



Lyxia | Xiaozao Tech  
Sustainable Omega-3s from Microalgae



## Omega-3s

- Vegan
- Non-GMO
- Non Allergenic Source





## A Better Way

With the existing source of Omega-3s on the market being fish oil, our vegetarian microalgae-derived supplements are a welcomed animal-component-free alternative which puts no additional pressure on our planet's threatened fish populations; in fact, we will alleviate pressure as we win market conversion to our new purer natural and sustainable EPA and DHA. Our products are naturally vegetarian, non-GMO, cholesterol-free and free of environmental contaminants. We control every aspect of our production from temperature, seawater and CO<sub>2</sub>, to finished product ready for global shipment – providing our customers with confidence, certainty and absolute traceability.



Non-GMO

Vegetarian / Vegan

Allergen-free

Sustainable

Earth-friendly

All Natural

100% Traceable

Exceptional Bioavailability



## Our Organization – Lyxia | Xiaozaos Tech

Commercial microalgae cultivation – while not new – has until now largely been focused on its value as a biofuel. Our purpose departs from this. Our dedicated team, spread from Los Angeles, California (Sales and Marketing) to Shenzhen, China (Research and Process Development) and beyond to Guangxi, China (Cultivation and Processing), cultivate microalgae for its nutritional significance. Our *Nannochloropsis salina* microalgae – in live and dried forms – are a valuable food source, and greater than this are specific molecules we isolate and purify from within. The molecule of greatest interest is the essential Omega-3 fatty acid for cardiovascular health, eicosapentaenoic acid (EPA). In addition to EPA, we also market algae-derived docosahexaenoic acid (DHA) – the essential Omega-3 nutrient critical to brain and eye development and maintenance produced by the microalgae *Schizochytrium sp.*



Advances in algal strain selection, propagation and biomass yield as well as greater efficiencies in downstream extraction occur in our facilities in Shenzhen. We then transfer this technology to coastal Guangxi province. Our Guangxi facility is a purpose-built cultivation and purification site that will readily meet the substantial throughput that our buildout will yield in just 2 years-time. With the goal of creating a facility every bit as green as our microalgal Omega-3 factories, we chose our site in sunny coastal Guangxi providing us an abundant source of clean seawater, and CO<sub>2</sub> generated by a local power station, which we repurpose as a carbon source for our algae – as opposed to seeing it released as a greenhouse gas. Better yet, as our algae utilize CO<sub>2</sub>, not only do they manufacture nutritional Omega-3s and other nutrients, they also release pure oxygen into our environment.

All operations from R&D and cultivation to extraction, purification and packaging are under Shenzhen Qianhai Xiaozaos Technology Co., Ltd and Guangxi Xiaozaos Agricultural Technology Co., Ltd (Xiaozaos Tech). Lyxia Corporation is our global sales and marketing division headquartered in California, USA.



## Our Omega-3s = Your Advantage

Having direct control over every aspect of our product's creation from algae cultivation to harvest, isolation to purification, and packaging to shipping is the key. This is how we can be certain to deliver you the best product possible – every time. Algae naturally produce multiple forms of Omega-3s, including triglycerides, free fatty acids and fatty acids in polar forms (phospholipids and glycolipids). Polar form Omega-3s are more efficiently transported through the intestinal wall, into cell membranes and across the blood-brain barrier enabling elevated bioavailability and efficient, rapid benefit.

- Highly Concentrated EPA & DHA – Enabling Flexibility in Formulations & Applications
- Wide Variety of Forms – Polar Lipids, Triglycerides, Free Fatty Acids (superior to fish oil)
- Wide Variety of Formats – Oils, Concentrates, Powders and Finished Dosage Forms
- Standard and Custom EPA / DHA Blends
- Exceptional Consistency and Purity
- Greater Bioavailability (superior to fish oil)
- Absolute Traceability (superior to fish oil)

## Health Benefits of EPA and DHA

Eicosapentaenoic acid and docosahexaenoic acid are Omega-3 long-chain polyunsaturated fatty acids (PUFAs) essential to both human and animal health and are primarily obtained from a diet including fatty fish or fish oil supplements. Like us, fish do not produce EPA and DHA; they also must acquire it from their diet. Predator fish accomplish this through consumption of smaller prey fish who in turn have consumed phytoplankton and microalgae rich in EPA and DHA.

EPA is an essential nutrient for both animal and human development and active in immune and cardiovascular health.

- EPA has been shown to lower triglyceride levels
- EPA is active in reducing vascular inflammation and the progression of rheumatoid arthritis
- EPA has proven effective in reducing risk of stroke, heart attack and cardiovascular death
- In conditions of DHA deficiency, EPA can be used as a precursor for DHA production

DHA plays critical roles in developmental health and maintenance throughout our lives to include our senior years.

- DHA has been proven instrumental in fetal brain and vision development
- DHA comprises 40% of the PUFAs in the brain and 60% of those in the retina
- Deficiency of DHA has been associated with depression and cognitive decline
- Omega-3s are thought to help prevent the development of and/or attenuate the progression of age-related macular degeneration (AMD), as well as help alleviate symptoms of dry eye



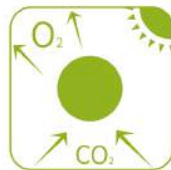
## Production and Processing

Consumers world-wide are increasingly concerned with corporate transparency and complete product traceability back to the raw material inputs. We are in direct control of every aspect of our process from seawater and CO<sub>2</sub> filtration, microalgae strain selection, population scaling, harvest and separation, desalination and dry-down through to isolation and purification of these essential nutrients. Our processes have been optimized to deliver exceptionally innovative, nutritious vegetarian products to the world market.



## And What's More, We Are:

- Helping our oceans' sea life by supporting a fish-free Omega-3 future in dietary supplements
- Moderating our planet's climate by feeding CO<sub>2</sub> to microalgae rather than the atmosphere
- Offsetting deforestation by supporting our planet's number one producer of pure oxygen - microalgae
- Supporting sustainable, vegetarian, cholesterol free, non-GMO and major-allergen-free Omega-3
- Getting behind a new technology critical to supplying essential nutrients to a growing population
- Harnessing the sun as our energy source for microalgae production





We welcome your interest in academic or industrial collaborations. Please contact us at one of the addresses below:

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