

Lion's Mane Mushroom – Unparalleled Benefits for Your Brain and Nervous System

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Lion's Mane is nature's gift to your nervous system! It's the only mushroom possessing not one but TWO potent nerve growth factors, showing potential benefits for Parkinson's and Alzheimer's disease, mild cognitive impairment, multiple sclerosis, leg cramps, anxiety and more.

What if there were one natural treatment that could restore brain function, regrow damaged nerves and reverse the progression of multiple sclerosis? There may be! Lion's mane mushroom has been used medicinally in Asia for centuries, but for some reason it's one of the best-kept secrets in the West.

Besides being called "[lion's mane](#)," *Hericium erinaceus*, is known by several other names including bearded tooth mushroom, bearded hedgehog, bearded tooth fungus and others. In Japan, it's known as yamabushitake, which means "mountain priest mushroom." It has a variety of other names, depending on the country.

In Asia, it is said that lion's mane gives you "nerves of steel and the memory of a lion," and from what science is revealing, that's apt prose. Thus far, evidence exists that lion's mane mushroom confers the following health benefits:

- Improved cognitive function
- Nerve regeneration, remyelination, and increased Nerve Growth Factor (NGF)
- Improved digestive function and relief from [gastritis](#)
- Immunosupportive, anti-inflammatory, antioxidant
- Anticoagulant; mild ACE inhibitor; improved lipid profile

The science about lion's mane is in its infancy, but evidence already points to unparalleled therapeutic benefits for numerous diseases of the central and peripheral nervous system, summarized in the table below, and the list seems to be growing by the day.

Conditions That May Benefit from Lion's Mane Mushroom			
Dementia and mild cognitive impairment (MCI)	Parkinson's disease	Peripheral neuropathy	Muscle cramps and spasms
Multiple sclerosis (MS)	Stroke recovery	Seizures and seizure-like post-stroke episodes	Anxiety and Depression

Mother Nature's First "Smart Mushroom"

According to world renown fungi expert Paul Stamets, lion's mane may be the first "smart mushroom," providing support specifically for cognitive function, including memory, attention and creativity. It is reported that Buddhist monks have consumed Lion's mane tea for centuries before meditation in order to enhance their powers of concentration.

This unique fungus contains a group of compounds that regenerate myelin along the axons, which opens the door to a world of neuroprotective benefits.

In one of the few human studies to date, older adults with [mild cognitive impairment](#) were given 250 mg powdered lion's mane three times a day for 16 weeks and compared to another group receiving a placebo. The lion's mane group scored significantly higher on the cognitive function scale compared with placebo, with no adverse effects. This study should prompt scientists to investigate the therapeutic efficacy of these fungi for dementia patients.



Lion's Mane Regenerates Nerves and Stimulates NGF

One of the reasons for lion's mane's exceptional neuroprotective powers is its ability to stimulate synthesis of Nerve Growth Factor (NGF). NGF is a protein that plays a major role in the maintenance, survival and regeneration of neurons in both your central and peripheral nervous systems. Lion's mane contains two unique types of compounds, hericenones and erinacines. The [erinacines](#) found in *Herichium erinaceus* mycelium are among the most powerful NGF inducers in the natural world, able to cross your blood-brain barrier and stimulate production of new neurons within the brain itself.

With many neurological disorders, the brain is unable to manufacture NGF—in fact, this is thought to be one of the primary mechanisms underlying Alzheimer's disease. Making matters worse, myelin sheaths and the blood-brain barrier prevent your body from accessing external sources of NGF, and this contributes to the progressive deterioration of brain neurons over time.

Lion's mane is the only mushroom to demonstrate significant potential for nerve regeneration. In a groundbreaking 2014 study, an oral extract proved effective in promoting peripheral [nerve regeneration](#) after surgically-induced crush-injuries in rats.

