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## Healthy Eating Initiative: The Benefits of Spirulina and Chlorella

Algae-based products, such as spirulina and chlorella, have become a supplemental staple in the lives of many health-conscious individuals, whether it be to improve health, detoxify the body of heavy metals, or to simply boost mineral and electrolyte consumption. Both have impressive nutrient profiles and potential health benefits, such as lowering risk factors of heart disease and improving blood sugar management.

Spirulina originates in freshwater bodies of water such as lakes, rivers, and ponds. It is a consumable cyanobacteria that grows in the form of algae. Historically, it has been consumed as a food item, and more recently, in supplemental form. Known for its nutritionally-dense profile, spirulina is considered one of the most complete items of food that exists.

Chlorella is a single-celled green algae that also grows in freshwater bodies. Unlike spirulina, the cellular walls of chlorella are indigestible to humans, so it must be broken down, processed, and taken in supplement form to reap its nutritional benefits.

Chlorella contains more iron per serving and has a higher percentage of its fat calories from omega-3 fatty acids, while spirulina is higher in protein and potassium. Chlorella contains significant amounts of B12 per serving, whereas spirulina only contains trace amounts of a form of B12 that is ineffective in humans. To reap the maximum benefit, it is best to take spirulina and chlorella together!

### Just a few benefits of taking spirulina and chlorella together:

1. They are **high in protein** and contain a **complete profile of all the required amino acids**. Combining the two can provide plant-based dieters with a complete protein source.
2. Both are **high in fiber**.
3. **Rich in B vitamins** such as Thiamin, Riboflavin, Niacin, Pantothenic acid, and folate.
4. **Plant-based source of B12**. One of the biggest challenges people face when pursuing a vegan or vegetarian diet is finding plant-based sources of B12. However, a single serving of chlorella powder will provide 250% of the B12 needed for a day!
5. **Omega-3 fatty acids**. Plant-based sources of Docosahexaenoic acid (DHA) and Eicosapentaenoic acid (EPA) are rare. However, spirulina and chlorella have both which is good news for vegans and vegetarians.

### Additional Resources:

- Healthline: <https://www.healthline.com/nutrition/chlorella-spirulina>
- Plant Based FAQs: <https://plantbasedfaqs.com/spirulina-and-chlorella-benefits/>

For additional information, email the DCPAS Work-Life Branch at:

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