

Lion's Mane Supplements: Benefits, Side Effects, and Dosage

Lion's mane is a type of edible mushroom that has been used therapeutically for centuries in traditional Chinese and Japanese medicine. It's gaining popularity as a dietary supplement for its ability to boost memory and mental clarity. It continues to be studied for a range of potential health benefits, including its neuroprotective effects in Alzheimer's disease, decreasing symptoms of depression, reducing inflammation, and supporting the immune system, among others.

What is Lion's mane?

Lion's mane mushroom (*Hericium erinaceus*) is an edible, nootropic mushroom. Known for its white, shaggy appearance, it resembles a lion's mane. It can be found growing on the wood of dead or decaying hardwood trees or logs, typically from late summer to fall. It can be found in Asia, Europe, and North America.

Lion's mane has long been used as a therapeutic mushroom in traditional Chinese and Japanese medicine for centuries for a variety of conditions, including stomach ulcers, liver and kidney diseases, and cancer. It is still widely used in the diets of East Asian countries.

Potential benefits of Lion's mane

Lion's mane is most known for its beneficial effects on cognitive function, but it also has a number of other valuable effects on the body. It contains many bioactive compounds, including beta-glucans, erinacines, hericenones, and ergothioneine.

1. Supports cognitive function

Lion's mane may support brain health through its ability to promote nerve growth factor (NGF) production, enhancing nerve growth and neuroplasticity in the brain. Studies suggest that when taken consistently, lion's mane can improve memory and cognition. Most research has been focused on people with mild cognitive impairment. Findings of a [study](#) in healthy adults had mixed results when evaluating performance speed and reducing subjective stress when taken for 28 days. There are no clinical trials evaluating Lion's mane in children or people with ADHD.

2. Has antioxidant properties

Antioxidants play an important role in treating and protecting the body against oxidative stress and inflammation, which are believed to be the causes of many chronic diseases, including cardiovascular disease and neurodegenerative conditions such as Alzheimer's disease. In addition, antioxidants help protect the skin from UV damage and help slow skin aging. A [study](#) evaluating the medicinal potential of 14 types of mushrooms found that lion's mane has numerous antioxidant compounds. It was determined to have the fourth highest antioxidant activity of the mushrooms tested, and the study authors concluded it could be a potential source of dietary antioxidants.

3. Supports immune function

Lion's mane mushroom supports immune function through several different ways in the body, but mainly in the intestinal immune system. The intestinal immune system prevents infections by fighting off bacteria and other pathogens that enter through the nose or mouth.

According to animal studies, Lion's mane may help support the immune function by [stimulating the intestinal immune system](#) and [promoting a healthy gut microbiome](#). In addition, antioxidants in Lion's mane protect immune cells from oxidative stress and damage, while the mushroom's anti-inflammatory properties modulate cytokine production.

4. Supports mental health

[Research suggests](#) that the Lion's mane has the potential to help alleviate symptoms of depression and anxiety, likely due to its ability to promote new brain pathways and reduce inflammation. New pathways, particularly in the hippocampus, is one suggested mechanism by which the Lion's mane can help alleviate depression. Chronic stress often worsens depression by causing inflammation, and the anti-inflammatory effects of lion's mane may also play a role in decreasing depression and anxiety symptoms. [Animal studies](#) found that lion's mane may also influence brain neurotransmitters, increasing levels of serotonin, dopamine, and norepinephrine, which play key roles in mood regulation.

6. May help lower blood sugar levels

[Animal studies](#) have shown that lion's mane can significantly lower blood sugar levels in mice. Research suggests that lion's mane may improve insulin sensitivity and support pancreatic beta cells. It may also block the enzymatic activity of alpha-glucosidase.

In addition to decreasing blood sugar, lion's mane is being studied for its potential to improve diabetic peripheral neuropathy in the hands and feet. Research in rats suggests that lion's mane may [decrease nerve pain](#) and [promote the regeneration of peripheral nerves](#). However, further studies on humans will need to be conducted to confirm these findings.

7. May protect against neurodegenerative conditions

The neuroprotection benefits of lion's mane are being studied in Alzheimer's disease and other neurodegenerative diseases. Research shows that 2 particular compounds in lion's mane (erinacines and hericenones) contribute to lion's mane neuroprotective effects. A [2017 study](#) found that mice with amyloid beta plaques treated with lion's mane didn't have the spatial, short-term, and visual recognition memory impairments seen in untreated mice. Similar results of reducing memory loss and preventing neuronal damage caused by amyloid beta plaques have been reported.

