

Use of medicinal mushrooms in the preparation of superfoods for sustainable nutrition and human health



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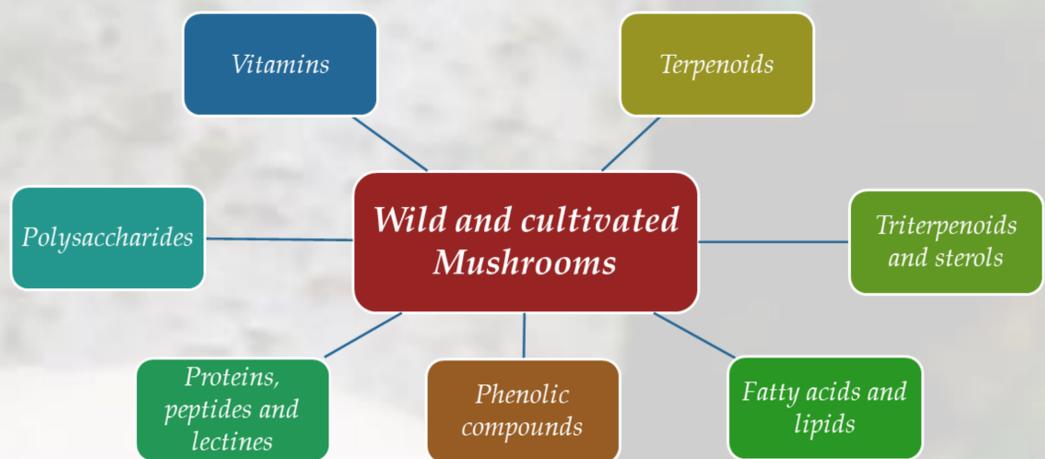


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Medicinal Mushrooms:

«Macroscopic fungi that are used in the form of extracts or powder for prevention, alleviation, or healing of multiple diseases, and/or in balancing a healthy diet»

Chemical substances, elaborated and accumulated by *medicinal mushrooms*, play an important role in human and animals health and nutrition



Bioactive compounds hosted in mushrooms mycelia and fruiting bodies. (adapted from Venturella et al., 2021)

The high quantities of Bioactive metabolites reported for medicinal have different **biological activities**

Antiallergic	Cytotoxic
Antibacterial	Prebiotic
Antifungal	Digestive
Anti-inflammatory	Immunomodulating
Antioxidant	Hepatoprotective
Antiviral	Neuroprotective
Antihyperlipidemic	Nephroprotective
Antitumor	Osteoprotective
Antidiabetic	Hypotensive

Several works showed that the enrichment of foods with fungal mycelia or fruiting bodies extracts increased the total availability of vitamins, minerals, fibre, beta-glucans, and antioxidants. Most of these works were focused on the use of **mushrooms species from eastern countries** and only few authors considerate to use **autochthonous strains** for the development of functional foods.

Autochthonous strains

- Pleurotus spp.*
- Cyclocybe spp.*
- Russula spp.*
- Boletus spp.*
- Lactarius spp.*
- Coprinus spp.*

Eastern countries strains

- Lentinula edodes*
- Ganoderma lucidum*
- Trametes versicolor*
- Hericium erinaceus*
- Grifola frondosa*
- Cordyceps spp.*



Thesis and Paper Preparation

References

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