

MUSHROOMS, THE MIRACLE OF NATURE, A TREAT TO HUMAN HEALTH

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Abstract

The aim of this work was to determine the heavy metals levels in the fruiting bodies of three fresh mushrooms species white *Agaricus bisporus*, brown *Agaricus bisporus* and *Pleurotus Ostreatus* available on the Romanian market. The mushrooms were collected from four different supermarkets. Analysis of heavy metals (Fe, Mn, Zn, Cu, Cr Ni, Cd, Pb) was made using high-resolution continuum source spectrometer ContrAA-300, Analytik-Jena device. According to the data, the studied heavy metals concentrations seem to be similar to the values present in analyzed mushrooms originated from other countries and are under the recommended maximal limit (table 1), with one exception, nickel content. Nickel concentration is under the recommended levels for *Agaricus* species but is 2 to 4 times more than the recommended levels for all analyzed *Pleurotus* samples. This makes the consumption of *Pleurotus Ostreatus* dangerous in special for people with allergies, but recommends this mushroom as a fantastic bio-accumulator of nickel.

Key words: heavy metals, *Agaricus bisporus*, *Pleurotus ostreatus*, romanian market
