

Science

Health benefits of natural astaxanthin have been studied in different animal categories. In a study on dogs, astaxanthin showed a significant effect on muscle recovery through facilitating carbohydrate sparing and promoting lipid utilization in muscles during exercise.¹

In another study on dogs suffering from an inflammatory eye condition, the dogs were fed an antioxidant/anti-inflammatory nutraceutical diet containing natural astaxanthin for 60 days. The diet appeared to significantly increase the eye's tear production and to clinically ameliorate the inflammation status as well as the corneal keratinization, corneal pigment density and mucus discharge in these dogs that were initially poorly responsive or unresponsive to immune-suppressive therapy.²

Natural astaxanthin supplementation could also enhance immune defense and improve immune response in pets.³ In another study, dietary supplementation with astaxanthin (75 mg/day) and L-carnitine (3,000 mg/day) for 8 weeks significantly lowered serum markers of exercise-induced muscle damage (creatinase kinase[CK] activity) and muscle fatigue (lactate dehydrogenase-5, LDH-5) in training Thoroughbred horses.⁴ So, natural astaxanthin supplementation is suggested as an efficient, non-invasive intervention to prevent complications such as Exertional Rhabdomyolysis (RER) or Tying-up Syndrome.

Moreover, astaxanthin supplementation has been associated with improved fertility^{5,6} and better growth performance⁷ in livestock, as well as optimum reproduction, growth, survival and immune competence in aquaculture.^{8,9,10}

See references on the back page.



Applications

Natural astaxanthin has a wide array of applications, and various ingredient formats that are available in the market offer a huge possibility for formulating innovative animal food and feed. Some examples:

- ✓ Supplemental: Capsules, Drops, Tablets
- ✓ Complementary feed: Treats, Snacks, e.g. Chews
- ✓ Convenient, Single-dose, On-the-go: Gummies, Liquid shots, Gels, Chews, Sachets, Stick packs, Palatable paste



Discover
the **POWER** of
AstaReal® Astaxanthin!

MADE IN SWEDEN
DESIGNED BY NATURE
BACKED BY SCIENCE

novasta®
By AstaReal®



All Natural

Astaxanthin is a reddish pigment from the xanthophyll carotenoids family responsible for the red-orange color of a number of marine animals and microorganisms like salmon, crabs, krill, lobsters, and even flamingos. It has potent antioxidant and anti-inflammatory properties, stronger than most other commonly known antioxidants. For instance, it has been shown that natural astaxanthin is 110 times stronger than vitamin E and 6000 times stronger than vitamin C in quenching free radicals and so protecting the cells from oxidative stress.

Microalgae For Enhanced Animal Nutrition

AstaReal Novasta® EB15 offers natural astaxanthin for animal nutrition in microencapsulated form with enhanced stability. The product is a pure algal flour derived from microalgae *Haematococcus pluvialis* that in addition to natural astaxanthin contains proteins, carbohydrates, and essential fatty acids, as well as other carotenoids including lutein, beta-carotene, and canthaxanthin.

This algal meal is encapsulated in fully-hydrogenated rapeseed oil. Novasta® EB15 is suitable for pets such as cats or dogs, as well as livestock, competitive animals like racehorses, and in aquaculture, and can be added or mixed into feed products.



AstaReal® Astaxanthin – Novasta® Product Specifications

- ✓ Pure algal flour, derived from microalgae *Haematococcus pluvialis*
- ✓ Soluble in fat
- ✓ Classified as feed raw material, approved by the Swedish Board of Agriculture
- ✓ Suitable for all animals, including pets and animals in competitive sports, agriculture, and aquaculture

NOVASTA® biomass

- ✓ Crushed and spray-dried aplanospores of microalgae
- ✓ Astaxanthin concentrations 4.5% to >5% w/w
- ✓ 42% fat

NOVASTA® EB15

- ✓ Encapsulated algal meal (32%) in fully hydrogenated rapeseed oil (66%)
- ✓ Astaxanthin concentration at least 1.5%
- ✓ Improved stability
- ✓ Applicable in "open" formulations (pellets, meal mixes and soft chews)
- ✓ 83% fat

References

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Who We Are?

AstaReal as the global pioneer and expert in microalgae cultivation, natural astaxanthin production, R&D and clinical science is an authority in both animal and human food supplements. It is the only brand of natural astaxanthin backed by +70 clinical studies. AstaReal AB (Sweden) offers its well-studied natural astaxanthin products for animal nutrition in different formats.

Reach out for some inspirational conversation!



Get in touch for further information and for business collaborations. Subscribe to our free monthly newsletter. Follow us on our social media channels to have access to the most interesting and up-to-date news!



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