

[IMAGE]

The Power of Algae Nutrition

By Catharine Arnston

You may not know much about algae, but you should, because it may be your last shot at being properly nourished. Our world is toxic, our oceans are polluted, our soil is lifeless, our children are nutrient-deprived, our bodies are fueled by sugar, and chronic disease continues to escalate. If we're going to survive, we need something different. Algae could be the solution.

We Are What We Eat

The field of epigenetics has proven that our health and DNA are directly impacted by what we eat. Our food literally speaks to our cells, but over the past 50 years our food has been stripped of its nutrients, leaving "no conversations" – just empty calories, sugar and carbs. This has triggered an epidemic of cellular inflammation, mitochondria damage, leaky gut, liver toxicity and chronic illness.

We are at a crossroads. If our bodies don't start getting the nutrients they need to reverse or prevent further damage, our health crisis will only escalate.

Understanding the Power of Algae

Like many healing foods found in other parts of the world, America is very late in understanding algae. Algae was the first life on Earth 4 billion years ago and is a multi-billion dollar agricultural crop in Asia, where it has been used for 50-plus years. In Japan, they don't take daily supplements, they take chlorella. The Japanese are well-known for their longevity, beautiful skin and low cancer rates. Could it be the algae?

It is important to understand that algae is *food*, not a supplement. Algae is grown in fresh water like kale or broccoli, except algae is far more nutrient dense. Even NASA says "*algae has 1,000 times more nutrients than any other fruit or vegetable*"²¹ and the United Nations⁸ says "*spirulina algae is the answer to world hunger.*"⁹

With endorsements like this, no wonder the buzz about algae is growing and explains why Congress recently passed the first "Algae Agricultural Act"²² as part of the 2019 Farm Bill to encourage American farmers to grow algae here. It also explains why practitioners nationwide have been rapidly embracing

algae.

As a functional food, algae is safer, more bioavailable and more natural than vitamins. Algae is also part of the exploding interest in plant-based nutrition and vegan diets. Twenty-five percent of American millennials are now vegan.²⁰ If you don't have enough vegan options, algae could be your solution.

A Wealth of Scientific Support

Algae is also the most scientifically studied food in the world. There are almost 100,000 evidence-based studies documenting its long list of therapeutic, sports and nutrition benefits. But until recently, these benefits haven't found their way out of the scientific community and into the consumer or practitioner communities.

Algae is a nutrient-dense,²³ high-protein, plant-based, sustainable, keto, vegan food that quickly satisfies hunger, helps with intermittent fasting or weight loss, provides virtually all macro- and micronutrients, improves energy and focus, removes toxins, boosts athletic performance, speeds recovery from sports or surgery, improves heart, brain and bone health, and helps improve overall longevity and wellness.

All this and more from just one ingredient, 40 vitamins / minerals and over 60 percent protein. No wonder it's called "efficient nutrition." In fact, algae contains such dense nutrition and its nutrient profile is virtually identical to mother's breast milk, that you could probably live on it forever.

There are two main types of algae you need to know about – *spirulina* and *chlorella* – and they are vastly different.

Spirulina

Spirulina is a *blue-green* algae regarded as one the most nutrient-dense functional foods of the 21st century.¹ Spirulina has the highest concentration of protein in the world,² and its 40 vitamins, minerals, antioxidants and nutrients³ work synergistically to elevate energy, improve mental focus⁴ enhance skin and hair health,⁵ improve athletic performance,⁶ boost vitality, reduce inflammation⁷ and support optimal health.

With our food supply and environment so toxic and our health suffering, instead of asking yourself why you should be taking spirulina algae every day, maybe you should be asking yourself, *Why aren't I?*

Chlorella

Chlorella is a *green algae* recognized worldwide for its wellness and medicinal properties¹⁰ and its ability to remove heavy metals¹¹ such as mercury and lead. Chlorella algae has the highest concentration of chlorophyll in the world. Chlorophyll is essential for cellular health, cleansing your body and helping to reduce or prevent chronic disease¹² including lung disease.¹³

Chlorella's high amounts of bioavailable iron, RNA / DNA, chlorella growth factor, and 40 other vitamins and minerals boost your immune system, speed cellular renewal, support mitochondria function, reduce aging,¹⁴ accelerate recovery¹⁵ from athletic activity and improve eye health.¹⁶ Chlorella even detects alcohol as a toxin, so it removes it within a few hours after drinking and helps prevent hangovers.

Chlorella is also a natural vitamin K₂,²⁴ which supports heart,¹⁷ bone¹⁸ and skin health.¹⁹ Recent research has found that heart disease is partly due to calcification of blood vessels. Only vitamin K₂ can move calcium out of your soft tissue like skin and blood vessels and move it into your bones, so it also prevents osteoporosis. Chlorella algae contains your daily requirement of vitamin K₂. Take chlorella every night or after a workout to help your body with cleansing, detox, cellular renewal, longevity and healing.

Your Wellness & Nutrition Solution

Algae is a wellness and nutrition solution that is long overdue. Now might be a good time to start using it. (Keep in mind that not all algae is high quality, so you want to be sure you purchase yours from a highly reputable company). It took 4 billion years for algae to be noticed, but its benefits are immediate and last a lifetime.

