



# THE SMART FUNCTIONAL FUNGI—**LION'S MANE**

Mushrooms are currently taking the natural products and health and wellness industry by storm. This is especially true in the immune health category, with *Nutrition Business Journal* reporting a staggering 143.6 % growth for mushroom-based supplements in immunity-targeted products alone in 2020. Since then, mushrooms remain a popular option for those looking for not only immune support, but brain, cognition, and memory support as well.\*

It's not just hype; there's good reason for this popularity. Lion's Mane, known as "The Smart Mushroom", is the most popular species of mushroom to support brain health. According to SPINS data, Host Defense Lion's Mane 60 count capsules is the top-selling mushroom supplement on the market. Additionally, Host Defense® Mushrooms™ is the **#1 best-selling mushroom supplement brand** in the U.S.†\*

Host Defense didn't become the best-selling mushroom supplement company by accident. The main differentiator in their product is high-quality, sustainably-cultivated, organically-grown mushroom mycelium. Mushroom mycelium delivers the benefits consumers are look for, whether that's immune and gut support, whole-body wellness, or mind and memory support.\*

Mushroom mycelium is the delicate, root-like structure of the mushroom organism. It represents up to 95% of the mushroom life-cycle and acts as the immune response of the mushroom itself while also supporting the health of the surrounding ecosystem by cycling nutrients between organisms and recycling >>



decaying matter. When harnessed for use in supplements, mycelium also supports human health. For use in human supplements, mycelium requires a nutritious food source, called a substrate, and needs to be grown in a sterile lab environment.\*

To grow their mushroom mycelium, Host Defense uses what is known as Solid State Fermentation, which has been used for thousands of years to make products like miso, bread, cheese, pickles, and a variety of other popular foods. They introduce mycelium that has been sustainably cultivated into an organic brown rice food source. The mycelium then

consumes and converts the rice in a process called Solid State Fermentation, which is not unlike the process of making other cultured foods like yogurt. The mycelium and rice become an interconnected, fermented matrix that can easily be used to create bioavailable supplements.\*

With scientific validation from Host Defense and independent third-party labs, it's become clear that Lion's Mane mushroom mycelium is capable of delivering powerful benefits for those looking for a wide range of wellness support, including immune, brain, and nervous systems. It truly is a wonderful functional fungi.\*

## - FREQUENTLY ASKED QUESTIONS -

### WHAT ARE THE BENEFITS OF LION'S MANE MUSHROOMS?

Known as "The Smart Mushroom" for its support of brain health, Lion's Mane is also well-known for supporting the nervous system. Studies have shown that Lion's Mane promotes mental clarity, focus, memory, and a healthy nervous system.\*

- Supports concentration and cognitive function\*
- Promotes healthy nerve function\*
- Supports a balanced mood\*
- Supports memory\*

### HOW DOES SOLID STATE FERMENTATION WORK WHEN CULTIVATING MUSHROOMS?

In Solid State Fermentation, an edible substance is either combined with a known microorganism, as is done with bread, cheeses, miso, and tempeh, or is allowed to pick up wild fermentation strains, as is done in kimchi, sauerkraut, and pickles. Solid State Fermentation provides a product with multiple components as the original compounds are converted into a new substance.

The process used by Host Defense starts with two primary components: Mushroom mycelium and an organic brown rice substrate. Once the mycelium consumes and converts the substrate, there are the fermentation metabolites that are created by the digestion process.

Like other fermented foods, the rice Host Defense started with

is no longer "just rice". The fermented rice is an integral and biologically active part of the material. This is a very complex and inclusive mycelium-plus-fermented-rice product.\*

### HOW DO MUSHROOMS SUPPORT IMMUNITY AND BRAIN HEALTH?

In both internal research conducted by Host Defense and independent third-party research, mushrooms have been found to stimulate the production and response of a variety of cells responsible for immune response in the human body, including both innate and adaptive immune cells: natural killer cells, monocytes, B cells and T cells, all of which play an important role in the body's immune system.\*

As for brain health, research has shown that mushrooms—especially Lion's Mane—are prebiotics that feeds the good bacteria in the gut and promote a healthy gut-brain axis. Many people don't realize that 90% of the body's serotonin is produced in the gut, contributing to how Lion's Mane promotes better brain health.\*

### WHAT MUSHROOM MYCELIUM PRODUCTS DOES HOST DEFENSE OFFER?

Host Defense offers a wide variety of products made from their USDA Certified Organic mushroom mycelium, including capsules, extracts, sprays, powders, and more!\*

\* Source: SPINS scan Natural / Natural Products Supermarkets > \$2MM / Total US - Natural Channel / Mushrooms Ingredient Report / 52 Wks 3/20/2022

\* THESE STATEMENTS HAVE NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THESE PRODUCTS ARE NOT INTENDED TO DIAGNOSE, TREAT, CURE OR PREVENT ANY DISEASE.

