

AFA F.A.Qs

Q: What is AFA?

A: AFA is a strain of blue-green micro-algae known as *Aphanizomenon flos-aquae* (AFA). AFA contains more protein and chlorophyll than any other food source. Although algae may appear to be simple single cell plants, most are highly efficient photo synthesizers, even more so than highly structured plants. Algae utilize light energy from the sun, carbon dioxide as well as nitrogen from the air, and hydrogen from the water to synthesize proteins, carbohydrates and lipids. Many call AFA the perfect food. AFA grows only in the wild and is far superior to any other algae on the planet. AFA is unique among all food grade algae in that this strain also metabolizes molecular nitrogen from the air to produce proteins and other nitrogen containing bio-molecules. The AFA cell is truly awe-inspiring in its intricacy and function. Although hundreds of times smaller than cells of the plant or animal kingdoms, its wide range of sixty-four micro-nutrients is unsurpassed by any known food. The nucleic acids contained in the DNA of *Aphanizomenon flos-aquae* also enhance and support the immune system.

Q: How does AFA affect the brain?

A: The brain is the most undernourished organ in the body. Although it comprises only 2% of the total body weight, it uses 20% of the body's available energy resources. Each of its estimated 10 billion neurons has an insatiable appetite, which must be satisfied every minute of every day of our lives if we are to think clearly. AFA metabolizes molecular nitrogen directly from the air. This growth pattern allows for the biosynthesis of Low Molecular Weight Peptide Groups. These low molecular weight peptides are the precursors of neurotransmitters, which are used by various regions of the brain and body to initiate the secretion of other substances (such as hormones) that influence metabolic functions. Neurotransmitters can be seen as the chemical link whereby neurons communicate with one another. The ability of the brain neurons to manufacture and utilize neurotransmitters is dependent upon the concentration of amino acids in the bloodstream. This largely depends upon the food consumption of the previous meal.

Q: Does AFA contain protein?

A: All of the body's basic biochemical processes require energy to occur. It is from the ingestion of various food substances that the required amount of energy is obtained. The central part of the body's energy package that provides for the replication and repair of cells, organs and organ systems is protein. Next to water, protein is the most abundant substance in a healthy human body. It comprises a major portion of the blood and lymph and creates a natural immunity by giving the body a means of recognizing invading foreign cells and viruses. Proteins are made up of amino acids, which are the building blocks of the body. Proteins comprise 90% of the hemoglobin and form the backbone of the body's immune system. ***Aphanizomenon flos-aquae* by cell size contain more protein than any other organism (plant or animal).** There are 22 amino acids, 8 of which are essential to human beings. The word essential means the body is unable to manufacture these amino acids. They must be obtained from our foods. Without proper quantities of all the amino acids, health cannot be maintained. When improper amounts of amino acids are consumed, less important body tissues are "cannibalized" in order to provide the deficient amino acids. Premature aging may result as well as the consequences lack of motivation, loss of memory, low mental alertness, poor intellectual performance and depression. What is truly unique about AFA is that its amino acid profile is almost identical to that found in the human body thus making it mankind's perfect food. It is as if AFA has been providentially designed for human consumption.

Q: Where does AFA come from?

A: This form of algae, harvested from the wild in its 100% organic natural state, comes directly from southern Oregon's extraordinary Upper Klamath Lake. Upper Klamath Lake is free of adverse bacteria, heavy metals, pesticides, herbicides, insecticides and fungicides. The lake receives an average 300 days of sunlight per year which provides a perfect growing environment for the world's richest strain of wild AFA scientifically known as *Aphanizomenon flos-aquae*. The alkaline lake water provides more than 60 times the nutrients needed for the algae to grow to its full potential each year. Under the right conditions, **AFA blue-green algae** can reproduce every 20 minutes, which provides a plentiful abundance of this organic, high life-force, miracle super food. The lake is far away from any large cities that might pollute the air and water, and it is also entirely surrounded by the Cascade Mountains. This unique ecosystem of mineral-rich water, clean air and high intensity sunlight makes Upper Klamath Lake the perfect growth medium for this nutrient-dense whole food.

Aphanizomenon flos-aquae harvested from Klamath Lake represent the quintessence of algae and **is the most fundamental food on the planet**. There is simply nothing else like it. Algae has been harvested and eaten for centuries and yet, until recently, its immense nutritional value has mostly gone unrecognized. Now, because of global hunger, shrinking resources, depleted lands, etc the scientific community has begun focusing its attention on the nutritional potential of this form of blue green algae. The results of research and testing have been impressive enough for **UC Irvine scientists to call it a "Super Food**, capable of contributing to the achievement and maintenance of wellness."

