



Fungi Fuel

Product Information Sheet

5-mushroom phytotherapeutic blend featuring:

The synergistic combination of Chaga, Cordyceps, Turkey Tail, Reishi, and Lion's Mane delivers a comprehensive spectrum of health benefits that span immune modulation, neuroprotection,

energy enhancement, and systemic resilience. Together, these mushroom extracts form an adaptogenic matrix that supports the body's ability to respond to stress, enhance mitochondrial function, and promote cellular repair. Chaga and Turkey Tail reinforce immune vigilance with potent polysaccharides and antioxidants, while Reishi modulates inflammatory pathways and supports cardiovascular and adrenal health. Cordyceps amplifies oxygen utilization and ATP production, contributing to increased stamina and vitality, and Lion's Mane stimulates the synthesis of nerve growth factor (NGF), facilitating cognitive function and neural regeneration. This multidimensional blend is ideal for individuals seeking to enhance longevity, strengthen immune defenses, recover from illness or fatigue, and support the brain–body axis through the wisdom of the mycelial world.

Mushroom Key Bioactives

Chaga Betulinic acid, Inotodiol, Melanin

Cordyceps Cordycepin, Adenosine, Polysaccharides

Turkey Tail PSP (Polysaccharide peptide), PSK (Krestin)

Lion's Mane Hericenones, Erinacines, β-glucans

Reishi (Ganoderma) Triterpenoids, Ganoderic acids, β-glucans

Suggested Dosage: 2–3g/day powder extract or 2–3 mL/day tincture (1:2 or 1:5 extract)

- 1. Chaga (Inonotus obliquus) The Immune Modulator & Antioxidant Shield
- **Key Actions**: Immunomodulation, antioxidant, DNA-protective
- Scientific Rationale: Chaga is rich in polyphenols, especially melanins, which exhibit high ORAC values (oxygen radical absorbance capacity). It also contains betulinic acid, which shows cytotoxicity against certain tumor lines [1].
- Primary Applications: Cancer adjunct therapy, oxidative stress reduction, DNA repair support, skin aging
 - 2. Cordyceps (C. militaris or C. sinensis) The Energy Enhancer & Mitochondrial Tonic
- Key Actions: Enhances ATP production, increases oxygen utilization, adrenal support



- Scientific Rationale: Contains cordycepin, a nucleoside analog that enhances mitochondrial efficiency and reduces fatigue [2]. Also modulates AMPK and mTOR pathways.
- **Primary Applications**: Aging-related fatigue, athletic recovery, hormonal balance (cortisol/testosterone), libido

3. Turkey Tail (Trametes versicolor) - The Immune Intelligence Activator

- Key Actions: Deep immune potentiator, microbiome support
- Scientific Rationale: Contains PSP and PSK, clinically used in Japan for adjunct cancer therapy due to their immunostimulatory and NK cell activation properties [3].
- Primary Applications: Immune restoration post-illness or chemotherapy, gut microbiota modulation

4. Reishi (Ganoderma lucidum) – The Shen Tonic & Inflammatory Regulator

- Key Actions: Adaptogenic, anti-inflammatory, calming (shen-nourishing)
- Scientific Rationale: Rich in triterpenes (ganoderic acids) that inhibit histamine release, modulate NF-kB, and reduce IL-6 production [4].
- Primary Applications: Stress resilience, anxiety, inflammation, sleep regulation, cardiovascular support

5. Lion's Mane (Hericium erinaceus) – *The Nerve Regenerator*

- **Key Actions**: Nerve regeneration, neurotrophic, nootropic
- **Scientific Rationale:** Contains hericenones (fruiting body) and erinacines (mycelium) which stimulate Nerve Growth Factor (NGF) and promote neurogenesis [5].
- **Primary Applications**: Cognitive decline, neuroplasticity, post-stroke rehabilitation, Alzheimer's and Parkinson's adjunct

Synergy & Integration

- Chaga + Turkey Tail: Full-spectrum immune support with both cytoprotective (Chaga) and immune-mobilizing (Turkey Tail) effects
- Cordyceps + Reishi: Yin–Yang adaptogen pair Cordyceps stimulates while Reishi calms and grounds
- **Lion's Mane + Cordyceps**: Neuroregenerative and mitochondrial duo for both central nervous system and systemic energy
- Reishi + Chaga: Dual anti-inflammatory and antioxidant action across cellular compartments

Scientific References

- 1. **Betulinic acid & Chaga** J Nat Prod. 2003, 66(3): 416–418.
- 2. Cordycepin & Mitochondria Biochem Pharmacol. 2008; 76(5): 631-644.
- 3. PSK/PSP Clinical Use Cancer Immunol Immunother. 1995; 41(4): 275–279.
- 4. **Reishi Immunomodulation** Int J Mol Sci. 2011; 12(9): 6067–6103.
- 5. Lion's Mane NGF Activity Int J Med Mushrooms. 2005; 7(3): 299–305.