

Don't Forget the Vitamin C

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It is amazing how many metabolic processes vitamin C is involved in and how many conditions a little extra vitamin C can help. We will briefly review some of the roles and applications of this powerful nutrient.

Vitamin C is a vital component of connective tissue. It helps in the production of collagen, elastin, chondroitin sulfates, and glycosaminoglycans, all of which contribute to various aspects of connective tissue synthesis. Any patient who enters your office injured, needs extra vitamin C. Amounts vary depending on the nature and extent of the injury, with the more serious problems requiring greater amounts.

Vitamin C is a powerful antioxidant. It can neutralize free radicals, which are highly reactive molecules that can damage the body at the cellular level. Applicable conditions include smokers (each cigarette destroys 25 to 50 mg of vitamin C); ingestion of chlorinated water; ingestion of nitrates (which are converted to nitrosamines in the gastrointestinal tract and are mutagenic); exposure to exhaust, ozone, pesticides, and industrial chemicals. Again, the greater the exposure, the greater the amount of vitamin C that is needed.

Vitamin C has a strong multifaceted effect on the immune system. It can enhance white blood cells, phagocytosis, neutrophil mobility, lymphocyte and interferon production. Anytime a patient has a cold, the flu, malaise, wounds, burns, bacterial or viral infections, a vitamin C increase is recommended.

When the body is under excessive stress, vitamin C is one of the nutrients that should be increased. The adrenal glands are a key component in the body's response to stress. Vitamin C plays an important role in the synthesis of adrenal hormones, as well as reducing histamine production. When a person is under psychological stress, physical stress from sickness or injury, or is exposed to weather extremes (cold or hot), vitamin C is one of your nutrients of choice.

Other conditions vitamin C can help and functions it performs include stimulating the cholesterol to bile conversion, helping gum disease, easy bruising, and diabetics combating complications of their illness. Some forms of male infertility respond quite favorably to vitamin C supplementation. Vitamin C is also an important ingredient in the repair process of epithelial tissue insult caused by various gastrointestinal conditions, such as peptic ulcers, ulcerative colitis, Crohn's disease, and irritable bowel syndrome.

Vitamin C helps in the absorption of most vitamins and minerals. It is especially helpful for people who need extra iron and folic acid. Bioflavonoids work synergistically with vitamin C and enhance its effectiveness. There is no known vitamin or mineral that inhibits vitamin C absorption; however, substances that do interfere with vitamin C include aspirin, antibiotics, barbiturates, cortisone, estrogen, oral contraceptives, alcohol, and antihistamines. Should any of your patients ingest these substances, extra vitamin C should be recommended.

The RDA for vitamin C is 60 mg. Although this is enough to prevent scurvy in the majority of the

population, this author feels adults should ingest at least 200 mg in divided doses to maintain their body's vitamin C stores in the healthy range. Therapeutically safe doses range up to 10 gms a day with 1 to 4 gm being the amounts most commonly utilized safely and therapeutically. Vitamin C-sensitive patients should take the ascorbate form which is easily available from most of the professional nutrition companies.

Vitamin C is truly one of the most powerful and versatile nutritional tools a chiropractor has. This article is simply a clinical overview of some of the major areas of utilization for vitamin C. It is, by all means, not an inclusive review. There are many new areas of vitamin C application in research that are ongoing and beyond the scope of this article.

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