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**COVER
STORY**

**AstaReal
Natural
Astaxanthin**

**TOP
STORY**

**BergaCare
SmartLipids**

**INTERVIEW
JOHN
JIMÉNEZ**

**TALC USE
IN
COSMETICS**

**DEANNA
UTROSKE
(Pre)Clinical
Testing**

Bitop p. 25

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Green algae in glass bulbs (© AstaReal)

The future is algae

Natural astaxanthin from microalgae perfectly aligns with growing demand for sustainable, plant-based ingredients

By Pernilla Berg *

Recent consumer interest in “better for me, better for the planet” foods and nutraceuticals will no doubt continue to drive demand for plant-based offerings. Here, algae can play a key role, and look set to be one of the most exciting, future-proof ingredients. Easy to cultivate, with an abundance of nutrients, whilst maintaining biodiversity, algae are more sustainable than conventional crops and therefore have minimal environmental impact. Although algal ingredients are not new in the field of nutrition and nutricosmetics, their popularity is increasing, and with good reason. As we become more mindful of our own health and that of our planet, algae is an ingredient with huge potential.

* Head of R&D, AstaReal AB

Quality assured

It is perhaps one of the most pressing questions of our time: How can we conserve the planet’s resources for both ourselves and future generations? And what are the most sustainable energy and food sources for an ever-growing world population? Perhaps not surprisingly, then, the development of new farming systems is one of the Top Ten Trends identified by Innova Market Insights for 2023. Here, fast-growing, nutrient-rich algae can play a key role. They grow and reproduce even under difficult conditions, and utilize climate-harmful CO₂ during photosynthesis. Microalga is being explored for large-scale food production as it can grow quickly and be harvested more regularly with minimal land use. State-of-the-art indoor photobioreactors, as used by the Swedish company AstaReal, not only save space but also secure the quality of the microalgae and its valuable ingredient astaxanthin.

Why astaxanthin is booming

Common algae are becoming very popular in food preparation, supplements and the field of nutraceuticals as awareness of their beneficial ingredients continues to grow. This trend offers huge potential for market growth for microalgae products and astaxanthin, in particular. The natural antioxidant derived from *Haematococcus pluvialis* microalgae has carved out a special place for itself among algal ingredients, and demand shows no sign of abating, as consumers increasingly look for preventative, natural ingredients to support their health. Sales of algae-based ingredients have been on an upward trend for the last decade, especially sales of natural astaxanthin. The global astaxanthin market is expected to reach USD 6.90 billion by 2030, and set to grow at a 17.2% CAGR from 2023 to 2030.¹ With more than 70 human clinical studies, AstaReal® astaxanthin is the most widely researched astaxanthin brand in the world, with proven benefits for eye health, immune defence, skin beauty, cognitive function and athletic performance, to name just a few. For instance, there are indications that natural astaxanthin protects the skin against UV-induced deterioration.² Astaxanthin may improve skin tolerance to solar radiation and reduce moisture loss. In contrast to other antioxidants, astaxanthin can penetrate both the hydrophilic and hydrophobic layers of the cell membrane, protecting it from free radicals on the outside and inside at the same time. It is these free radicals that affect the skin and lead to visible signs of ageing.



Algal powder product (© AstaReal)



Astaxanthin at plant (© AstaReal)

