

BOTTOM LINE

Natural Healing

With Dr. Mark Stengler

www.BottomLinePublications.com

281 Tresser Boulevard,
Stamford, CT 06901-3229
203-973-5900

DEEPER CURES FROM AMERICA'S TOP NATURAL PHYSICIAN

Mark A. Stengler, NMD ■ Stengler Center for Integrative Medicine

FIND OUT WHAT ASTAXANTHIN, THE OCEAN'S ANTIOXIDANT, CAN DO FOR YOU

I am excited to tell you about a super antioxidant—*astaxanthin* (pronounced as-tuh-ZAN-thin)—that you might not have heard about. And if you have heard about it (there has been a lot of talk about it in the natural healing community), I'm going to set you straight on how it can best help you.

Astaxanthin is a type of red-orange-pink carotenoid that comes from the sea. Carotenoids are pigments that give food their color and have powerful antioxidant properties. Most of us are familiar with beta-carotene, the main carotenoid found in land plants. Well, astaxanthin is the main marine carotenoid. It is found in some types of algae as well as in some fungi and plants—and it gives salmon, shrimp, lobster and crawfish their bright color. You get some astaxanthin when you eat these foods, but most of us don't eat enough of them to benefit.

Astaxanthin is closely related to *lutein*, a carotenoid known to improve eye health, and it has long been used as a supplement to treat aging eyes. But new studies are finding that this carotenoid provides many other health benefits. In my own practice, I have found that astaxanthin can especially help patients with diabetes and heart disease. Laboratory studies also show that astaxanthin may fight cancer

and enhance cognition, but these findings have not yet been tested in humans. *Here's how astaxanthin can help you...*

HEART DISEASE

Research shows that heart cells have a particular affinity for astaxanthin, which is a potent anti-inflammatory agent. Studies have found that astaxanthin not only reduces inflammation but also lessens oxidative stress. This is particularly important because doctors now believe that coronary artery disease is caused by inflammation in the heart and arteries.

• **LDL cholesterol.** A study published in *Atherosclerosis* found that astaxanthin significantly lowered triglyceride levels and increased HDL (good) cholesterol in adults who were not obese. Astaxanthin also prevents LDL (bad) cholesterol from oxidizing. Oxidized LDL contributes to inflammation and the formation of cholesterol deposits.

• **Diabetes.** High blood glucose levels, which can occur in people with uncontrolled diabetes, increase deposits of fatty materials on the insides of blood vessel walls. This affects blood flow and can result in clogged and rigid blood vessels, increasing the risk for heart attack and stroke. The antioxidant activity of astaxanthin helps keep blood vessels

clog-free and flexible by minimizing oxidative damage to the cells that make up blood vessels.

• **Blood flow.** Astaxanthin improves blood *rheology*—the velocity of blood moving through arteries and veins. In a small study of middle-age men, Japanese researchers showed that taking 6 milligrams (mg) of astaxanthin daily for 10 days resulted in smoother, faster blood flow. Improved rheology eases the heart's workload.

• **Heart and brain protection.** Research indicates that astaxanthin can protect the heart and the entire cardiovascular system from ischemic injury. This type of injury occurs when the blood supply to an area of tissue is cut off, such as during a heart attack, stroke or other thrombotic event, including when an *embolus* (a mass of clotted blood) blocks a blood vessel in the heart, brain or veins. Tissue damage occurs when blood supply returns to the area after a period of absence. Reentering blood causes oxidative stress, resulting in inflammation and oxidative damage. This type of injury also occurs during open-heart surgery, when blood flow is stopped and then resumed during the procedure. Similar circulatory damage also may be involved in pressure sores and diabetic foot ulcers. Astaxanthin has not been tested in all of these situations,

Mark A. Stengler, NMD, licensed naturopathic medical doctor in private practice, Stengler Center for Integrative Medicine, Encinitas, California...adjunct associate clinical professor at the National College of Natural Medicine, Portland, Oregon...author of many books, including *The Natural Physician's Healing Therapies* and coauthor of *Prescription for Natural Cures* (both from Bottom Line Books)...and author of the *Bottom Line/Natural Healing* newsletter. www.DrStengler.com

Copyright © 2011 by Boardroom Inc., 281 Tresser Blvd., Stamford, Connecticut 06901-3229. www.BottomLinePublications.com

but it does appear to reduce these types of injuries.

AN IMMUNE BOOSTER

In a Washington State University study, researchers gave college-age women 2 mg or 4 mg of astaxanthin or placebos daily for eight weeks. Astaxanthin increased the immune system's production of natural killer cells, which help us fight infections. The supplements also lowered the women's levels of *C-reactive protein*, a marker of inflammation.

MY RECOMMENDATIONS

To boost immunity and for people with diabetes, I suggest taking 2 mg to 4 mg daily of astaxanthin. For people with coronary artery disease, I recommend taking 8 mg to 16 mg daily (the dose is determined by your weight) as part of a dietary and supplement regimen. You can speak to a holistic doctor about the amount that is right for you. There are no reported side effects. Astaxanthin is safe for everyone but should not be taken by pregnant

and lactating women because it has not been studied in these populations. The supplements are derived from algae, so they are even safe for people who are allergic to shellfish (but read your label!).

One brand I like: Source Naturals (800-815-2333, www.SourceNaturals.com). ■ ■

Reference

J.P. Yuan, et al., "Potential Health-Promoting Effects of Astaxanthin: A High-Value Carotenoid Mostly from Microalgae," *Molecular Nutrition and Food Research* (2011).