

## Did You Know That Chlorella A Single Celled Micro Alga Can Boost Health And Wellness?

Chlorella is what is known as a micro alga, a single celled vegetable organism that grows in fresh water. Microalgae are microscopic species of plant life that are likely responsible for the biological evolutionary history of our planet. Most people associate algae with seaweed: marine plant life. However, this is a restricted view since algae are also common on land, although are rarely conspicuous and still require an aqueous environment if not necessarily a salt water ocean.

The reason for this is that algae have no vascular tissue to draw moisture up into the body of the plant as terrestrial plants do, and they tend to be found in tropical regions, on snow in areas of the Arctic and also on exposed areas of stone and rock in symbiosis with fungi in the form of lichens. They can also be found in freshwater ponds and rivers, and chlorella is one of these.

Its scientific name is Chlorella pyrenoidosa, and it occurs worldwide. It is said to have the highest concentration of chlorophyll of any other known plant in addition to its other highly nutritional content. The superlatives are almost limitless for such a small plant that most of the general population is unaware of. It is the first plant known to have a true nucleus, it has been around for about two and half billion years, and it can multiply itself fourfold making it the fastest growing species of plant known on earth. It beats other fast-growing algae and bamboo out of site.

So what of its nutritional content? It is believed by NASA to be the ultimate foodstuff for long-term travel in space and an ideal crop for colonizing communities. Were a space community to be established on Mars, chlorella would be the first to be cultivated under these big glass domes we all see in the movies! It is more than just a foodstuff though; it is also the most powerful known natural detoxifier for the human body, which makes it practically the ideal food. Why is this?

If any food deserves to be referred to as a 'superfood' it is chlorella. It consists of over 60% bioavailable protein, and contains six members of the vitamin B complex (1, 2, 3, 5, 6, 12) and also vitamins A, C, E and K. It is therefore very high in antioxidants and excellent for destroying free radicals as soon as they are formed, and before they can cause problems such as atherosclerosis and excessive cell damage.

It also contains more than its fair share of minerals such as calcium, manganese, magnesium, phosphorus and zinc, and also iodine, folic acid and a high proportion of iron. That is not all: it contains many more nutrients essential for a healthy life, but above all chlorella contains all eight essential amino acids.

Human biochemistry and metabolism need 20 amino acids to function properly, twelve of which can be manufactured by the liver from these eight: leucine, isoleucine, lysine, methionine, phenylalanine, threonine, tryptophan and valine, and sometimes serine is added. These are called the essential amino acids from which all the others that your body needs can be manufactured.

Amino acids are needed to build proteins and DNA, manufacture body cells, repair damaged tissue, help the immune system to protect you from invading bacteria and viruses, ensure that the oxygen you breathe gets to the cells where it is needed to sustain life and carry out many other functions besides. Without them you could not exist. Chlorella contains five times more protein and amino acids than eggs do.

The Chlorella Growth Factor or CGF is a combination of these amino acids, together with nucleic acids, carbohydrates and peptides that have not yet been completely characterized. The CGF promotes the growth of body cells, and stimulates cell repair in a way not seen before in any other food. It has been shown to promote the growth of children in a natural and safe way.

Not only this, but it has been found not to promote the growth of diseased or cancerous cells, only healthy ones. The fact that that this accelerated growth does not happen with adults indicates that the Chlorella Growth Factor supports the natural growing process, although in adults it has been seen to accelerate the repair of damaged body tissue.

Chlorella also appears to strengthen the immune system, and researchers have found the presence of a polysaccharide in the cell walls of the microalgae that acts with CGF to produce an interferon that protects the helper cells that aid macrophages to destroy invading bacteria and viruses. It can help our resistance to influenza, choryza (common cold), fungi such as candida and many other forms of invasion by foreign agents into our bloodstream.

The detox effect of chlorella is largely contained within its cell walls that can bind with persistent toxic substances such as DDT, and bind with heavy metals to safely remove them from the body. In fact it is the ideal anti-toxin for life in today's environment, full of vehicle exhaust fumes, pesticides and other chemical emissions. It has been claimed to be able to remove mercury from the body, but this has not been established.

Probably the only problem with the ingestion and the efficiency of the body to use Chlorella to its full extent is the strength of the cell walls. Chlorella has very strong cell walls, which could also account for the concentration of nutrients within them. The traditional method to overcome this was to mill them using small glass or ceramic beads to break the cell walls down, but the Japanese have come up with a more effective means. High frequency sound waves are used to break the cell walls down supersonically, a technique known as 'cracking', and once cracked the cells can release up to 65% of its nutrients, compared to the 50% of the milling method.

The nutritional content of single celled microalgae such as chlorella is amazing, and if there was only one food that you were able to eat, then this would be it. There is no other known species of plant or animal life that provides the range of vitamins, minerals, proteins and amino acids that chlorella does, and it truly is the king of all superfoods.

### About the Author

More information on [broken cell chlorella](#) is available at VitaNet &reg;, LLC Health Food Store. <http://vitanetonline.com/>

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