# The magic of mushrooms: health benefits of powdered fungi

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Blog



Having been used as a culinary wonder and folk medicine in both oriental practice and Eastern medicine for thousands of years, medicinal mushrooms are making an explosive comeback—and the hype surrounding them is not unfounded.

Whether warriors for the immune system or nature's answer to pharmaceutical factories, medicinal mushrooms are powerhouses of vital antioxidants. They also contain beta-glucans, a type of complex carbohydrate, which can create small miracles for people with autoimmune conditions, any type of physical or emotional stress and those undergoing cancer treatment.

Dried medicinal mushrooms are often sold as a powder, either separately or combined, from most health food stores. With a distinct but subtle flavour, a spoonful can be added to almost anything, be it your cup of dandelion coffee, spicy dhal, or even your favourite dessert! However, each variety is unique in both its appearance and the health advantages it bestows.

# Shiitake: a heart-warming friend

Boasting all eight essential amino acids in outstanding proportions, this mushroom is particularly friendly with the heart, as it has been shown to lower LDL (i.e., the "bad") cholesterol in rats 1 and contains compounds that stop the liver from absorbing and producing more cholesterol. Shiitake's vast array of <u>phytonutrients</u> also aids in preventing plaque buildup, whilst maintaining healthy blood pressure and circulation.2

# Enoki: food for body, mind and soul

Also known as "golden needles", enoki's crisp texture and mild flavour makes this culinary delight one of the most delicious types of mushroom to add raw to salads, boiled in soups and stews or sauteed in stir fries. With very similar properties to other varieties of fungi, the main thing that sets these earthy little beauties apart is their versatility in the kitchen.

#### Reishi: nature's Valium

Also known as lingzhi, this mushie has some serious calming properties, thanks to an abundant mood-boosting compound called triterpene, 3 which elicits a positive effect on the nervous system, helping to alleviate anxiety, depression and insomnia, <u>promote healing</u> and sharpen focus 7. Additionally, reishi may assist with weight loss 4 by altering the microbiome and exerting a prebiotic effect. It may even shrink tumours in breast cancer, 5 thanks to the sugar lentinan, which helps fight off disease and infection.

# Chaga: the glowing young maiden

As our schedules become more stressful, our lifestyle takes a backseat and the popularity of anti-ageing products soars. This little Siberian wild child, otherwise known as "the gift from heaven", is best recognised for its immune-boosting properties. Its high melanin and betulinic acid content helps eliminate oxidative stress in the skin, preventing the onset of wrinkles, pigmentation and acne. This translates to a glowing complexion, as well as luxurious hair and sparkling eyes.5

#### Maitake: the hormonal stabiliser

Otherwise known as hen-of-the-woods and literally translated to "dancing mushroom" in Japanese, legend has it that the nuns and woodcutters rejoiced through dance after first discovering this incredible fungus in the wild. Commonly used for type 2 diabetes and hypertension, maitake also has therapeutic effects in PCOS, bringing on ovulation in young women by improving insulin resistance and balancing the expression and ratio of sex hormones.6

#### Lion's mane: the brain's assistant

Used to treat brain fog and gain mental clarity, <u>lion's mane</u> is the feathery, pom-pom-like relative in the family of medicinal mushrooms. It fosters the production of the bioprotein nerve growth factor and myelin (the insulation found around nerve fibres), both of which are crucial to neurological health, helping to improve cognition and concentration and alleviate anxiety and irritability.**7** 

### Turkey tail: king cancer fighter

This striking little beast boasting vibrant colours is jam-packed with antioxidants, including the anti-inflammatory bioflavonoid, quercetin. Most impressively, it contains a compound called polysaccharide-K (PSK), approved in Japan as an anti-cancer prescription drug. It has also been shown to improve the survival rate of patients with leukaemia and may assist immune function when taken alongside chemotherapy.8

## Cordyceps: the sexual healer

Whether you're in need of a pick-me-up or just crave a little TLC, this fireball of a fungus is known for being incredibly stimulating—for not only energy, but the libido! Also known as caterpillar fungus, it can help the body utilise oxygen more efficiently and enhance blood flow to the necessary areas, as well as increase arousal to make sex more attainable and/or pleasurable.9

