma and bone density

I have had glaucoma for over ten years and my pressure never went below 18 even with drops. After two months on bio algae my pressure dropped to 11 in one eye and 9 in the other. I have been using it for two years now and my doctor is thrilled. Also I had a bone density test a few months ago. My GYN could not believe the difference since the last one and asked me what I was taking. I am 68 and the figures were much better than hers.

– Anonymous

Kidney function improved to 24%

Now kidney function is up to 24% function, a 2% increase over the last three months. I feel certain BAC is the reason. I have been taking 10 capsules a day for over a year now. My diet otherwise is awful. I have been eating one meal every other day. Enjoy, more to be revealed!

F. & B.B., California – October 2008

Extremely high frequency product

Meanwhile, I've some things to report on the algae products I'm taking. I only manage to take one each of the F-2 and F-3 twice a day. However, within a week I noticed:

My energy level is maintained throughout the day instead of the usual 2pm slump I experienced in the afternoon.

My mood is much better and more positive; not overly so but just level. Things don't get me down as much.

Because I've got so many other vitamins left, I tried to combine ingesting them along with the algae and promptly threw them up each time. My body just flat out rejected the other supplements after taking this algae.

I sleep soundly and wake up much earlier, feeling awake and refreshed.

I feel well-fed on this product. My body feels nourished.

There is an extremely high frequency to these products.

– Marjorie Bennett, Colorado Springs, Colorado – December 2007

Chronic gastritis: Right away I had results

My name is Cheryl F. and I live in the Seattle area. In 2005, I had emergency surgery for a bad gall bladder. When I woke up in the hospital I found out that I had also had a complete gastric by-pass. No, I am not heavy or have ever been heavy. I had a quarter size hole in my stomach and jaundice and was not doing very well. My doctor later told me that I had about 2 weeks to live.

When I left the hospital, I thought my life would be back to normal and I would be on my way to healing and good health once again. I was mistaken. I began to have little pains and not very much energy. The pain grew and grew until I wasn't able to eat anything except yogurt, kefir and soup. When I did try and put anything in my stomach, it would blow up like a balloon and be very uncomfortable.

In October this year 2007 I had an endoscope and was diagnosed with Chronic Gastritis. I was given medication that wasn't working and the pain was still there, and getting worse.

About the same time, I have a friend that met a lady named Jan. Jan's testimony was so amazing. Her testimony was about how a product named Bio-Algae totally changed her life. I decided right there to give it a try and the following morning I called Dr. Thomas.

I received the product on the 22nd of October and took one that night. Right away I had results, no stomach ache and I slept through the night. I started my program the next day and I am happy to report that I have not had another stomach ache since that day. I am able to eat food, I have energy and am so happy to have found such a wonderful healing product.

My friends have seen a change in me and so has my husband. Some of them are now taking or thinking about taking Bio-Algae.

Thank you Bio-Algae; Dr. M. Kiriak and Dr. Thomas for giving me my life back!

– Cheryl F., Seattle, Washington – November 2007

Strength-wise and endurance-wise I am making crazy improvements

I have been taking this supplement now for a while, I started training three weeks ago and the improvements that I make are just insane. I take three in the morning and three in the afternoon and my friends, who are professional fighters, all ask me what I am using.

Strength-wise and endurance-wise I am making crazy improvements. It's the ONLY thing that I am taking next to Milk Thistle, no other things what so ever.

My neighbor is 56 years old, he used to be Stallone's bodyguard for 17 years, he's taking it too and can't believe what he's doing right now, training hard and recovering like crazy.

I truly believe that it can be only because of the bio-algae, since that's the only thing I use.

Everywhere I come people ask me what my training routine is, when I tell them that I started training three weeks ago after a 14 month layoff, they don't believe me.

Many will think for sure that I am doing something illegal, like steroids, but trust me, that stuff I don't use, they can actually test me with ANY test they want, and if they want to put their money where their mouth is, I will be happy to take that bet right away, I can always use some extra cash!

Try it out and see how it works for you, what do you have to lose right?

Godspeed!

– Bas Rutten, October 2007

Three time undefeated King of Pancrase, and the undefeated UFC Heavyweight champion Visit Bas's website at www.basrutten.com

BAC has brought me back to health



I have been very ill for 4 years. I was bit by a tick carrying Ehrlichia and Lyme Disease. Unknown to me at the time, the head of the tick was left in my side. Four months later, I was bitten several times by a Brown Recluse Spider. Between the two bites I got very ill, bedridden for 4 weeks and even with massive medical intervention, I almost died. For one year, I suffered with severe joint and muscle pain and headaches. I was often weak and couldn't get comfortable in any position.

I started taking BAC and within a few weeks of starting a friend, that knew of my condition who had not seen me in a while, asked me what I was doing because she said I looked great. Well, I thought about it and realized I had been feeling better and the only change that I had made was that I had been taking BAC. I have been taking BAC for over six months now (2 capsules/day) and during times of stress I take an additional mid-day capsule. I am a true believer that BAC has brought me back to a healthy functioning person.

– Robin H. – 2007

My energy levels have improved to no end

This is the end of my second week using F2. I am a long time qigong practitioner. My energy levels have improved to no end. Also, I am more aware of a sense of well being. Slightly changed my diet at the same time and over the 2 weeks I have lost 5lbs.

Health & happiness,

– Eric W., UK – August 2007

Acne rosacea seems to be gone

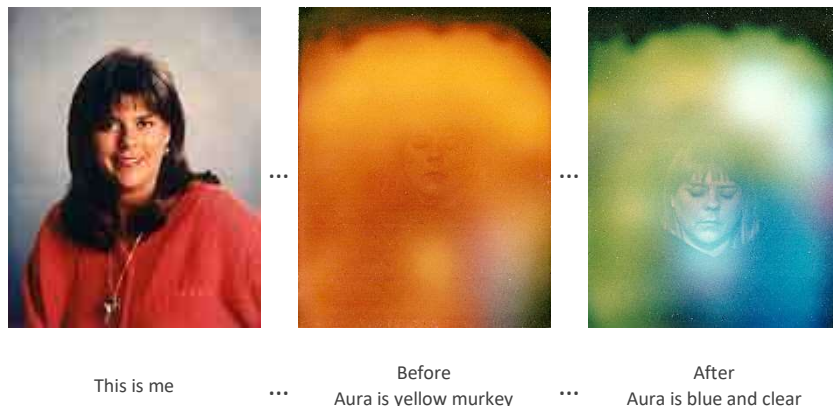
I'm not sure what the algae is doing for me. Certain things like the acne rosacea seems to be gone. I have more energy, my joints might be a little better. Tomorrow I will be up to 11 a day. I am also giving my dog (who weighs 20lbs) one pill a day. He was limping at the end of the evening so I did two things. I changed his food (because of the recall) and started giving him an algae a day. He has not limped for a while now, and seems to have a lot more energy. He just seems happier.

– Donna Kaiser – August 2007

A picture tells a thousand words

A picture tells a thousand words

I was curious about this Bio-Algae product that Roland Thomas, ND was lecturing about at the USPS conference. I decided to take a before and after picture. 15 minutes after taking one capsule of the formula F2, the results speak for themselves.



– Katherine Kennedy, www.RainbowVisions.net
USPS Conference, Chicago, IL – July 2007

I really feel the difference if I don't take it for even one day!

I've been using BAC as part of my healthy lifestyle routine for just over two years now.

I've had a couple of rough years – first my father passed away Dec 05 and then my husband had a major heart attack Dec 06. It's been a very stressful time for me and BAC has helped me enormously. I really feel the difference if I don't take it for even one day!

Thank you Dr. Thomas for the wealth of information. God bless both you and Dr. Kiriac for this superfood.

Regards,

– Jacki – United Kingdom, July 2007

Fibromyalgia

I don't know how it works, but BAC has helped me with my "brain fog" (lack of oxygen to the brain) and my thinking and head are much clearer. Additionally, I find myself feeling much calmer, more positive, and having a "sense of calm" from taking BAC. I've cut back to two capsules daily as I feel much better with this regimen.

This product is just incredible. Granted, I've only been on it for a week, but I am enjoying it. It works!

With best regards,

– Bob G. – July 2007

Have never quite had any results for myself... until I found the BAC

I have found for myself that I am getting so much more done now than ever before... forget those help-yourself manuals! Just get yourself on the right track and watch out! My vision is improving very much and I just realized that my astigmatism is not so noticeable, wow.

I find the product is a very gentle de-toxer and that is good.

In my senior year of high school (1981) I did a science project on raising turkeys with and without spirulina.... The results were stunning. The birds on the spirulina ate half as much and grew twice as fast. They also were all very healthy and all in this group lived. The group without the spirulina added to their diets were sickly, cannabilistic and about half of that group died. I remember taking the spirulina also for myself in orange juice and I found that classes I normally 'slept' through I wanted to get up and lead them; I was so much more engaged!

Since that time I have bought other spirulina and have never quite had any results for myself that were close to the same until I found the BAC. I feel like I've finally come home and this is where my future lies.

Thank-you for giving life to the entire planet and all its beings. I love sharing this with others and look forward to seeing more and more excellent results... Life is good!

Namaste.

– Jacqueline Chapman, Bozeman, ID – July 2007

I'm able to LIVE WELL with stage IV breast cancer

Bless you for The Magic! BAC is a major part of my health and wellness regimen, and one of the main reasons I'm able to LIVE WELL with stage IV cancer despite weekly chemotherapy. Many people tell me that I don't look like a cancer patient... perhaps I'm part of a new wave of people who are changing the face of cancer!

Be well,

– Wendi Pedicone – June 2007

Favorable eye check up

Thought you would like to know that I have had a pretty favorable eye check up. Especially compared to declining eyesight. This time only a little of the retina damage was seen by the optometrist, this morning. Very good news for me. Was also thinking about my cat. He seems to have less breathing problems. He has been taking two capsules to my twelve. Hope that this reaches you in the greatest wealth, good health!

– Franklin & B.B. – June 2007

The pressure (glaucoma) in my right eye has dropped from 16 to 11

Dear Roland, I am now on my fourth bottle of the Bio-Algae and still taking nine capsules a day, as you advised.

The eye doctor checked the pressure for the glaucoma yesterday. I was most curious to see if there would be any difference since taking the BAC. The pressure in my right eye (which they have been unable to bring down for years) has dropped from 16 to 11. The left eye is even a bit lower!!

Even more strange: I noticed that the vision in my left eye had improved... I have a few blind spots from the glaucoma, and when I read the chart I find that every third letter in a line is a total blur. This time I was able to read many more letters.

I am really happy about it and now feel justified in spending that much every month! Thank you again so much for all your help and advice.

Sincerely,

– Gail Gallagher – June 2007

UPDATE – July 2007

I am still very happy with the eye pressure with my Glaucoma. I might also mention that I think you may have discovered the Fountain of Youth! On my fourth or fifth bottle of supplements, I have noticed a remarkable improvement in my skin... especially on my hands which have been severely chapped ever since I was a child.

Leukemia: He just rolled up his eyes, even after seeing her results

I just wanted to share with you real quick some great news. I got my mother in law on the F3 because she has leukemia. Her doctor wanted to put her on all this medicine for her rising cholesterol and white blood cells. She told him to wait one month and she would get blood work again and they could go from there. Just after one month with the F3 (she didn't change anything else) her levels all dropped.

Total cholesterol 258 to 185!

Tryglicerides 223 to 135!

Bad cholesterol 163 to 112!

White cell count went back to normal!

The doctor asked her what meds he put her on, thinking he forgot to write it in her chart. Smiling back she said "none", and proceeded to tell him about the supplement. He just rolled up his eyes, even after seeing her results in the blood work! Go figure, maybe some day he'll choose to look into it for his clients.

I just wanted to thank you for such an amazing product. It has also helped tremendously with my Newfoundland who has kidney disease.

Thanks!

– Shannon, Taylor, Paws & Claws
Breckenridge, Colorado – February 2007

Bio-Algae Concentrates is "Kung Food"

Anyway, I wanted to give you my BAC story as of late. Last Saturday I woke up with the worse sore throat I had ever had. It swelled up and I had a horrible time swallowing. I had never experienced that before. On Saturday, I took 1 capsule of F3 every hour all day and on Sunday, I

did the same. By Sunday evening, I felt 100% better. The power of BAC is unbelievable! My energy level was great. Thank you Dr. Kiriatic for your passion and knowledge with your BAC products!

I know that any other person that went through what I did would have raced to the medical doctor and got antibiotics. I see it all the time. I would much rather o.d. on BAC!

I love that “Bio-Algae Concentrates is the Kung Food of the nutritional art of self defense from diseases.”

That is awesome!

– Dina Page, Denver, CO – October 2006

I feel really REALLY good!

Dear Roland, I feel really REALLY good! It is much more than I could have hoped for. I will see about getting you my blood values. All have improved. My urine has less protein, my need for insulin has diminished. Mostly I feel wonderful. I could not have said that when I started taking BAC. Immediately I knew this was something special. Everyone I talk to says that I sound so much better. “What has happened to you?”, I hear a lot. Everyone who knows me knows that I have gone through a tremendous change. I only hope to be able to soon stop all the medications I have been taking. You know, I used to spend much more on vitamins and minerals and supplements of all sorts. I feel that the need for those things is gone. I feel much better than I ever did on all that mess of vitamins and other stuff. No doubt about it. Thanks again for a mighty turn on. I have only gotten up to eight capsules a day. On my third bottle.

I give my cat, B.B., only one a day now. You said to give him three, and I will work up to that too. He waits for me to add the BAC to his food. It is very special.

– Franklin & B.B – April 2007

Life into my dried bones

Thanks for the BAC. I need to let people know about this wonderful stuff. I feel like God has used your Bio-Algae to breath life into my dried bones. My wife is thinking that I have become like a new man in only 6 days. Before I was always so tired, now I have energy that I have not had in years. With my last lung function test showing that I had less than 15% of my lungs left, I just though that the fatigue was part of the disease.

I have been making arrangements to move to a lower elevation because I could not get enough strength to exercise and without exercise, I was getting weaker by the day. With BAC, I have

done more in the last 5 days than I have in the last 5 months. This is nothing short of a miracle and I know I would have to give the disclaimers to people letting them know that I am an extreme case and maybe not everyone will have the same results.

Thanks.

– Larry J., Colorado – March 2007

No longer pre-diabetic!

I started taking BAC F2 and F3 almost exactly one year ago.

I informed myself about the products by reading the Bio-Algae Concentrates website after my vet recommended BAC F2 for my aging cats. I then decided to try BAC myself.

For the past 15 years I've been told I'm pre-diabetic. Because of that, I've tried to change my diet and take supplements according to recommendations by various naturopaths and healers. But, despite everything, I remained pre-diabetic. I also take synthroid and liothyronine supplements, as prescribed by my physician.

Now, one year later, I see great improvement in my health; my lab tests in September, 2006, indicate that I'm no longer pre-diabetic, and my thyroid dose was cut in half last May. I also have very little plaque on my teeth after decades of deposits that required cleaning every 4 months. My dentist is surprised because teeth and gums usually deteriorate more at my age (63) as opposed to becoming healthier.

After a year of taking 4-6 F2 and 8-12 F3 daily and getting these results, I feel comfortable recommending BAC to others.

Sincerely,

– Ingrid Eisenman, Seattle, WA – October 2006

BAC does it!

I discovered BAC in a conference in the States 3 years ago, tried it to replace my medicine for hypo-thyroid, and in less than 3 weeks I was off my medicine.

I was feeling great using BAC (10 pills of BAC 2 and 10 of BAC 3) for only 4 months, before I dropped down to 5 pills of BAC 2 and 5 of BAC 3, and one year later I'm taking only 3 of each every day.

It took only 3 weeks to stop my medicine and since then (even going through a difficult divorce with heavy stress), I've been able to have full potential of energy, great looking skin, and feel just good. Before BAC I would have had a hard time to wake up and get up in the morning, I was ALWAYS feeling tired from morning to evening, and I was either too cold or too hot, now my thermo-regulation is well balanced.

