



Marine Phytoplankton: Super-food from the Sea!

What is it? Phytoplankton are single cell plants that inhabit the oceans of the world and are thought to be responsible for producing up to 90% of the Earth's oxygen. Whales, of course, consume both plant and animal plankton in their diets. Recent nutritional studies are discovering that phytoplankton may indeed be a super-food for humans as well. Made up of many different micro-algae that are incredibly nutrient rich, phytoplankton forms the basis for all living life on our planet, through its vital role in photosynthesis. Their indispensable role in the carbon cycle is an indelible illustration of our wholistic universe, with ancient dead algae, over million of years, forming fossil fuels like oil and coal, which, when burnt, produce carbon dioxide that is then transformed into oxygen by today's marine phytoplankton: an ever repeating cycle of life.

If all life did indeed evolve from the sea, as is theorised by science, there are signs within our physiology that provide a link to that origin - with the composition of human plasma (blood) and the fluid surrounding cell walls being remarkably similar to sea water. Diluted sea water contains almost the same concentration of minerals and trace elements as blood plasma, and its sodium content also matches that of blood. Diluted sea water has been used in blood transfusions involving animals without any perceived adverse effects and there are calls for research into its use in humans. The micronutrients and electrolytes contained in phytoplankton are perfectly suitable for what our human cell membranes require when metabolising. What are our cell membranes made up of? Sugars, proteins and fats. Thus, what we eat provides both the fuel that our cells need to function, but also the very building blocks for their structure. A diet lacking in the necessary micronutrients, will over time reduce effective metabolism and thus lead to disease.

What is the nutritional make-up of marine phytoplankton? The phytoplankton that we can now purchase is produced in sea farms or aqua-culturally and is pure micro-algae rather than cyanobacteria, which can be toxic. Within these micro-algae, is a veritable cornucopia of nutritional riches – omega 3 fatty acids, vitamin B12, thiamine (B1), selenium, potassium, superoxide dismutase (SOD), zinc, vitamin

E, vitamin C, iron, electrolytes, folic acid, magnesium, niacin (B3), calcium, arginine, beta carotene, chlorophyll, manganese, phenylalanine, pantothenic acid (B5), bioflavonoids, biotin, aspartic acid, alanine, boron, methionine, molybdenum, nucleic acids, phosphorous, gamma linolenic acid, glutamine, lecithin, tyrosine, pyridoxine (B6) to name most of them. The extraction processes used in these farms create a phytoplankton food product, which is full of phyto-nutrients and sea minerals.

Good nutrition contributes directly to the function and structure of all the organs that make-up our bodies. As Hippocrates, the ancient Greek physician, who founded his practice on the principle of observation, said "let food be your medicine, and your medicine be your food." Every system within our body benefits from a balanced nutritionally rich diet, our immune system in fighting off colds and flu's, our digestive system in providing optimal energy, weight management and letting go of wastes via healthy kidneys, liver and bowels, our nervous system effecting mental functioning, and our endocrine system for our skin's health. Shiny hair, healthy nails, clear eyes, and restful sleep are all indicators of good health and are all influenced by what we eat and drink. Phytoplankton is the perfect food for healthy cell functioning and provides high levels of antioxidants for the maintenance of our bodies on this cellular level. SH ■