References

1. Matondo FK, et al. Spirulina supplements improved the nutritional status of undernourished children quickly and significantly: experience from Kisantu, the Democratic Republic of the Congo. *Int J Pediatr*, 2016 Sep 29 (e-pub in advance of print)
2. Lupatini AL, et al. Potential application of microalga *Spirulina platensis* as a protein source. *J Sci Food Agric*, 2017 Feb;97(3):724-732.
3. Wells ML, et al. Algae as nutritional and functional food sources: revisiting our understanding. *J Appl Phycol*, 2017;29(2):949-982.

4. Weiser MJ, et al. Docosaheptaenoic acid and cognition throughout the lifespan. *Nutrients*, 2016 Feb;8(2):99.
5. Benefits of spirulina on hair and skin health. American Association of Naturopathic Physicians.
6. Kalafati M, et al. Ergogenic and antioxidant effects of spirulina supplementation in humans. *Med Sci Sports Exerc*, 2010 Jan;42(1):142-5.
7. Ku CS, et al. Health benefits of blue-green algae: prevention of cardiovascular disease and nonalcoholic fatty liver disease. *J Med Food*, 2013 Feb;16(2):103-111.
8. Intergovernmental Institution for the Use of Micro-Algae Spirulina Against Malnutrition: <http://iimsam.org/eng/iimsam-spirulina-resource-centre-2/>.
9. Achieving Sustainable Development: Economic and Social Council Substantive Session for 2008 High-Level Segment: www.un.org/en/ecosoc/docs/statement08/iimsam.pdf.
10. Panahi Y, et al. Chlorella vulgaris: a multifunctional dietary supplement with diverse medicinal properties. *Curr Pharm Des*, 2016;22(2):164-73.
11. Dosing With Chlorella / Cilantro for Neurotoxin Elimination. National Integrated Health Associates: [Click here](#) to access.
12. Donaldson MS. Nutrition and cancer: a review of the evidence for an anti-cancer diet. *Nutr J*, 2004;3:19.
13. Lin P-Y, et al. Chlorella sorokiniana induces mitochondrial-mediated apoptosis in human non-small cell lung cancer cells and inhibits xenograft tumor growth in vivo. *BMC Complement Altern Med*, 2017;17:88.
14. Nakashima Y, et al. Preventive effects of Chlorella on skeletal muscle atrophy in muscle-specific mitochondrial aldehyde dehydrogenase 2 activity-deficient mice. *BMC Complement Altern Med*, 2014;14:390.
15. Umemoto S, et al. Chlorella-derived multicomponent supplementation increases aerobic endurance capacity in young individuals. *J Clin Biochem Nutr*, 2014 Sep;55(2):143-146.
16. Yu B, et al. Spirulina is an effective dietary source of zeaxanthin to humans. *Br J Nutr*, 2012 Aug;108(4):611-9.
17. Maresz K. Proper calcium use: vitamin K2 as a promoter of bone and cardiovascular health. *Integr Med*, 2015 Feb;14(1):34-39.
18. *Ibid*.
19. Schagen SK, et al. Discovering the link between nutrition and skin aging. *Dermatoendocrinol*, 2012 Jul

1;4(3):298-307.

20. Parker J. "The Year of the Vegan: Where Millennials Lead, Businesses and Governments Will Follow." *The Economist*: <https://worldin2019.economist.com/theyearofthevegan>.
21. Ravi M, et al. The beneficial effects of Spirulina focusing on its immunomodulatory and antioxidant properties. *Nutr & Dietary Suppl*, 2010 Jul;2:73-83.
22. "Algae Agriculture Triumphs in Farm Bill Compromise." Algae Biomass Organization (ABO) Blog, Dec. 12, 2018.
23. Sathasivam R, et al. Microalgae metabolites: a rich source for food and medicine. *Saudi J Biol Sci*, 2019 May;26(4):709-722.
24. Rheume-Bleue K. *Vitamin K2 and the Calcium Paradox: How a Little-Known Vitamin Could Save Your Life*. Harper, 2013.

Additional Resources

- Avena N. "Should You Be Taking an Algae Supplement?" *Psychology Today*, Oct. 3, 2018.
- Karkos PD, et al. Spirulina in clinical practice: evidence-based human applications. *Evid Based Complement Alternat Med*, 2011;53:1053.
- Hasler CM. Functional foods: benefits, concerns and challenges - a position paper from the American Council on Science and Health. *J Nutr*, 2002;132(12):3772-3781.
- Park H-J, et al. The influence of obesity on the effects of spirulina supplementation in the human metabolic response of Korean elderly. *Nutr Res Pract*, 2016;10(4):418-423.
- Serban M-C, et al. A systematic review and meta-analysis of the impact of Spirulina supplementation on plasma lipid concentrations. *Clin Nutr*, 2016;35(4):842-851.

Catharine Arnston is the CEO / founder and chief scientific officer of ENERGYbits® Inc.

(www.energybits.com). Her mission is to help the world improve their nutrition and wellness naturally with Mother Nature's oldest and original food: algae.

Page printed from:

http://www.toyourhealth.com/mpacms/tyh/article.php?id=2722&no_paginate=true&no_b=true