

## Vitamin C in Human Health and Disease: Effects, Mechanisms of Action, and New Guidance on Intake

W.J. Lee

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Vitamin C is an antioxidant and very important in maintaining our life and a healthy body. It is produced in the liver and excreted through the proximal tubules of the kidneys. It can be transported through several glucose transporter proteins. In the peripheral blood, almost 98% of vitamin C is present in the reduced form (L-ascorbate) whereas less than 2% is present in the oxidizing form (dehydroascorbate). Vitamin C has a 6-h cycle in the peripheral blood, indicating that its level in the blood peaks 3 h after oral intake with a meal and then returns to the original basic level 6 h after oral intake. Vitamin C is water-soluble, and its ascorbyl radical is less toxic than the radicals of other antioxidants. It can regenerate toxic radicals generated from other antioxidants. Vitamin C has an important role as a cofactor in various enzymatic reactions in wound healing, energy and cholesterol metabolism, biosynthesis of norepinephrine, downregulation of high blood pressure, and response of hypoxia.

This book presents the scientific evidence for the role of vitamin C in health and diseases, and offers new guidance on its intake

based on the author's extensive research and review of the scientific literature. The book is organized into 13 chapters, and aside from the introductory and summary chapters, the chapters are outlined according to organ systems, such as the cardiovascular, immune, central nervous, and digestive systems. There are also chapters describing the ways in which the liver, skin, and eye are affected by vitamin C and how diseases such as cancer, the common cold, aging, and stress are related to vitamin C intake. Vitamin C has an important role in protecting organs from oxidative damage and in promoting reactions involved in life processes such as atheromatosis, cancer, and aging. The author tries to promote human health by encouraging use of a proper dose of vitamin C and makes recommendations on the amount that should be taken daily.

This book is relatively handy, with essential information about vitamin C that is very helpful for our health. I highly recommend it both to clinicians and to research workers on vitamins or health.

**E. Edmund Kim**

*University of California at Irvine  
101 The City Dr. S.  
Orange, CA 92868  
E-mail: edmundek@uci.edu*

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