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Citrus flavonoids in preventing cardiovascular diseases

(Book Chapter)

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Abstract

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Citrus, belonging to the family of Rutaceae is a genus of the flowering plants and shrubs. They originated in the tropical and subtropical regions of Southeast Asia. Citrus fruits are highly produced in China, Brazil, USA, India, Mexico, and Spain. Among Citrus species, sweet oranges (*Citrus sinensis*) are the most widely spread and valued throughout the world. Citrus fruits are rich in flavonoids, mainly hesperidin and naringin that are known to have benefit in the avoidance of long-term diseases. Based on the in vivo and epidemiological studies done previously, the potential biological properties of Citrus flavonoids in Citrus fruits are beneficial for the prevention of cardiovascular diseases (CVDs) by acting as antihypertensive, anti-hypercholesterolemia, and antidiabetic. However, the mechanisms of action are still uncertain and not clearly defined. Citrus contains some phytochemicals that can give beneficial effects to human's health through several biological properties. Thus, Citrus fruits can be a new discovery of natural prevention of chronic diseases around the globe with regard to their high production each year. This chapter provides a comprehensive information on the phytochemical constituents found in Citrus fruits and their biological properties in preventing cardiovascular diseases. © Springer Nature Singapore Pte Ltd. 2020.

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