



# Astaxanthin

Introduced 2004



## What Is It?

Derived from Hawaiian *Haematococcus pluvialis* microalgae cultivated under pristine conditions, esterified astaxanthin is a stable, powerful, fat-soluble antioxidant from the carotenoid family. *Haematococcus* algae produces astaxanthin to protect itself against ultraviolet induced free radical damage.\*

## Features Include:

**Enhanced Antioxidant Capacity:** Astaxanthin is different from beta-carotene in that it has two additional oxygenated groups on each of its ring structures, enhancing its ability to scavenge free radicals. It is believed to be several hundred times more effective than vitamin E in neutralizing singlet oxygen molecules and has been shown to exert greater antioxidant activity than both zeaxanthin and lutein.\*

**Bioavailability and Stability:** Astaxanthin is formulated in a base of safflower oil to enhance bioavailability. Vitamin E and rosemary are added to enhance stability.

**Clinically Studied:** Astaxanthin has been and will continue to be clinically studied.

## Uses For Astaxanthin

**Antioxidant Support:** Astaxanthin protects the phospholipid membranes of cells from oxidative damage. In a recent U.S. study, it demonstrated the ability to cross the blood brain barrier and protect the retina in animals, suggesting its potential for supporting the brain and nervous system from free radical damage. In one animal study, astaxanthin helped to maintain a healthy bacterial environment in the stomach.\*

**Skin Support:** Initial trials with astaxanthin suggest that it may boost the skin's natural antioxidant defenses against ultraviolet induced free radicals. In a human clinical evaluation, supplementation with astaxanthin for two weeks provided significant antioxidant protection for the skin. In cell cultures, astaxanthin provided greater protection than both beta-carotene and lutein, in part by supporting catalase and superoxide dismutase activity. Astaxanthin may also moderate the activity of polyamines generated by exposure to sunlight.\*

**Joint Support:** In one double-blind, placebo-controlled trial, astaxanthin significantly supported joint comfort in human volunteers. The results of another human clinical trial suggest

that astaxanthin supported knee comfort and joint function after strenuous leg exercises. Subjects in a third study using astaxanthin reported enhanced wrist nerve comfort.\*

**Immune Support:** Enhanced dietary concentrations of astaxanthin have demonstrated the ability to support healthy immunoglobulin activity and immune function. Additional studies suggest astaxanthin's immune and cellular support potential.\*

**Lipid And Cardiovascular Support:** In another animal study, astaxanthin supported healthy lipid metabolism. Other studies are in progress to evaluate further its cardiovascular support properties.\*

## What Is The Source?

Astaxanthin is derived from *Haematococcus pluvialis* microalgae and cultivated under highly controlled conditions. In addition to astaxanthin, each softgel typically provides 40 mcg naturally occurring lutein and 65 iu naturally occurring vitamin A as beta carotene.

## Recommendations

Pure Encapsulations recommends 1–3 capsules daily, in divided doses, with meals.

## Are There Any Potential Side Effects Or Precautions?

At this time, there are no known side effects or precautions. If pregnant or lactating, consult your physician before taking this product.

## Are There Any Potential Drug Interactions?

At this time, there are no known adverse reactions when taken in conjunction with medications.

## Astaxanthin

each softgel capsule contains 7.5 sg

Astaxanthin .....4 mg  
(naturally derived from *Haematococcus pluvialis* microalgae)  
other ingredients: extra virgin olive oil, gelatin capsule (gelatin, glycerin, water)

1–3 capsules daily, in divided doses, with meals.

‡These statements have not been evaluated by the Food & Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.