The other amazing fact is that I was under a high dosage of medicine for thyroid, 100mg instead of the "normal" 50mg. When my first child was born, I decided to give her on her second winter one pill of BAC 2, one every other day. She NEVER got any cold at all, never got any flu when all the other children were sick. And for myself I've NEVER gotten sick either since I'm on BAC. Also I'm a vegan-vegetarian and it does influence the results a lot. I say that because my ex-husband was not a vegetarian and was often coming home from work with cough, cold or flu, and he never took BAC consistently (just when he was sick), and the thing is that me and the children could live in the same house and we were not getting sick!!

I love BAC and do believe it is the best product ever. In fact doctor Churney from Colorado State, at Eden Valley, invited me to a conference, and my life changed for good since then.

Still today I give BAC 2 to both of my children over the cold months of Switzerland. Would you believe me if I said that my children NEVER get runny noses, and mothers around me are always amazed. BAC does it!

Have a great day!

– Esther, Switzerland – September 2006

Now there is a clue

I have been on the product now for over a year and decided that I would go off the product because it was expensive and I was taking other green products. Well after a week I crashed and felt terrible. I was very agitated. My adrenals were pooped. I took 4 pills and in 2 hours I felt like myself again. I take 6 open caps a day. I tell people I am not ill I just have green lips because I am taking a green product.

My lesson is that I had no idea how this product was affecting me. This year I did notice that at springtime I did not have to take medication for allergies. Now there is a clue. I take the BAC Forte everyday. I have learned my lesson that the longer you are on the product the better your health will be.

– Lyra Grant, New Mexico – July 2006

Do not experience heart palpitations anymore

I am thrilled to share to you this good news and I credit this to BAC. Just like what you mentioned I experience tangible health benefits. The most noticeable by me is I do not experience heart palpitations anymore despite being diagnosed of having Mitral Valve Prolapse. My breathing is now calm and I do NOT experience shortness of breath anymore. In fact, I look forward to having my next 2D Echo Doppler test. I am glad I did not follow the advice of the cardiologist in putting me on beta blockers. I did take them for two weeks but I felt weird physically so I stopped. After several months of searching the net for answers on how to be healthy, I found BAC.

One more thing that I am thrilled of... last May 17, 2006, I had a skin carotenoid test using Pharmanex biophotonic scanner. My score was 24,000. Then when your shipment arrived on May 19, 2006. I started taking an average of 4 to 5 capsules per day. Guess what is my score now, July 5, 2006? In just 45 days, my score leaped to 29,000!!! I am happy with the results and hope to reach a score just like yours. I think your score was 60,000+++.

Thank you again for everything.

Sincerely,

– Hennery Relucio, Manila Phlippines – July 2006

Strength in my lungs

I am writing this letter in absolute gratitude for what the product, BAC, has done for me. When I started taking BAC 2, it was because my sister, realizing the tremendous state of poor health that I was in, ordered it for me. I began taking it, one half of a tablet at a time. I saw no real response to it, and stopped taking it. Months passed before I would try again. Chris finally convinced me to start taking the product once again, and this time I made a commitment to follow through taking it. I am now up to five tablets a day.

It has been about four months, and during this period of time, I have experienced some phenomenal things. First of all, I was suffering with Irritable Bowel Syndrome. It is gone. Next, I was suffering with arthritis. It is much better and I believe on it's way out. Thirdly and most importantly, I was suffering with scarred and damaged lungs from having been stricken with Staphylococcus Pneumonia in 1998 and ARDS in 2000. Both deadly infectious lung illnesses that kill most people quickly. I was on life support both times, in a coma both times, trached in my throat both times and pronounced dead both times. I was told I would be on oxygen the rest of my life. I had no wind in me, and breathing was difficult.

Today, I can tell you my lungs are on the mend. I know that since taking BAC my ability to breath and even hold my breath has more than greatly improved. I am truly on the mend. I had lungs that collapsed and filled up with blood. Doctors gave up on me. Of course, I give the credit to God, but I also credit the BAC for giving me back my strength in my lungs. The other day, I held my breath for close to one minute. Unbelievable. Thank you to all the people who ever worked on this product to bring about the wonder of it all.

Sincerely,

– J.P. Cisneros – June 2006

Tremendous difference in my energy and mood

I wanted to thank you again for this incredible product. I really can't believe that I have gone this long between usages. Just the tremendous difference in my energy, my mood, my desire for food has gone way down, my desire for quality food has gone up. I think this is operating on a much more important level than just the physical. Thank you.

– Glenn Streeter, Certified Medical Fitness Specialist – April 2006

No need for surgery

I was a lineman for the local power company for many years and suffered with very painful knees most of that time. My doctor said I would have to have both knees replaced which I wasn't looking forward to, so I put it off. A couple years ago a friend introduced me to Bio-Algae Concentrates and after taking it for only a few weeks, I had absolutely no pain and there was no need for any surgery. I am completely retired now at 74 but very active and busy gardening and mowing lawns for people. I also clear snow for them in the winter with no pain whatsoever.

– G. Fenske, Wisconsin – March, 2006

Cancer of the bone marrow

I was diagnosed with Waldenstrom's Macroglobulinemia or cancer of the bone marrow. In February 2003, after receiving 4 treatments of antibodies and one blood transfusion, I took MGN3 for a while and my condition did not improve.

In January of 2004 I started taking BAC F3 and after only one month, my hemoglobin went up 10 points. I felt a new surge of energy and well being I had not felt in years. By July 2004 my oncologist declared "I was in remission".

BAC was my miracle pill. It is indeed a fabulous cellular food!

For you to have discovered this formula denotes a very loving, caring person, on the road to help mankind stay alive and well.

God bless you and your family. Sincere and grateful thanks.

– Cecile Jalbert, Montreal, Canada – February 2006

UPDATE – July 2006

Last month, I visited my oncologist for a control exam. He declared my blood “perfect”. Since January 2004 I have only used BAC in my regiment. Thank you Dr. Kiriak for your magnificent research that has saved my life.

Tremors stopped

It’s now been 34 days that I take BAC and I can safely say that my general tremors have stopped. I have been mostly in bed for two years due to chronic lower spine (L5 / S1) pain. I get up to go to the bathroom. I have stopped taking my pain medication a week now and I feel fine. A friend unaware of my condition called me to ask that I pick up their car and pick them up at the airport. I felt daring enough and figured it would take me 30 minutes to ride my bike 3 miles to their home and car... It took me 20 minutes and I felt good. Thank you BAC.

– D. K., Hawaii – February 2006

UPDATE – May 2006

Before I started taking BAC, my PSA had jumped to 6.5 in December 2005. Last week I had new test results and it is now down to 5.1. Also, since I stay in bed a lot, I used to have problems with lactic acid when I bicycled for exercise. Now I don’t have that problem.

Diarrhea stopped

After two days on BAC my chronic diarrhea that I have had for one year everyday has stopped. It’s been three weeks now without... I am thrilled.

– Joannette P., USA – February 2006

Lou Gehrig’s Disease (ALS)

After two weeks of taking Bio-Algae Concentrates, my 31 year old son and I have been able to enjoy watching television together after dinner. Because of his lack of muscle control I spoon feed him and that takes us a few hours each day. Since taking the capsules he swallows better

and faster and we are able to eat faster and gain one whole hour by the end of the day. Also, I noticed in the shower that he has stopped losing his hair, and that even after we had quit taking a fish oil supplement. I can't wait for more results to come.

Updates: 08/05/2004: Son has gained 5 lbs since may while on BAC, was 76 lbs, now 82.

– Lucy L, Texas – February 2004

No seizures in five months

I have suffered from epileptic seizures since I was a child. When taking medication I would get seizures 3 to 4 times per week. Without medication I could get them daily. With Bio-Algae Concentrates and without medication I have not had one seizure since the first day I started taking Bio-Algae Concentrates six months ago now. Because of my success I recently gave some Bio-Algae Concentrates to my cousin and he has not had a seizure in seven weeks.

– Brenda, San Diego, California – February 2006

Rock and roll with Bio-Algae Concentrates!

Hi, My name is Pierre Bouvier, I am the lead singer of the Rock and Roll group Simple Plan of Montreal.

I have been using Bio-Algae Concentrates for over a year and I wanted to congratulate you about your unbelievable product.

When my schedule became supercharged a few years back, I was frequently ill... with regular colds and frequent throat infections. I was often very tired and had a hard time with the weeks filled with unending travels, interviews and public shows.

Since I started using Bio-Algae Concentrates Formula F3, I am never sick and I have much more energy. I also have a more positive mood and attitude. I have no problem getting up early in the mornings and even the longest and the worse of days seem easier.

I want you to know that your product functions extremely well for me and that it has become an indispensable ally in my life as an international Rock and Roll star.

Thank you very much for creating these miracle pills!!!!

Pierre Bouvier, Lead Singer, Rock and Roll Group "Simple Plan"
Montreal, Canada

Wow, wow and double wow!

It has now been 10 days since I started on the BAC2 & BAC3. WOW, WOW AND DOUBLE WOW!!!!!!!!!!!! That is all I can say. I feel 1000 times better, my depression has lifted and I never want to go back to feeling like I was before BAC.

Thank you soooooooooooooooooooooo much for this product.

– Linda Bradtke, Chicago, IL – October 2005

Comdemned to mononucleosis

Dear Professor,

It is with some pride and enormous joy that I pass on to you the testimony of my niece, Valérie Hébert, in which she talks about herself.

God knows, and her as well, that the day you were born was blessed by the celestial authorities, whomever they may be, since you are one whom they chose to do good to humanity.

My niece had received a death sentence from medical authorities that had told my sister (Valérie's mother) that they could do nothing more for her. At that point I was put in contact with you and Valérie has since received a certificate of rebirth.

A thousand thanks are little for a life, but that is what expresses the joy felt from the healing of Valérie, all thanks to BAC.

I wish you and your loved ones long life, health, success and prosperity in this holiday season, a period of consciousness that love and harmony are our most precious possessions.

Sincere thanks,

Paul M. Gélinas – Counselor in corporate and financial engineering

===== Valérie's Testimonial =====

Hi, my name is Valérie and I am 17 years old. Since August of 2002, I have attended the Trois-Rivières high school where I studied in human science. I have my driver's license and at last I can do activities that I had to abandon under order of the doctors at St. Justine hospital. Through reading this text you will understand why I had to stop these activities.

It all began in October of 1997. I was twelve years old and I was in my first year of high school. That month I thought I had a bad flu, and I did not consult a doctor about it because I didn't think it was something to be worried about. However, during the following months, my case worsened, I became more and more tired, dizzy, I ate very little, I was nauseated, I would shake, sweat, have headaches, my lymph nodes swelled and I was very weak.

All this continued into January of 1998, when I finally decided to consult a doctor. The diagnosis was very clear; I had mononucleosis. The doctor recommended that I rest, sleep and not go back to school before the second week of March. Following this rest period, I returned to school. The first week went by wonderfully, but the second week was difficult. I was not getting better and the virus had revived. After this second diagnosis, I went to see a hematologist in Trois-Rivières and he identified my case as severe with a platelet count at 34,000. He talked to me about cortisone treatment, or removal of my spleen. After this verdict, my mother decided to transfer my case to St. Justine Hospital.

Following my first appointment in September, I was hospitalized and took a battery of tests. For two years I went to St. Justine every fifteen days. I kept going until one day when a doctor told me that I was "a lost cause", that my state would never improve, and that they could do nothing for me.

It was May 2000, I was fifteen years old, and I had just been condemned. I continued having checkups by my family doctor, but only because there was nothing else to do.

Then, one day my anxious uncle wanted to see my state improve, and suggested I try Bio-Algae Concentrates as he had heard of its benefits. In 2001, he sent me some and I began to take it regularly. My state stabilized and improved rapidly, my immune system was reinforced and I rediscovered my energy.

Today, my health is better. Despite all I've been through, I have since completed high school. I did half of my first year of high school at home, all of my second year at home, my third year two days a week at school, my fourth year three days a week at school, and my fifth year four days a week at school. The BAC has succeeded in doing something that nothing else had been able to do for me.

Thank you! Always yours,

Valérie Hébert, Quebec, Canada

Clarity of mind

I would like to thank the scientist Dr. Kiriatic for creating this fabulous product, Bio-Algae Concentrates (BAC). I am grateful for his interest in the health of people and for this cellular food with so many nutritional wonders.

Since I started taking Bio-Algae Concentrates (6 months), I feel that the nutritional and complete value of this food supplement has supported my healing process very effectively: I have more physical vigor, more clarity of mind, an alert spirit, better sleep, better and longer concentration, a greater tolerance to stress, a bigger capacity to meet daily challenges, better digestion, more joy, less pain, and not the least a better blood test report.

I have suffered six years of extreme fatigue, crippling and unbearable pains in my entire body, and I am very happy to have discovered Bio-Algae Concentrates. The Bio-Energy test showed that my organs responded miraculously to the formula proposed by Dr. Kiriatic; and it is with amazement that I can enjoy the beautiful gift of life again.

I am not trying to say that my symptoms have completely disappeared. At times they may amplify and certain obstinate pains still persist... but each time with less intensity and frequency. It is important to understand that the body goes through the natural process of detoxifying and regenerating itself; this also requires listening, rest, faith, tolerance and patience at all times.

In our society of speed and consumerism, it's expected to get "quick" results without much effort. My experience enables me to recognize that the body must respond to other laws in order to reverse the negative "patterns" of the past: the universal laws of love, wisdom, and intelligence prevail. This is the grand mystery of life to which we are all subjected to.

I wish you all the blessings of BAC and to find the spirit of discovery, the simple recognition of "what is" and the complete happiness of living in the present, beyond pain and suffering.

Manon, A great lover of life, Quebec, Canada – June 2005

True scientist and humanist

Dear Doctor Kiriatic and devoted team,

My girlfriend and I are anxious to thank you infinitely for this lecture and discussions this afternoon. A lot of knowledge and plain truths, no lies, you are a TRUE SCIENTIST AND HUMANIST, THEY ARE SO RARE. We read your information flyer and we are still amazed...

Thank-you a thousand times and we remain in communication with you.

D.H.A., Naturopath
J. G., Scientific Journalist, Q. Sciences

Cerebral Vasculitis

Dear Dr. Thomas,

I cannot thank you and Dr. Kiriak enough for making this fabulous product available to me.

In May of 1995 I was diagnosed with Cerebral Vasculitis. It is a very rare and deadly disease in which the arteries in the brain become inflamed and weakened. Most doctors are not even aware that such a disease even exists. I was fortunate to have one who did know about this disease. However, my prognosis was very grim as my disease had progressed to a very dangerous state. After a Cerebral Angiogram confirmed my diagnosis in 1995, my doctor told my family I would be lucky to live 5 days.

After 7 years of total bed rest with severe headaches, nausea and vomiting, and 4 ½ years of Chemotherapy and massive doses of Prednisone; which gave me osteo-arthritis and other debilitating problems, I am still here. My blood pressure was through the roof at 250/150 most of the time during those years; even while being on 3 blood pressure medications. I did regain some ability to function; but never to the extent that I was able to enjoy my life and plan time with family and friends. The Lord was helping me through the long and very difficult days of suffering; but I still had a long way to go to ever get back to being my old self again.

In February of 2005, I began to have the same symptoms again and had an MRI of my head; to find the vasculitis was far more severe than it had ever been in the beginning in 1995. My doctor was very worried for me when I told him I was not going to go the route of chemo and Prednisone again and go through a living "hell" everyday. I had already started taking the Super-Algae Formula 2 as a good daily supplement. I knew it was a terrific product; as I felt good in just a few days of taking it, not knowing I was getting very sick again. I called you and told you my problem and we set up a regimen of the Super-Algae and I started that; plus I have eaten nothing but all organic foods, including my eggs, flour, sugar, milk, spices, etc. There is nothing to eat in my house that is not totally organic. I was determined to keep my body as clean and pure as possible so as to allow this amazing product to have every chance to cleanse my body of every toxic chemical and waste product so it could heal itself with the help of the powerful nutrients in the Super-Algae. (As a Registered Nurse I know a bit about how the body functions and what it needs to repair and keep itself healthy.) I thank my Lord everyday for creating algae and causing Dr. Kiriak to persevere until he got the formula right. Then He instilled in you a desire to help with what He had provided that was helpful and not hurtful.

Believe me; I know how hurtful medications can be. I required 4 medications to treat my Vasculitis the first time around; but wound up taking 12 in the end. The extra 8 were to treat the side effects of the original medications or the debilitating diseases they caused; such as my osteo-arthritis.

