

Global Astaxanthin Market – Sources, Technologies and Applications

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Abstracts

REPORT SYNOPSIS

Astaxanthin is 550 times stronger than vitamin E, and 6,000 times stronger than vitamin C in regard to antioxidant power. Due to its powerful antioxidant properties, astaxanthin proved to have benefits on various health conditions including inflammation, diabetics, cardiovascular, vision and CNS conditions. Astaxanthin has been widely used in aquaculture industry for pigmentation of salmon, trout and shrimps; used for its antioxidant and other health benefits in nutraceutical industry; used in cosmetics for its skin care and anti-aging properties; and also used for fortification of foods and beverages.

The global nutraceuticals industry is estimated to have consumed the largest volume of *Haematococcus pluvialis* (*H. pluvialis*) microalgae natural astaxanthin in 2017 accounting for 54.8% which is likely to reach 190 metric tons by 2024. However, the emerging market of Food & Beverages for *H. pluvialis* microalgae astaxanthin consumption will witness the fastest CAGR between the period 2017 and 2024.

Research Findings & Coverage

Global Astaxanthin market is explored in this report with respect to key types (based on raw material source) and major end-use applications

The study extensively analyzes each type and end-use application by key country for all major regions globally

Astaxanthin from *H. pluvialis* Algae a Potential Key Ingredient in Sports Nutrition

Food and Beverages Get Supercharged with Algae Astaxanthin

Algae Astaxanthin Sector Posts a Scenario of Mixed Developments

Natural Astaxanthin's High Cost an Impediment to its Growth in the Aqua Feed Industry

Key business trends focusing on product innovations/developments, M&As, JVs and other recent industry developments

Major companies profiled – 37

The industry guide includes the contact details for 63 companies

PRODUCT OUTLINE

The report analyzes the market for the key types of Astaxanthin (based on raw materials) including:

Synthetic

Microalgae

Bacteria

Major application areas of Astaxanthin analyzed comprise the following:

Nutraceuticals

Aqua & Animal Feed

Cosmetics

Food & Beverages

Analysis Period, Units and Growth Rates

The report reviews, analyzes and projects the global Astaxanthin market for the period 2014-2024 in terms of volume consumption in metric tons, market value in US\$ and the compound annual growth rates (CAGRs) projected from 2017 through 2024

Geographic Coverage

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Fermentation

Cell Recovery and Product Preparation

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Phaffia rhodozyma strains

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2. Parry Nutraceuticals Ltd

Algae Strains

Algae Cultivation

Harvesting & Product Preparation

3. Jingzhou Natural Astaxanthin Inc

Algae Cultivation

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5. Heliae Development LLC

Helix Seed Production Systems

Volaris Commercial Production Platform

Harvesting & Extraction

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Algae Cultivation

Phase I Cultivation

Phase II Cultivation

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2. Beijing Gingko Group Biological Technology Co. Ltd (BGG)

3. Yunnan Alphy Biotech Co., Ltd.

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1. Fuji Chemical Industry Co., Ltd (AstaReal Co., Ltd)

Algae Strain

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SYNTHETIC ASTAXANTHIN

BASF SE (Germany)
Divis Laboratories Limited (India)
Royal DSM NV (The Netherlands)
Zhejiang Medicine Co., Ltd. (China)
Zhejiang NHU Co., Ltd. (China)

NATURAL SOURCE ASTAXANTHIN

Haematococcus pluvialis Microalgae Astaxanthin Manufacturers

Algae to Omega Holdings Inc (United States)
Algaetech International Sdn Bhd (Malaysia)
Algalif Iceland EHF (Iceland)
Algamo Ltd. (Czech Republic)
Algatechnologies Ltd. (Israel)
Alvita Corporation (Japan)
Andexs Biotechnology SRL (Peru)
AstaMaz NZ Ltd (New Zealand)
Atacama Bio Natural Products SA (Chile)
Beijing Gingko Group (BGG) (China)
Algae Health Sciences, Inc. (United States)
Solix Algredients, Inc. (United States)
Biogenic Co., Ltd. (Japan)
MC Biotech Sdn. Bhd. (Brunei)
Cyanotech Corporation (United States)
E.I.D Parry (India) Ltd. (India)
Alimtec SA (Chile)
Valensa International (U. S. Nutraceuticals LLC) (United States)
Ennature Biopharma - India Glycols Limited (India)
Fenchem Biotek Ltd. (China)
Fuji Chemical Industry Co., Ltd. (Japan)
Astareal Co., Ltd. (Japan)
AstaReal AB (Sweden)
AstaReal, Inc. (United States)
Garden State Bioenterprises LLC (GS BIOE) (United States)
Heliae Development LLC (United States)
Inner Mongolia Ever Brilliance Biotechnology Co., Ltd. (KEB) (China)
Innobio Ltd (China)
Jingzhou Natural Astaxanthin Inc. (China)

MBD Industries Limited (Australia)
Piveg, Inc. (United States)
Regenurex Health Corporation (formerly AlgaeCan Biotech) (Canada)
Shandong Wefirst Biotechnology Co., Ltd. (China)
Supreme Health New Zealand Limited (New Zealand)
Tianjin Norland Biotech Co., Ltd. (China)
Yunnan Alphy Biotech Co., Ltd. (China)
Cultivation Technology, Extraction and Other Services Providers
Algaebiotech (The Netherlands)
Evodos BV (The Netherlands)
Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB) (Germany)
Originclear, Inc. (United States)
Olas - All Things Algae, LLC (United States)
Pharmalink Extracts Ltd (New Zealand)
Phasex Corporation (United States)
Radiant Inc. (Canada)
Subitec GmbH (Germany)
Thar Process, Inc. (United States)
Other Natural Astaxanthin Manufacturers
JX Nippon Oil & Energy Corporation (Japan)
NextFerm Technologies Ltd (Israel)

