



# The Health Benefits of Mushrooms

By: Dr. Anne Huss  
Evolve Consulting Group



# The Health Benefits of Mushrooms

Functional mushrooms have been part of the dinner table and medicine chest for centuries—and they’re now showing up in modern pet care for good reason. Today’s research helps explain what traditional healers long observed: certain mushrooms can help the immune system respond more wisely, support antioxidant defenses against everyday stress, and, in some situations, complement veterinary care. Much of this comes from natural fibers called beta-glucans, which “coach” front-line immune cells to react in a balanced way rather than pushing them too hard. For dogs, three mushrooms stand out both historically and scientifically—maitake (*Grifola frondosa*), shiitake (*Lentinula edodes*) and turkey tail (*Trametes versicolor*)—each offering its own blend of immune, digestive, metabolic, and healthy-aging support.



### **Maitake [my-taa-kee] *Grifola frondosa***

Maitake mushrooms have been loved in Japan for centuries as both a delicious food and a healing mushroom. In Japanese the name means “the dancing mushroom” and comes from stories of people being so excited to find it in the wild they would dance. It is also commonly referred to as “hen of the woods” due to the layered appearance that resembles the feathers of a fluffed hen. Maitake is often found growing in giant clusters at the base of oak trees with overlapping, wavy caps that are dark gray-brown when young but lighten in color with age. Nutritionally, maitake are rich in nutrients, antioxidants, and minerals.<sup>1,2</sup>

Maitake mushrooms are also abundant in beta-glucans and other phytochemicals, which support immune health, exhibit anti-inflammatory properties along with blood sugar regulation and support of cardiovascular health.<sup>1</sup>

While controlled research studies of maitake benefits specifically for dogs are limited, there are a multitude of studies showing the health benefits to humans. This includes:

1. **Immune support:** The beta-glucan found



in maitake has been found to help activate various immune cells, including macrophages, T-cells, and natural killer (NK) cells. All of these immune cells are part of the innate immune system and act as your dog’s first line of defense against various pathogens and allergens. Maitake has specifically been found to increase NK cells to help reduce the growth of cancerous cells.<sup>1,3</sup>

2. **Anti-inflammatory properties:** Maitake contain a variety of natural antioxidants that help the body manage daily stressors.



3. **Blood sugar regulation:** Multiple animal studies have shown various extracts of maitake can help regulate blood sugar and improve insulin sensitivity.



Effectively managing blood sugar levels helps support whole-body health due to glucose interacting with almost every organ of the body.<sup>4</sup>

4. **Support of cardiovascular health:**



Research has shown maitake extracts can suppress triglycerides and cholesterol and help improve overall lipid metabolism along with support of blood pressure regulation.<sup>4</sup>



## Shiitake [shuh-taa-kee] *Lentinula edodes*

Shiitake is one of the world's oldest cultivated mushrooms, grown for over 1,000 years in East Asia. Ancient texts describe how people harvested it from hardwood logs to use in soups, broths, teas, and wellness remedies. In traditional Chinese and Japanese medicine, shiitake was used to support energy, improve longevity, promote healthy circulation, and fortify the immune system. Its popularity spread not just because it tastes good, but because healers believed it helped the body stay strong during stress. Modern science has since identified compounds like lentinan and eritadenine that explain some of these effects.

Recent canine research has confirmed what many traditional practitioners suspected: shiitake isn't just good food—it can genuinely support wellness.

Here's what shiitake may do for dogs:

### 1. **Antioxidant support for healthy aging:** A



2024 study in healthy dogs found that shiitake supplementation increased superoxide dismutase (SOD), an important antioxidant enzyme. Higher SOD activity can help dogs handle everyday oxidative stress more effectively.<sup>5</sup>

### 2. **Supports healthy cholesterol levels:** That



same study showed shiitake reduced total cholesterol levels in healthy dogs. This makes shiitake a meaningful wellness supplement, especially for dogs needing metabolic support.<sup>5</sup>

### 3. **Helps maintain healthy immune function:**



Shiitake contains lentinan, a natural compound studied for its ability to support immune balance and encourage the body's normal defenses. Human research has looked at lentinan as an immune-supportive agent in various settings, helping explain why many pet parents notice better overall resilience when using shiitake.<sup>6</sup>

### 4. **Nutrient-dense whole-body support:**



Shiitake naturally contains B-vitamins, minerals, and dietary fiber, all of which help the digestive tract, skin, and energy levels. This makes it a wellness-forward mushroom your dog can benefit from even if they're perfectly healthy.<sup>6</sup>



## Turkey Tail *Trametes versicolor*

Turkey tail has been enjoyed and trusted in traditional Chinese and Japanese medicine for hundreds of years. In these cultures, it was commonly brewed as a warm tea or tonic to support overall wellness, strengthen the body during the winter, and help with things like fatigue, respiratory health, and digestive balance.<sup>7</sup>

As a bracket fungus, turkey tail grows in thin, fan-shaped layers on dead or decaying wood. These fan-shapes resemble a turkey's tail feathers with concentric bands of color in tan, gray, brown, and blue-green, thus the naming. Turkey tail contains a unique blend of complex carbohydrates, including beta-glucans. As a structural polysaccharide, beta-glucans interact with immune receptors and may influence inflammatory signaling. More specifically, protein-bound polysaccharides, identified as PSK and PSP, from turkey tail have been extensively studied as immune-modulating adjuvants in human oncology. While not a replacement for modern cancer treatment, PSK/PSP has been approved in Japan for use alongside standard cancer treatment to help the immune system respond more effectively and support a health gut.<sup>8</sup> In addition to immunomodulatory activity, turkey tail also contains phytochemicals with anti-inflammatory and antioxidant activities.

