POTENTIAL TO DEVELOP FUNCTIONAL FOOD PRODUCTS FROM MUSHROOM BIOACTIVE COMPOUNDS

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Abstract

From prehistoric times mushrooms have been used not only for nutrition but also for healing purposes. At present there are already several hundred species of mushrooms for which there are known various therapeutic properties, and which can be used as dietary supplements or for fortification of food with functional compounds.

In vitro and *in vivo* studies on immune modulating, antitumor, hypocholesterolic, hypolipidemic, antidiabetic and other effects were performed. Enzymatic activities were studied using appropriate substrates.

Immune-modulating effect of rich with beta-glucans mushroom extracts was demonstrated. It was shown, that studied extracts also have antitumor effect. Hypocholesterolic, hypolipidemic, antidiabetic, milk-clotting, and other effects of uptake of mushroom extracts were clearly shown.

Besides well-known immune modulating and anti-tumor effects, mushrooms possess other valuable properties including antioxidant, anti-hypertensive, cholesterol-lowering, liver protection, anti-obesity, anti-inflammatory, anti-diabetic, anti-microbial and some others. Mushrooms also can be a source of various enzymes useful for food industry.

***Key words**: Mushrooms, Bioactive components, Immune modulators, Antimicrobial hypocholesterolic, Antidiabetic, Hepatoprotective, Antioxidant activity, Milk-clotting.*