



GREEN JUICES, GREEN POWDERS & CAPSULES — WHICH IS BEST?

Your questions — Our qualified answers!



1. Why can the addition of supergreen powders/pills be a benefit to ones diet/ health?

Ans: Very few people are successful at meeting the governmental requirements of minimal intake of vegetables - approximately 4-5 per day! Science has proven that the higher one's diets of green's the less heart disease, cancers and degenerative diseases. Consuming supergreen powders is a reliable way to get in the minimum daily intake of greens and then some...and one cannot eat too many greens (with the exception of those on blood thinning medications).

2. With so many Americans coming up short in the daily fruits and veggies department, can green products provide a good way to make up for deficiencies?

Ans: Absolutely! Supergreen powders are high in vitamins, minerals, fibers (soluble and insoluble), enzymes and other, anti-cancer compounds, anti-inflammatory compounds, detoxification compounds and other important nutritional items.

3. What should consumers look for and what should we be wary of in a green foods product?

Ans: Make sure that the product does not contain food concentrates that you have known allergies or sensitivities to. The product should have a wide variety of foodstuff that taste pretty good to great. These products should be free of excessive bacterial and yeast organisms and heavy metals such as lead and mercury.

4. What is chlorophyll and what are the benefits of it? I've read that it is similar to hemoglobin in blood? Also is it true that algae such as spirulina will have much more chlorophyll than green grasses such as barley?

Ans: Chlorophyll does have a chemical structure that has similarities to human (mammal) hemoglobin, but chlorophyll is not hemoglobin and does not have the same functions in the human body. However, chlorophyll does seem to have weak detoxification properties and thus blood cleansing properties, but not in cases of serious toxicity. Also, chlorophyll cannot effectively detoxify heavy metals. Depending upon the toxins in question, certain nutritional compounds are more exacting and appropriate than others. The amount of chlorophyll in a food depends on the food and the amount consumed. Chlorophyll is a type of fiber and is not absorbed. Algae is higher in chlorophyll per gram compared to barley, but algae is algae so one would just need to alter their intake for equivalent amounts. It is best, in my opinion, to consume a variety of algae containing foods.

5. What is chlorella and what are the nutrition/health benefits of chlorella? I've read it is particularly rich in chlorophyll? I've seen "cracked cell wall" on labels beside chlorella - what does this mean?

Ans: Chlorella is a type of green algae, which is a fantastic source of inexpensive proteins, healthy fats and carbohydrates containing approximately 45% protein and 20% each of fats and carbohydrates. "Cracked cell wall" chlorella refers to a process by which the cell wall of the single celled chlorella algae is broken helping to release its nutritional contents that otherwise would resist digestive enzymes and acids in the human body.

6. What are the benefits of consuming kelp in green food supplements?

Ans: Kelp is a form of brown seaweed algae and a rich source of vitamins A, B, C, D, E, K and the minerals iodine. Kelp is yet another high nutritional content plant food, that when combined in a comprehensive green food helps to cover a variety of nutritional bases.

7. Would consuming spirulina, chlorella and kelp be tantamount to consuming a "whole food"?

Ans: A whole food does not exist. This is a term only that refers to a product or foodstuff that is considered to contain an exceptionally well-balanced variety of proteins, healthy fats and carbohydrates, vitamins, minerals, herbs, fibers and other nutritional compounds. A "whole food" does not imply that the food product contains everything that an individual needs each day or throughout their lifetime. Together with a healthy diet a "wholefood" can serve as "nutritional insurance" towards helping to ensure an exceptional nutritional effort.

8. What are some of the nutritional benefits of cereal grasses such as wheat, barley and alfalfa?

Ans: Those with gluten or wheat allergy and/or sensitivity should avoid wheat and barley. Alfalfa is not a gluten grain. If one is not allergic to these foods then they serve to provide unprocessed fibers, carbohydrates, vitamins and minerals.

9. Are their anti-inflammatory properties with green powders? If so, why is this important?

Ans: It is not generally recognized in medical research and clinical arenas that inflammation is the fundamental process causing cellular, tissue, organ and organ system degeneration. Green powders contain literally hundreds to tens-of-thousands of plant compounds suspected or well-established to effect many known inflammatory pathways in the body including interleukens, interferons, cytokines and other inflammatory modifying pathways.

10. Are there any detoxifying properties of these greens? If so, what are they?

Ans: Many greens provide a large number of compounds that are known to enhance the body's detoxification mechanisms including many of the cytochrome P450 enzyme systems in the liver and other organs; monoamine oxidase systems (MAOs) and Phase I, Phase II and Phase III detoxification mechanism.

11. When choosing a green powder formula, what other items can be beneficial (e.g. probiotics, digestive enzymes)?

Ans: The addition of probiotics to green powered formulations can add an additional health benefit. Probiotics are helpful for detoxification, modification of immunity, improvement of inflammation control and thrive in an environment high in live enzymes and fibers such as green foods. Green foods themselves are exceptionally high in naturally-occurring plant enzymes; additional enzymes added to green powders could enhance the healing benefits of such products.





**12. Are there any differences between taking these in juice, powdered or pill form?**

Ans: Powdered products allow for high dosages much more easily managed in daily oral dosages by most people. For example, taking a scoop of green powdered products might equal 30-50 capsules of green products. However, some people do not like the taste and/or consistency of powdered green products and prefer capsules. Taking some capsules is better than taking no green products at all.

