

Title Effects of radiation processing on phytochemicals and antioxidants in plant produce
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Abstract

Consumption of natural, fresh plant produce rich in phytochemicals and antioxidants has been reported to overcome some of the degenerative diseases that affect humans. However, improper processing, handling, and long-term storage of produce might result in minimal availability of the health-promoting compounds. Food irradiation as a physical method for preservation has proved its efficacy over other common means of preservation, and is known to retain the quality of food and agricultural commodities. This paper summarizes the effects of ionizing (gamma and electron beam) and non-ionizing (UV) radiation on the compositional changes induced in health-promoting phytochemicals and antioxidants of plant origin. The information will be beneficial for further commercialization and exploration of this novel technology on a pilot scale in food industries.