After my diagnosis in February of 2005, I have felt really well after just a few days on the Formula 3. After 3 weeks my blood pressure normalized and I was forced to go off my 3 blood pressure medications, because it would get too low and I would want to pass out. It has continued to be normal. My osteo-arthritic knees improved rapidly and the swelling and pain were non-existent within a month of taking Formula 3. My migraine headaches; which I have had for over 42 years are no more (I was taking 4 hypos a month for those awful headaches). Hallelujah! Don't I love being free of those! Remember when I called and asked you if there was a natural anti-histamine for my cottonwood allergy this year? You said I had it in the Super-Algae. Guess what? No cottonwood allergy.

The greatest news of all—I'm alive!!! My MRI on 5/30/2005 shows no signs of active vasculitis. Just 3 months and 13 days after being handed a death sentence; with no chemo, no horrible Prednisone, and no side effects. What more could a girl ask for?

My doctor is having a very hard time believing it; even though he has seen me out of bed and looking very well this time around, and not running into his office to get a couple of IV's every other week, because I couldn't keep anything in my stomach, and would get dehydrated.

That was how it was for years last time around. I know this is awfully long; but I wanted you to know how absolutely miraculously the Super-Algae has worked to save my life this second time around, and I didn't even feel sick. How much better does it get when you are supposed to die, and the cure is so simple and so easy to tolerate. Sorry if I sound like a commercial. I am a living commercial. I tell everyone I know. If they don't take it, they are the world's biggest fools, as far as I am concerned. I want my husband, children and grandchildren around for a very long time, so they will all be on Super-Algae very soon. My daughter is coming from Macedonia in a couple of weeks and I plan to send it back for her, my son-in-law and four grandchildren. Nothing is more precious than your health. We don't realize that until we lose it. How sad is that?

Thank Dr. Kiriak for me next time you see him. May my Lord bless both of you richly in every area of your lives; but mostly may He give you peace, joy, happiness, and a great sense of satisfaction knowing you are helping sooo many people take back their lives, and a chance to smell the roses for years to come.

Most sincerely,

Jan Khatibi, Sammamish, Washington

Great adjunct to chiropractic

Personally, I have more endurance, I look and feel younger and my hair isn't falling out anymore. I used to see a great deal of hair in the drain prior to taking BAC, but now there is none. At a recent gathering I was told by a woman I have not seen in 5 years that I look so much younger than when we last met. She asked what I was doing and I explained that I started taking BAC a year ago and she was so impressed that she is now a BAC user as well.

Clinically, BAC is a great adjunct to my chiropractic that I never had before. BAC supplies the necessary minerals and proteins to repair the ligaments and as a result, the adjustments hold better.

I also use BAC for women that are looking for hormone replacements as it balances the body's chemistry and nourishes the nervous system. As a result, hormones become more balanced, hot flashes either diminish or are eliminated and moods become more balanced. The nervous system requires a high-quality protein as the nerves contain mostly protein. Biologically, vegetable protein is more effective than animal protein. The word protein – means first.

Every tissue and fluid in the body has protein in it except bile; we need protein to make enzymes. Protein is sloughed off in the skin and nails (those that have weak nails are low on protein). Vegetable protein of which BAC contains a lot is complete protein and maintains healthy tissue, feeds the red and white blood cells. Beans and rice are a complete protein. If you eat too much protein and you don't digest it, it becomes toxic in the system and putrefies.

Acids break down protein. BAC helps the body rebuild the villi in the small intestine for better assimilation. It covers so many things: repairs the intestinal lining, helps the body make enzymes and is a completely regenerative source of food.

– Dr. William Johnson, DC (Male, 74) Illinois

Lung tumors: All gone!

A year ago, Win R., a friend of mine in Austin, TX was diagnosed with a large tumor on his kidney and... tumors in his lungs. They removed his kidney and 3 months ago, after the results of a biopsy for the tumors in the lung (cancerous and malignant) they wanted to remove tumors in the lung and proceed with chemotherapies and radiations.

I sent him the book about Dr. Kiriak you wrote and all the info. He decided to postpone the treatments with his doctors and to try the Bio-Algae Concentrates.

Well last Tuesday, I receive a call from him. His doctor had just called him to give him the results of an MRI test he had done a week earlier. She was on her way to Hawaii for vacations and was so happy to let him know the tumors were all gone!

On behalf of my friend Win, thank you, thank you, thank you!

– Janis K., Washington – May 2005

Cholesterol and PSA

When I received a call from the nurse at my new young doctor's office yesterday I feared she was going to tell me to get on lipitor or some other drug as one year ago my cholesterol was 240 and my PSA was 3.5. Well what a relief when she told me my cholesterol is 160 and my PSA is 2.4. I have now been on your product for 1 year and I have not had to take any drugs. I am 68 years old and my health is getting better every time I look at it.

Thank you.

– Raymond S. (Male, 68) Indiana – May 2005

Recovery

Dear Dr. Kiriac,

It has been such a challenging time in my life. Really, all my life, I have been challenged with health problems.

I am working very determinedly to achieve total radiant health of body and a happy joyous heart.

I wish to convey to you Dr. Kiriac my deepest gratitude for your loving support and dedication toward my successful recovery. Every moment of every day has become very precious and important to me. I here express my words of appreciation and love to you here in my art work. Please hear hear how grateful I am Dr. Kiriac. I love God, Goddess and all the people in my life who support and love me. Thank you for blessing me with your wisdom, BAC and your guidance. May you be blessed a thousand fold.

Most sincerely,

– Loraë, Quebec, Canada – April 2005

HIV: Viral load down to 10,000 from 139,000

I am HIV positive. I just got my latest lab work back and it's great! My viral load is stable at about 10,000 (the nurse practitioner said she was very surprised at just how stable it is), and my T-cells are up! To over 400. That's the highest they've been in over a year. If you will recall, exactly one year ago my viral load was at 139,000 and the T-cells barely over 250, prompting the docs to want to start me on meds. But then I started the BAC.

I am especially impressed with the numbers because since October, when I returned from Brazil, I've been dealing with some very difficult emotions like grief, sadness, and some depression. There has been a lot of stress as I've tried to find a job (still looking). Also, I haven't been very strict nutritionally as that has been difficult as well. Given these factors, I'm so thrilled that my numbers are so good. It gives me new energy and motivation to eat right, and continue trying to make good lifestyle choices. But I think if it weren't for the BAC, the picture would look very different right now. Thank you!

– D.R., Colorado – February 2005

UPDATE – February 2006

I just received my result from my MD. He says "Dan, numbers look good. Get the test done again in 3 months."

UPDATE – May 2006

My latest results show a drop in viral load to just over 5,000. My CD4s are stable at about 414. Interestingly, my numbers continue to look good despite huge amounts of stress at my work. Additionally, my relationship broke up 3 months ago which has also been very difficult emotionally and psychologically. But I continue to take the BAC and the numbers are either stable or have actually improved.

She loves how she feels

My niece continues to use your product and has found great relief with it. She is now off Prozac and her IBS symptoms disappear when she uses the formulations. I only have her on one of each in the a.m. and one of each in the p.m. and she says she loves how she feels. Thanks for your time.

– Annie, USA – February 2005

X-ray revealed her foot bones to be normal

I need to give you this testimony. My daughter broke her foot and was in a cast for 10 weeks. She then was told to walk and put pressure on it. A week later it broke in another place just

from walking. I became suspicious of her bones and had her get a bone density test. She was told she was at the beginning of osteoporosis and that the bones of the new break were not coming together and she would need an operation. So I put her on Bio-Algae Concentrates – 8 capsules a day as prescribed during the seminar that I attended when Dr. Kiriatic was in Denver. Therefore, she has been taking Bio-Algae Concentrates for about two months. She went to the Doctor this past Thursday and the X-ray revealed her foot bones to be normal and shoots of calcium are being formed between the two bones that broke during the second break. This is really a miracle which I prayed for. Blessings,

– Carolena, Colorado – February 2005

Spots have begun to disappear

F.Y.I. I just thought I'd write quick and let you know that the spots on my face that had been cancerous in the past years have begun to disappear. I never really doubted that they would, but it is nice to hear other people notice their disappearance too.

– L. P., Wisconsin – February 2005

A significant change in my body, mind and soul!

I am writing this letter to you marking one year that I have been using the Bio-Algae Concentrates products. I began using them last fall because I had been on birth control since college using Depo-Provera, and I had not gotten my period for over seven years. At the time it was a wonderful thing (not getting my period and all of the female things associated with it) but after going off the birth control, six months had passed and my cycle had not returned. After starting with the combination of BAC Formula F2 and Formula F3, within a few days I felt a difference in my energy, my regularity and my overall health. With the continued tweaking of the BAC and my other lifestyle discipline, my cycle became regular in May.

I have been thrilled with the progress my body has made over the past year. My cycle is regular to the day, my female hormones have adjusted and are now secreting properly and I truly feel as if my body's core is stronger and healthy. Not to mention the fact that I am a teacher around many, many children who carry hundreds of germs that I now continually fight off avoiding those awful sicknesses I used to get prior to BAC.

Thank you for introducing me to Bio-Algae Concentrates products. They have made a significant change in my body, mind and soul that will continue throughout my lifetime. Gratefully yours,

– Kate B., Denver, Colorado – January 2005

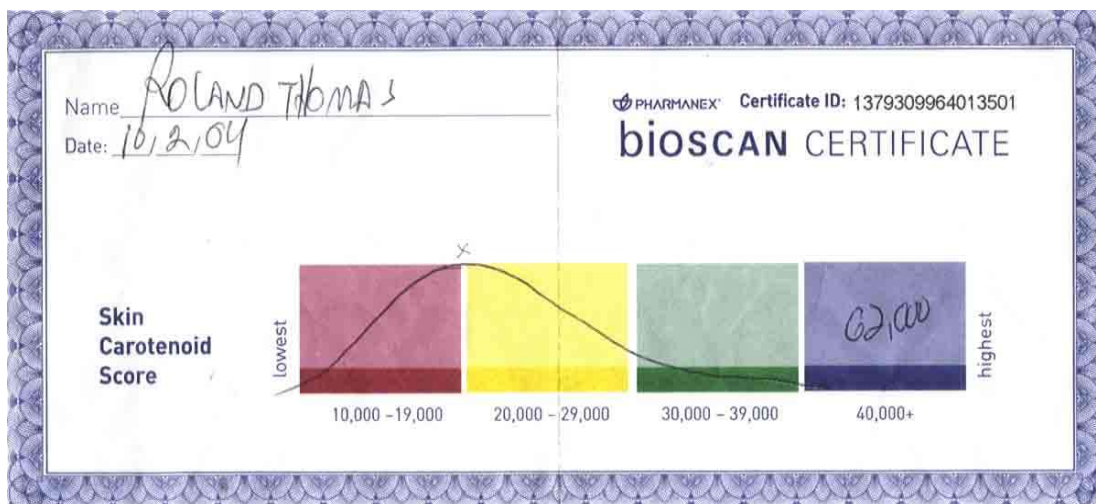
UPDATE – January 2006

Kate became pregnant soon after this testimonial and gave birth to a beautiful daughter in October 2005.

I finally ran a marathon!

I have used BAC since 2001 and to this date BAC has continued to provide me with extraordinary health benefits. I have to make an effort to remember my health issues prior to taking BAC. I will revisit some here: At 50 yrs of age, I weighted 187lbs, compared to 147lbs at 20. I was continuously trying to lose weight; I had much lower energy compared to just a few years prior, sometimes leading to me falling asleep at the movies or at home after a meal and a glass of wine; I was no longer able to practice active sports like running, tennis, squash, etc., due to chronic back problems resulting from a 17 yr old injury, and for which I was having to visit chiropractors or massage therapists once or twice monthly. I was plagued with at least one annual cold or flu. I was taking 23 different supplements and wondering if it was enough, continuously searching for new ones.

Since I started taking BAC, I have dropped all 23 supplements and use only BAC; I have not been sick at all, not one bit! No cold, no flu and even better, neither has my wife, Linda. I have lost 35lbs without effort. On Sunday Dec. 5th, in lovely Tucson AZ, I completed my first Marathon run (26.2 miles), a goal envisioned when I was 17 yrs old. I have no more chronic back pain. A good tangible result is my skin carotenoid count of 62,000 taken with the Pharmanex bioscan laser – this high count helps explains why I have had no cold or flu.



I often tell people “BAC is a supplement that energizes the body, the brain, the mood and the spirit”. That line sums up well my personal experience with BAC. In ending, I will borrow a line from a friend: “BAC... LIFE for LIFE.”

– Roland Thomas, Denver, Colorado – December 2004

This is absolutely wonderful!

This is something that will be well utilized and just wanted you to know you have certainly made my day! ...keep up the good work. I am now taking F2's along with F3's... and it is making a difference. God continue to bless you in his wonderful work using his herbs!

– D. Harper, Illinois – October 2004

Biophotonic Powerhouses

Dear Professor Kiriac,

I have been impressed with the story of your life and fascinated by your passion and dedication to human health; real vibrant health independently of social and economic pressures... Usually around here, I'm the one they call Mr. Algae! It is true that for the last 12 years, I have also been passionate about these precious algae, about a certain vision of health and nutrition and specially about micronutrition.

When I read your documentation, I had the feeling of having found a soul mate, someone with whom to share this battle for life. Though my path has been less academic and thorough than yours, like you, I really believe that these products can "save humanity" and I look forward to meeting you soon.

The reason I waited to contact you was that I had doubts about the vitality of your algae since you use bioreactors in the process. To this date, all spirulina that I have tested have been low on that level though their nutrient content corresponded to their scientific analysis. But none of them reached a sufficient white light and vitality level to efficiently sustain human health.

Even the high grade products contained in Miron glass provided with strong scientific documentation only managed to lower general vitality of the subjects tested while with good bioavailability of the vitamins, the pigments, the minerals, etc. And so, I had come to judge all algae negatively.

A recent radionic analysis of your products has led me to reconsider my restricted views about algae. The level of white light and vitality of your products are absolutely incredible. They are real biophotonic powerhouses!

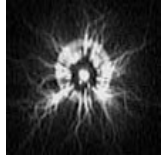
Bravo and thank you, dear Professor. May your invention obtain its well deserved success everywhere on our old planet. Spassiba!

Cordially,

– F. P. (Mr. Algae) Switzerland – August 2004

Impressed with its energy

...Here are the Kirlian pictures of the Bio-Algae Concentrates. Frankly, I'm impressed with its energy...



Kirlian photography is a high voltage, contact print photography. Sheet film is placed on top of a metal plate, and then an object to photograph is placed on top of the film. High voltage is applied to the plate momentarily to make an exposure. The corona discharge between the object and high voltage plate is recorded onto the film. When the film is developed you have a Kirlian photograph of the object.

– Jason M., Utah – January 2004

Stomach doing well

From childhood I suffered (strong word – probably annoyed by) a nervous/irritable stomach. Couldn't really tell which drove which... the stomach or the nervous worry... I have noticed zero acidity since the BAC. I scarcely remember to check my stomach any longer as it's become so placid. I clearly connect this to BAC. I have also noticed my allergies are lessened and my immune system stronger. Strikes me that a food that acts as a medication is a tremendously valuable ally in life. Thanks.

– Bill Obrien, USA – September 2004

Energy and digestion

I have only been on F2 for 3 months but have seen some wonderful improvements in digestion and energy and feel like it will continue to get better with time. I thank you for this fantastic product that helps people in so many areas of good health!

– Gary Lloyd, Gilbert, South Carolina – June 2004

Shoulder pain down 95%

The stress has been very bad. I lost my wife three years ago, July 8th. We were married 46 ½ years. I have had a frozen shoulder for over six years. I got cortisone shots, chiropractors, and shock therapy. I went to Moorsville into the replacement hospital. The doctors said I had bone on bone and when it hurt bad enough I would be back.

He said I was just throwing away my money with BAC.

Well now, I am able to exercise every morning, and walk a mile every day. My energy is great. I went to a funeral and I got more comments. They said I sure look nice for 67 years old. The pain in my shoulder is 95% pain free. I take no drugs...only BAC.

I know since I have been on BAC Formula 2 and BAC Formula 3, that it has helped me a whole lot. I will continue to take BAC for as long as I live.

