

Micro Algae Immune System

The **Micro Algae Immune System** is a completely natural, additive-free dietary supplement capsule containing various dried algae, designed to support the body's vitality, immune system, and overall health.

WHAT DOES MICRO ALGAE IMMUNE SYSTEM CONTAIN?

The recommended daily dose contains 319 mg of powdered spirulina algae, 24 mg of dried *Dunaliella salina* algae, and 12 mg of *Haematococcus pluvialis* algae powder.

HOW DOES MICRO ALGAE IMMUNE SYSTEM WORK?

Spirulina is not a single species but a biomass of several unicellular cyanobacteria (blue-green algae), most commonly three species: *Arthrospira platensis*, *Arthrospira fusiformis*, and *Arthrospira maxima*. These algae can thrive in both marine and freshwater environments. The earliest documented use of spirulina as food comes from the Aztecs, with records brought to Europe by Spanish conquerors. Scientific interest in spirulina surged when both NASA and the European Space Agency (ESA) proposed it as a potential component of life-support systems for long-term space missions due to its high nutritional value, health benefits, and ease of cultivation.

Powdered spirulina has a high nutritional value while being low in calories. It is rich in protein (approximately 57%) and amino acids, containing all essential amino acids. It is also a good source of vitamins B1, B2, and B3, minerals (potassium, magnesium, copper, iron), and omega-3 and omega-6 fatty acids in an ideal 1:1.5 ratio. Spirulina's high antioxidant capacity contributes to its anti-inflammatory effects. Recent research suggests that consuming spirulina benefits lipid metabolism, reduces LDL cholesterol, total cholesterol, and triglycerides in plasma, supports arterial health, and helps lower blood pressure. It has been shown to improve anemia and reduce associated fatigue. A study on type II diabetes found that spirulina reduced HbA1c levels by 9%, leading to a 21% decrease in diabetes complications. Studies on athletes have shown that spirulina increases muscle strength and endurance during physical exertion and speeds up muscle recovery. Several studies also suggest that one of its active compounds, phycocyanin, may have immune-boosting and anti-cancer properties, though more research is needed.

Dunaliella salina is a halophilic, unicellular green alga that thrives in hypersaline environments. In these hostile conditions, it accumulates antioxidants such as β -carotene, lutein, lycopene, astaxanthin, and zeaxanthin, as well as phytoene, phytofluene, and fatty acids to protect its cellular processes from harmful chemicals and intense sunlight. The amount of these antioxidants is so high that flamingos, which feed on *D. salina*, develop vibrant pink-orange feathers from the accumulated pigments. Commercially available lutein and lycopene are extracted from *D. salina*. This alga also has high levels of natural vitamins A and B12. Its beneficial effects have been demonstrated in various cell types and tissues, making it health-protective in most metabolic processes. Its B12 content supports skin health, protects cardiovascular health, reduces blood lipids and blood sugar, lowering the risk of atherosclerosis, and protects eyesight by reducing the risk of age-related macular degeneration. It also supports liver detoxification and protects the liver from toxic damage. Anti-inflammatory effects have been confirmed, and animal studies suggest that it may reduce the risk of cancer and inhibit the proliferation of viruses.

Haematococcus pluvialis is a freshwater, unicellular green alga from the *Haematococcus* family. Despite its bright red color, it contains extremely high levels of astaxanthin. Astaxanthin is an antioxidant that concentrates in eye tissues, playing a significant role in maintaining eye health and visual acuity. It reduces the harmful effects of ultraviolet and blue light radiation in the eyes, making it a potential countermeasure against age-related macular degeneration. Research also indicates beneficial effects on the cardiovascular system, including lowering blood pressure and protecting blood vessels. It helps reduce several aging-related skin processes, such as wrinkles and age spots, making it a common ingredient in skin rejuvenation cosmetics. A small human study found it beneficial for male infertility, though further confirmation is needed. It improved physical endurance and performance in animal studies, though this has not yet been confirmed in humans. Promising results have also been seen in treating joint and tendon inflammations, such as carpal tunnel syndrome.

WHO SHOULD USE MICRO ALGAE IMMUNE SYSTEM?

The **Micro Algae Immune System** is not intended to treat or diagnose specific diseases. However, its natural algae components, which complement each other's effects, support cellular function and overall health, protecting against degenerative processes caused by free radicals. It is recommended for maintaining youthful vitality, particularly during physically, mentally, and emotionally challenging periods, as well as in cases of chronic fatigue. Athletes may find it beneficial during intensive training and preparation periods. It may also help prevent flare-ups in the quiescent phases of chronic diseases and support recovery from acute illness or malignancies, especially after surgery, chemotherapy, or radiation therapy.

STORAGE AND SHELF LIFE OF MICRO ALGAE IMMUNE SYSTEM

Store in a dry, moisture-protected place at room temperature until the expiration date printed on the packaging. Keep in its original packaging and out of the reach of children.

HOW TO USE AND DOSE MICRO ALGAE IMMUNE SYSTEM

It is recommended to take 1-2 capsules daily with plenty of fluids, preferably between meals. Do not exceed the recommended daily dose.

SIDE EFFECTS AND WARNINGS

The algae in the **Micro Algae Immune System** are safe to consume. Any reported side effects related to algae consumption have been due to contamination from cultivation in polluted environments or improper storage. Due to its high phenylalanine content, it is not recommended for people with phenylketonuria. Pregnant and breastfeeding women should avoid it due to a lack of safety data.

The Micro Algae Immune System is not a substitute for a balanced diet and healthy lifestyle.