

Vitamin C: One Vitamin, Many Benefits

Editorial Staff

Vitamin C is essential for a wide range of metabolic reactions, and it's manufactured internally by plants and animals, which synthesize it from glucose. Humans are a notable exception, which means we need to get vitamin C from food and/or supplements.

The good news is that while the human body can't manufacture vitamin C naturally, it is present in high amounts in a number of foods and is also commonly added to foods that do not already contain this important nutrient - important because adequate consumption is associated with numerous health benefits.

Vitamin C is so important because it's required for tissue repair and growth throughout the body; that means it helps to heal wounds and repair and maintain cartilage, bones and even teeth. In addition, vitamin C is needed to form collagen, a protein used by the body to make everything from new skin to scar tissue to ligaments and blood vessels. These functions alone make it extremely valuable. And just take a look at some of these troubling symptoms attributable to vitamin C deficiency (Source: Medline Plus):

- Dry and splitting hair
- Gingivitis
- Bleeding gums
- Rough, dry, scaly skin
- Slower wound healing
- Easy bruising
- Nosebleeds
- Weakened tooth enamel
- Swollen, painful joints
- Anemia
- Decreased ability to fight infection
- Slower metabolism
- Possible weight gain

Vitamin C also plays a key role in cell defense because it is an antioxidant, which help block the production of free radicals. As discussed in the July 1 issue of *DC* ("[Why Do Antioxidant Trials Fail?](#)" by Dr. David Seaman), free radicals can cause a great deal of damage to the body, including damage to genetic material (DNA), enzymes and other proteins, and important cell membrane fats. This damage contributes to the development of many chronic diseases, not the least of which are cancer and heart disease.

Considerable research supports the disease-preventing role of vitamin C, in fact, nearly 100 epidemiological studies have examined the role of vitamin C or vitamin C-rich foods in cancer prevention, finding strong evidence for its role in reducing the risk of cancers of the esophagus, oral cavity, stomach and pancreas, and substantial evidence supporting protection against cancer of the cervix, rectum, breasts and lungs.

Vitamin C also may reduce the risk of suffering a stroke, [according to a 2008 study](#) published in the

American Journal of Clinical Nutrition. Study participants with the highest levels of plasma vitamin C had a 42 percent lower risk of stroke compared to study participants with the lowest levels of plasma vitamin C.

Foods considered good sources of this vital nutrient include citrus fruits and juices, tomatoes, cantaloupe, sweet and white potatoes, broccoli, peppers and leafy greens. Because it is a water-soluble vitamin, the body cannot store leftover amounts and excretes what it doesn't use through the urine), so make sure you and your patients get plenty of C every day.

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