

VALENSA'S SUPPLY CHAIN

GIVES CONFIDENCE IN CONTINUITY

Valensa's Integrated Algae Production Supply Chain Delivers Continuity for Your Business

For Valensa, the value of investing in a fully integrated supply chain begins with ownership of our astaxanthin production facility in South America and the partnership with our sister company in India for Spirulina and phycocyanin supply. We go beyond ownership of production to include downstream processing into finished product – all important to allow us to deliver on our commitment to quality and consistency from production through processing of the finished product.

But Valensa takes this one step further by anchoring our supply chain capabilities with third-party audits of our facilities and verification of our finished products for



purity, potency, and quality to make sure our standards meet our partner's needs. Our customers and partners recognize and rely on the value we provide for business continuity and consumer satisfaction. Our commitment to supply chain excellence can certainly be appreciated in a time of global supply crisis, but for Valensa, the key is maintaining this commitment for existing and new partners every day.

EXAMPLES OF WAYS VALENSA ASSURES SUPPLY CHAIN

CONFIDENCE IN OUR SPIRULINA & ASTAXANTHIN PRODUCTS

Our customers and partners recognize and rely on the value we provide for business continuity and consumer satisfaction. Our commitment to supply chain excellence can certainly be appreciated in a time of global supply crisis, but for Valensa the key is maintaining this commitment for existing and new partners every day. Below are examples of ways Valensa assures supply-chain confidence with our Spirulina and astaxanthin products.

SPIRULINA



- Command of the Supply Chain
- Taking Command of the Supply Chain to the Next Step
- Helping our Partners Achieve Business Value

ASTAXANTHIN



- Production Mastery in a Pristine Setting
- Extracted with Green Technology
- Business Value without Compromise

CONFIDENCE IN OUR SPIRULINA



The flagship of our algae business, Parry™ Organic Spirulina USP (*Arthrospira platensis*), is a nutrient-dense blue-green algae that is a complete plant protein, naturally low in fat, and packed with carotenoids, B-vitamins, minerals, chlorophyll, important fatty acids, and antioxidants like phycocyanin – Spirulina’s hidden gem. This superfood is one of the most nutritious and concentrated food sources in the world and has been shown to influence the immune system and inflammatory processes.

COMMAND OF THE SUPPLY CHAIN

Delivering consistent supply starts with fully integrated production systems optimized to produce the purest, highest quality product, developed in compliance with stringent standards set by third-party auditing and certifying agencies. And that is what has been built by our sister company, Parry Nutraceuticals, to provide commercial supply of Spirulina for over thirty years to key global markets.

Parry Nutraceuticals has fully integrated production capabilities in India for Spirulina that meet global organic certification standards, from raw material sourcing and production inputs, to downstream processing to deliver the finished product. Algal production and processing are all done in US Pharmacopeia (USP)-audited facilities, a certification program that goes beyond Good Manufacturing Practices to validate the quality and consistency of the finished product, and not just the processing operations. USP has designated our Organic Spirulina as USP Verified, a distinction not carried by any other Spirulina on the market.

CONFIDENCE IN OUR

SPIRULINA



TAKING COMMAND OF THE SUPPLY CHAIN TO THE NEXT STEP

Produced not only to consistent standards, Organic Spirulina USP is backed by a list of credentials that include some of the toughest third-party certifying agencies in the world for quality, purity, and identity. Organic Spirulina USP is produced to true organic standards that comply with US and European regulations, and the strict Naturland certification for safety. It is also the first and only Spirulina in the world to be USP Verified to confirm a true quality Spirulina that is made consistently, batch to batch. Rigorously tested, Organic Spirulina USP meets and exceeds the highest safety and quality standards set for manufacturers around the world,

and is designated GRAS. Each batch produced contains organic certification and credentials for USP Verified for identity and purity.

The finished product is shipped from India to Valensa's warehouses in the US for distribution to our customers. The supply chain in India and the operations in the US all function under the company's Quality Systems Program for documentation, chain of custody, and integrity. This allows for seamless distribution to our partners with no disruption in supply, regardless of supply chain forces that exist in the world.



HELPING OUR PARTNERS ACHIEVE BUSINESS VALUE

But, consistently producing a Spirulina that carries important certifications not matched by the competition is only part of the business value. By delivering a quality organic Spirulina to our partners, your customers can appreciate the quality of this rich source of vegan protein and the important phytonutrients that are delivered. Organic Spirulina USP is a consistent source of antioxidant power, achieving the most enrichment in phycocyanin of any Spirulina available. This level of quality delivers maximum support to the immune

system and for inflammatory processes related to health and wellness. And Organic Spirulina USP meets the criteria to support maintenance of healthy blood sugar levels, as established by the European Food Safety Authority (EFSA), and helps maintain a healthy blood lipid profile, such as good cholesterol (HDL). All of this is delivered in the whole-cell algal Organic Spirulina USP, rich in protein and phytonutrients, to support gut health and the microbiome.

