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Special Issue Reprint

Health Properties of Plant Bioactive Compounds: Immune, Antioxidant and Metabolic Effects

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The World Health Organization recommends the consumption of plant foods instead of animal-origin foods due to their high levels of saturated fat and cholesterol. Consumption of plant products has led to research on the beneficial properties of their components beyond basic nutrients. Vegetable-derived peptides have shown multifunctional effects related to chronic diseases, attracting interest from the food, nutraceutical, and pharmaceutical industries. This reprint highlights studies on various vegetable extracts, such as chestnut, quinoa, amaranth, buckwheat, and *Protium heptaphyllum* gum resin, which have demonstrated antimicrobial, anti-inflammatory, and cholesterol-regulating properties. Specific compounds derived from plants, such as methyl p-coumarate and lupin protein hydrolysate, have shown effectiveness in reducing inflammation and anxiety, respectively. A vegetable extract of rosemary has been studied for its potential to treat osteogenesis imperfecta. Moreover, this reprint reviews *Lycium barbarum* berries, essential oils from Annonaceae species, antioxidant compounds, phytosterols, and natural compounds for the prevention and treatment of oral mucositis was discussed. Overall, these studies suggest that vegetable-derived bioactive compounds could serve as new nutraceuticals to prevent and treat a wide range of chronic diseases.

