



## Gimme the Green: Cereal Grasses & Micro-Algae

### Chlorophyll and the Liver

All life depends on chlorophyll. It is the cornerstone of the food chain. Leafy-green vegetables use chlorophyll to expand and spread out into their surrounding space. They distribute energy made by chlorophyll directly from the sun, water, and air (CO<sub>2</sub>) to all parts of the plant. Spring is the season when green plants begin their growth. In acupuncture, both the spring season and the green of chlorophyll-rich plants correspond to the Liver and Gall Bladder. These two organs connect many different areas of the Body/Mind including the muscles and sinews, the reproductive system, the Blood, the capacity to digest fats and oils, the eyes, growth patterns in general, the smooth flowing of emotions and ideas, the ability to stand up for and protect oneself, the ability to visualize and imagine, and the capacity to organize life so that all beings can share the same space for the common good of all. In addition, the Liver/Gall Bladder is also the indirect cause of other organ malfunctions such as those of the digestive system, the heart, the lung, and the skin. The Liver is also involved in cancer, which can be thought of as the ultimate block in this circulation of vital energy, or Qi. Chlorophyll is the most important food for healing all of these Liver related conditions.

The bio-chemical healing agents contained in chlorophyll include:

1. Complex carbohydrates that correct blood sugar imbalances;
2. Digestive enzymes that improve digestion;
3. Beta-carotene that is converted into vitamin A;
4. Omega-3 and/or Gamma-linolenic fatty acids (GLA);
5. High proportions of assimilable protein;
6. Nucleic acid (RNA and DNA) known to benefit cellular renewal and reverse aging;
7. Anti-oxidants (AOs) that slow cellular deterioration and mutation;
8. Immune-enhancing qualities;
9. Anti-fungal and anti-bacterial substances;
10. Minerals in their most comprehensive, concentrated, and bio-available form; and
11. Magnesium.

Green foods are also very cooling and form a good antidote to disorders arising from excess animal food consumption, which creates Hot inflammatory conditions in the body. The green-colored "blood" of plants contrasts with the red blood of animals and humans (hemoglobin). Green and red are opposites in the light spectrum. This polarity gives chlorophyll anti-inflammatory and detoxifying properties that helps counteract the negative effects of animal products and refined foods. While hemoglobin cells have iron in their center, chlorophyll centers are comprised of magnesium. Magnesium is an important mineral that is also frequently deficient in modern diets. It is contained in chlorophyll-rich foods and involved in important Liver functions such as regulating fats and oils, calming the emotions, relaxing the muscles, stimulating digestion, and regulating blood sugar.

Another important attribute of chlorophyll is its ability to neutralize acidic conditions in the body. Chlorophyll is the most alkaline-forming food on the planet. Acids are poisonous to the body and when the acid/alkaline balance is upset, the acids rob the body of its alkaline reserves in order to restore this balance. Chlorophyll heals the Liver to maintain this balance while antacids merely disguise it by buffering the acids.

In general chlorophyll has three different properties: 1) Renewal, 2) Purification and Cleansing, and 3) Cooling. Its renewing properties improve Liver function, build blood and tissue, promote healthful intestinal flora, strengthen the intestines, and relieve

nervousness, anxiety, and ADHD. Its purifying and cleansing properties counteract radiation, reduce high blood pressure, stop the growth of microorganisms in both wounds and in the digestive tract, remove drug deposits, counteract toxins, and deactivate carcinogens. Its cooling properties are used for sore throat, pyorrhea, gingivitis, inflammation and ulcers of the stomach and intestines, all skin inflammations, arthritis, and pancreatitis.

### Vitamin A

Chlorophyll is also the most abundant source of plant-derived vitamin A. It contains more than twice as much as yellow/orange vegetables such as carrots. Because of the relative lack of chlorophyll in the diet, vitamin A is also one of the most widely recognized nutritional deficiencies of modern times. While the beneficial effects of synthetic vitamin A are relatively insignificant, and animal sources of vitamin A (retinol) are toxic in large doses and often saturated with harmful chemicals, hormones, and drugs; plant sources of vitamin A in the form of beta-carotene can easily be stored in the body until needed and have the additional advantage of their superior anti-tumor effect.

Common signs of vitamin A deficiency correlate to Liver patterns of imbalance and include eye problems such as night blindness, and weakened vision, especially in those who use their eyes a lot for reading or other focused work; allergies; general skin diseases (including rough, dry, prematurely aged and wrinkled skin, and dandruff); and dryness of the mucous membranes of the mouth, respiratory, and reproductive systems.