According to a 2020 study, patients with Alzheimer's disease who took 1 g of lion's mane daily for 49 weeks saw an improvement in their cognitive test scores. However, further research is needed to determine its efficacy in preventing neurodegenerative diseases.

Side effects and precautions

A lion's mane is generally considered safe. No significant adverse side effects or hallucinogenic effects have been reported in human or animal [studies](#), even when given in large doses. Although significant adverse reactions were not found, side effects of nausea, stomach discomfort, and skin rash have been [reported](#) in some people.

Allergic reactions are possible and may be serious. There have been [case reports](#) of people experiencing skin reactions or difficulty breathing. People with a mushroom allergy or who are sensitive to mushrooms should avoid taking lion's mane.

Because of the possible effects of lion's mane on blood sugars and blood clotting, people taking diabetes medication or a blood thinner or who have a bleeding disorder should consult a healthcare professional before using lion's mane. Lion's mane should also not be used by people who are pregnant or breastfeeding.

How to use Lion's mane?

Fresh lion's mane mushrooms have the greatest health benefit when consumed in fresh, dried, or cooked form. However, depending on your lifestyle and preferences,

extracts and supplements may be more convenient. Supplements come in a variety of forms.

- Powder: Lion's mane powders can be added to smoothies or juices, coffee or other beverages
- Capsule: capsules are available in many places supplements are sold
- Tincture: highly concentrated liquid plant extracts that can be added to beverages
- Tea: Lion's mane tea comes in loose leaf or bag variety
- Gummies: a chewable form of lion's mane
- Coffee: Lion's mane coffees are available as an alternative to your usual coffee

Dosage

There is no standard or recommended dosage guidelines for lion's mane. Lion's mane dosing will depend on the individual, your health status, the concentration of active compounds in the supplement, the purpose of taking the supplement, and the desired effect.

That being said, the doses used in [studies typically](#) are typically between 250 mg and 1 g. One study reported an improvement in cognitive function at a dose of 250 mg three times a day, although some researchers recommend a dose of up to 5 g per day. Another study used a dose of 2 g per day in postmenopausal women and reported an improvement in symptoms of anxiety and depression.

Possible interaction with medications

Studies have not been done to identify specific drug interactions. However, based on what is known about the effects of lion's mane, caution should be used in people taking diabetes medications, blood thinners, or immunosuppressant medications.

Diabetes medications: Lion's mane may lower blood glucose levels. When taken with diabetes drugs, lion's mane could cause blood sugar to become too low.

Anticoagulant medications: Lion's mane may have antiplatelet effects. An increased risk of bleeding is possible when it is taken with anticoagulants, such as aspirin or clopidogrel (Plavix). Also, be aware of other supplements that can have blood-thinning effects, such as ginkgo biloba or garlic.

Immunosuppressants: Lion's mane may enhance immune system function. Decreased effectiveness of medications used to suppress the immune system, such as in autoimmune disorders or post organ-transplantation, is a concern.

Antidepressants: There is limited information on lion's mane's effect on depression or interactions with antidepressant medications.

How to choose the best Lion's mane supplement

There are many supplements on the market, and choosing which supplement to use can be challenging. There are a few aspects to consider when choosing a lion's mane supplement to ensure its safety and quality.

Purity

Supplement products come in many different concentrations. When choosing a product, check to see if it is a stand-alone mushroom extract that contains a high concentration of lion's mane or if it is combined with other vitamins and substances for additional benefits. Whether it is a pure extract or used as part of a combination can affect how much lion's mane is in the product. Look for a product that is certified by NSF or USP for safety and purity.

Extraction method

How the compound is extracted can affect the potency and bioavailability of lion's mane in the supplement. To maximize the health benefits, choose supplements that use a dual-extraction (water and alcohol) process.

Source

Choose supplements that use organic lion's mane mushrooms to reduce the risk of exposure to harmful or toxic chemicals.

Editors top picks (3 products from the related "best" page)

Here, we offer our editors top 3 picks for Lion's Mane supplements. Read more about some of the top [Lion's Mane supplements](#) vetted by our team.

BATCH

Each wild berry-flavored gummy contains 300 mg of Lion's mane mushroom and includes extracts of cordyceps and reishi mushrooms.

Made using a dual extraction process to ensure high potency and bioavailability.

