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Dietary phenolics for chemoprevention

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Abstract

Dietary phenolic antioxidant compounds and the foods that contain them are emerging as an important new tool in the chemoprevention of various diseases associated with aging, such as diabetes mellitus and cancer. In the dissertation here, I discuss research performed to investigate novel approaches to harnessing the phenolic antioxidants found in soybean involving solid-state bioprocessing by dietary fungus such as *Rhizopus oligosporus* and *Lentinus edodes* (Shitake mushroom) and dark-germination sprouting to promote phenolic synthesis. Further, I discuss important new biofunctionalities discovered for dietary phenolic antioxidants from soybean, herbs, and other foods that may have implications for modulation of diabetes mellitus and associated hypertension, as well as for combating troublesome food-borne or diet-associated bacterial pathogens such as stomach cancer and ulcer-linked *Helicobacter pylori* and the causative agent of listeriosis, *Listeria monocytogenes*. ^

Subject Area

Agriculture, Food Science and Technology|Biology, Microbiology|Health Sciences, Nutrition

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