Q: Does AFA contain chlorophyll?

A: Yes, chlorophyll is a very important part of the algae. Its molecular structure is almost the same as that of the hemoglobin, which is responsible for carrying throughout the body. Oxygen is the prime nutrient, and chlorophyll is the central molecule for increasing the oxygen availability to your system. Chlorophyll is vital for the body's rapid assimilation of amino acids. **AFA is the highest known source of chlorophyll.**

Q: Does AFA contain vitamins?

A: Yes, vitamins are essential to human life. They are organic compounds necessary in small amounts to promote growth and maintenance of life. They do not provide energy, nor do they construct or build any part of the body. They are needed to transform food into energy for the body. **AFA contains a complete balance of vitamins except for vitamins "D" and "E". Spending time outdoors in the sun provides a source for vitamin "D", where it is formed in the skin by ultra violet rays. Eating high chlorophyll foods such as AFA helps the body produce its own vitamin "E".**

Q: Does AFA contain minerals?

A: Yes, minerals are also important to the overall functioning of the mind and body and in reality are more important than vitamins. Minerals and vitamins work together to activate enzymes. Enzymes do the work for the body and require cofactors. Think of yourself as a mineral. Your car is an enzyme. Without you getting into your car and turning on the ignition nothing happens. The enzyme-car will just sit there. The same is true with the body. If your body is mineral deficient your enzymes cannot accomplish the work they are designed to complete. Without enzymes being activated nothing happens. Minerals have two general body functions - building and regulating. Without minerals, vitamins have no function. Minerals help build the skeleton and all soft tissues, and regulate heartbeat, blood clotting, internal pressure of body fluids, nerve response and oxygen transport from the lungs to the tissues. ***Aphanizomenon flos-aquae* contain almost every organic mineral in trace amounts, which is what the body must have to function well.** Minerals can literally mean the difference between good health and serious disease. While the minerals only represent about one percent or less of our daily food intake, without them we cannot utilize our food, and we would quickly perish.

Q: What about beta carotene?

A: The body uses beta-carotene to produce its own Vitamin A. Because the body converts beta-carotene into Vitamin A only as needed, there is no threat of toxic build up. The beta-carotene in AFA is probably one of the most powerful natural antioxidants known today. It may well be the single most important factor towards enhancing the immune system (by protecting the thymus gland) and thus increasing our life span. However, the potential healing properties of beta-carotene are maximized ONLY when other precious carotenoids are also present. *Aphanizomenon flos-aquae* contain dozens of carotenoids, all able to neutralize the deleterious effects of dangerous free radicals. In the past 25 years, twenty-four worldwide studies have looked at beta-carotene. All findings are consistent. Leading degenerative disease research authorities have shown that people who consume higher-than-average amounts of foods rich in beta-carotene have lower incidence of degenerative disease.

Summary

America's food supply is highly refined, processed, genetically altered and nutrient deficient. All of these factors negatively affect our bodies over time. It is very difficult to eat and stay healthy on the typical American diet. Over production of our farmlands have depleted the soils, causing our foods to be nutrient deficient. Most of the major degenerative diseases are largely caused by poor diet and unhealthy foods. Dr. Stanley S. Bass, N.D., D.C., Ph.C. says, "The closer the food comes to the natural state in which it occurs, or the closer we come to its raw, unfired form, the higher its quality is." In this condition, all the enzymes are found intact. **The amino acids are in their finest form. The minerals, vitamins, trace elements, carbohydrates and life force are present. This life force is, in turn, capable of reproducing tissue, which is full of life and longer lasting in structure.** Eating organically grown unprocessed foods, fruits, vegetables, nuts and seeds provides your body nutrients that are free of herbicides, pesticides and preservatives. *Aphanizomenon flos-aquae* provide mankind with the most basic food found in nature. This alga is the foundation of the food chain, provides perfect nutrition and contains more protein than other whole foods. AFA nutrition provides rich naturally occurring Chlorophyll. Chlorophyll enhances health in a variety of ways including boosting the immune system. This amazing food can also help purify the blood, promote intestinal regularity and naturally help the body heal itself. Good nutrition is obtained by eating foods containing the elements the body required to function as it is designed and is the first step toward living a long and happy life.