ASTAXANTHIN



Astaxanthin from the freshwater algae *Haematococcus pluvialis* is a naturally occurring carotenoid, also found in shrimp, krill, and salmon. A powerful antioxidant, astaxanthin is documented for its protection of cells, lipids, and membrane proteins from oxidative damage, and for its role in helping manage inflammation and pain associated with the inflammatory response. The antioxidant power of

astaxanthin is more powerful than any other plant or vegetable carotenoid, like beta-carotene from carrots or lycopene from tomatoes. In fact, astaxanthin is 100 times more powerful than beta-tocopherol (Vitamin E), found in sunflower seeds and almonds.



PRODUCTION MASTERY IN A PRISTINE SETTING

The production of Zanthin® Natural Astaxanthin begins at Valensa's growing facility in Chile's beautiful Elqui Valley in South America, where cultivation of the astaxanthin-rich *Haematococcus pluvialis* biomass takes place. This pristine valley in South America was chosen for its abundance of sunlight, which is essential for a healthy, quality biomass that can become highly enriched in astaxanthin.

The algae are cultured in a hybrid system, using indoor greenhouses for the initial green phase growth, followed by a phototropic red growth phase in open sunlight where the algal cells mature. Once the algal biomass has achieved full growth, the cells are harvested. After harvesting, the resulting biomass is concentrated, cracked, dried, and prepared for shipment to Valensa's Deep Extract® supercritical carbon dioxide extraction facility in the United States.



ASTAXANTHIN



EXTRACTED WITH GREEN TECHNOLOGY

Capability in astaxanthin extraction is not enough to deliver the best quality extract from a natural source. It is important to consider how extraction takes place, and the extraction technique, to obtain the best that algae and sunlight can produce. That is where Valensa's specifically designed extraction facility in Florida shines by example. Valensa's leadership in ultra high-pressure supercritical carbon dioxide (CO₂) technology is a key for sustainable supply. Actives from the algal biomass are extracted using a green technology,

without harsh solvents and without solvent residue impacting the environment. Operating at commercial scale at the facility in Florida, the production facility delivers consistent quality Zanthin® Natural Astaxanthin for our partners. In fact, Zanthin® was the first commercial astaxanthin to receive regulatory compliance for the US (NDI) and Europe (Novel Foods). The FDA-audited facility operates to the highest industry standards consistently, and the extracted astaxanthin is of the highest quality on the market.



BUSINESS VALUE WITHOUT COMPROMISE

Production of the highest quality astaxanthin allows our partners to deliver a product that addresses consumer needs. As an important component of eye, joint, and immune health formulations, Zanthin® has clinical backing. Valensa has developed a proprietary "xp3" technology to enhance bioavailability and support absorption, adding to the value proposition for Zanthin® Natural Astaxanthin. Scientific substantiation for astaxanthin in healthy aging, especially in areas

of inflammation and immunity, is exploding, but, fundamentally, solutions already exist with Zanthin® for eye, joint, and cardiovascular health. A powerful antioxidant that supports cellular function and biological processes in a natural way without side effects, Zanthin® is an important product for our aging population, and for all of us who want to enjoy an active lifestyle.

INTEGRITY, BUSINESS CONTINUITY

Valensa International recognizes the challenges of our partners in delivering consistent quality product to the market. You rely on a supplier with command of the supply chain, and an integrated production and distribution system to manage through times of supply chain disruption. Our commitment is to supply chain integrity, quality of production, and third-party verification for peace of mind.



Valensa's supercritical carbon dioxide extraction facility, Eustis, Florida

ABOUT

VALENSA INTERNATIONAL

For two decades, Valensa International has partnered with nutrition, food, and pharmaceutical companies to develop patented formulations for human and companion-animal wellbeing. Our world-class supercritical CO₂ extraction and microalgae-based manufacturing facilities produce clinically proven botanical solutions for prostate, joint, cardiovascular, eye, and general health. Headquartered near Orlando, Florida, Valensa is committed to safety, quality, and the environment, as represented by its participation in the United States Pharmacopeia (USP) Dietary Ingredient Verification Program, FDA Good Manufacturing Practice compliance, and sourcing and sustainability protocols. Its portfolio includes the following global brands: USPlus® Saw Palmetto Extract, Zanthin® Natural Astaxanthin, Parry™ Organic Spirulina USP, Parry™ Organic Chlorella, and FlexPro MD® Joint Health Formulation.

Learn more about Valensa at www.valensa.com.



If you have additional questions, please email us at moreinfo@valensa.com.