**13. Can you get the same benefits from wheat grass and other grasses in powder form as you would in juice form?**

Ans: I would think you would get more fiber from the powders. However, I have read that cereal grasses in juice form are easier to digest. Let me initially answer the first part of this question – grasses in juice or powder form are highly nutritious loaded with enzymes, vitamins, minerals and other important phyto- (plant) chemicals. Fresh juices, consumed soon after they have been juiced (immediately up to three or so hours later) have the highest nutritional and enzyme content. The nutritional content of juices starts to diminish once the plant is harvested, processed, and juiced and consequently with every passing minute, more loss of enzyme activity and nutrition. Dehydrated products are very high in enzyme and nutrient content and the dehydration process actually helps to maintain much of the nutritional and enzyme content until the juice is once again rehydrated for consumption. If it is convenient and possible, I would suggest drinking the juices very shortly after they have been juiced for oral consumption. Life is so busy for most of us that the later is just not always possible, but reconstituting the dehydrated green products is a very healthy second choice.

**14. Does one get more fibers from the powders? I would agree that one would get more fibers from the powders.**

Ans: The purpose of juicing is for the nutritional content, to break open the plant fibers (otherwise non-digestible in humans) to release nutrition from the plant cell and for high enzyme consumption.

**15. Could we approximate how many equivalent servings of green vegetables are found in a typical dose of a green supplement?**

Ans: Green vegetables are mostly composed of water. Between 75-95% of a given green vegetable is water weight, which means that 5-25% of the weight (in grams) of a given vegetable is solid mass consisting of fibers, vitamins, minerals and assorted other healthful constituents. Consider the possibilities! Consuming anywhere from one to six grams per day of a super green product provides a level of plant-based nutrition that, in my opinion, covers many essential healing bases.

**16. Could we say that essentially the greener you are the healthier you are?**

Ans: The short answer is yes! Studies have clearly demonstrated that the higher one's intake of fruits and vegetables the lower one's susceptibility to chronic degenerative disease. A higher green's diet helps to maintain steady blood sugar levels, reduce inflammation, enhances detoxification, improves energy and helps maintain a steady physiologic pH (acid base balance).

"It's now generally recognized both clinically and scientifically that inflammation is the fundamental process precipitating cellular, tissue and organ degeneration; and thus all disease. Green powders contain literally hundreds to tens-of-thousands of plant compounds suspected or well-established to reduce inflammation and modify inflammatory, immune, hormonal, detoxification, neurologic and other systems required to reach and maintain optimal health."

**17. Would you consider these greens to be alkalizing? If so, why would this be important? Would you consider the current American diet to be acidic?**

Ans: This is a loaded question so let me provide an adequate and detailed response. Acid-Base balance is an essential physiological component of homeostatic regulation in the human body. Respiration (breathing), kidney function, exercise, disease (i.e., infection, etc.), diet and digestion are just a few

of the major influences that keep our body pH systems in the narrow ranges required for optimal function. Our diets contain both acid and alkaline promoting foodstuff, which in short, means that these foods contain primarily acid and alkaline components such as proteins and minerals. The primary minerals in fruits and vegetables are alkaline and the primary nutrition in animal products are acidic. Different types of diets contain a mixture usually of both acid and alkaline foods. It is not merely the consumption of these foods that promote either acid or base or both in the body. The individual's digestive capacities and other factors (body systems mentioned above) all play more or less of a role towards balancing the required physiologic pH in different body compartments. For example, each of us requires an alkaline pH in the mouth for initiating starch digestion; an acid pH in the stomach, an alkaline pH in the small intestine, a slightly acid pH in the large intestines, a slightly acid pH in the urine, a slightly alkaline pH in venous blood, etc. As you can see the concept that "we should be alkaline for best health" is nonsensical.

**18. The answer to the question, "...do green's promote alkalinity in the body?" The short answer is, "not really!"**

Ans: A diet composed mainly of greens will provide the body with nutritional elements that should help maintain balance of excessive inflammation, oxidative stress, toxicity and ultimately pH in various compartments of the body – this last statement is the most important! It stands to reason that if diets high in green's reduce degenerative disease incidence, and disease is associated with loss of homeostatic control of pH in various body compartments, then a high green's diet (supplemented with dehydrated green's products) helps promote optimal pH in the body overall.

**19. Finally, the question also asked if the American diet is acidic?** The answer is that yes most American's are known to consume a diet far too high in red meat, animal products overall, soda pop, refined and processed carbohydrates and low in fruits and vegetables – this is an acidic composition. If the body is overwhelmed with acid foods, it stresses the bodies alkalizing physiologic mechanisms. Eventually, the body fails to use its alkaline reserves to "dilute" the acidifying effects upon the body and a more acid pH in the blood predominates. Think about it, when one consumes lots of animal protein the stomach must produce chronically high hydrochloric acid for protein digestion. Hydrochloric acid contains hydrogen ions that diffuses (leaks through) the stomach into the blood promoting acid. One can see that if an acid containing diet that requires constant stomach acid production (HCL) continues, a lower pH (towards the acid side of the pH range) develops; other areas of the body must compensate altering their respective pH. The ultimate result is ill health, sickness, disease and premature death.

**20. You mentioned that modern technology allows for the breaking of chlorella cell walls helping release its nutritional contents such as essential fats. Are there any other notable items such as vitamins or minerals?**

Ans: Yes, not only fats, but vitamins and minerals. Other nutritional phyto-compounds may also be released that have the potential to improve and maintain health and wellbeing.

**21. Would it be fair to say that as more people become aware of the diet health connection, the interest in green products will continue to rise?**

Ans: I would hope that people will realize the importance of eating a diet high in fruits and vegetables, low in saturated fats, high in unrefined carbohydrates, very low in refined and processed sugars from desserts and other products and high in mono and polyunsaturated fats. I developed my own green and fruit products because maintaining the best diet possible on a consistent basis is very difficult to say the least. For those of us that are interested in longevity and a higher health potential taking dehydrated (powered) plant and fruit products in addition to a healthy diet similar to the one briefly described above, is the way to go!