6. KEY BUSINESS TRENDS

Israeli biotech startup, NextFerm Technologies, to commercialize Phaffia based Astaxanthin

BGG and Solix Algreredients Merged their Algae Ingredients Operations

Algatechnologies Invests in New Zealand based Astaxanthin Producer Supreme Health
AstaReal's Natural Astaxanthin for Sports Nutrition Market Exhibited at Vitafoods Europe 2018

Algatech and Sphera Join Forces to Develop Innovative Functional Ingredient Formats

Algalif Expands into Asia-Pacific Market and Introduces Astaxanthin Finished Products

Subitec Ships Photobioreactor System to Soka University in Japan

AlgaeHealth's AstaZine Natural Astaxanthin Tested 100% Glyphosate-Free to Extreme Level of Detection

Nutrex Hawaii's BioAstin Hawaiian Astaxanthin and MD Formulas Verified by IGEN

Cardax and HECL Form ZanthoSyn Distribution Pact for China

KnipBio Meal, Premium Aquafeed Ingredient Developed by KnipBio

Non-GMO Accreditation for Algalif's Astalif 5% and 10% Oleoresin Products

NOW Foods Formed Astaxanthin Distribution Pact with AlgaeHealth
Felcra and Algatech International Partner on Commercial Production of Algae
Algatech's AstaPure Natural Astaxanthin Verified by the Non-GMO Project
Two New US Patents Granted to Valensa
Algatechnologies Starts Marketing its AstaPure Astaxanthin in Brazil
Cyanotech's BioAstin SCE 5 and Vegan BioAstin Soft Gels are Now Halal Certified
US PTO Granted a Patent to Valensa's EyePro MD Formula
NIH Chose Cardax's Astaxanthin Compound for Anti-Aging Interventions Testing Program
Valensa Became Part of the Algae Biomass Organization
Lycored Formed a Joint Venture with Algatechnologies for Astaxanthin Distribution
Subitec Builds New Astaxanthin Production Facility for Algamo
MBD Energy to Complete the Construction of Australia's First Astaxanthin Plant
US FDA Granted Approval for Parry Nutraceuticals' Indian Microalgae Facility
Algatech's AstaPure Natural Astaxanthin Received NOP Certification from the USDA Agricultural Marketing Service
Algalif Receives EU Novel Food Certification for its Natural Astaxanthin
California GOLD Nutrition Astaxanthin Supplement Caps with TruAzta Label now Available on iHerb
Vegan and Vegetarian Certifications Granted for Heliae Astaxanthin Products
Algalif Introduces its Astalif Astaxanthin at Vitafoods Europe 2017
Launch of Algatechnologies' Whole-Algae AstaPure Natural Astaxanthin at Vitafoods 2017
AstaReal, the First and Only Preferred Supplier of Natural Astaxanthin Recognized by NASC
Algaetech Targets a Daily Sale of 500,000 Astaxanthin Eggs in the Next 24 Months
Both FDA GRAS and EU Novel Food Certifications for INNOBIO's Astaxanthin
Food Safety Authority of Ireland Approved AstaZine Natural Astaxanthin as a Novel Food
Heliae's Joint Venture, Alvita Starts Astaxanthin Operations in Japan
New NDI Notification Submitted by AlgaeHealth for Use of AstaZine at a Daily Dose of Over 12mg
NSF International Granted GMP Registration to AstaReal USA
Mitsubishi Corporation Subsidiary MC Biotech Opens Astaxanthin Production Facility in Brunei
Canadian Astaxanthin Producer, Regenurex Health Corporation's Astaxanthin is rebranded as Regenurex, replacing AstaVantage
Cyanotech's BioAstin SCE Products are Now Non-GMO Project Verified
Astavita Develops a New Astaxanthin Formulation AstaMed MYO for Clinical Dietary

Management of Sarcopenia

Cardax Introduces ZanthoSyn Synthetic Astaxanthin Supplement

Launch of Valensa's Flex Pro ES Chewables

Algae Health Sciences, Inc is the New Name for BGG's Algae Subsidiary

BGG received a Notice of Trademark Infringement from ArcticFarma

Broadening of Taiwan Cement's Micro Algae Unit

Astarism for Skin Conditioning Introduced by Astavita

Solix Algredients Gets UL Registrar Certification for Solasta Astaxanthin

Commercial Launch of Astatude Astaxanthin by Algaetech International

Algaetech to Build its Second Astaxanthin Production Facility in Brunei

Withdrawal of AstaReal from NAXA

BGG to Broaden its Product Offering in Mexico

AstaReal Technologies Inc Merged into AstaReal Inc

AlgaeHealth's AstaZine Natural Astaxanthin gets FDA NDI Notification

Fuji Chemical Receives Halal and Kosher Certifications

AlgaeHealth's Astaxanthin Crop is Now Organic Certified

AstaSuper Natural Astaxanthin Feed Product Launched by Fenchem

Opening of BGG's Third Affiliate in Switzerland

AstaReal Natural Astaxanthin is now Non-GMO Project Verified

Frutarom and Algalo Industries Collaborate to Build a Modern Biotechnology Facility

Algatech and SCHOTT Signed a Deal to Gauge the Efficiency of Glass Tubing in PBR Systems

Broadening of Piveg's Carotenoid Production in Mexico

Supercritical Carbon Dioxide Extraction System Installed at Cyanotech's Facility in Kona, Hawaii

Heliae to Expand its Gilbert Algae Production Facility

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