Antioxidants

Have you ever wondered how you get all those wrinkles? Those annoying crow’s feet at the corners of your eyes? Or those laugh lines around your mouth? True, these things are but part of the normal aging process, but what causes aging anyway? And is there anyway to retard the process?

In biological systems, the process of oxidation is what leads to aging. Oxidation causes the production of substances called free radicals, which are highly reactive. These free radicals readily react with and damage other molecules. And that means all molecules. Free radicals don’t make the distinction between foreign bodies and healthy cells. So when free radicals start attacking the body’s own cells, you can guess what the result is – Aging.

The good news is that antioxidants are the natural enemies of free radicals. The function of antioxidants is to destroy harmful free-radicals, counteracting the damaging of tissues. As a result, antioxidants can be used to treat aging and cause its retardation.

Antioxidants are commonplace in nature. In fact, antioxidants are abundant in the more common vitamins, such as retinol (Vitamin A), ascorbic acid (Vitamin C), tocopherol (Vitamin E), and selenium. Antioxidants can be nutrients (vitamins and minerals) or enzymes (proteins in your body that assist in chemical reactions). Antioxidants are believed to play an important role in preventing the development of such chronic illnesses as heart disease, stroke, cancer, Alzheimer’s disease, Rheumatoid arthritis, and cataracts.

Although antioxidants cannot completely rid our bodies of free radicals, they can work to retard or minimize the damage caused. Antioxidants block the process of oxidation by neutralizing free radicals. By neutralizing free radicals, the antioxidants themselves become oxidized. For this reason, our bodies are always in need of a constant source of antioxidants.

How antioxidants work is a two-way process. The first step in the process is the chain-breaking. The antioxidant molecule breaks the chain reaction of free radicals turning other molecules into free radicals. Chain-breaking is also called Stabilization.

The other step in the process is on the preventive side. Antioxidant enzymes, like superoxide dismutase, catalase, and glutathione peroxidase, prevent oxidation by reducing the rate of chain initiation. That means that instead of waiting for the free radicals to make a long chain, antioxidants scavenge initiating radicals and destroy them before oxidation is set in motion.

In this manner, aging is delayed. And not only that, but the diseases and other illnesses caused by harmful free radicals are avoided. Antioxidants are an excellent weapon in the fight against aging.