



OPTIMUM CHOICES, LLC

Healthy choices for people and pets

Toxic Algae?

The dangers of a “toxic bloom” of blue-green algae are well known. According to a website published by the Minnesota Pollution Control Agency, certain environmental conditions (i.e., periods of sustained warm, sunny days in shallow, nutrient rich bodies of water) that generally occur late in summer can trigger a sudden overgrowth of a certain family of algae called *cyanobacteria*. In these conditions, the blue-green algae suddenly “blooms” — that is, reproduces exponentially. The algae produce a powerful toxin — one of the most powerful natural poisons known. Cyanobacteria are the scientific name for blue-green algae or “pond scum.” The first recognized species were blue-green in color, which is how the algae got their name. *Microcystis aeruginosa* is a type of blue-green algae (also referred to as cyanobacteria). Further species identified since then range in color from olive-green to red. Researchers generally agree that between 30 and 50 per cent of cyanobacterial blooms are harmless because they contain only non-toxic species of freshwater cyanobacteria. Blooms containing even one species of toxic cyanobacteria will be poisonous and potentially dangerous. Because there’s no obvious way to tell if a particular bloom is toxic, samples have to be analyzed in a laboratory before it can be declared safe.

There are over 25,000 different species of algae in the world—some are toxic but most are very beneficial to all living creatures. Dr Kiriac does not believe there is any natural body of water on Earth (including the Arctic and Antarctic Oceans) that is not polluted to some extent. Contamination of polychlorinated hydrocarbons (PCHC), aldrin, heptachlor, heptachlorepoide, lindane, DDE and PCB have been found in tissues samples of Arctic seals. Polar bears, polar foxes and sheep from southwest Greenland.¹ Dr. Kiriac, therefore, will not use any lake, ocean or wild grown algae in his products despite claims by other manufacturers as to their purity. Sure the manufacturers can claim they test their lake or wild grown algae for commonly known toxins and contaminants but what about the uncommon, unknown and ones that there are no tests for yet? To ensure the strictest quality control and have full control over the growing environment, Dr Kiriac has chosen to grow his algae in closed bio-reactors. Dr. Kiriac selected only the four best and most nutritious algae for his products based on over 20 years of research. BioSuperfood and BioPreparation both contain the micro algae *Spirulina pacifica* (ocean-based), *Spirulina platensis* (lake-based), *Dunaliella* and the carotenoid *Astaxanthin* concentrated from *Haematococcus* algae and nothing else. They do not contain the blue-green algae *cyanobacteria* mentioned above. **Every batch of algae (not just randomly selected) used in BioSuperfood and BioPreparation have been tested for bacteria, herbicides, pesticides, heavy metals and other contaminants before encapsulation (according to Health Canada standards, the U.S. equivalent to the F.D.A.). They are grown without the use of synthetic fertilizers, pesticides and without antibiotics, growth hormones or feed additives.**

You can be assured that both BioSuperfood and BioPreparation never contain any of the toxic algae species since they are grown in closed and totally controlled bio-reactors not in the wild. Everything from the light, heat, filtered water and nutrients is under Dr Kiriac’s (or his trained

staff's) control. This totally controlled environment is another reason why BSF/BP is unique in the algae product market. From over 20 years of research he has learned what light, heat and water conditions are necessary to maximize the nutrients of his algae. **The concentration of nutrients in Dr Kiriatic's algae far exceeds what wild grown algae contain.** Dr Kiriatic's algae are, therefore, more therapeutic and has more potential to awaken the body's own natural ability to heal than generic store-bought algae products. We have proven this to ourselves and seen these results from other testimonials we have collected.

¹ J. Clausen, L. Braestrup and O.Berg, "The content of polychlorinated hydrocarbons in Arctic mammals," ***Bulletin of Environmental Contamination and Toxicology***, Volume 12, Number 5 / November, 1974, PP. 529-534.