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Nutraceutical Potential of Mushroom Bioactive Metabolites and Their Food Functionality

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Abstract : Numerous mushroom bioactive metabolites, including polysaccharides, eritadenine, lignin, chitosan, mevinolin, and astrakurkurone have been studied in life-threatening conditions and diseases such as diabetes, cardiovascular, hypertension, cancer, DNA damage, hypercholesterolemia, and obesity attempting to identify natural therapies. These bioactive metabolites have shown potential as antiviral and immune system strengthener natural agents through diverse cellular and physiological pathways modulation with no toxicity evidence, widely available, and affordable. In light of the emerging literature, this paper compiles the most recent information describing the molecular mechanisms that underlie the nutraceutical potentials of these mushroom metabolites suggesting their effectiveness if combined with existing drug therapies. The findings raise hope that these mushroom bioactive metabolites may be utilized as natural therapies considering their therapeutic potential while anticipating further research designing clinical trials and developing new drug therapies while encouraging their consumption as a natural adjuvant in preventing and controlling life-threatening conditions and diseases.

Keywords : bioactive metabolites, food functionality, health-threatening conditions, mushrooms, nutraceutical
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