NGF also plays important roles in myelination, including protecting oligodendrocytes (myelin-producing cells) and the production of [BDNF](#) (Brain-Derived Neurotrophic Factor). In 2003, lion's mane extract was found to stimulate nerve [myelination](#), which was confirmed by a later study (2013). This finding has huge implications for helping individuals with multiple sclerosis, a disease characterized by progressive demyelination.

As an aside, there is actually another mushroom that may prove helpful with demyelination—*Phellinus igniarius*, otherwise known as willow bracket. One study found its extract suppressed demyelination as well as suppressing many of the immune cells active (or overactive) in multiple sclerosis.

Amyloid Plaques, Anxiety and Depression

Lion's mane has also been shown to reduce beta-amyloid plaques. Beta-amyloid plaques are proteins that form in the fatty membranes that surround nerve cells, interfering with neurotransmission. These plaques are thought to play a role in neurodegenerative diseases such as [Alzheimer's](#) and Parkinson's.

In a compelling animal study, mice were injected with neurotoxic peptides (to induce plaque formation), in order to assess the effects of lion's mane on the type of [amyloid plaque](#) seen in Alzheimer's sufferers. As the plaque developed, the mice lost their ability to memorize the maze, but when they were fed a diet containing lion's mane mushroom, their performance in the maze significantly improved. In addition to regaining their former cognitive skills, they gained NEW cognitive skills—something akin to curiosity, as measured by greater time spent exploring novel objects compared to familiar ones. The reduction of beta amyloid plaques in the mushroom-fed mice was remarkable.

Lion's mane also shows potential in the treatment of [anxiety and depression](#). In a study involving menopausal women, the mushroom reduced depression and anxiety by some mechanism other than its NGF-enhancing properties. The effects were particularly strong in lowering anxiety, reducing feelings of "irritation" and enhancing concentration. *So the Buddhist monks were right!*

Benefits Beyond the Nervous System

As with many mushrooms, lion's mane has a number of other therapeutic actions resulting from its [anti-inflammatory](#) and immunosupportive properties, including the following:

- **Cancer:** One animal study found an extract of lion's mane inhibited the spread of [colon cancer](#) cells to the lung by 66 to 69 percent; the mushroom has also been shown to induce apoptosis in [leukemia](#) cells and inhibits angiogenesis
- **Thrombosis:** Hericenone B appears to "potently and specifically inhibit collagen-induced platelet aggregation"
- **Mild ACE Inhibitor:** The exact molecule underlying this effect is not currently known, but it is thought to be a bioactive peptide
- **Lipids:** Reported to reduce triglycerides and improve LDL and HDL levels (lion's mane mycelium, specifically)
- **Fat Metabolism:** Increases the expression of several genes involved in fat metabolism
- **Wound Healing:** Topical application of the extract was found to accelerate wound healing

Lion's mane mushroom has earned its right to be in your kitchen pantry and medicine cabinet. I'm sure we'll be seeing many more studies illuminating its therapeutic potential in the near future.

Although the mushroom's availability is limited to hardwood forests and a few gourmet food shops, kits are available that allow you to grow your own lion's mane at home. Lion's mane mushrooms are 20 percent protein and can be prepared using standard culinary techniques, just like any other edible mushroom. *Mushroom Forager* describes this oddball's appearance as sort of like a "faceless hedgehog," or a truffula tree out of *The Lorax*—so, they're rather easy to spot. Does it taste like chicken? No, in this case *lobster...* or so they say, as I've not partaken myself.

According to *Mushroom Forager*:

"Lion's mane has no look-alikes, edible or poisonous, and all forms are edible and delicious in the kitchen."

You'll find lion's mane in the forests of North America, Europe and Asia during the summer and fall, typically attached to dead or dying hardwood trees and logs, including maple, beech, oak, birch, walnut and sycamore. Lion's mane is also widely

available as a supplement and comes in powders and liquid extracts. Some serious allergic reactions have been reported, so please take ample precautions.



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