

DEFENSE C

Essential Defense for your Immune System

Protection Against Excess Free Radicals

Vitamin C is probably best known as an antioxidant. This is a word that we use frequently but don't always stop to think about in terms of its meaning. Antioxidants are forms of molecules that help keep chemical reactions in our body in check. In particular, antioxidants help prevent excessive activity on the part of free radical molecules. (Free radicals are forms of molecules that tend to be very reactive, and too many free radicals in the wrong place at the wrong time can do damage to our cells and tissue.) Vitamin C and other antioxidants help prevent that damage. Damage to the lens of the eye, damage to molecules circulating around in our bloodstream, and damage to genetic material (DNA) in our cells are all examples of damage that have been shown to be prevented under certain circumstances by vitamin C.

One interesting application of vitamin C as an antioxidant is its ability to transform iron into a state that is better absorbed in the intestine. Including vitamin C-rich foods in recipes with your best iron sources can potentially be a way to enhance iron absorption.

Collagen

Vitamin C is required to produce collagen, a protein that plays a critical role in the structure of our bodies. Collagen is the framework for our skin and our bones, and without it, we would quite literally fall apart.

This is exactly what we see with severe vitamin C deficiency, or scurvy. People who have this condition lose teeth, bleed easily, and lose the strength of their bones. Luckily, it doesn't take much vitamin C to prevent this problem. As we've known for more than two centuries, a single lime per day would usually be enough. (However, as described earlier, we have dozens and dozens of great food choices that will give us as much vitamin C as a single lime!)

Brain Health

Vitamin C is necessary to make certain neurotransmitters. These neurotransmitters are the signals that carry thoughts, feelings, and commands around our brains and throughout our nervous system.

In particular, we need vitamin C to produce serotonin, a hormone that plays a critical role in wide variety of body systems, including the nervous system, endocrine system, immune system, and digestive system. Many of our moods, daily bodily rhythms (including sleep-wake cycles), and experiences of stress and pain have serotonin included as a factor in their occurrence. Some of the most commonly used prescription medications for depression (SSRIs, or Selective Serotonin Reuptake Inhibitors) also target this hormone. While we are not suggesting that dietary intake of vitamin C will automatically improve the quality of any experiences described above, we do recommend that you include vitamin C-rich foods on a daily basis as part of your overall well-being.

Global Nutrition Vitamin C is made in the USA, gluten soy wheat milk/dairy, artificial flavors free