

## Chapter-9

# Nutritional and Health Benefits of Mushrooms

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### Abstract

To meet the need of quality products for the ever increasing population, depleting agricultural land, scarcity of water along with climate changes, it is needed to diversify the agricultural activities and mushrooms use the vertical space addressing the nutritional quality, health and environmental friendly. Mushroom production to be promote for not only food purposes but also for using in medicines as well as to balance the nutritional uptake. Mushrooms is known for many health benefits like weight reduction, antioxidant properties and it also contain low saturated fat and sodium which will boost the immune system and also provide proteins and nutrition. In this chapter, nutritional content and medicinal properties of mushrooms are discussed.

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### Introduction

Mushrooms are the fruiting body of macro fungi and are known for their health benefits.

Most of them are grown symbiotically with trees. Mushrooms are used as an important diet with high nutritional and medicinal values (Buyck, 1994). About 15,00,000 species of fungus are reported and of them only 14,000 were identified as mushroom species world wide (Hawksworth, 2001; Kirk et al., 2008; Schmit and Muller, 2007)but actually it may cross 140000 mushroom species on this planet. About 7000 species are edible, 3000 species are prime edible species (Chang and Miles, 2004). Out of 300 prime edible species 200 species have been grown experimentally, 100 species were economically grown and about 10 species cultivated in industrial scale. Besides these species, about 2000 species have been known for their medicinal properties. In India about 1105 to 1208 species are edible which constitute 70-80 genera.

Mushrooms are not grouped in plants and animals still it is considered as vegetable. Appearance varies with respect to species but normally they have a stalk and fleshy rounded or umbrella type cap. Mushrooms have been used as medicine for thousands of years. Mushrooms species are low in fat and calories. They contain fiber and different nutrients. The non-nutritional parts of mushrooms are