The most important function of vitamin A, however, may be in the treatment and prevention of cancer and other diseases related to weakened immunity, especially cancer of the lungs, stomach, colon, bladder, uterus, ovaries, and skin. High amounts of vitamin A in the plant form of beta-carotene can safely result in a 700% decrease in cancer among heavy smokers.

### Micro-Algae

The richest sources of chlorophyll are by far the micro-algae and cereal grasses. Micro-algae, including spirulina and chlorella are one-celled, water-dwelling plants. They are among the oldest and most primitive organisms on earth and have been used by native peoples for thousands of years. Their reproduction by cellular division keeps them in a constant state of expansion and growth, factors that correlate them with patterns of the Liver. They store the incredible energy derived from their connection to primordial life in the form of an extremely high content of nutrients including minerals, protein (60%), omega-3 and/or GLA fatty acids, beta-carotene, and their abundant content of nucleic acid (RNA and DNA), which is known to benefit cellular renewal and reverse aging. They also contain unique anti-fungal and anti-bacterial bio-chemicals not found in other sources. Nutrients contained in micro-algae derived from 100-gram samples are shown below:

	Spirulina	Chlorella	Other Sources
Protein	68%	55%	Brewer's Yeast 45%
Vitamin A	250,000 IU	55,000 IU	Carrots 28,000 IU
Iron	58 mg	133 mg	Beef Liver 6.5 mg
Chlorophyll	.7-1.1%	2-3%	Alfalfa .2%; Cereal Grass .2-.54%
DNA/RNA	4.5%	13%	Sardines .8%

## Spirulina

Spirulina is an extremely nutrient-dense food containing a higher concentration of digestible protein than any other food (65% more than beef). It is one of the richest sources of GLA. GLA is made from the common omega-6 essential fatty acids and, in turn, produces prostaglandin 1, which is essential in preventing heart attacks and strokes as well as in regulating the production of cholesterol and insulin. It also reduces arthritic inflammation and stimulates the immune system to destroy foreign organisms. While normally converted from the omega-6s, 20% of the population is unable to make this conversion and is, therefore, dependent on the rare primary sources of GLA like spirulina.

Spirulina's nutrients occur in natural packages called mucopolysaccharides. These are completely digestible combinations of simple sugars, complex carbohydrates, amino acids, and protein. They easily nurture and strengthen body tissues and protect the vascular system by lowering fat. These features make spirulina a powerful food used by many world-class athletes for renewing the sinews and joints and reducing inflammation after strenuous physical exercise. Spirulina is also an important food for tonifying deficiencies, increasing mental capacity, and cleansing the body in order to treat degenerative conditions like hypoglycemia, diabetes, obesity, arthritis, and cancer.

## Chlorella

Chlorella has four important and unique features: 1) its high content of nucleic acid; 2) its high content of chlorophyll, 3) its particularly tough cell wall, and 4) its high proportion of essential fatty acids including the all-important omega-3s, 20% in fact, the greatest among the micro-algae. Chlorella's effectiveness in reducing cholesterol and preventing atherosclerosis is due to this high content of omega-3s. The nucleic acid in chlorella's true nucleus has a special characteristic called "Chlorella Growth Factor" (CGF), which replenishes the RNA/DNA depleted from the human body by lack of exercise, stress, pollution, and poor diet. The CGF in chlorella prevents and helps reverse premature aging as well as weakened immunity and is crucial to all aspects of physical health and longevity.

Chlorella's cell wall protects against invading organisms and toxins and offers this protection for our own cellular structure. It contains compounds that fortify immunity and protect against tumor formation by stimulating the production of interferon, an important protein involved with immune response. It also binds with heavy metals, pesticides, and carcinogens in order to safely detoxify them from the body.

Chlorella is very tonifying and is suitable for treating deficiencies, improving children's growth patterns, and maintaining health in old age. It promotes normal growth without stimulating the growth of disease processes such as tumors. Its predigested protein helps regulate the blood sugar imbalances of diabetes, hypoglycemia, manic-depression, and ADHD. The immune-enhancing qualities of its CGF works synergistically with the antiviral effect of its chlorophyll to make it an effective healing food in the treatment of viruses and fungi such as candida, Epstein-Barr, chronic fatigue, and AIDS.

## Cereal Grasses

Cereal grasses are the second highest group of chlorophyll-containing foods. Common cereal grasses used for food include wheat, kamut (an ancient form of Egyptian wheat that has never been hybridized and is, thus, the purest and strongest form of grain in the world), barley, oats, and alfalfa. Cereal grasses represent the activation of potential stored in grain by virtue of its sprouting into the light of the sun. This simple act of transformation actualizes a wealth of nutrients in cereal grasses, a feat that made wheat grass tablets the most popular form of nutritional supplements in the 1950s.

