

## **Ascorbic acid: physiology and health effects**

### **ABSTRACT**

Ascorbic acid (vitamin C) is an essential dietary nutrient required for various biological processes in the human body. These include its vital role as antioxidant, and it acts as cofactor for the biosynthesis of collagen, catecholamines, amino acids, and various peptide hormones. Accumulating literatures suggest that vitamin C may potentially implicate in the development of various chronic diseases partly due to its role in maintaining oxidative balance, this is due to the fact that initiation and development of many chronic diseases stemmed from oxidative stress and inflammation. Given that, vitamin C has controversially been used in the prevention and treatment of specific health conditions, this article attempts to summarize recent evidences pertaining to the roles of vitamin C in health and diseases. A brief description on the physiology of vitamin C was also included to support the understanding of its role in maintaining health.

**Keyword:** Asthma; Cancer; Cardiovascular disease; Cataract; Collagen; Dehydroascorbic acid (DHA); Health effects; L-ascorbic acid; Osteoporosis; Physiology; Safety levels; Sodium vitamin C transporter (SVCT); Toxicity; Vitamin C; Vitamin C metabolism; Wound healing