– Raymond Shaw, Greentown, Indiana – June 2004

Energy without worry

What is great about BAC is that I do not need to take any other supplements except for my calcium since I have “Graves Disease”. This illness accelerates bone density loss so that is why my alternative doctor requests it. I know for a fact my energy level has been progressively increasing. Know that the medications I take are natural and that the BAC has all the nutrients that I need. I feel completely comfortable taking them without worry of maybe not receiving the supplements I need.

– Marie-Lynne, California

Insomnia and circulation

I am now taking ½ my sleep aid for insomnia. I am close to getting off my blood pressure medicine and premium. I have been on BAC for 6 months.

– Barbara Vestal, Grove Oklahoma – June 2004

Blood sugar control

My 11 year record of Type I Diabetes has never shown the degree of control of blood sugar that I am now experiencing since I began using BAC 6 weeks ago. I am using less insulin and showing much better control. Stay tuned for further results.

– Norma Gimlin (Female, 83) Carrizozo, New Mexico

I am feeling fantastic!

I have been taking BAC formula F-2 for the past 2+3 months. I am feeling fantastic! I think I am ready for the next step! I had a chat with you a while ago and told you I am in a program in preparation for Bariatrics Surgery.

It has been 3 months now since I began an extensive exercise program along with diet changes. I have now lost 20 lbs. of fat and gained 5 lbs. of muscle. My metabolism has made a real jump! In fact, I am their 'Star Patient'—I am doing so well! I still do not have a date set for the surgery since I am awaiting 'approval' but no matter. I will just keep going anyway it feels so good! I can now swim tirelessly for 45 minutes without a break and I started weight-lifting to strengthen the upper and lower body 2 weeks ago. I swim and exercise 4 days a week for 2 hours now! Wow! I have not been able to exercise for years! How wonderful!

My sleep is also so much better. I have so much more energy and stamina than I have had in years. I am so grateful! My spine is also much stronger and I have less back pain. [I have scoliosis of the spine].

Also of course, my blood pressure has been in the normal range for months now. I only take my HBP medication [Hyzaar] only 2x/week now. I was taking it every other day, and for years took it every day! I am gradually weaning myself off! My schedule is filled to the brim with activities and even though I am still very tired at the end of my busy day, I notice how I bounce back much quicker now.

Thank you for your wonderful product! My body loves BAC and I am looking forward to having a successful surgery and a HEALTHY AND FULL LIFE! Many Blessings.

– A. (Female 57) California – June 2004

It's a miracle!

I am a Dark field and Phase Contrast blood microscopist and recently I had a client that complained of always being tired as long as she could remember, even from childhood. She is now 58 years old. After evaluating her blood I suggested 2 BAC formula 2 capsules per day, morning and evening on an empty stomach. The very next day she called and was thrilled at how much better she felt and how much energy she had! She was almost in disbelief and could not stop repeating over and over how good she felt. It's a miracle!

– Carol Pliska, Lexington, Kentucky – May 2004

Alzheimer's: Cleared up in about 1 1/2 weeks

On March 15, a neuro doctor told me, based on symptoms, I probably had 1st stage Alzheimer. When I took his prescription I was worse and very nervous. I couldn't sleep well at night and had constant diarrhea. When I quit using it and went on BAC formula 2, I was cleared up in about 1 1/2 weeks.

– M.E., Topeka Kansas – June 2004

Stronger adrenals, thyroid, and pituitary

My chiropractor has commented about how much stronger my adrenals, thyroid, and pituitary are! I love that I take much fewer other supplements. I use dowsing to check myself and am amazed at how many products no longer check for me as optimal.

– Cezanna Malter, San Rafael, California

Alertness and more energy

After only 3 radiation treatments post-op from Cancer, I felt exhausted as expected. I tried to line dance after radiation treatment, which I was not able to do as I felt exhausted. I began BAC F2 for 3 days then increased my capsule intake on that Wednesday on your advice. I again tried to line dance after radiation treatment, and after 4 hours there is no exhaustion. Respiratory allergies almost disappeared, blood pressure going down and blood sugar easier to control. I noticed mental alertness during line dancing. Never felt so good. Sleeping well! I am sharing information with other cancer patients that I've met as well as other elderly (seniors) who are my line-dancing friends and family.

– Nellie Ramsey, Albuquerque, New Mexico – May 2004

Parkinson's and arthritis pain

I have been able to stop the progression of Parkinson's and reduce arthritis pain.

– Dorothy Rutledge, Hayden, Idaho

Better outlook on life

Your product has given me a better outlook on life in general. I am taking care of my wife (of 58 years) who has advanced Alzheimer's disease. This is quite taxing on my patience. I seem to cope with this somewhat better.

– KW Bowsher, Vidor, Texas – June 2004

Stabilize blood sugar

BAC has helped stabilize my blood sugar.

– Mort Tiensuold, Rushville, Nebraska

Boost of energy

I began using Bio-Algae Concentrates the fall of 2003; since then I've become more active because I'm no longer tired. By afternoon, I'd feel burned out. After work, I'd come home and sit the whole evening watching TV. That has significantly changed. I now work out for an hour every night after work by getting on my treadmill. BAC is my "boost of energy" I use to get my day started. I've noticed alertness also. I only wish I came into the knowledge of this wonderful product earlier than when I did. I just thank God for his wonderful "greens", for I am (we are) certainly benefiting from it. Thank you for a very healthy addition to my (our) lives! I will never be without it!

– D. Harper (Female) Columbus, Ohio – June 2004

Weight control

BAC has helped me to lose a few needed pounds and help me maintain my proper weight. It keeps me from being hungry and helps when I fast.

– Anonymous, USA

Less fatigue and pain

I am very pleased with Bio-Algae Concentrates. It has really helped turn around my chronic fatigue. I have an even level of energy all day and can exercise without having excess pain.

– Beverly Montgomery, Oakland, California – June 2004

More energy and mental clarity

All the clients I have put on BAC have experienced more energy and mental clarity. Over all, less stress on the system, better sleeping and waking up alert and refreshed instead of groggy and tired.

– E. Lemes N.D, Lombard, Illinois – June 2004

Losses vs. benefits

BAC was so easy to take and effective for me. Because my income is low and I did not want to lose enzymes and other supplements that I had not finished taking, my decision was to finish them first. What I realized was that the savings were not as important as the losses of not using

BAC, that I missed during that time. So, those almost empty containers will go into the garbage and I am off to a new BAC start. Thanks.

– Joan Sullivan, Kirkland, Washington – June 2004

Energy, digestion, focus

I have taken both F2 and F3 at 3 each per day for two months. My mental focus and concentration has greatly improved resulting in increased sales and revenue with my full time job, which is selling printing presses. I can handle stress much more positively and my sleep patterns are improved, I believe because of Bio-Algae Concentrates. I have more energy to perform both business and personal challenges. I consult to individuals concerning health related issues and problems and in this aspect of my life I find improved awareness of how to assimilate the entire scope of the situation. Because of my increased metabolism and more efficient use of foods with this product, I have noticed that I can fit back into my size 32 blue Jeans that I have used as a measuring stick for the last 30 years. I am very excited not only about my results but also the benefits that I have seen. Because of this product my wife is able to digest her food. This has been a major problem for my wife for 20 years but now she can assimilate her food without getting a stomach ache for the first time in 20 years. And all she has to do is take 4-6 algae capsules per day. Thanks and congratulations to Michael Kiriak and those involved with the bringing of this product to the people in need.

– Michael Lawson, Lexington, Kentucky – June 2004

Lifetime commitment

My husband and I are very happy with BAC. We are going to use BAC as a lifetime commitment in addition to our organic food intake, exercise, and consciousness raising life style. We feel fortunate to have found BAC. Thank you to all and everyone who has brought us this product.

– Sabrina Allen, Los Angeles, California – June 2004

Most supportive nutritional product I have ever taken

I found BAC to be and still is an incredible product. It is the most supportive nutritional product I have ever taken. I know my body is getting what it needs and it helps tell me what my body needs so I can support it too. It was the only thing I found that helped me heal all of the physical problems I was having.

– Summer Jones, Boulder, Colorado – June 2004

Whole food supplement

In my last Holistic Flash newsletter, I mentioned many of the incredible benefits people were receiving by taking the Russian algae product. I've been taking it since September and am very impressed. The Russian algae is a whole food that contains all the vitamins, minerals, amino acids and over 4,000 enzymes. My problem with individual supplements was that you could easily throw the body out of balance by taking incorrect amounts. The algae solves that problem and saves us a lot of money. After a couple months, we found that we hardly tested for any other supplements besides the algae.

– Jim Walters, Holistic Practitioner, Mount Horeb, WI

Chronic sinusitis, arthritic pain, and more...

Hello Mr. Thomas: I thought I would report to you on my own amazing progress with the Bio-Algae Concentrates after taking it for just 6 weeks. I started with just 1 capsule of Formula #2 twice a day and am now taking 6 a day. Side effects have been minimal and are to be expected with any detox program... and of course, it is important to drink plenty of pure water. I only have had a couple days with a dull headache and I've noticed a few small itchy red breakouts which go away in a few days. I sleep well (lots of dreams every night) and don't require as much sleep. What has been very remarkable is the detoxing that keeps going on, and especially with my intestinal system...I have had colonics in the past and this does the same thing, only more slowly and gently. My blood pressure is excellent with only a small amount of the medication... and I am sure I will be off of even that before long. Best of all, this morning I woke up with the clearest sinuses I have had in years. Chronic sinus infection and post-nasal drip in the back of my throat has been a health problem for a long time. Hardly any arthritic pain now to speak of, and in a few days I will be 71 years young!

– Joyce B., 71 years young, – Wisconsin

Immunity

Today at my Yoga class, the Pharmanex team was testing people with their Bioscan antioxidant laser device. I scored 41,277 for the presence of carotenoid antioxidants in my body... that puts me in the top 1% of the world population for Optimal Protection. What a great feeling of security. I have been taking 1 to 3 capsules of Bio-Algae Concentrates for about 19 months.

– P.S. My husband scored 46,294 and he takes 3 to 9 capsules per day.

– Linda Milon, Denver CO – September 2003

High blood pressure and weight loss

It has been several months now that I have been on BAC (Bio-Algae Concentrates). Just recently, I had my annual medical check-up. I am proud to announce that I lost ten pounds and my blood pressure reading was 118 over 76. My Doctor just wrote in regards to my blood work, he stated my blood looks great. With me only taking three F2 tablets per day in the morning, I now can say I do feel the difference. I usually work out by myself in the morning, but now I work out in the evening as well with my daughter with her basketball drills.

– John Pointer, KY – August 2003

John is a former linebacker in the Canadian Football League. He started with Edmonton in 1981 and won the Grey Cup that year. He then went to the Green Bay Packers and played for them in 1984/85.

Rheumatoid Arthritis

Just wanted to let you know how thankful I am for Bio-Algae Concentrates! I have had rheumatoid arthritis since 2000, and am thrilled to be off all my meds after a couple of months on BAC!!

– Jenny Larsen, Denver, CO – August 2003

Gout / Hypertension

When I started taking the Bio-Algae Concentrates I could not go one day without taking Allapurinol. After 3 weeks I started eliminating the Allapurinol and have not taken any Allapurinol in almost one year. I have also decreased my hypertension medication by two-thirds.

– Bruce Wolin, Lakewood, CO – August 2003

Type I Diabetes

My insulin intake has measurably decreased over the past 2 months as I have been taking the Bio-Algae Concentrates F3. Throughout 2002 my daily insulin usage has averaged 42 units, including a basal rate of 10-15 units of Lantus and the rest short acting Novolog. Since starting use of Bio-Algae Concentrates F3, my average has dropped to 34.1 over the past 90 days, measuring on July 1. The average is 34.1 for the past 60 days, 34.3 for the past 30 days, 31.2 for the past 14 days, and 27.4 units for the past 7 days. I have been eating lighter the past 10 days, which shows up as decreased insulin requirements. I also notice more consistent energy and

need for about 1 hour less sleep compared to before I began using Bio-Algae Concentrates F3 in March.

– Jeff Myers, Loveland, CO – July 2003

Win Win

Because of the various screening tests that I utilize in Naturopathy, I derive great success with Bio-Algae Concentrates. The results are early, be it for people that are just tired, stressed, anemic or plagued with aches and pain. I have been able to observe reversal of pancreatic problems, and Ph changes from acidic to alkaline. My patients are thrilled to have only one product to purchase and consume. Bio-Algae Concentrates has made my job much easier and I carry a simple inventory of product vs. the dozen that I carried in the past. Everyone is a winner!

– Colombe Gauvin, Naturopath, St-Adèle, Quebec, Canada – May 2003

Sports Performance

As a Medical Fitness Professional I always keep on the lookout for a better procedure or product for my clients and myself. The science and the “first in the food chain” concepts behind the Bio-Algae Concentrates are beyond question (more on that later), so allow me to share some real world anecdotes about the effectiveness for athletes of all types. In my observations, I have found that BAC will:

- Stabilize blood sugar levels, allowing greater access to stored body fat.
- Significantly raise Lactic Acid Threshold
- High Anti-oxidant levels of product increase endurance and delay fatigue
- High assimilation rate of absorption means reduced intake of other “Bulk” foods , resulting in weight stabilization.

Balanced EFA (Essential Fatty Acids) content normalises hormones, resulting in strength gains and vastly shortened recovery periods.

Protein content is the most assimilable ever measured, which means less total protein intake needed. Your liver and kidneys will thank you.

Brain chemistry normalizing aspects are astounding. Nervousness, irritability or fear before an event or competition are replaced with calm power.

Here are a few testimonials:

A professional motocross racer came to me 20 minutes before his event with completely depleted adrenal glands and no energy. After taking 5 Bio-Algae Concentrates(F3) he went out and won his race handily. He came back to me grinning asking “what was that stuff you gave me”.

A hard core amateur ski racer was experiencing severe calf cramping, and after 4 F3 capsules and 20 minutes they were gone.

Weight trainers are reporting more repetitions per set, more weight lifted, less fatigue and faster recovery.

I participate myself in long distance off-road motorcycle racing, some races being 100 miles long and 6 hours in duration. The fatigue can sometimes be at the level of marathon running, (I enjoyed? 3 hours of the Boston Marathon as a comparison) and recovery can take days. I take the F2 and F3 along with water (20 caps spread out during the day), whey protein powder, and Extran, an advanced sports drink. As I have been using the whey protein and Extran for years I can make a distinction as to the effectiveness of each product. The carbs and protein are obviously necessary from a calorie standpoint, but the addition of the Bio-Algae Concentrates is profound. I can ride longer, more focused, zero cramping, and recovery is usually 1 day. There is no being like Well-being.

Thank you Dr. Kiriatic.

Glenn Streeter ATC CES AFP – President, Medical Fitness Services Inc.
Golden, Colorado – June 2003
visit at: www.medfit4u.com/

Boosted immune system

Today, at the Golden Annual Health Fair, I scored 46,294 on the Pharmanex Bioscan test for the presence of carotenoids antioxidants in my body...that puts me way up there as Optimal Protection on that index. I take 6 to 9 capsules of Bio-Algae Concentrates daily.

– Roland Thomas, Denver CO – May 2003

General overall feeling of euphoria

I have more energy and a general overall feeling of euphoria when taking Bio-Algae Concentrates algae. The Bio-Algae Concentrates definitely uplifts my moods and helps alleviate my depression. I used to take 6-8 capsules/day of an EPA supplement to get my supply of

Omega-3 fatty acids. After taking Bio-Algae Concentrates, I was able to cut back to 2-3 capsules/day and still maintain moist skin and uncracked fingers, even in the winter. The Omega components are more stable in the Bio-Algae Concentrates than in regular oil capsules.

– Russell Louie, Optimum Choices – Golden, Colorado
visit at: www.optimumchoices.com/spirulina.htm

Hypothyroid

We gave this to one of our elderly cats who was dying of kidney disease and saw an amazing improvement after just a couple of days on it. She had more energy and was more like her “old” self. We are giving this to Connie our other elderly, obese cat who is hypothyroid and have seen her energy level and appetite improve. Her weight has stayed the same, yet she is skinnier, showing that her fat is being replaced by muscle. We started giving Connie Bio-Algae Concentrates formula F-1 (micro algae supplement) and by January 2003, her thyroid values were normal.

