

The History of Scurvy and Vitamin C

Kenneth J. Carpenter, ed.

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According to Professor Carpenter, "If we exclude straight forward famine, scurvy is probably the nutritional deficiency disease that caused the most suffering in recorded history." His goal is "to describe the work of a relatively small number of people who tried to understand the cause of this strange disease and to find a means of prevention and cure." An intensive medical and historical literature has been reviewed. Each point is illustrated by a quotation properly referenced in a footnote. This is an authoritative, scholarly work, fulfilling the wish of Sir Richard Hawkins in his voyages into the South Sea in 1593:

"I wish that some learned man would write of it, for it (scurvy) is a plague of the sea, and a spoyle of mariners. Doubtless it would be a meritorius worke with God and man, and most beneficial for our cuntry; for in twentie yeares, since I have used the sea, I dare take upon me to give accompt of ten thousand men consumed with this disease."

Professor Carpenter surveys the long and fascinating history of theories about scurvy beginning with the long sea voyages of the 16th and 17th centuries, entitled "The Explorers' Sickness (1498-1700)." Note is taken of the reports of scurvy during the Crusades and of the claim that scurvy was mentioned by earlier medical writers including Hippocrates, though there is little solid data to support the latter. In the second chapter, "The Writings of Learned Men (1540-1700)," Carpenter describes the attempt of medical scholars to find an explanation for scurvy through logical development of ideas based on statements of medical authorities such as Galen, which unfortunately were inaccurate. The result was confusion. The third chapter, "Scurvy in the British Navy (1700-1772)," covers the work of James Lind, who carried out the first controlled nutritional experiment establishing the effectiveness of oranges and lemons, reported but not proved since the early sea

voyages. However, these results did not allow Lind to develop a significant theory of the cause and control of scurvy, since he continued to write about blocked perspiration due to a cold wet climate (and also an unhappy psychological state and inactivity), poor air on ships, food preserved with salt for long sea voyages or combinations of these factors. Perhaps because of his inability to develop a clear-cut, supportable theory Lind's accomplishments were forgotten for many years.

Later chapters are entitled "Captain Cook and the Pneumatic Chemistry (1770-1815)," "Land Scurvy, Potatoes and Potassium (1810-1905)," "Problems in the Arctic and the Ptomaine Theory (1850-1915)," "Infantile Scurvy: The New Disease of Affluence (1877-1917)," "Guinea Pigs and the Discovery of Vitamin C (1905-1935)" and "Needs and Uses of Vitamin C (1935-1985)." The latter includes the pros and cons of megavitamin therapy.

For anyone interested in the history of scurvy or in the development of medical knowledge and theory over the past 500 years, this book is an excellent reference. Professor Carpenter writes in an interesting, very readable style. He has done an extensive review of books and papers on the subject and supports his points with numerous pertinent quotations and 23 carefully selected illustrations. He has made a very fine contribution to medical literature. This is the first full-length treatment of the subject in over 60 years and should be on the bookshelves of all nutritional scientists and teachers.

Reviewed by

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