No fillers, mycelium, or grain

Future Kind

One capsule contains 500 mg of Lion's mane and includes 4 other adaptogenic mushrooms: chaga, maitake, shiitake, and reishi.

The product is vegan and free from gluten, soy, caffeine, GMOs, and preservatives.

The majority of users report positive results, including improved cognitive and physical functioning.

Real Mushrooms

- One capsule contains 500 mg of Lion's mane. Real Mushrooms guarantees 30% beta-glucan content.
- Considered a best value-for-money option.
- Uses a single hot water extraction of the mushroom fruit body

FAQs

How much Lion's mane is too much?

There are insufficient studies to determine how much lion's mane is too much. The dosage of lion's mane will depend on the individual and what it is being used for. It's recommended to always start with a low dosage and slowly increase until your desired result is reached.

Is Lion's mane safe for everyone?

Lion's mane is considered safe for most people. People who are allergic to mushrooms should not take this supplement. People who have diabetes, a bleeding disorder, or take a blood-thinning or immunosuppressant medication should consult with a healthcare provider before using.

Can you eat Lion's mane raw?

Yes, lion's mane can be consumed raw. As with any raw food, there is a risk of contamination when consuming raw mushrooms. Make sure to thoroughly clean the mushroom before eating. Slicing the mushroom into thin pieces may also make it easier to chew and digest.

What's the best time to take Lion's mane?

The best time to take a Lion's mane will depend on your goals and reason for taking it. Morning is considered the best time to take lion's mane to get the most benefit of enhancing cognitive function, focus, and mental clarity throughout the day.

How long does Lion's mane take to work?

While some people may notice a difference in a few days, most will need to take lion's mane regularly for several weeks or months before feeling a positive effect. Most research studies suggest that it needs to be taken consistently for at least four weeks to see a noticeable difference.

Can you take Lion's mane every day?

Yes, it's generally considered safe to take lion's mane every day.. However, there are insufficient studies to determine the safest and most effective dosage. Research shows that doses of up to 1 g per day for 16 weeks are well-tolerated and without adverse effects.

Is Lion's mane high in vitamin D?

Compared to some other mushrooms, such as portabello or shiitake, Lion's mane is not particularly high in vitamin D. Mushrooms can produce vitamin D2 when exposed to UV light, so wild mushrooms that grow in sunlight typically will have higher vitamin D levels than those grown indoors.

Key takeaways:

- Lion's mane is an edible nootropic mushroom that can be found on logs and the trunks of dead hardwood trees.
- Lion's mane is most widely known for its effects on cognitive function but it may provide numerous additional health benefits, including neuroprotective effects, supporting mental health, improving blood sugars, stimulating nerve growth, and immune support.
- Don't use Lion's mane supplements or extracts if you have an allergy or sensitivity to mushrooms.
- Lion's mane is generally well-tolerated. However, nausea, abdominal discomfort, and skin rash have been reported by some people.
- Most research on lion's mane comes from animal studies. Further research is needed to determine how lion's mane can be used in humans.

Conclusion:

Lion's mane may provide numerous health benefits. Depending on your preferences and lifestyle, there are a variety of ways get the health benefits of lion's mane by incorporating it into your daily routine.

You can incorporate raw lion's mane into your diet, which can be consumed raw or cooked. It has been described as having a "seafood-like" flavor, often being compared to lobster or crab. Cooking the mushrooms tend to make them more tender and easier to digest. To cook Lion's mane, try roasting, sauteing, or pan-frying. Some people use the mushroom as a meat substitute. It can be used in soups, stews, stir-fries, or pasta dishes.

To take as a supplement, Lion's mane is available as capsules, tablets, or powders produced from mushroom extracts. Lion's mane mushroom powder can be mixed into coffee, tea, smoothies, or other beverages. It can also be added to soups or stews. Liquid tinctures are another available option that can be added to beverages. Tinctures are often more concentrated, so a smaller dose is usually required. Alternative mushroom coffees often contain Lion's mane, and add an easy way to add it to your morning routine.

META DESCRIPTION:

Research suggests lion's mane mushrooms have numerous health benefits. Choosing a lion's mane supplement can be confusing. Here are our editor's top 3 picks.

RESOURCES:

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16. International Journal of Biological Macromolecules. [Structures, biological activities, and industrial applications of the polysaccharides from *Hericum erinaceus* \(Lion's Mane\) mushroom: A review](#)
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