– Russell Louie, Optimum Choices – Golden, Colorado
visit at: www.optimumchoices.com/spirulina.htm

Results

Since we introduced BAC in our center, it has greatly amplified our results with our clients and with our in-house practitioners.

– James & Irma Pacheco, CMT, CNMT – Colorado Center for Physical Therapy, Denver, CO

Simplicity

I now use only BAC in my practice... It has greatly simplified my work and the results with my clients are far better than with any other natural products that I have worked with for over 15 years.

– Ginette Pelletier, Naturopath, Montreal, Quebec, Canada

Essential Fatty Acids

The best Essential Fatty Acids (EFA) I’ve ever tested.

– Anne Wheeling, AC, MT, Denver, CO

Chronic diarrhea

Dr. Kiriac, I would like to thank you for giving me back my dignity... Let me explain: I contacted you a while back because of digestion problems such as chronic diarrhea. Because of this condition, I felt extremely distressed and humiliated. Often I had to spend all night in the toilet. When I did manage to fall asleep, I'd often wake up soiled. Following my meeting with you and after only 7 days, I was astounded. There was a great progress in eliminating the diarrhea. Thanks to you I now sleep without interruption nearly every night. The anxiety of soiling my bed is gone! What a relief and I know its only the beginning of my freedom... THANK YOU, THANK YOU, DOCTOR KIRIAC FOR GIVING ME BACK MY DIGNITY AND MORE.

– D.K. (Female, 40) Ontario, Canada

Adrenals

FYI. I just had my adrenal's re-tested and my doctor and I were both expecting them to be in a bad state again and to both of our surprises they were within the normal range (considering my stress and lifestyle at the moment this is miraculous). I am certain that without the Bio-Algae Concentrates this would not be the case.

– Kim C., Colorado, December 2002

Bodybuilding

Hi, my name is Todd Page and I am a TOP RATED NATURAL BODYBUILDER (Click for Picture) and trainer for 15 years.

I am also a Nutrition Consultant and Blood Microscopist. My early interest in nutrition and beliefs in natural ways, have led me early on in my career to organic food and natural health supplement choices for body development, stamina and recovery.

For 20 years now, I have used products like spirulina, bee propolis, wheatgrass, green juices, etc. 20 years ago, this was plain "weird" in my profession, but today, I see that this has paid off, as this summer, I will be competing again for the Mr. USA title. At age 38, my body is fitter than ever and I feel and look 15 years younger.

The first time I took Bio-Algae Concentrates (BAC), I felt the difference right away. You see I am very sensitive to my metabolism. Any deviations from my form, I notice. Well I have tried many products over the years, but BAC tops them all. BAC has more naturally occurring nutrients, natural hormones and antioxidant protection than any known natural products, all the while fitting my criteria of being 100% organic and natural.

With BAC, I experience energy support throughout the day. As I am preparing for this summer's contest, I feel a big difference in my workouts, with stamina, endurance, with post workout recovery and reduced muscle and body pains.

In my gym, I now recommend BAC to clients for nutrition and support, for stamina, strength, natural steroids and post workout recuperation.

They notice the difference within days. As a Blood Microscopist, I am able to look at the result in their blood after the intake of BAC and over time. It's clear that BAC triggers blood cleansing and oxygenation.

– Todd Page, (Male 38) Highlands Ranch, Colorado – November 2002
TOP USA NATURAL BODYBUILDER for 15 years

Stress

Six months ago I went through a very difficult period. Problems and stress built up to the point where I was heading for a nervous breakdown. My therapist advised BAC by Dr. Kiriac instead of sedatives. I was astonished at the positive effect of such a natural product!

– Mary B., Sweden (Female, 35) – September 2002

Glaucoma

After observing the success my wife was having using BAC for her fibromyalgia I decided to try BAC for my energy and general declining health. I also suffered from Glaucoma experiencing intense pressure and pain. Now after two months of using BAC, my Glaucoma pressure has declined radically, my doctor wants to talk with the folks about BAC for his other patients. I feel better overall with my health and have lots more energy like my wife.

– Bud Woody (Male, 58) Denver, Colorado – August 2002

Hypothyroid

I've had a hypothyroid condition all my life that has gotten so bad with the change of life that the doctors want to put me on multiple hormone replacement therapies that will cost thousands and make me a slave to clinics and needles for most of my days. After the first day of BAC, I could not believe how different I felt! It was like a fog lifted from my mind and I could think again. I had energy like I can't remember having before. It seems like everything feels better and works better, even my eyesight. My family is laughing and having fun with me again, and that's the best part of all.

– Vicki Holien, Denver, Colorado – July 2002

Digestion

My situation consisted of severe digestive problems and a related eyes problem since over five years ago. Even after having tried all the supplements that I was recommended, my situation was still getting worse. I was not in panic, but I was loosing hope of ever recovering my health. After listening to Professor Kiriac's radio talk show with Celine Goudreau, I concluded that what Professor Kiriac said was possibly my solution. After using BAC now for three months, my digestion and my eye problems have returned to normal health. I have been able to eat again and also enjoyed half a bottle of wine with my friend this weekend. My energy and endurance that I had lost has also come back. Truly a MIRACLE of NATURE. Thank you Professor Kiriac.

– G. R. (Male 66) Quebec, Canada – July 2002

Fibromyalgia

I have fibromyalgia and I've been taking BAC for two weeks. I just spent hours with a friend shopping, walking and goofing around with no fatigue and no burning muscles. I could not even go to the store before. I was taking 12 to 14 Vanquish a day for constant burn and daily headaches. I take nothing but BAC now and have just a little pain left in my neck and no headaches. I am sleeping every night, and started dreaming again. The depression is gone, I have great concentration. I don't get distracted all the time any more. And I can handle stress. I used to be constantly on edge and irritable. My skin has cleared up, I used to have rashes and outbreaks but now even my dry skin is gone.

– Char Woody, Denver, Colorado – May 2002

High blood pressure & cholesterol

I have been taking BAC four months now for high blood pressure and "bad" cholesterol. Right when I started, I felt better... I am able to eat without feeling down and groggy. My energy has been much higher. Because of the unpleasant side effects of the cholesterol and diuretic medication that I was still taking, I recently mustered the courage to stop those. I stopped on a Friday and felt much better on the Monday.

– Bruce E., Denver, Colorado – June 2002

Type II diabetes

am diabetic on multiple medications and recently reached such a low that I could barely function. In 3 weeks on BAC, I quit taking anti-depressants, stopped eating any sugars, began working out twice a day, and have dropped my blood sugar from 250 to 125. I'm sure the diet and exercise was a big part, but I never could have even begun without that BAC boost.

– Karl Martinez (Male) Denver, CO – February 2002

Anti-Aging

I am a firm believer in anti-aging, but for the sake of living well TODAY, rather than living LONGER. I started researching and taking MANY supplements and vitamins a few years back when I began noticing the signs of age creeping up. I gradually became knowledgeable in the science of anti-aging and loaded up my daily diet with a significant volume of supplements. This routine was costly and a burden to keep up with. Additionally, taking so many supplements usually left me feeling some drowsiness and energetic downs. I have replaced all supplements with just a few BAC capsules daily. I can take them anytime with or around meals, the cost is reduced by half, and I feel great!

– Roland Thomas (Male, 52) Denver, CO – December 2001

A YEAR LATER...

BAC has continued to provide me all of the early reported benefits and much more. I have continued to feel energized and as a result I feel I have accomplished much this year. I have not been sick at all! I have saved more than \$1,000 in supplements this year alone. Due to a lower back disc displacement (L5) that happened 17 years ago, my back kept acting up regularly and as a preventive solution, I would (have to) visit nearly every month or two either a massage therapist, a chiropractor or a D.O. (Osteopath) for the pain or adjustment. I am happy to report that I have NOT seen ONE of those practitioners for over 14 months. For over 20 years, on most mornings, I have been sitting in cross legged position for about one hour to meditate. Up to until a few months ago, the pain in my knees had always bothered me, at times excruciatingly. And now, it's gone and I can enjoy sitting rather than suffer through it. I also had (may still have, but can't feel it) a chronic tendonitis at the right knee since 15 years developed during long years of running. I had stopped running entirely, but started fast walking and the tendonitis kept bothering me until a few months ago when it stopped.

– Roland Thomas (Male, 53) Denver, CO – November 2002

Pancreatic cancer

After losing five members of my immediate family to cancer of the pancreas, a hereditary problem in my family, and having obtained successes with bio-algae concentrates in clinical research and practical applications, I intensified my research with Bio-Algae Concentrates. Today, none of the remaining members of my family that have been using BAC show any trace of cancer. I am committed to my research in bio nutrition, and in sharing this extraordinary product with the world.

– Michael Kiriatic, PhD, N.D., Laval, Quebec, Canada – January 2002

Tumor in the Lung

On January 15 2001, I began BAC with Dr. Kiriatic after having been diagnosed with a large tumor in the center of my left lung. It was too large to operate. Chemotherapy would direct the poison to the blood stream. Here are excerpts of my report to Dr. Kiriatic as of January 31 2001:

- Last night I did not feel like going to bed like last week. I felt “speedy”, “ready to go.” When bedtime came at 11:30 pm, I had to force myself to take the horizontal position (ha ha ha).
- I woke up a few times. I was looking forward to getting up. I felt new internal warmth.
- I feel better – I have less thoracic pains and more energy.

– Jean. B. (Male, 72) Laval, Quebec, Canada – January 2002

(Today Jean is well and lives in Italy!)

Energy and weight control

BAC has given me more energy, endurance... kept weight off and controlled my appetite. It's great!

– Richard M. (Male, 50) Rosemere, Quebec, Canada – January 2002

Pancreatic cancer

My pancreatic cancer had reached level 2 and was climbing rapidly – After two months and 2 bottles of Dr. Kiriatic's BAC F3, my cancer level is down to 1.28.

– Gilles T. (Male, 65) Montreal, Quebec, Canada – January 2002

Rheumatoid arthritis

I have suffered from rheumatoid arthritis for 15 years. After using BAC for two months, my pains have decreased and I now get up at 6 a.m. instead of 10 a.m. The energy is new!

– Odette T. (Female, 51) Sherbrooke, Quebec, Canada – January 2002

Healthier skin

My skin is healthier and I have more energy.

– Anonymous, USA

Digestion, recovery, sleep

I have better digestion, less muscle tension, and I recover better from exercise. I also sleep well now.

– Anonymous, USA

Ulcers

My ulcers and fatigue seem improved.

– Anonymous, USA

Animal Use – Testimonials and Cases

Another IMHA dog doing well

Hello,

I received my first order very quickly. Thank you so much.

I'm excited to test some pets out on it. I had discovered your product when my friend's 8yr old Rottie was diagnosed with IMHA. I ordered a bottle for her and she immediately started it.

The results have been what I feel are dramatic. Considering his age, etc. he bounced back faster, without transfusions than younger dogs I've seen go through this. This has been such a blessing and I'm excited to see what we can accomplish with the pets.

Thank you,

Debbie N.

www.edenlodgecreations.com

One more happy animal story.



I must admit, I was a bit of a skeptic. I had accepted that my dog has a terminal illness and that there is no miracle cure. (Four years ago, I lost a dog to lymphoma 10 weeks following diagnosis).

Although my dog has been in remission since 12/21, she has had chronic allergies/itching skin causing sores that sometimes became infected. She has also had elevated liver enzymes and has been on Denamarin since January.

I decided to try F3 – figured can't hurt; may help; she has been on 3 capsules/day for 3 weeks. Today was her follow-up appointment with the vet and I am happy to report that she has NO swollen lymph nodes; her skin is in the best condition in years and her CBC and blood chemistry levels were all normal except for her liver enzymes which are still elevated. Her ALT level today was 165 (we want it below 100 BUT it was 497 in May!)

The only thing I have done differently was to add the F3 to her diet. I truly believe BAC has made the difference & tonight, I just ordered 180 capsules. Thank you for all your advice.

Nancy Warren

The product gave me two additional years with my dog Gerry

As you know, I've been committed to the product for such a long time now ... since Diane first introduced it to me when my dog Gerry was suffering from liver cancer. The product gave us more than two additional years with him, and his quality of life improved so much. F3 became invaluable to me in my athletic undertakings, too, as you are familiar. I still can't believe what it does for recovery after intense physical exertion.

Andrea L., (Fastest female runner in a state for her age group)

Saved from Ehrlichia Canis – BAC clearly saved her life!



Back four years ago, we had a nightmare case with my dog Samba. She was diagnosed with the chronic phase of Ehrlichia Canis. Her bone marrow was nearly to nothing, blood cells and platelets gone crazy. There was nothing but from three vets suggested to release her from her pain. After only a week, giving her small doses of BAC, she "awakened in within" and recovered in miracle time. She received her first blood transfusion on Valentine's Day and only 3 months later we moved from Buenos Aires to the Caribbean. A long flight and a lot of moving stress! However... she turns 16 next month and does remarkably well given her age! BAC clearly saved her life! Meanwhile, all my family and friends take it! Thank you from the bottom of my heart! – Lela with Samba

From 3 seizures daily to one or two during the last few years!

I gave my Italian Greyhound BioPreparation F2, I want to say for 6 or more years? I gave it to her because like many Italian Greyhounds, she would have seizures. I reduced her at 3 and she was on a raw diet from the get-go. When she passed, she was three months shy of 19 (!) and only had one or two seizures in time she was on BioPreparation. She lived a full, healthy and happy life until the end. Thank you for a great product! I'm convinced it is a huge part of her longevity and great health, especially with regard to her seizures.

With gratitude, Pam Lacey

Drifting Away from IMHA to Completely Healthy!

Hi! Your products are amazing, life-saving actually! I'm convinced my dog was drifting away with IMHA and as soon as the expressed ordered algae we purchased from you arrived, we gave it to her and within 30 minutes our little Chloe lifted her head. Her hemoglobin was 3 and she was fading fast. After the 1st dose, we saw life come back to her eyes first. This was a little over 2 yrs. ago and fortunately she is completely healthy. In fact, she just ran back inside to get in from the rain!! So, we know your products are truly amazing. For Chloe, what can she take to keep her at her peak performance at the age of 12 now?

—Z.N.

18 years old Sophie – no more kidney disease

Another girl cat I have named Sophie showed signs of kidney disease a year ago and so did energy work over the year and increased her BAC to just over 1/3 cap 2 or 3 times a day. Just had her labs done again and the vet said she has never seen this before, where an older cats kidney stats got better over the year. Sophie is 18 years young.

Note: none of my cats have any health issues, no high BP, nothing. Again, thank you for BAC.



Have a blessed day

Constantina, USA, May 2015

MRSA – From Euthanasia to life

Also wanted to tell you a couple of great stories.

I have a kitty who showed multiple urinary infections for almost year. The last was when she had a tooth extracted. A few months later she gradually lost the use of her hind legs. We took her to a specialist who performed an MRI and said she felt surgery was indicated as there was some compression to the nerves of the spine. We agreed but after 4 days at the vet without her raw food diet and her BAC F3+, Dolly went down hill and the vet called to say she cultured her urine and discovered she had MRSA of the urinary tract. Now it was all coming together. Seems she had MRSA for some time but because of good food and care she didn't exhibit symptoms of illness. The vet then said her BUN was 130 diluted and the antibiotic for MRSA would shut down the kidneys completely, therefore suggesting euthanasia.

I said I would pick her up next day and treat her myself and at least have her home if she wasn't going to make it. The next night I went to pick Dolly up. I kept her on fluids and began giving her BAC with raw food and baby food every 2 hours to equal 3 caps per day. Note: Dolly weighed under 6lbs at this time. I tested her urine every 3 days. 2 weeks later I took her to my regular vet and the MRSA was completely gone, no urinary infection at all.

It has been a year and Dolly's has gained back her weight and although her back legs are still weak, she is able to walk quite well now with a hind quarter support or towel around her midsection. We recently had labs done and her kidney BUN is still 39. She is a happy lap cat girl and is now 19 yrs young.

Thank You for BAC.

Another girl I have named Sophie showed signs of kidney disease a year ago and so did energy work over the year and increased her BAC to just over 1/3 cap 2 or 3 x a day. Just had her labs done again and the vet said she has never seen this before, where an older cats kidney stats got better over the year. Sophie is 18 years young.

Again, thank you for BAC. Note: none of them have any health issues, no high BP, nothing.



