Lyxia

Xiaozao Tech

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

Lyxia Corporation

5830C Hannum Avenue, Culver City, CA 90230 USA

Telephone: +1 (310) 990-6711 **Email: greg@lyxia.com**

Shenzhen Qianhai Xiaozao Technology Co., Ltd

3rd Floor, North Tower, Yuanxing Technology Building, No. 1 Songpingshan Road, Nanshan District, Shenzhen, China 518057

Telephone: +86 183-1872-5695 Email:info@xiaozaotech.com

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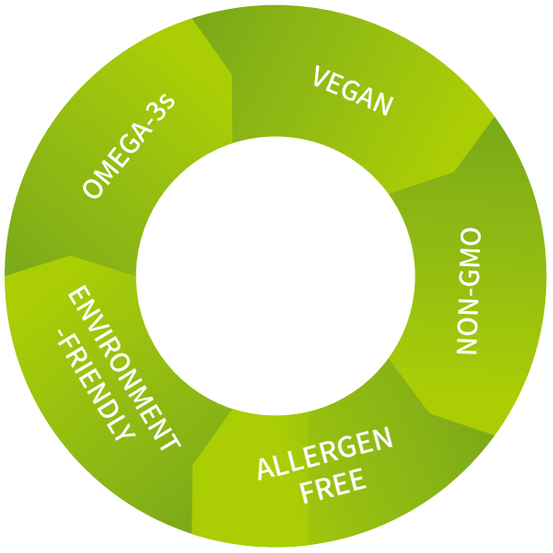
Document: NB v2.0 09222018

EPA and DHA

Sustainably Sourced from Microalgae



GOED OMEGA-3 PROUD MEMBER

"Bringing a sustainable vegetarian source of EPA and DHA to the world."

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; and in fact, will serve to 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_2, 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

Lyxia & Xiaozao Tech

Commercial microalgae cultivation – while not new – has until now largely been focused on its potential as a biofuel. **Our vision departs from this**. Our dedicated team, spread from California (Lyxia Corp.) to Shenzhen, China (Research and Process Development) and beyond to Guangxi, China (production facility), are pursuing microalgae for its nutritional significance. Our microalgae – in live, and dried whole and defatted forms - is a valuable food source in aquaculture and feed, and greater than this are specific molecules we isolate and purify from it. Backed by Shenzhen Qianhai Xiaozao Technology Co., Ltd. (Xiaozao Tech), Lyxia is producing the essential Omega-3 fatty acid for cardiovascular health, eicosapentaenoic acid (EPA). The heart of our production is *Nannochloropsis salina*, a species of green microalgae which consumes CO_2, a greenhouse gas, and produces oxygen as it grows in seawater and sunlight. **In addition to EPA, we also market an algae-derived docosahexaenoic acid (DHA) - another essential Omega-3 nutrient critical in brain and eye development and maintenance** produced by the microalgae *Schizochytrium sp*.

In Shenzhen we have made advancements in propagation and yield of algal biomass as well as efficiencies in downstream extraction and purification, which will come to employ 1000 workers in Guangxi once we reach full capacity. Our Guangxi facility is a purpose-built cultivation and purification facility that will readily meet the substantial throughput that our buildout will yield in just 4 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_2 generated by a local power station which we repurpose as a carbon source for our algae**. Better yet, as our algae utilize CO_2, not only do they manufacture nutritional Omega-3s and other nutrients, they also release pure oxygen into our environment.

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 produce multiple forms of Omega-3s, including triglycerides, free fatty acids and fatty acids in polar forms (phospholipids and glycolipids). Polar lipids more effectively transport fatty acids 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)
- Format Options – 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)

EPA Health Benefits

Eicosapentaenoic acid is a polyunsaturated fatty acid (PUFA) primarily obtained from a diet of fatty fish or fish oil supplements. Fish do not produce EPA; the EPA found in fish comes from their direct or indirect consumption of microalgae. EPA is an essential nutrient for both animal and human development and active in immune and cardiovascular health. We offer EPA in multiple forms and formats:

AlgaLab™ **EPA** Nutraceutical Products from Microalgae- Vegetarian, Non-GMO						
Product Name	**EPA EE**	**EPA rTG***	**EPA (PL, TG, FFA)***	**DHA EE**	**DHA TG**	**Total Omega-3s**
AlgaLab CEPA Natural*			300mg/g			300mg/g
AlgaLab CEPA EE	350mg/g					350mg/g
AlgaLab CEPA EE Ultra	550mg/g					550mg/g

** Our Natural and rTG (re-esterified triglyceride) EPA contain blends of naturally occurring EPA forms including polar lipids, triglycerides and free fatty acids.*

DHA Health Benefits

Docosahexaenoic acid, like EPA, is a PUFA found in fish from their direct and indirect consumption of microalgae. DHA is an essential nutrient for both animals and humans, is active in fetal brain and vision development, and with EPA, plays critical roles in developmental health and maintenance throughout our lives to include our senior years. We offer DHA in multiple forms and formats:

AlgaLab™ **DHA** Nutraceutical Products from Microalgae- Vegetarian, Non-GMO						
Product Name	**EPA EE**	**EPA rTG***	**EPA (PL, TG, FFA)***	**DHA EE**	**DHA TG**	**Total Omega-3s**
AlgaLab DHA TG 40 Oil					400mg/g	400mg/g
AlgaLab DHA TG 40 Oil Winterized*					400mg/g	400mg/g
AlgaLab DHA TG 50 Oil Winterized*					500mg/g	500mg/g
AlgaLab DHA TG 10 Powder					100mg/g	100mg/g

** Our winterized AlgaLab DHA TG Oils have been fractionated for constant clarity through temperature cycles.*

Our EPA + DHA Blends

Our AlgaLab ™ Omega-3 blends include popular ethyl ester and triglyceride forms as well as our AlgaLab ™ Complete Omega Natural – offering EPA in free fatty acid and triglyceride forms as well as in polar, phosphor- and glycolipids, shown to be more rapidly incorporated into cell structures and readily transported over the blood brain barrier for essential nutrition.

AlgaLab™ Blends **EPA + DHA** Nutraceutical Products from Microalgae- Vegetarian, Non-GMO						
Product Name	**EPA EE**	**EPA rTG***	**EPA (PL, TG, FFA)***	**DHA EE**	**DHA TG**	**Total Omega-3s**
AlgaLab Complete Omega Natural*			150mg/g		200mg/g	350mg/g
AlgaLab Complete Omega EE	300mg/g			300mg/g		600mg/g
AlgaLab Complete Omega TG*		150mg/g			300mg/g	450mg/g

** Our Natural and rTG (re-esterified triglyceride) EPA contain blends of naturally occurring EPA forms including polar lipids, triglycerides and free fatty acids.*

In addition, we welcome your inquiries regarding custom blends that may best suit your specific application.

Production and Processing

Consumers world-wide are increasingly concerned with corporate transparency and product traceability from raw material inputs through to finished products. We are in direct control of every aspect of our process from seawater and CO_2 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_2 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.