Given the benefits to humans, exploration of the benefits for dogs has increased over the years. Most notable is a study from 2012 evaluating the effectiveness of turkey tail in treating dogs with hemangiosarcoma. In this double-blind randomized multidose pilot study, high dose PSP from turkey tail was found to delay the progression of metastases and extended survival of dogs with canine hemangiosarcoma.<sup>9</sup>

Turkey tail's best-known dog study looked at how it helped dogs with hemangiosarcoma, but many pet parents don't realize it has several benefits for everyday health, too.

Research and veterinary wellness sources show that turkey tail may help with:

### 1. Immune balance and everyday resilience:



Turkey tail's natural beta-glucans help "train" the immune system to respond appropriately—not too much, not too little. This can help dogs stay strong through seasonal changes, stress, travel, or recovering from mild illness.<sup>10</sup>

### 2. Gut health and digestion:



Turkey tail acts like a prebiotic, feeding the good bacteria in your dog's gut. Studies in humans show it increases helpful microbes like *Lactobacillus* and *Bifidobacterium*, and similar digestive benefits are thought to support dogs as well—especially those with sensitive stomachs or who are recovering from antibiotics.<sup>10</sup>

### 3. Inflammation support:



Every day environmental factors lead to oxidative stress at the cellular level for dogs. Powerful antioxidants, like phenols and flavonoids, contained in turkey tail help neutralize free radicals before they can damage cells, helping combat oxidative stress and the onset of inflammation. Antioxidant benefits support cardiovascular health, protect liver function, help maintain healthy skin and coat, support cognitive function in senior dogs, and promote cellular regeneration.<sup>10</sup>



### What these mushrooms can do for your dog—at a glance

Maitake is a food-forward wellness helper. It supports day-to-day immune readiness and has a long tradition of use for metabolic balance, including healthy blood sugar and lipid support. With naturally occurring antioxidants, maitake fits well into routines aimed at vitality, stress resilience, and circulatory health—especially when paired with sound nutrition and activity.

Shiitake is both nutritious and supportive. In dogs, it has been shown to boost antioxidant enzyme activity and help maintain healthy cholesterol, making it a smart choice for healthy aging and metabolic wellness. As a whole food, shiitake also contributes B-vitamins, minerals, and fiber, which gently nourish skin, digestion, and energy.

Turkey tail shines as an immune-balancing and gut-friendly mushroom. Its beta-glucans help the immune system stay alert without becoming overactive, while its natural prebiotic fibers can feed beneficial gut bacteria and support comfortable digestion. Turkey tail also brings antioxidants that help neutralize everyday oxidative stress, an important part of healthy aging.

### Use thoughtfully—less is often more

Mushrooms are powerful functional foods, not magic bullets. Make sure you are feeding your companion approved food or treats that have been properly cooked and prepared by reputable manufacturers. Use them with intention and avoid overfeeding—more is not necessarily better. Start low, increase gradually, and watch for changes in appetite, stool quality, energy, and skin.” Always consult your veterinarian, especially if your dog has a chronic condition (e.g., diabetes, pancreatitis, autoimmune disease), is pregnant or nursing, or is taking medications (such as immunosuppressants, anticoagulants, or chemotherapy). Your veterinary team can help you select quality, standardized extracts, tailor amounts to your dog’s size and goals, and decide on appropriate monitoring so mushrooms remain a safe, supportive part of your pet’s wellness plan.

## References

1. [https://www.researchgate.net/profile/Wendy-Weissner/publication/26248013\\_Maitake\\_mushroom\\_Grifola\\_frondosa\\_Systematic\\_review\\_by\\_the\\_natural\\_standard\\_research\\_collaboration/links/00b4953324ec239c18000000/Maitake-mushroom-Grifola-frondosa-Systematic-review-by-the-natural-standard-research-collaboration.pdf](https://www.researchgate.net/profile/Wendy-Weissner/publication/26248013_Maitake_mushroom_Grifola_frondosa_Systematic_review_by_the_natural_standard_research_collaboration/links/00b4953324ec239c18000000/Maitake-mushroom-Grifola-frondosa-Systematic-review-by-the-natural-standard-research-collaboration.pdf)
2. <https://www.mindfullmycology.com/post/medicinal-maitake-mushroom>
3. <https://franklintnvets.com/the-top-4-immunity-mushrooms-for-dogs-and-cats/>
4. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7824844/>
5. <https://www.frontiersin.org/journals/veterinary-science/articles/10.3389/fvets.2024.1355560/full>
6. <https://www.k9-doghealth.com/wp-content/uploads/sites/4/2024/04/shiitake.pdf>
7. <https://vitalibrary.com/turkey-tail-mushroom-benefits/>
8. <https://link.springer.com/article/10.1007/s42452-024-05936-9>
9. <https://onlinelibrary.wiley.com/doi/epdf/10.1155/2012/384301>
10. <https://www.northhoundlife.com/en-us/blogs/natural-dog-health-wellness-guide-north-hound-life/turkey-tail-mushroom>