# Tremella: beauty's best-kept secret

Like chaga, tremella, also known as "snow fungus", is most celebrated for its youth-preserving properties, resulting in everlasting beauty. The vast nutrients within it deeply hydrate the body, giving rise to nourished and moisturised skin, improved elasticity and a brighter complexion. As the flavour is very subtle and sweet, tremella can also be used to add vanilla tones to baking. 10

**NOTE:** Always talk to your doctor before adding medicinal mushrooms to your diet, especially if you're using specific medications or are pregnant, as certain mushrooms (such as the agaricus variety) can cause side-effects, including an upset stomach or allergies.

#### References

- 1 Rahman, T., & Choudhury, M. (2013). Shiitake mushroom: A tool of medicine. *Bangladesh Journal of Medical Biochemistry*, *5*(1), 24-32. doi:10.3329/bjmb.v5i1.13428.
- **2** Zhu, M., Nie, P., Liang, Y., & Wang, B. (2013). Optimizing conditions of polysaccharide extraction from Shiitake mushroom using response surface methodology and its regulating lipid metabolism. *Carbohydrate Polymers*, *95*(2), 644-648. doi:10.1016/j.carbpol.2013.03.035.
- **3** Dudhgaonkar, S., Thyagarajan, A., & Sliva, D. (2009). Suppression of the inflammatory response by triterpenes isolated from the mushroom Ganoderma lucidum. *International Immunopharmacology, 9*(11), 1272-1280. doi:10.1016/j.intimp.2009.07.011.
- **4** Delzenne, N. M., & Bindels, L. B. (2015). Ganoderma lucidum, a new prebiotic agent to treat obesity? *Nature Reviews Gastroenterology & Hepatology*, *12*(10), 553-554. doi:10.1038/nrgastro.2015.137.
- **5** Wold, C. W., Gerwick, W. H., Wangensteen, H., & Inngjerdingen, K. T. (2020). Bioactive triterpenoids and water-soluble melanin from *Inonotus obliquus* (Chaga) with immunomodulatory activity. *Journal of Functional Foods*, 71. doi:10.1016/j.jff.2020.104025.
- **6** Chen, J.-T., Tominaga, K., Sato, Y., Anzai, H., & Matsuoka, R. (2010). Maitake mushroom (Grifola frondosa) extract induces ovulation in patients with polycystic ovary syndrome: A possible monotherapy and a combination therapy after failure with first-line clomiphene citrate. *The Journal of Alternative and Complementary Medicine*, *16*(12), 1295-1299. doi:10.1089/acm.2009.0696.
- **7** Mori, K., Inatomi, S., Ouchi, K., Azumi, Y., & Tuchida, T. (2009). Improving effects of the mushroom Yamabushitake (Hericium erinaceus) on mild cognitive impairment: a double-blind placebo-controlled clinical trial. *Phytotherapy Research*, *23*(3), 367-372. doi:10.1002/ptr.2634.
- **8** Patel, S., & Goyal, A. (2011). Recent developments in mushrooms as anti-cancer therapeutics: a review. *3 Biotech, 2*(1), 1-15. doi:10.1007/s13205-011-0036-2.
- 9 Panda, A. K. (2010). Tracing historical perspective of Cordyceps sinensis An aphrodisiac in Sikkim Himalaya.
  Indian Journal of History of Science, 45(2) (2010) 189-198. Retrieved from
  <a href="https://www.researchgate.net/publication/283508145\_Tracing\_Historical\_Perspective\_of\_Cor\_dyceps\_sinensis\_-">https://www.researchgate.net/publication/283508145\_Tracing\_Historical\_Perspective\_of\_Cor\_dyceps\_sinensis\_-</a>
  An Aphrodisiac in Sikkim Himalaya

10 Shahrajabian, M. H., Sun, W., Shen, H., & Cheng, Q. (2020). Chemical compounds and health benefits of Tremella, a valued mushroom as both cuisine and medicine in ancient China and modern era. Amazonian Journal of Plant Research, 4. 692-697. doi:10.26545/ajpr.2020.b00077x.



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