Have a blessed day
Constantina, USA, May 2015

IMHA – BAC saved our dog’s life!

Hi, I just wanted to follow up with you on what is happening with Bentley. When I first spoke with you, we were in a severe state of desperation. He was dropping weight, had no strength and would not eat. The prednisone dosage was causing atrophy in all of his muscles. It’s been almost a full month since he started on the BAC F2+ and the difference in him is night and day. We are giving him two tablets/day and have reduced his prednisone dosage to once.../day. We are also giving him 1/2 tablet of a blood strengthening supplement 2x/day.

He is eating regularly, he has way more energy and he is even sassing at his brothers again. The gums on his left are a full, bright pink again and the right side is steadily catching up to the left. We have not taken him back to the Vet to do a blood test but when we do, I will be shocked if we do not see an increase in his hemolytic counts. I don’t think they will ever be in the 30’s, but they do not need to be as long as he continues to show the progress he has.

I can honestly say that this product saved our dog’s life! Without it, we would have had a very sad holiday season. Thank you for guidance on the correct product for him. I just ordered another 3 bottle supply. —M.H.

KIPPER IS ALIVE AND KICKING

Kipper was very very ill losing protein because of his inflamed colon. The vet gave up hope and said that was all they could do. Kipper is taking the BIOPREPARATION and is doing just fine at 11. His coat is that of a young puppy and it was thin and greying. I do give him Primal Defense powder when he eats as well. However, adding 2 BIOPREPARATION capsules a day is the best thing I have ever done for him. The vets could learn something about nutrition and forget the meds. He was dying 2 years ago. – Jeanne at Golden Apple Org



No more awful bird cage smell (cockatiel parrots)

I have been enjoying the bio-algae concentrates (BAC) myself for over nine years, and so three months ago I started giving the BAC to my two cockatiel parrots. Almost immediately I noticed that they started drinking almost double the amount of water and that they were eating only half of what they were eating before. Yet they did appear more lively. Their droppings became smaller. The awful pet store cage smell has disappeared.



Thank you for this wonderful super food.

– Wayne Kellner, Greely, Colorado

Significant health benefits for dogs.

I and friends have used the animal version for our dogs and have found significant health benefits for them.

Joseph O., IL, USA 2014

My 12-yr old cat acts like a kitten

I have given BioPrep to my indoor cat since she was a baby, and she has never had to be seen by a vet. She is now 12 and acts like a kitten.

S.L., WA, USA 2014

Dog made complete recovery from IMHA ...now we both take BAC too!

Well, our BioSuperfood story began from the incredible success of BioPreparation in saving our dog from autoimmune hemolytic anemia. His system was no longer creating red blood cells and was being kept alive by blood transfusions. However, the strong doses of prednisone and cyclosporine were not helping him overcome the disease. They were making him progressively sicker and weaker to the point that we were told by the vet there was nothing more they could do for him. Thankfully we came across your website and had ordered the F3 strength and gave him 7-8 a day and he slowly but surely got stronger and has made a complete recovery. In fact, he has so much energy now, we laugh at all the trouble he gets in. His recovery made me and my wife realize that the nutrition in the bio-algae would be very helpful to us. We began taking the BioSuperfood in Jan 2014 and we both made it through the winter with no colds or flus and we both have greater energy.

Sandy and Ted Mason Ontario Canada 2014

Cat recovered to full health

One of my cats, Angel, was not doing well, spitting up saliva, not eating and only drinking a little. So glad that I had the BAC F3 handy. She was listless, sleeping a lot with very little activity. She's young at 3 years old. I had a company come out & spray for bugs with marigold oil. Maybe she licked it or ate a bug with it on it. Angel wasn't interested in food or water for 3-4 days, getting weaker. I tapped a small dose (1/4 capsule) of F3 in her mouth & squirted a few eyedroppers of algae water. I did this 2-3x/day for a week. She recovered back to full health, no longer listless. Thank goodness for the algae! BAC F3 allowed her body to naturally heal. Glad I knew about & had the algae to avoid a vet bill and the possible loss of my cat! I got BAC F3 for my oldest cat at 18 who stayed active for 2 more yrs. She lived fully healthy to 20+!

Dawn Doucet, Brighton, CO, USA 2014

She's staying on F3+ no matter what!

As mentioned above, our Pug, Rainy Day, began having trouble with her hind legs almost 2 years ago. The vet surmised that it may be a spinal tumor. It was getting to the point where we had to carry her up/down steps and her hind legs would completely give out. We put her on the BAC F3+ and in about 1 month we saw improvement. She was balancing better and was able to use the steps on her own. We had to stop giving it to her for a while (financial reasons) and the legs got worse. She's now back on the F3+ and the legs are getting stronger. She's STAYING on F3+ no matter what! We feel it's keepng that tumor at bay and feeding her body what it needs to stay strong and healthy.

Ron H., PA, USA 2014

Case history

Baby Bear — 7 yr old, German Shepherd/Husky mix, diagnosed with mast cell cancer tumor in the foot. Standard protocol to remove the entire tumor plus a 3 cm perimeter was not followed to save Baby Bear's foot. Conventional radiation or chemotherapy was not followed due to the ill side effects.

May 22, 2004 — two weeks after the surgery to remove most of the mast cell tumor. Standard protocol to remove entire tumor plus 3 cm perimeter was not followed to save Baby Bear's foot. Started BAC at one pinch/day:



June 5, 2004 — after 15 days on BAC Formula F3+ May 22–May 28 = one pinch per day; May 29–June 5 = ½ capsule per day:



July 13, 2004 — eight and one-half weeks after starting on BAC baby Bear is now on one capsule F3+ per day:



July 31, 2004 — ten weeks after starting BAC F3+, July 14–July 21 = one capsule per day; July 22–July 31 = 1-½ capsule per day:



Baby Bear Adopted! We are happy to report that Baby Bear was adopted on September 23, after 6 months of rehabilitation by the Misha May Foundation, which offers training and rehabilitation for mixed-breed shelter dogs. He had a vet check on September 23 and was proclaimed very healthy with no sign of any recurrence of his tumor. He looks and feels marvelous.



Weak cells

Simon is doing GREAT on the BAC. [My vet] told me that he seems to have weak cells in his digestive track. They have difficulty absorbing nutrients and releasing waste. The BAC really feeds these cells and supports their healthy function. Cool, huh?

– K.S.M.

Cat with hypothyroid condition

We found out that Connie is hypothyroid, an unusual condition for cats, which accounts for her obesity. We are giving BAC to her and have seen her energy level and appetite improve. We started giving Connie the micro algae supplement in October 2002 and by January 2003, her thyroid values tested normal. Her weight has stayed the same, yet she is skinnier, showing that her fat is being replaced by muscle.

– M.A.L.

Dog with arthritis

Snowpea was supposed to have \$2,000 surgery for hind legs/arthritis, and so far has been doing better, more demonstration of flexibility, etc. No surgery plans.

– C.B., Denver, Colorado

BAC for an elderly cat

We gave this to our elderly cat that was dying of kidney disease and saw an amazing improvement after just a couple of days on it. She had more energy and was more like her “old” self.

– M.A.L.

Dog with lymphoma: Lymph nodes shrunk to normal within 2 weeks

My dog Harley was diagnosed with Lymphoma Sarcoma in February 2004. My naturopathic vet recommended your product, though he had not yet used it in his practice. I ordered F3 and started giving him 4-6 a day. His lymph nodes “disappeared” (shrunk to normal) within 2 weeks.

– Kim B, Seattle, Washington – June 2004

Bionic eggs

Dear Roland,

The chickens are starting to lay eggs now. They are about 22-25 weeks old (some are a few weeks older than the others). We have 3 breeds of hens (total of 5 hens). One breed is not laying yet, another traditionally lays smaller eggs, and the last is a Rhode island Red who ironically is the smallest hen, but is laying the largest eggs.



I thought you would enjoy these photos. The Shells of all eggs that we collect are the thickest I have ever seen. The yolks are a beautiful sunrise orange. The photos show the egg from our smallest hen compared to the store bought “large” Nest Fresh eggs!!!! Wow!!!

*One photo depicts that we could not close the egg carton on the same side of the “bionic” egg!
If you look real close you can see the brown egg through the hole.*



*Our chickens are also free range and appear very healthy (plush feather coat, etc.).
Furthermore, the eggs are delicious.*



– James & Irma Pacheco, Sedelia, Colorado – October 2004

Editor's Note: James has been feeding Bio-Algae Concentrates to these chickens since their birth. He has not used antibiotics nor any growth hormones.

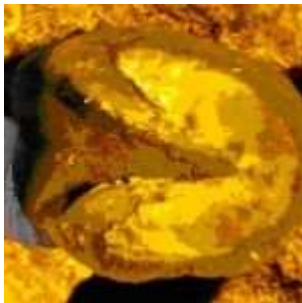
Protein synthesis



Our somatic cells count has been under 100 for going on 30 days for the first time in my life! They are eating about 1.25 pounds less feed per day. To put this in perspective, this is equivalent to almost two sixteen foot chopper boxes of feed a month. This is truly unbelievable!

John Perrone, Third Generation Organic Dairy Farm Owner, Wisconsin – February 2005

Sammi GALLOPED!



Sammi – January 2005



Sammi – March 2005

Once started on the BAC, Sammi made rapid progress. Growth increased. I had to trim her weekly. As she had new growth, the sole of her hoof started to become more concave in front of the frog. On February 15, for the first time in over 18 months, Sammi GALLOPED up the driveway, on the stones, on her own! It brought tears to my eyes to see this lovely mare finally able to kick up her heels and run with the herd.

Ashara M, Horse Owner, Washington – May 2005

Great cleansing

Hello Dr.Kiriac, I am a cat breeder and I wonder how much BAC to give my cats. I have been feeding them BAC for 10 days by placing one capsule per day for each of six feeders.

The cats have vomited, have lots of mucus discharge, diarrhea and loss of hair.

I have stopped and all came back to normal. Did I give them too much? Should I give then less periodically like half a capsule?

Dr. Kiriac responded that BAC can cause cleansing of the intestines and the lungs. He suggested that I give them each one half capsule per day.

After a few weeks, all is well, the cats have a superb coat and have stopped losing hair.

Thank you Dr. Kiriac.

Nicole Gourde, Rouyn-Noranda, Quebec, Canada – September 2005

I was told to put my dog out

I was told to put my dog out, that it had a few weeks to live. With natural food, bottled water and the BAC F3+ capsules, my giant Schnauzer had 10 additional months of comfortable and happy life. Thank you for all your help.

– Thor B., Virginia

The Lyne and Alain Forget Dairy Farm

The Lyne and Alain Forget Dairy Farm

Lyne and Alain Forget have a large dairy farm in Laval, Quebec. Their farm produces some of the highest quality milk in Canada. They accepted to trial BAC on their farm in January, 2006. This trial is an ongoing preliminary step towards a formal presentation to the Canadian Agricultural agency.

Read next the summary of results of the last six months as reported by Alain Forget. Updates will be presented as they become available.

For six months now, The Alain Forget Dairy Farm of Laval has been participating in a research project consisting of administering a special blend of algae to the dairy cows. Find here a synopsis of the farm's results after 6 months trial.

We have a farm averaging 40kg of Butter Fat per day. We keep our cows free range and feed them the Total Mix Ration (TMR). The 20 cows involved in the trials are pure breed Holstein. Their average production before the start of the trial was 10,039kg of milk per cow with a Breed Class Average (BCA) of 226 M, 219 Fat, 223 Proteins and somatic cells count (SCC) averaging 84,000 for the previous 12 months.

After six months of trial with BAC their productivity averages have shifted to 10,565kg of milk per cow with a BCA of 248 M, 242 Fat, 236 Proteins and a somatic cells count averaging 70,000 for the six months period.

In summary the milk quality and improvement numbers are :

	... <u>Production</u> ...	<u>Milk</u>	... <u>Fat</u>	... <u>Protein</u> ...	<u>SCC</u>
Pre-trial	... 10,039kg	... 226	... 219	... 223	... 84,000

Post Trial	... 10,565kg	... 248	... 242	... 236	... 70,000
Differences	... +526kg	... +22	... +23	... +13	... -14,000
Improvement	... 10.5%	... 10.8%	... 11.5%	... 10.6%	... 8.33%

We have also noted signs of better health of the herd and a better emptying of the udder from milking. Previously with these cows in the trial and currently with the cows not involved in the trial, the udder will remain somewhat hard after milking while on the cows using BAC the udder is nice and soft.

These results represent only six months of trial feeding BAC to the cows. I have learned that there is never smoke without fire. I believe that the use of BAC increases the health of the cow's udder, its total health and the health of the herd.

Lyne and Alain Forget

Owners, Lyne and Alain Forget Dairy Farm

Quebec, Canada

Chula says, "order me another bottle!"

Hello all,

This week I was especially impressed with BAC and the way it saved my dog's life.

My wife has a white 6 year old, standard poodle, who has Thrombocytopenia, a blood platelet disorder, and when her platelet count goes too far down, we can't stop the bleeding.

The Veterinarians don't have any answer except for that dreaded Prednisone, so she's been on Prednisone for over 5 years. Each time we try to reduce her medication, she goes into a critical stage, and we have to increase it again.

Of course, Prednisone has a lot of side effects. In her, she's put on over twice her weight, which puts a tremendous strain on her heart and other organs, not to mention the hips.

Two days ago, Chula, our Poodle, was unable to eat or drink, she would just lay still, not raising her head. Her eyes had that cloudy, listless look, and we were seriously thinking of putting her out of her misery.

When poodles are in severe discomfort, they tend to be very still and quiet. We really thought it was time. Her heart just couldn't take all the stress.

Needless to say, both of us were extremely sad, especially my wife, who loves that dog like crazy.

I had ordered a bottle of micro algae supplements, for Chula, but was not very diligent about giving it to her. I decided to give her one and see if it had any effect.

Within an hour of giving Chula her first capsule, she started drinking a little. By the second one, a few hours later, she was moving around and ate a small meal. We gave her another before bed and by the next morning, we had our old dog back again!

Chula says, "order me another bottle!"

We certainly won't forget to give her the bio-super-foods any more!

Richard Zapata, LMT
SCENAR & Soft Laser Practitioner

BAC and Chronic Renal Failure (CRF)

It was nearly 17 years ago when I brought home 3 adorable Himalayan kittens: Rocky, Kasey, and Chanda. Rocky and Kasey littermates and Chanda had the same father. For their entire lives I gave them the best care I knew of — following the advice of a respected, well-established veterinarian clinic, I gave them the highest quality food touted on the market like Iams and Hills Science Diet and lots of TLC!



This past summer I learned the other side of pet ownership. In August 2006, we learned Rocky had intestinal cancer and within 4 weeks he was gone. One week later, I took Kasey in for a senior screening and learned he was in the advanced stages of Chronic Renal Failure (CRF). [Sigh] Kasey did great, however, and for 4 months we enjoyed some of the best times of his life! He really was mostly “normal” clinically right up until the day before his death on Dec 25th. Amazing!

Among the wealth of information I gleaned from Little Big Cat (visit at www.LittleBigCat.com), two areas were paramount. The importance of canned or wet food over dry food and a specific algae blend called Bio-Algae Concentrates (BAC) for whole food supplementation (visit at www.OptimumChoices.com). I encourage you to read through the information on the above websites but here is the short version of these two important points:

1. The importance of canned or wet food (or even raw) over dry food: Cats are by nature arid (dry climate) animals and thus are designed by their Creator to obtain the majority of their moisture from the foods they eat (i.e. birds, mice, rats, etc.). Do the math; give your cats dry food and you are compounding the dehydration factor which can lead to numerous health issues including but not limited to CRF.
2. Bio-algae Concentrates: I don't sell the stuff so you can put your guard down right away as this is not an attempt to sell you anything. From what I have learned, cats, being obligate carnivores, do not have the ability to break down the cell walls of plants thus it is probably a waste of time to give them fruits & veggies.

Chanda today: despite having been diagnosed nearly 6 months ago as being in the very early stages of CRF, her numbers/kidney values are stable, her blood pressure is normal, eyes are clear, and clinically she literally has as much energy and spirit as her earlier years, once again playing with her toys and running through the house. She has such a soft and shiny coat that everyone who meets her, whether a veterinarian, vet tech, stranger or friend remarks about her soft coat! They simply cannot believe she is nearly 17 yrs old!

