



UNIFood2021 Conference

24th-25th September 2021 University of Belgrade

2nd International UNIFood Conference



MUSHROOMS AS SOURCES OF THERAPEUTIC FOODS

*Jovana, D. Petrović*¹

¹*Institute for Biological Research „Siniša Stanković“, National Institute of Republic of Serbia, University of Belgrade, Bulevar despota Stefana 142, 11040 Belgrade, Serbia*

Edible mushrooms have been appreciated worldwide for their unique odour, taste and texture, as well as their beneficial nutritional and chemical properties. They have been used as food by Chilean tribes 13,000 years ago, whereas the most comprehensive data on their medicinal use are 3,000 years old and come from Traditional Chinese Medicine. Until recently, use of mushrooms for medicinal purposes has been marginalized in Western countries while only their organoleptic properties have been appreciated. Nowadays, the situation has changed significantly, as is indicated by extensive research studies in the field of medicinal mycology (over 50,000 scientific studies, 400 clinical trials and 15,000 patents in the last 30 years have been conducted), as well as increasing number of mushroom-based products on the market (nutraceuticals, functional food additives, supplements). Interest in these products has increased tremendously in the last few years, thus suggesting mushrooms have significant potential in pharmaceutical and food industry. The therapeutic potential of edible mushrooms may be attributed to their favourable nutritional value - high carbohydrate and protein content with low total fat share, as well as presence of numerous biologically active compounds: phenolics, terpenoids, steroids, vitamins, <fatty acids and many other. The abundance of these bioactives in edible mushrooms possibly allow their further use as prophylactic agents in diseases associated with poor nutrition, oxidative stress, infections, tumour cell development etc. With this in mind, all the acquired knowledge in mushroom science should be passed to the public with the aim to encourage use, cultivation and further studies of mushrooms, as well as development of proper mushroom-based medicinal products.

Keywords: medicinal mushrooms, edible mushrooms, nutritional value, biological activity

Acknowledgements: This research was funded by Ministry of Education, Science and Technological Development of the Republic of Serbia, grant number 451-03-68/2020-14/200007.