Non-pill alternatives

Such positive and motivational research, and subsequent growing demand for algae products, has led to suppliers finding new ways to make their ingredients palatable in a variety of delivery formats. Astaxanthin can be used in gummies, liquid shots, sachets and softgel capsules, and also in combination with numerous other ingredients. AstaReal's bulk product range includes different concentrations of raw material as biomass, oil extracts, water-dispersible powders for the development of innovative new products, and also finished formulations. An Innova survey found that two in three consumers globally are looking for simple and convenient ways to ensure health-promoting nutrition.³ Gummies, sachet powders and liquid shots are increasingly taking precedence over traditional pill forms, as they are not only practical for everyday use but also give supplements a more modern feel. Plus, consumers are highly receptive to hybrid products that comprise a blend of synergistic ingredients. Here, astaxanthin is a perfect fit, as it can be easily combined with a range of other ingredients. For example, in the field of skin health, combinations with collagen or equivalent essential amino acids offer synergistic effects. In a placebo-controlled study, researchers found that women taking an astaxanthin-collagen combination had significantly improved skin elasticity and skin barrier integrity, resulting in reduced moisture loss and a lower expression of collagen and elastin-degrading enzymes.⁴ Other antioxidants, such as ubiquinol and vitamin E, can also help protect skin from environmental stresses. Moreover, astaxanthin is fat soluble and lipids are required for optimal intestinal absorption.

Supporting both human health and that of the planet

Plant-based products are flourishing as a result of consumer interest in health, naturalness, vegetarian and vegan nutrition, and sustainability – all of which tie into the broader consumer lifestyle trend towards cleaner living and eating. Sustainability expectations are driving plant-based sourcing – particularly as people are increasingly concerned about the origin of the products they consume. The number of vegetarians and vegans is also rising globally and so, too, is demand for vegan-compliant supplements. That's why AstaReal has launched Astaxin® VEGAN, an antioxidant formula that perfectly taps into the plant-based market: the vegan softgel is made of carrageenan and modified starch, with the content mirroring Astaxin® Original.

Planet-friendly nutrition

The global food and nutraceutical industries are looking for plant-based sources of ingredients such as antioxidants. Since not all plant-based and vegan products are sustainable, the focus is switching to algae and their derivatives. In 2021, the market size of algae-based ingredients exceeded 3.5 billion USD and its nutraceuticals segment is likely to grow more than 6% annually during 2022–2030.⁵ Therefore, it is anticipated that algae-based research and new product development will gain further momentum in the future. As more and more consumers are proactively following a

flexitarian, vegetarian or vegan lifestyle, algae-derived foods, supplements and nutricosmetics are becoming more widely embraced. With its numerous benefits, natural astaxanthin is well positioned to satisfy the demands of health- and environmentally conscious people. It also provides product developers with ample opportunities for creative dosing and ingredient combinations.

References

- 1 *Research and Markets Report: Astaxanthin Market Size, Share & Trends Analysis Report By Product (Dried Algae Meal Or Biomass, Oil, Softgel, Liquid), By Source (Natural, Synthetic), By Application, By Region, And Segment Forecasts, 2023 – 2030. December 2022* https://www.researchandmarkets.com/report/astaxanthin?gclid=CjwKCAjwKLCkBbA9EiwAka9QRmigQ0FOOx6sbzUdaG05hjLbkBH5vYeZ0wsEQne0uN7r861HyZKFNBoC20EQAvD_BwE (accessed: 13.7.2023)
- 2 Ito N et al.: *The Protective Role of Astaxanthin for UV-Induced Skin Deterioration in Healthy People -A Randomized, Double-Blind, Placebo-Controlled Trial.* *Nutrients.* 2018 Jun 25;10(7). pii: E817.
- 3 *Innova Market Insights. Innova Trends Survey 2022 (average of Brazil, Canada, China, France, Germany, India, Indonesia, Mexico, Spain, UK, US).*
- 4 Yoon HS et al.: *Supplementing with Dietary Astaxanthin Combined with Collagen Hydrolysate Improves Facial Elasticity and Decreases Matrix Metalloproteinase-1 and -12 Expression: A Comparative Study with Placebo.* *J Med Food* 17 (7) 2014, 810–816.
- 5 *Global Market Insights Report: Algae-based ingredients market size – by ingredient, by source, application & global forecast, 2022-2030. September 2022.* <https://www.gminsights.com/industry-analysis/algae-based-ingredients-market> (accessed: 13.7.2023)



AstaReal lab_Algae green phase (© AstaReal)