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EDIBLE INTELLIGENCE with Standard Process and Mediherb mushrooms

Mushrooms can be deep reservoirs of powerful medicines. The fact that some mushrooms can feed you, some can heal you, some can kill you, and some can send you on a spiritual journey speaks of the full spectrum of their their chemical variety. The mycelium from which they arise can live for many hundreds of years. The largest known organism on Earth is a mycelial mat of a honey mushroom in eastern Oregon- more than 2000 years old.

“Mushrooms produce a lot of interesting chemical compounds that could be defensive, and that might be useful for fending off bacteria and other bodily invaders that make us sick. Fungi produce some of our most important drugs. Penicillin and cholesterol-lowering statins were derived from fungi” says David Hibbett, PhD., a mycologist and professor of biology at Clark University in Worcester, Massachusetts.

Paul Stamets mycologist and medical researcher points out that bio diversity is bio security and mycelium has its own immune system. Mushrooms are prebiotic, boosting the microbiome’s beneficial bacteria, improving digestion and overall health. Recent independent research shows that certain varieties of mushroom are also our best dietary sources for potent antioxidants, such as sulfur-rich ergothioneine and glutathione. A diet rich in antioxidants such as these is known to help the body withstand normal oxidative stress that damages healthy cells. In addition to boosting longevity, mushrooms pack a serious nutritional punch, providing a great source of vitamin D, essential for strong immune system function.

MUSHROOMS IN THE STANDARD PROCESS AND MEDI HERB LINE: Please note: All of our mushrooms also contain mycelium. Whenever you see mushroom powder listed as an ingredient, it’s a 50/50 blend of certified organic Shiitake / Reishi. Medi herb mushroom extracts are hot water extracted. Standard Process Epimune contains both Turkey Tail and Maitake gold mushrooms. Cellular Vitality contains Shiitake / Reishi and American Ginseng root. Other SP products that contain mushrooms are Catalyn, Cataplex AC, ACP, C and Collagen C.

Turkey Tail: is one of the best studied types of medicinal mushrooms in the world.

Studies in humans and animals suggest that a component of turkey tail, polysaccharide-K (PSK), may stimulate the immune system. The natural killer cells promoted by ingesting turkey tails also target virally-infected cells. Moreover, turkey tail mycelium excretes strong antiviral compounds, specifically active against Human papillomavirus and hepatitis C.

Being the most studied medicinal mushroom, Turkey Tail contains 2 notable protein-bound polysaccharide complexes: PSP & PSK (both are B-glucans). This little mushroom—tenacious, resilient & adaptable—has so much to offer in terms of medicine. Certain systems thrive from shocks, volatility, and stressors in the environment as does the Turkey Tail. Known as hormesis, these clever stressors nudge the system into strengthening the adaptive response (similar to exercise and intermittent fasting).

Maitake Gold:

Both the Maitake mushroom and its mycelium contain a constellation of active constituents that bolster human health via many complex pathways. These metabolic pathways work synergistically to improve host defense. Isolating one constituent from the others denatures and lessens the broad-spectrum potency of this natural, functional food.

MEDI HERB GANODERMA/SHIITAKE

Did you know that only 5 out of 19 supplement products purchased in the USA could be verified as authentic Reishi (*Ganoderma Lucidum*)? *Ganoderma lucidum* (in the strictest sense) is now one of the few mushroom species whose DNA

has been fully sequenced (16,113 genes). The variety of these enzymes, among more than 400 active constituents that have been found, indicates that mushrooms such as reishi are like ***miniature pharmaceutical factories that can produce hundreds of medicinally-interactive compounds***. Today, *Ganoderma Lucidium* stands out as one the most valuable of all polypore mushrooms in nature for the benefit of our health.

Ganoderma lucidum, popularly known as the "Mushroom of Immortality, appears to possess a wider range of therapeutic properties than any other health supporting mushroom known. In a chart by Paul Stamets, *Ganoderma lucidum* extract is listed as therapeutic in 16 out of 17 areas of health. **Medi Herb Ganoderma Lucidum** is extracted in ethanol and water due to its woody nature.

A combination of Reishi, Shiitake, and Maitake mushroom extracts may synergistically stimulate immune cells responses, says a new study from Australia. Please refer to: <https://www.nutraingredients-usa.com/Article/2019/11/22/A-scientific-first-Reishi-Shiitake-Maitake-combination-has-synergistic-immune-benefits>
For a detailed discussion highlighting the studies being done in conjunction with Medi Herb (Integria).

Always cook mushrooms to get their immune-boosting benefits, he says. Cooking also destroys any toxins that may be present in edible (not poisonous) mushrooms such as shiitake and morels.

The Unexplored Anticaries Potential of Shiitake Mushroom

Recently, there has been an upsurge of interest in mushrooms not only as a healthy food but also as a caries preventive food. The most common type of mushroom, *Lentinula edodes* also called as shiitake, is studied in-depth for its oral health benefits. Various biologically active compounds such as erythritol, copalic acid, adenosine, carvacrol, and many more are responsible for this mushroom's antimicrobial activity. Anticariogenicity can be attributed to the induction of the detachment of cariogenic microorganisms from hydroxyapatite, changes in cell surface hydrophobicity, bactericidal activity, and disruption of signal transduction in *Streptococcus mutans* as proved through various *in vivo* and *in vitro* studies. Apart from these benefits, it has tremendous potential to be used as an antioxidant, anticancer, antigingivitis, antifungal, and antiviral agent.¹

References:

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5214552/>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4684114/>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6889544/>
- https://www.huffpost.com/entry/maitake-mushroom_b_2908332
- https://www.huffpost.com/entry/mushrooms-cancer_b_1560691
- <https://www.theguardian.com/society/2019/jan/16/mud-wtr-mushroom-water-coffee-health-benefits>
- <https://www.nutraingredients-usa.com/Article/2017/11/10/75-of-Reishi-supplements-don-t-actually-contain-Reishi-mushroom-says-USP-analysis>
- <https://www.youtube.com/watch?v=7agK0nkiZpA>
- <https://www.sciencedaily.com/releases/2018/10/181004100044.htm>

¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5214552/>