



Astaxanthin: Potential Benefits for Skin Health and Anti-Aging Properties

Erica Peaokif*

Department of Food Science, University of Massachusetts, Massachusetts, USA

ARTICLE HISTORY

Received: 07-Aug-2023, Manuscript No. EJMOAMS-23-119378;
Editor assigned: 10-Aug-2023, PreQC No. EJMOAMS-23-119378 (PQ);
Reviewed: 25-Aug-2023, QC No. EJMOAMS-23-119378;
Revised: 01-Sep-2023, Manuscript No. EJMOAMS-23-119378 (R);
Published: 08-Sep-2023

Description

Among antioxidants, astaxanthin shines as an exceptional powerhouse. It's a naturally occurring compound that belongs to the carotenoid family, known for its vibrant red-orange pigment. Found in various marine organisms and some plants, astaxanthin has gained attention for its remarkable health benefits and potential therapeutic properties.

Benefits of astaxanthin

Potent antioxidant: Astaxanthin is an exceptional antioxidant, capable of scavenging free radicals in the body. Its molecular structure allows it to traverse the blood-brain barrier, making it effective in protecting both the brain and the nervous system from oxidative stress.

Eye health: This compound is renowned for its role in supporting eye health. As an antioxidant, astaxanthin may help reduce the risk of age-related macular degeneration and eye fatigue by protecting the eyes from harmful UV rays and oxidative damage.

Skin health: Astaxanthin is increasingly popular in skincare products due to its ability to improve skin elasticity, moisture, and reduce wrinkles. It aids in protecting the skin from UV damage and can assist in managing skin conditions caused by inflammation.

Heart health: Studies suggest that astaxanthin may promote heart health by reducing oxidative stress and inflammation, leading to improvements in various cardiovascular risk factors.

Exercise performance: Athletes and fitness enthusiasts often turn to astaxanthin for its potential in enhancing endurance, reducing muscle fatigue, and improving exercise performance.

Sources of Astaxanthin in food

Salmon and trout: Wild-caught salmon and trout are

rich sources of astaxanthin. The compound gives these fish their characteristic pink or reddish hue. Consuming these fish provides an excellent dietary intake of astaxanthin.

Shrimp and lobster: Shellfish such as shrimp and lobster also contain notable amounts of astaxanthin. The reddish color of these shellfish comes from this antioxidant compound.

Crab and krill: Other seafood like crab and krill are good sources of astaxanthin. Krill oil supplements are popular due to their high astaxanthin content.

Microalgae: Certain microalgae, including *Haematococcus pluvialis*, are a potent source of astaxanthin. Some supplements use this algae as a primary ingredient to provide concentrated doses of the antioxidant.

Red and pink fruits and vegetables: While in smaller quantities, some fruits and vegetables, such as red peppers, tomatoes, and pink grapefruit, contain astaxanthin. However, the levels in these foods are relatively low compared to seafood.

Astaxanthin, with its potent antioxidant properties, offers a range of potential health benefits, from protecting the eyes and skin to supporting heart health and aiding exercise performance. While it can be obtained through dietary sources like seafood, incorporating supplements might be necessary for those looking to attain higher doses for specific health concerns. It's important to consult a healthcare professional before starting any supplementation, especially for individuals with existing medical conditions or those on specific medications. Incorporating astaxanthin-rich foods into one's diet can contribute to overall well-being, offering a natural way to harness the power of this exceptional antioxidant.