Please realize I am not suggesting that switching to canned food or adding BAC are “miracle” cures and I am not a veterinarian. I am simply letting you know what my experience has been, in the hopes you will get the same or similar results with your pet! I know Chanda will not be with me forever; I may have weeks, months, a year or at most several years given the average life of a cat is 15-16 years but I want however much time she has to be as enjoyable and healthy as possible. Whether the above is adding years to her life, I do not know but I do know it is adding life to her years!

Kent and Chanda

His fur really is growing *that* quickly. I’m amazed.

Hello Roland, ... I’ll cut right to the point here! My cat has been given everything at different points in time for his health and maintaining his urinary tract health / urine pH etc. and nothing has worked, and BAC is the ONLY new product he’s had, I have to credit the BAC for this improvement.

For a year and a half now since he came down with the urinary blockage / FLUTD, he’s had bare patches on his arms (I thought originally that it was just slow to grow back where they shaved his arms for IV’s!) and also lost a patch of fur near his right hip; and a couple teeny patches on the back of his rear feet / hocks. Well for the past 2 weeks I have given him the tiniest sprinkle of BAC powder from a capsule into his raw food meals – I’ll estimate about every other day and not more often than that ! and his fur is swiftly filling in the bare patch on his side and the area inside his arms.

Even now, I am having a hard time believing his fur is growing this quickly from the BAC and I am trying to convince myself there’s a combination of things going on because he’s been on parasite remedies, increased taurine for just slightly longer – maybe 3 to 4 weeks. But when I think more on this, say for example just the day before yesterday I was examining that bare patch on his side and saying “Is it my imagination or is this really filling in! I think it’s filling in!” While today I’m even more in shock that I can barely tell where there was fur loss. So truly his fur really is growing *that* quickly. I’m amazed. And, I had not even thought to look at his arms until two nights ago. I tried to look and I thought they looked like they were growing fur but he was trying to eat 😊 and I gave up trying to lift his arms. So I just looked now and you wouldn’t

know up until recently that he appeared to have shaved inner front legs. He's got probably most of his fur back on his arms. I'm truly amazed.

A side note – my most finicky dog actually likes the BAC powder, as evidence last night I was watching her eat and she actually licked the residual off the plate after finishing her chicken (raw). She has avoided every other nutritional product she's ever had, so that is truly encouraging.

I'm glad you are promoting this super nutritional product – it's fantastic. I did read the booklet sent along with the bottle about its development and am so grateful for Dr. Kiriak's perseverance throughout the development process. And finally, I so very much thank and appreciate Lita at P4H for her constant studies and research which led her to your informative website on BAC, and for sharing her links with me when she finds wonderful products.

Warmest regards,

– Laura Gordon, pilingraphics.com

Cat with kidney failure, bladder infections and a cancerous growth

I give BAC to my cat who is 16. She was diagnosed with kidney failure, has recurring bladder infections with unknown cause, and has a cancerous growth on her leg. I was told to feed her Science Diet KD and it was KILLING her. Her hair started falling out and she was declining rapidly. I changed her to a grain free diet and included BAC in her diet. Now she has had no signs of bladder infection, she is more energetic and the cancer has stopped growing. I love this stuff! Thanks.

– Anonymous

BAC helped calm my dog down

A homeopath recommended BAC for my dog that had a personality change after receiving a vaccination. She became reactive – barking and growling at some dogs and people. BAC has helped calm her down and therefore makes it much easier to walk her and take her places! In addition, because BAC contains thousands of nutrients and antioxidants, I am more comfortable that she is getting the nutrients that her body needs for the best health possible.

– Anonymous

I cannot tell you how many animals I have seen improve their health on the BAC products

As an Animal Wellness Consultant I cannot tell you how many animals I have seen improve their health on the BAC products. Time and again with issues ranging from Immune Mediated Anemia to cloudy eyes, to digestion issues to tumors and allergies, the animals get healthier. I have watched coats change within a week, arthritic animals move with greater ease, older animals perk up and a renewed vitality emerge.

– Alecia Evans, Animal Wellness Consultant

Dog with skin allergies: Skin is clearing up

One of my clients has a dog who has skin allergies they have been trying to clear up for seven years. She is giving the dog 3/4 capsule of BAC every day and within one month the skin is clearing up.

– Larry E. USA – March 2007

Dog with lymphoma – The tumor had completely gone away

My 3.5 year old Sheltie, Riley was diagnosed with lymphoma. He is taking chemotherapy but is on F3 formula 1/2 capsule 6 times per day. He went into remission with his second chemo, and the tumor had completely gone away. He has only had one bad reaction to the chemo and has plenty of energy and is leading a full life.

– Anonymous

Cat with lymphoma: From only a few weeks to live to feeling well for the next year

I was told my cat had only a few weeks to live by her regular vet. I went to Dr Lemmon, a naturopathic vet and he prescribed your product. He told me he also took it himself. I gave it to my cat mixed with chicken broth 3 times a day and she was so much better. I believe it kept her alive and feeling well for the next year. She eventually was overtaken by her lymphoma but I am grateful for the time she got feeling well after beginning your product.

– Anonymous

Dog with bone marrow necrosis: Blood count is now normal

My 10 year old American Eskimo dog, Russell, collapsed suddenly this summer. We took him to the vet and his blood levels were critically low. He received an emergency blood transfusion and went to a specialty hospital for a bone marrow biopsy. The results showed bone marrow necrosis. Our vet advised we put Russell down. An internet search for “bone marrow

regeneration” led me to a website that sold BAC. We have used the product faithfully and Russell’s blood count is now normal.

– Anonymous

NO MORE STINKY GAS!!! WHOOPIE!!!!

I have to share my good news with you!!

Kinga my elderly Rhodesian Ridgeback (12 years old) has had a problem for the past few years with very loose stools and **very** stinky gas. I figured he was getting old, so his digestion wasn’t as efficient as when he was younger. He is raw fed, so I know he’s getting good quality food and nutrition. Someone suggested that I give him digestive enzymes. That didn’t help. Then it was suggested that I give him probiotics. That didn’t help either.

So I started giving him Bio-Algae Concentrates two months ago. There were no other changes to his diet; he doesn’t get any supplements. The other day I realized that he doesn’t have loose stools anymore!

And there’s NO MORE STINKY GAS!!! WHOOPIE!!!!

But wait there is more! He recently had an abscessed tooth and was taking antibiotics for it. The vet said the antibiotics usually don’t work so he told me what they usually do is extract the tooth. Since Kinga is 12 yrs old, I did **not** want him to undergo surgery! So I started giving him an increased number of capsules per day. Voila!

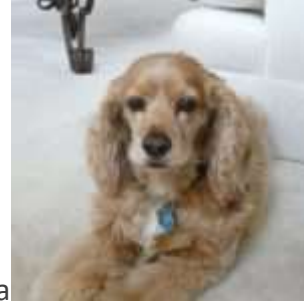
The abscess was gone in less than 2 weeks 😊

***Yup, it’s definitely worth \$25 a bottle. 😊*

– Gail C., Kinga, and Kizzy

Dog with bone marrow cancer: Back to normal and full of life

Do you recall me ordering the Bio-algae concentrates from you last Sept/Oct? It was for our dog, Charlie Brown, who was diagnosed with a rare form of terminal bone marrow cancer. The



doctors said there was no hope for him; he was only hours away from dying at the time. Well, we gave him one of these pills as a last ditch effort (he could not drink or eat or even raise his head at this point), and over the next few days, he started to improve little by little. We didn't expect anything at all, but it is now 8 months later and he is 100% back to normal and full of life!! The vets could not believe it and took a sample of the Bio-algae concentrates for analyses to see what may be in them, but they couldn't find anything specific. They simply see it as a miraculous recovery that can't be explained.

- Lisa X, Texas, USA

Dog with IMHA (Immune-mediated hemolytic anemia): Improved blood test results

I am very pleased to post that after a hematocrit reading of 22 on Monday August 13th, prior to giving her BAC but providing an interim option of algae supplements, and then graduating her to BAC on August 17th, that today August 24th, her hematocrit was at 38! I am now slowly weaning her off of the steroid because her current symptoms emanate from the steroid and nothing else. Vastly increased appetite, thirst, need to pee, and a marked reduction in her muscle mass... all in the span of about 3 weeks.

– Judy – August 2012

Dog with IMHA (Immune-mediated hemolytic anemia): We have no doubts that BAC saved her life

2008 is the year our Rainbow, our beloved Beagle, was diagnosed with IMHA.....her blood counts were down to 7 at one point. We had BAC overnighted to us and today, more than 4 years later, Rainbow is still with us and doing fine, just an older dog now. We have no doubts that BAC saved her life. We did choose to never have any more immunizations for Rainbow, not sure that was a cause or not, but preferred not to chance it... You and your friends have our prayers for a good outcome.

– Sandy and Steve Howard – October 2012

Dog with a bladder tumor: The vet could not believe the dog was still alive

My nephew, David, went to the vet with his dog and the vet could not believe the dog was still alive. He passed an examination and could not find the large tumor in the bladder. He was dumbfounded when David told him he had saved his dog with seaweed. The vet had no choice but to believe it, because the evidence was right there. Davidson Riley, who was with him, only 9 years old remarked to the vet that if he had continued to care for their dog, it would have been a year and a half that he would have been dead. David had a good laugh but Riley is absolutely right. This little boy will be marked forever as they not only saved his dog with BAC, but he also does not need to take Ritalin anymore since he is taking some BAC too, and he is in perfect shape. I am so happy that everything ends well, he is my nephew and I love him so much, he is like a son to me.

– Marie-Andree, Montreal – March 2012

Supporting Research

Leave a comment

Algae health libraries contain thousands of published scientific references covering 45 years of international researches. A few of these studies are referenced here in order to provide a broader view of the extent of scientific research about algae and their nutrients, like those contained in BAC. The number of research studies done on nutrients and phytonutrients in algae is in the hundreds of thousands and continues to grow each day. Some nutrients are more beneficial than others, but all nutrients are more efficient when occurring naturally within the whole food. Many studies of specific nutrients are included here as they can inform you about the extraordinary health benefits of these nutrients that occur in BAC. These research briefs are not intended as medical advice or as a guide for self-treatment. Consult a qualified healthcare practitioner for diagnosis or treatment of any disease or medical condition.

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ANEMIA

Clinical experiences of administration of spirulina to patients with hypo chronic anemia – T. Takeuchi et al. 1978. Tokyo Medical and Dental University, Japan. Eight women had been limiting their meals to stay thin and were showing hypo chronic anemia-lower than normal blood hemoglobin content. They took four grams of spirulina after each meal. After 30 days blood hemoglobin content increased 21 % from 10.9 to 13.2, a satisfactory level, no longer considered anemic.

ANTI VIRAL

AIDS/HIV – Inhibition of HIV-1 replication by an aqueous extract of spirulina (*Arthrospira platensis*) – Ayehunie S.1, Belay A.2, Hu Y.1, Baba T.1,3, Ruprecht R.1

1 – Laboratory of Viral Pathogenesis, Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA, USA.

2 – Earthrise Farms, Calipatria, CA, USA.

3 – Division of Newborn Medicine, Department of Pediatrics, Tufts University, Boston, MA, USA.

Water extract of spirulina strain Platensis (*Arthrospira platensis*) inhibits HIV-1 replication in human derived T-cells and in human peripheral blood mononuclear cells. A concentration of 5-10 mcg/ml was found to reduce viral production and/or syncytium formation of about 50 %, and a concentration of 100 mcg/ml show a 90-100 % inhibition without cytotoxicity. The 50 % inhibitory concentration (IC50) for cell growth was computed to be between 2-6.5 mg/ml depending on the cell types used; the therapeutic index was >100. The extract also blocked Rauscher murine leukemia virus (RL V)-induced plaque by 95 % at concentrations ranging from 75-150 mcg/ml. The 50 % reduction in plaque formation (50 % effective concentration or EC50) was at a concentration of 9-30 mcg/ml. The extract directly inactivated HIV-1 infectivity when preincubated with virus prior to addition with human T-cell lines at similar inhibitory concentrations.

HERPES – An extract from spirulina is a selective inhibitor of Herpes Simplex virus type 1 penetration into Hela cells – Hayashi et al. 1993. Pub. in *Phytotherapy Research*, Vol. 7, p. 76-80, Japan

The water-soluble extract of spirulina achieved a dose-dependent inhibition of the replication of Herpes Simplex virus type 1 (HSV-1) in Hela cells within the concentration ranges of 0.08-50 mg/ml. This extract proved to have no virucidal activity and did not interfere with adsorption to host cells. However, the extract affected viral penetration in a dose-dependent manner. At 1 mg/ml the extract was found to inhibit virus-specific protein synthesis without suppressing host cell protein synthesis if added to the cells 3 hours before hamsters at doses of 100 and 500 mg/kg a day.

AIDS antiviral sulfolipids from cyanobacteria (blue green algae) -K. Gustafson et al. August 16, 1989. Pub. in *Journal of the National Cancer Institute*, Vol. 81(16) p. 1254, USA. Sulfolipids from blue green algae exhibit strong antiviral properties. Helper T-cells exposed to blue green algae sulfolipids were protected from HIV-1 infection in vitro studies. Beta-carotene, *Cancer Prevention and Health Improvement*

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Inhibition of experimental oral carcinogenesis by topical beta-carotene – Schwartz et al. 1986. Harvard School of Dental Medicine, Pub. In *Carcinogenesis*, May 1986, Vol. 7 (5), p. 711-715, USA. Beta-carotene was found to significantly inhibit the formation of squamous cell carcinoma of hamster buccal pouch when a solution was applied topically three times weekly for 22 weeks in an experiment with 4 hamsters. In a second experiment with 80 hamsters, beta-carotene was found to inhibit oral carcinogenesis in an initiation-promotion hamsters buccal pouch system. Beta-carotene inhibited both initiation and promotion of carcinogenesis.

Effect of gamma-linolenic acid on cellular uptake of structurally related anthracyclines in human drug sensitive and multidrug resistant bladder and breast cancer cell lines – Davies CL, Loizidou M, Cooper AJ, et al. *Eur J Cancer*. 1999;35:1534-1540.

Effects of dietary gamma-linolenic acid on blood pressure and adrenal angiotensin receptors in hypertensive rats – Engler MM, Schambelan M, Engler MB, Ball DL, Goodfriend TL. *Proc Soc Exp Biol Med*. 1998;218(3):234-237.

Gamma linolenic acid with tamoxifen as primary therapy in breast cancer – Kenny FS, Pinder SE, Ellis IO et al., *Int J Cancer*. 2000;85:643-648.

Effects of gamma-linolenic acid and oleic acid on paclitaxel cytotoxicity in human breast cancer cells – Menendez JA, del Mar Barbacid M, Montero S, et al., *Eur J Cancer*. 2001;37:402-413.

Effect of n-6 and n-3 fatty acids on the survival of vincristine sensitive and resistant human cervical carcinoma cells in vitro – Madhavi N, Das UN., *Cancer Lett*. 1994;84:31-41.

Gamma linolenic acid alters the cytotoxic activity of anticancer drugs on cultured human neuroblastoma cells – Ikushima S, Fujiwara F, Todo S, Imashuku S., *Anticancer Res*. 1990;10:1055-1059.

Inhibitory effects of n-3 polyunsaturated fatty acids on sigmoid colon cancer transformants – Tsai W-S, Nagawa H, Kaizaki S, Tsuruo T, Muto T., *J Gastroenterol*. 1998;33:206-212.

Polyunsaturated fatty acids promote colon carcinoma metastasis in rat liver – Griffini P, Fehres O, Klieverik L, et al. *Cancer Res*. 1998;58:3312-3319.

Breast cancer and the Western diet: role of fatty acids and antioxidant vitamins – Stoll BA., *Eur J Cancer*. 1998;34(12):1852-1856.

Differential modulation by dietary n-6 or n-9 unsaturated fatty acids on the development of two murine mammary gland tumors having different metastatic capabilities – Munoz SE, Lopez CB, Valentich MA, Eynard AR., *Cancer Lett*. 1998;126:149-155.

Effect of polyunsaturated fatty acids on the drug sensitivity of human tumour cell lines resistant to either cisplatin or doxorubicin – Plumb JA, Luo W, Kerr DJ., *Br J Cancer*. 1993;67:728-733.