In addition to their high chlorophyll content cereal grasses also contain high levels of vitamin A, trace amounts of vitamin B<sub>12</sub>, protein (about the same as meat), a huge amount of bio-available minerals (wheat grass absorbs more than ninety minerals of the possible 100 found in good soil), and hundreds of unique digestive enzymes enabling them to improve digestive absorption so that other immune-strengthening, anti-aging nutrients can be utilized.

These enzymes include the AO superoxide dismutase (SOD) and the special fraction P4D1, both of which help resolve indigestible and toxic substances in food, and treat degenerative disease and premature aging by slowing cellular deterioration and mutation. SOD is completely absent in cancer cells and protects healthy cells from being destroyed by "free radicals" formed from radiation, air-pollution, refined and chemical-laden foods, and other toxins. P4D1 is a natural anti-inflammatory more powerful than steroids like cortisone. Its presence helps explain why inflammatory conditions like arthritis respond so well to the cereal grasses without side effects or toxicity.

Because of the transformation cereal grasses undergo in sprouting, they almost never present allergic reactions and can be used safely for fatigue, anemia; toxicity from lead, mercury, and other heavy metals; burns, poison oak rash, bruises, wounds, gangrene; muscle debility, arthritis, rheumatism; emphysema; hypertension, high cholesterol, hepatitis; peptic ulcer, hypoglycemia, diabetes, obesity, constipation, hemorrhoids; prostate difficulties, premenstrual syndrome; and cancer.

## Life's Green Essentials®

95% of all Americans, especially children, consume a diet incapable of sustaining a disease-free life. *Life's Green Essentials®* is made to address this problem. It is comprised of 100% certified organic vegetable foods that are over 50% chlorophyll-rich and contain no synthetic vitamins or minerals, no chemicals, preservatives, or added sweeteners. Their extremely rich nutrient content is due to their being grown in volcanic soil. *Foods For Life®* is dried within minutes after juicing at a temperature below 88° F to insure the integrity of its enzymes and provide excellent shelf life. It contains 30 nutrient-rich whole foods including the highest quality spirulina, chlorella, and sea kelp (the most mineral-dense food); the cereal grasses kamut, barley, oats, and alfalfa; the sprouted seeds of soy (the most digestible form of soy), flax, chia (used traditionally for athletic endurance), and fennel; stabilized rice bran and germ; the five most important cancer reversing cruciferous vegetables including broccoli, cauliflower, kale, cabbage, and Brussels's sprouts; as well as parsley, spinach, asparagus, celery, green bell pepper, carrot, beet, tomato, garlic, onion, and ginger.

Together these foods supply all 70 of the known AOs; all of the needed essential fatty acids including the omega-3s and 6s; all of the 22 known amino acids; and a bio-available concentration of all 100 known minerals. *Life's Green Essentials®* also contains a full spectrum of enzymes, which are proteins that catalyze every life function and serve important AO roles. In addition, the potent form of vitamin E contained in rice bran and germ has been certified by the Diabetes Resource Center to alleviate symptoms of both Type I and II Diabetes.

*Life's Green Essentials®* is a tasty and complete food. It can be used to add the benefits of micro-algae and cereal grasses to a normal natural foods diet as well as supplement any diet with all known nutritional co-factors in their most bio-available form in contrast to the inefficient and poorly absorbed nutritional isolates normally sold as supplements. It can also be used as an important ingredient in healing various diseases, especially those related to the Liver as mentioned above.

## Ordering Information

*Life's Green Essentials®* ordinarily retails for \$65.00 per bottle, which is a 1-2 month supply. In order to start the program you can avoid this retail price by ordering a four-pack case for as little as \$40.00 per bottle. Most people experience benefit from the very beginning. If you don't experience any changes, it is important to realize that every organ and tissue is being cleansed, rebuilt, and nourished. Good health is a continuous process of giving your body what it truly needs. There is, nevertheless, a thirty-day satisfaction guarantee. If for any reason you are unsatisfied, simply return the balance for a refund. You may order by phoning Life Science Products toll free at 800-713-3888 (**tell the order desk to use code 42976 to get your discount**), or online at <http://www.lifescienceproducts.com/42976>. Please refer to the author's forthcoming *Natural Healing With Essential Oils* as well as Paul Pitchford's book *Healing With Natural Foods* for more information.