

Vitamin C: optimal dosages, supplementation and use in disease prevention

Callen Pacier and Danik M. Martirosyan

Functional Food Center/Functional Food Institute, Dallas, TX 75252, USA

Corresponding Author: Danik Martirosyan, PhD, Functional Food Center/Functional Food Institute, 7575 Frankford Rd, Suite 3527, Dallas, TX, 75252, USA

Submission date: February 4, 2015; Acceptance date: March 5, 2015, Publication date: March 7, 2015

ABSTRACT:

The importance of vitamin C as a way to prevent scurvy has been known for centuries. More recent research on vitamin C has expanded beyond scurvy prevention, providing promising evidence for additional health benefits and clinical applications. This review of scientific literature will evaluate many aspects of vitamin C including deficient versus optimal blood plasma levels, adequate daily amounts necessary to maintain ideal levels, and the safety of higher doses. It will also focus on the importance of vitamin C as a powerful bioactive compound, and its utilization in the prevention and management of different chronic diseases. This review is necessary to express the importance of alternative healthcare methods in both preventative and clinical care. Vitamin C was chosen as a representative of this concept due to its powerful antioxidant capacity, incredibly important physiological implications, and very minimal chance of side-effects. This review focuses on studies involving human participants that address how vitamin C is important for our health.

Keywords: Ascorbic acid, deficiency, disease, dose, health, supplementation, vitamin C