

Could Megadoses of Vitamin C Be Harmful?

Laboratory study reveals large doses of Vitamin C may lead to damaged DNA – and potential for increased cancer risk.

A study released in the June 2001 issue of *Science* suggests that large doses of Vitamin C produce toxins that could possibly increase cancer risk by damaging the body's DNA.

Long regarded as a protective nutrient against cancer, researchers from this study demonstrated that too much of a good thing might actually cause harm. Vitamin C is a powerful antioxidant, but previous studies have failed to show that supplementation is protective. This study may begin to show why.

The researchers do caution *against* thinking that Vitamin C causes cancer. What they do suggest is that megadoses of the vitamin may not be a beneficial. More studies are needed to determine if Vitamin C produces this toxin and DNA damage in the body itself.

Critics point out that this study was conducted in test tubes and that nutrients often function differently in the human body. They suggest that people should not stop taking Vitamin C supplements based on the results of this single study.

While the topic of Vitamin C supplementation is controversial, there is agreement that optimal levels of this powerful antioxidant can be met through a rich and varied diet of whole foods.

The message to be gained? More is not always better when it comes to supplements and we should not overdo when taking them. The daily Recommended Dietary Allowance for Vitamin C is 75 milligrams for women and 90 milligrams for men. Smokers require an additional 25 milligrams. These levels can easily be met through a varied and balanced diet.

Reference:

Lee, S.H., Tomoyuki, O., Blair, I.A. (2001). Vitamin C-Induced Decomposition of Lipid Hydroperoxides to Endogenous Genotoxins. *Science*, 292(5524): 2083-2086.