

What is Lions Mane?

Hericium erinaceus (also called Lion's Mane Mushroom) is an edible mushroom and medicinal mushroom in the tooth fungus group.

What are the active constituents of lion's mane?

Hericium erinaceus is high in polysaccharides, fatty acids (Y-A-2), hericenons A and B, hericenons C, D, E, F, G, and H. The mycelium also contains a group of diterpenes called erinacines that might support a healthy nervous system.

How does Lions mane work?

1) Brain Function

Lion's mane may benefit older adults with mild cognitive impairment, according to a small study published in *Phytotherapy Research* in 2009. For the study, researchers assigned 30 older adults with mild cognitive impairment to take either lion's mane extract or a placebo every day for 16 weeks. In cognitive tests given at weeks eight, 12, and 16 of the study, members of the lion's mane group showed significantly greater improvements compared to members of the placebo group.

- In a more recent study, scientists examined the effects of lion's mane on brain function in mice. Results revealed that lion's mane helped protect against memory problems caused by buildup of amyloid beta (a substance that forms the brain plaques associated with Alzheimer's disease). The reason that lions mane affects brain function is because it can
- Stimulate animal nerve cells production.

- A double-blind, parallel-group, placebo-controlled trial showed improved cognitive ability in individuals with mild cognitive impairment.
- Stimulated nerve growth factor in an *in vitro* experiment with human astrocytoma cells. Nerve growth factor stimulated by phenol-analogous Hericenone.
- Stimulated myelination in an *in vitro* experiment.
- Regenerated peripheral nerves following crush injury.

2) Depression

Lion's mane may help alleviate depression and anxiety, suggests a small study published in Biomedical Research in 2010. For the study, 30 menopausal women consumed lion's mane or a placebo every day for four weeks. Analyzing study findings, researchers observed that members of the lion's mane group were less irritable and anxious and had less difficulty concentrating than members of the placebo group.

3) Cancer

Preliminary research suggests that lion's mane shows promise in protection against cancer. For instance, in a 2011 study from Food & Function, tests on human cells revealed that lion's mane may help knock out leukemia cells.

In addition, a 2011 study from the Journal of Agricultural and Food Chemistry found that lion's mane extract helped reduce the size of cancerous colon tumors in mice. The study's findings suggest that lion's mane may help fight off colon cancer, in part by increasing activity in certain cells involved in the immune response.