



Health benefits of Milky White Mushroom (*Calocybe indica*)

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Calocybe indica, commonly known as the Milky White Mushroom, is a species of mushroom that has gained attention for its potential health-promoting properties. It contains a number of secondary metabolites, phenolic compounds, terpenes, and steroids that may contribute to its therapeutic properties and nutritional value. This mushroom is native to certain regions of Asia and has been traditionally used in culinary and medicinal practices. Recent scientific studies have explored its nutritional composition and bioactive compounds, uncovering several health benefits associated with its consumption.

Introduction

Milky White Mushroom (*Calocybe indica*) is the third most important commercially grown mushroom following button and oyster mushrooms. One of the most nutritious edible mushrooms that may be grown throughout the year in India's tropical climate is the milky mushroom. In addition, it has various qualities that make it a better option for mushroom producers and consumers, including an easy cultivation procedure, minimal capital investment, and an extended shelf-life.

Some important potential health benefits of Milky White Mushroom (*Calocybe indica*) include:

- 1. Nutrient-Rich:** *Calocybe* mushrooms are a good source of essential nutrients such as vitamins (particularly vitamin B and vitamin D) and minerals (like potassium, phosphorus, and selenium). These nutrients are important for overall health and well-being.
- 2. Antioxidants:** It contains antioxidants, such as polyphenols and beta-glucans. Antioxidants help combat oxidative stress and reduce the risk of chronic diseases.
- 3. Immune Support:** It contains bioactive compounds that may support the immune system. Beta-glucans, in particular, are known for their immunomodulatory properties and may help enhance immune function.
- 4. Anti-Inflammatory:** Compounds like ergosterol, have been studied for their potential anti-inflammatory effects. Reducing inflammation can have a positive impact on various aspects of health.
- 5. Amino Acids:** *Calocybe* mushrooms contain a variety of amino acids, including essential ones that the body cannot produce on its own. Amino acids are the building blocks of proteins and play crucial roles in many physiological processes.
- 6. Digestive Health:** Milky white mushrooms are good source of dietary fiber, which can promote healthy digestion by supporting regular bowel movements and feeding beneficial gut bacteria.

7. Weight Management: Due to their low-calorie content and fiber content, *Calocybe* mushrooms can be included in a weight management plan as they provide satiety without contributing significantly to calorie intake.

8. Cholesterol Management: Some studies have suggested that certain mushroom species, including *Calocybe*, may have potential benefits for managing cholesterol levels, although more research is needed to confirm these effects.

Composition of fresh milky white mushroom

Sr.No	Constituent	Content
1.	Total solids	14.05 ± 1.05
2.	Crude protein (g/100 g)	03.22 ± 0.17
3.	Total lipids (g/100 g)	01.05 ± 0.03
4.	Available CHO	6.38
5.	Dietary fiber (g/100 g)	01.11 ± 0.02
6.	Ash (g/100g)	02.30 ± 0.73
7.	Total carbohydrate (g/100 g)	6.80 ± 0.5
8.	Calorie (kcal/100 g)	50.03



Figure: *Calocybe indica* Mushroom Cultivation

Comparison of mineral and non-enzymatic reducing compounds composition milky white mushroom in fresh and dry form (Per 100 g)

Sr.No	Constituent	Wet	Dry
1.	Calcium (g)	0.01	0.21
2.	Iron (mg)	1.8	56.25
3.	Zinc (mg)	8.0	12.87
4.	Magnesium (g)	0.51	0.13
5.	Manganese (mg)	0.53	1.64
6.	Vitamin A (g)	0.32	0.22
7.	Vitamin C (g)	1.03	0.40
8.	Vitamin E (g)	2.93	0.80
9.	Reduced Gluathione (nmole/g)	0.16	0.12

Conclusion

Milky White Mushroom (*Calocybe indica*), offer a range of potential health benefits when incorporated into a balanced diet. Incorporating *Calocybe* mushrooms into a diet can be a flavorful and nutritious choice. However, it's essential to consume them as part of a diverse and balanced eating plan. While more research is needed to fully elucidate their effects, the available evidence suggests that these mushrooms can contribute positively to overall health and well-being.

References

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