CARDIOVASCULAR

Randomized controlled trial of gamma-linolenic acid and eicosapentaenoic acid in peripheral arterial disease – Leng GC, Lee AJ, Fowkes FG, et al., *Clin Nutr*. 1998;17(6):265—271

Gamma linolenic acid causes weight loss and lower blood pressure in overweight patients with family history of obesity – Garcia CM, et al., Swed J Biol Med. 1986;4:8-11.

Seasonal allergic rhinoconjunctivitis and fatty acid intake: a cross-sectional study in Japan – Wakai K, Okamoto K, Tamakoshi A, Lin Y, Nakayama T, Ohno Y., Ann Epidemiol. 2001;11(1):59-64.

CHOLESTEROL REDUCTION

Cholesterol lowering effect of spirulina
N. Nayaka et al. 1988. Tokai University. Pub. In Nutrition Reports Int'l, Vol. 37, No. 6, p. 1329-1337, Japan.
Thirty healthy men with high cholesterol, mild hypertension and hyperlipidemia showed lower serum cholesterol, triglyceride and LDL (undesirable fat) levels after eating spirulina for eight weeks. These men did not change their diet, except adding spirulina. No adverse effects were noted. Group A consumed 4.2 grams daily for eight weeks. Total serum cholesterol dropped a significant 4.5 % within 4 weeks from 244 to 233. Group B consumed spirulina for four weeks, then stopped. Serum cholesterol levels decreased, then returned to initial level. Researchers concluded spirulina did lower serum cholesterol and was likely to have a favorable effect on alleviating heart disease since the arteriosclerosis index improved.

The effect of spirulina on reduction of serum cholesterol
N. Nayaka et al. 1986. Tokai University. Pub. In Progress in Medicine, Vol. 36, No. 11, Japan.

DEPRESSION

DiETING, essential fatty acid intake, and depression – Bruinsma KA, Taren DL. Nutrition Rev. 2000;58(4):98-108.

DIABETES

Treatment of diabetic neuropathy with gamma-linolenic acid – Keen H, Payan J, AllawiJ, et al., The Gamma-Linolenic Acid Multicenter Trial Group. Diabetes Care. 1993;16(1):8-15.

Prevention of nerve conduction deficit in diabetic rats by polyunsaturated fatty acids – Head RJ, McLennan PL, Raederstorff D, Muggli R, Burnard SL, McMurchie EJ., Am J Clin Nutr. 2000;71:386S-392S.

DETOXIFICATION

Effect of spirulina on the renal toxicity induced by inorganic mercury and cisplatin – H. Fukino et al. 1990. Pub. In Eisei Kagaku, Vol. 36 (5), 1990. Japan. Kidney toxicity caused by mercury was suppressed by feeding spirulina to rats. A water-soluble extract of spirulina, containing phycocyanin, the natural blue pigment, was examined. Renal (kidney) toxicity in rats caused by para-aminophenol (pain reliever) and cisplatin (anti-cancer) was significantly reduced by the phycocyanin extract of spirulina. Researchers concluded that phycocyanin plays a major role in the protective effect of spirulina against renal failure caused by mercury and pharmaceutical drugs, and that spirulina might be applicable to the general renal dysfunction.

Alteration of cyclosporine (CsA)-induced nephrotoxicity by gamma linolenic acid (GLA) and eicosapentaenoic acid (EPA) in Wistar rats – Morphake P, Bariety J, Darlametsos J, et al., Prostaglandins Leukot Essent Fatty Acids. 1994;50:29-35.

DIGESTION

Effect of evening primrose oil on gastric ulceration and secretion induced by various ulcerogenic and necrotizing agents in rats. – al-Sabanah OA. Food Chem Toxicol. 1997;35(8):769-775.

Effect of polyunsaturated fatty acids on dexamethasone-induced gastric mucosal damage – Manjari V, Das UN., Prostaglandins Leukot Essent Fatty Acids. 2000;62(2):85-96.

Nutritional modulation of mineralocorticoid and prostaglandin production: potential role in prevention and treatment of gastric pathology – McCarty MF., Med Hypotheses. 1983;11(4):381-389

Inhibitory effect of polyunsaturated fatty acids on the growth of Helicobacter pylori: a possible explanation of the effect of diet on peptic ulceration – Thompson L, Cockayne A, Spiller RC., Gut. 1994;35(11):1557-1561.

IMMUNITY

Polysaccharides and Immune System Improvement – Calcium spirulina, an inhibitor of enveloped virus replication, from a blue-green algae spirulina – Hayashi et al. 1996. Pub. In Journal of Natural Products, Vol. 59, p. 83-87. Japan. Bioactivity is directed from fractionation of a hot water extract of blue green algae. Spirulina strain platensis led to the isolation of a novel sulfated polysaccharide named calcium spirulina (Ca-SP) as an antiviral principle. This polysaccharide was composed of rhamnose, ribose, mannose, fructose, galactose, xylose, glucuronic acid, galacturonic acid, sulfate and calcium. Ca-SP was found to inhibit the replication of several enveloped viruses, including Herpes Simplex virus type 1, human cytomegalovirus, measles virus, mump virus, influenza A virus and HIV-1. It

was revealed that Ca-SP selectively inhibited the penetration of virus into host cells. Retention of molecular conformation of calcium ion with sulfate groups was suggested to be indispensable to its antiviral effect.

Enhancement of antibody production in mice by dietary spirulina

Hayashi et al. June 1994. Kagawa Nutrition University, Japan. Pub. In Journal of Nutrition Science and Vitaminology, Japan.

Mice fed a spirulina diet showed increased numbers of splenic antibody-producing cells in the primary immune response to sheep red blood cells (SRBC). However, immunoglobulin G (IgE)-antibody production in the secondary immune response was hardly affected. The percentage of phagocytotic cells in peritoneal macrophages from the mice fed spirulina diet, as well as the proliferation of spleen cells, was significantly increased. Addition of hot-water extract of spirulina (SHW) to an in vitro culture of spleen cells markedly increased proliferation these cells, whereas culture of thymus cells was scarcely affected. The spirulina extract also significantly enhanced interleukin-1 (IL-1) production from peritoneal macrophages. Addition to the in vitro spleen cell culture of SHW as well as the supernatant of macrophages stimulated with SHW resulted in enhancement of antibody production that is an increase of the number of PFC. These results suggest that spirulina enhances the immune response, particularly the primary response, by stimulating functions, phagocytosis and IL-1 production.

Immunostimulating activity of lipopolysaccharides from blue-green algae

L. Besednova et al. 1979. Pub in Zhurnal Mikrobiologii, Immunobiologii, Vol. 56 (12), p. 75-79, Russia. The whole cells of blue green algae and lipopolysaccharides (LPS) isolated from these cells were shown to stimulate the production of microglobulin antibodies in rabbits. The macro- and microphage indices in rabbits increased significantly after the injection of LPS isolated from blue green algae 24-48 hrs before injecting the animals with a virulent *Y. pseudotuberculosis* strain. Besides, the inhibiting action of this strain on the migration of phagocytes to the site of infection was abolished immediately after the injection. The use of the indirect hemagglutination test allow to provide the absence of close antigenic interrelations between blue green algae and the following organisms: *Spirulina platensis*, *Microcystis aeruginosa*, *Phormidium africanum* and *P. uncinatum*.

Study on effect and mechanism of polysaccharides of spirulina on body immune function improvement

– G. Baojiang et al. April 1994. South China Normal University. Pub. In Proceed of Second Asia Pacific Conference on Algal Biotechnology, University of Malaysia, p. 33-38, China. Polysaccharides of spirulina, at the dosage of 150-300 mg/kg, by injection or taking orally, can increase the phagocyte percentage index of abdominal macrophage, the percentage of T-lymphocyte and haemolysin content in the peripheral blood of mouse. These results demonstrate polysaccharides can improve both the nonspecific function of cellular immunity and the specific hormonal immunity. The mechanism seems related to fact that polysaccharides can enhance reproductive ability of marrowcyte, growth of thymus and spleen, biosynthesis of serum protein, and that polysaccharide can eliminate the inhibition effect of inhibitive circular phosphamide on immune system of body.

MISCELLENEOUS

Addition of eicosapentaenoic acid to gamma-linolenic acid-supplemented diets prevents serum arachidonic acid accumulation in humans – Barham JB, Edens MB, Fonteh AN, Johnson MM, Easter L, Chilton FH., J Nutr. 2000;130(8):1925-1931.

Fatty acids and atopic disease -Calder PC, Miles EA. – Pediatr Allergy Immunol. 2000;11 Suppl 13:29-36.

The effects of chronic ethanol administration on rat liver and erythrocyte lipid composition – Corbett R, Menez JF, Flock HH, Leonard BE. 1991;26(4):459-464.

PREMENSTRUAL MENOPAUSAL SYMPTOMS (PMS)

The potential for dietary supplements to reduce premenstrual syndrome (PMS) symptoms – Bendich A., J Am Coll Nutr. 2000;19(1):3-12.

Effect of oral gamma linolenic acid on menopausal flushing – Chenoy R, Hussain S, Tayob Y, O'Brien PM, Moss MY, Morse PF. BMJ. 1994;19(308):501-503.

The role of essential fatty acids and prostaglandins in the premenstrual syndrome – Horrobin DF., J Reprod Med. 1983;28(7):465-468.

VISION AND EYES

Nutrition supplements and the eye – Brown NA, Brown AJ, Harding JJ, Dewar HM. 1998; 12(pt. 1):127-133.

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Polyunsaturated fatty acids and rheumatoid arthritis – Calder PC, Zurier RB., Curr Opin Clin Nutr Metab Care. 2001;4(2):115-121.

Antioxidants and fatty acids in the amelioration of rheumatoid arthritis and related disorders – Darlington LG, Stone TW. Br J Nutr. 2001;85(3):251-269.

Gamma linolenic acid, an unsaturated fatty acid with anti-inflammatory properties, blocks amplification of IL-1 beta production by human monocytes – Furse RK, Rossetti RG, Zurier RB, J Immunol. 2001;1;167(1):490-496.

Botanical lipids: effects on inflammation, immune responses, and rheumatoid arthritis – Rothman D, DeLuca P, Zurier RB., *Semin Arthritis Rheum.* 1995;25(2):87-96.

HEALTH AND NUTRITION

Effectiveness of spirulina algae as food for children with protein-energy malnutrition in a tropical environment – P. Bucaille 1990. University Paul Sabatier, Toulouse, France.

The study on curative effect of zinc containing spirulina for zinc deficient children – Yonghuang et al. 1994. Capital Medical College, Beijing. Presented at 5th Int'l Psychological Congress, Qingdao, June 1994, China.

Spirulina with high zinc content may be twice as effective as a zinc supplement in curing zinc deficiency in children. – The effective dose of zinc from spirulina was 2 to 4 times less than the zinc from a common supplement, zinc sulfate. More than two times the children were cured with high zinc spirulina. One hundred children were diagnosed as suffering from zinc deficiency. For a three-month period, 50 children were given zinc sulfate and 50 were given spirulina tablets. Doctors concluded spirulina's effect was much better than zinc sulfate. Spirulina had no side effects and was easy to administer for long periods of time. They theorized that high zinc spirulina had many bioactive and nutritious substances, which improved mineral absorption, general health and the immune system.

Importance of dietary gamma-linolenic acid in human health and nutrition – Fan YY, Chapkin RS. *J Nutr.* 1998; 128(9): 1411-1414.

A polyunsaturated fatty acid diet lowers blood pressure and improves antioxidant status in spontaneously hypertensive rats – Frenoux JMR, Prost ED, Belleville JL, Prost JL., *J Nutr.* 2001;131(1):39-45.

Essential fatty acids in health and chronic disease – Simopoulos AP., *Am J Clin Nutr.* 1999;70(3 suppl):560S-569S.

Spirulina: a model for micro algae as human food – Alan Jassby 1988. In *Algae and Human Affairs*. Edited by Lembi and Waaland. Pub. By Cambridge University Press, Cambridge, UK. This is an evaluation of the food potential of micro algae using proven technology. Numerous examples of traditional use of inland micro algae are cited from more than 15 countries. The nutritional aspects of spirulina stand out. Spirulina's safety for human consumption, food applications, economics and environmental aspects, world spirulina production, production costs and therapeutic applications are reviewed. How micro algae can address world hunger problems is addressed with mention of harvesting wild algae and village scale production systems.

Bioavailability of spirulina carotenes in pre-school children – V. Annapurna et al. 1991. National Institute of Nutrition, Vol. 10, p. 145-151, India.

The bioavailability of total carotenes and beta-carotene from spirulina was examined in apparently healthy preschool children and found to be comparable to those value reported for other plant sources like leafy vegetables and carrots. The study also showed spirulina is a good source of vitamin A, as there was a significant increase in serum retinal levels. Researchers concluded that spirulina can be used as a source of vitamin A for dietary supplement, is relatively inexpensive, has higher beta-carotene than any other plant sources and can be cultivated throughout the year.

Current knowledge on potential health benefits of spirulina – Amha Belay and Yoshimical Ota 1993. Pub. in Journal of Applied Phycology, Vol. 5, p. 235-241, USA. Spirulina is a microscopic algae, produced commercially and sold as a food supplement around the world. Until recently, interest in spirulina was mainly in its nutritive value. This is a critical review of data on therapeutic effects of spirulina, ranging from reduction of cholesterol and cancer to enhancing the immune system, increasing intestinal lactobacilli, reducing nephrotoxicity by heavy metals and drugs as well as radiation protection.

WEIGHT LOSS

Clinical and biochemical evaluations of spirulina with regard to its application in the treatment of obesity – E. W. Becker et al. 1986. Inst. Chem. Pfan. Pub. In Nutrition Reports Int'l, Vol. 33, No. 4, p. 565, Germany.

Gamma linolenic acid causes weight loss and lower blood pressure in overweight patients with family history of obesity – Garcia CM, et al., Swed J Biol Med. 1986;4:8-11.

In vitro interactions of gamma-linolenic acid and arachidonic acid with ceftazidime on multiresistant Pseudomonas aeruginosa – Giamarellos-Bourboulis EJ, Grecka P, Dionyssiou-Asteriou A, et al. Lipids. 1999;34:S151-152.

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Atopic dermatitis: unapproved treatments or indications – Graham-Brown R. Clin Dermatol. 2000;18(2):153-158.

Treatment in atopic dermatitis and asthma – Hederos CA, Berg A. Arch Dis Child. 1996;75(6):494-497

Meta-analysis of placebo-controlled studies of the efficacy of Epogam in the treatment of atopic eczema: relationship between plasma essential fatty changes and treatment response – Morse PF, Horrobin DF, Manku MS, et al., Br J Dermatol. 1989;121(1):75-90.

Novel unconventional therapeutic approaches to atopic eczema – Worm M, Henz BM., Dermatology. 2000;201(3):191-195.

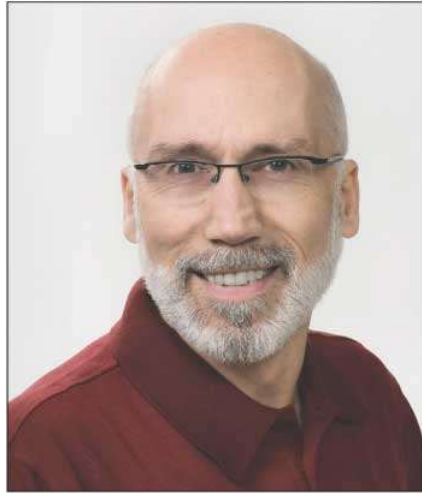
Polyunsaturated fatty acids in maternal diet, breast milk, and serum lipid fatty acids of infants in relation to atopy – Kankaanpaa P, Nurmela K, Erkkila A, et al., Allergy. 2001;56(7):633-638.

OSTEOPOROSIS

Gamma-linolenic acid and eicosapentaenoic acid supplementation in senile osteoporosis – Kruger MC, Coetzer H, de Winter R, Gericke G, van Papendorp DH. Calcium, Aging Clin Exp Res. 1998;10:385-394.

Calcium metabolism, osteoporosis and essential fatty acids: a review – Kruger MC, Horrobin DF., Prog Lipid Res. 1997;36:131-151.

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