

**\* RESEARCH UPDATE \***

**TURKEY TAIL MUSHROOMS SUPPORT IMMUNITY OF BREAST CANCER PATIENTS IN NIH-FUNDED CLINICAL STUDY**



*Trametes versicolor* (= *Coriolus versicolor*), Turkey Tail mushrooms. Photo © Paul Stamets.

**Fungi Perfecti's [Host Defense®](#) Turkey Tail mushroom product used in research announced at International Integrative Oncology conference.**

Olympia, WA, 1/13/11. A seven-year, \$2 million NIH-funded clinical study jointly conducted by Bastyr University and the University of Minnesota shows that freeze-dried Turkey Tail (*Trametes versicolor*) mushroom mycelium supports immune function when administered to women with stage I–III breast cancer. Immunity was enhanced with daily oral doses. Immune response was dose-dependent, with none of the test patients showing adverse effects.

Post-radiation therapy, cancer patients typically have reduced numbers of NK cells since radiation therapy reduces their immune defenses. “I have long recommended Turkey Tail and other medicinal mushrooms to persons with cancer. They are nontoxic, do not interfere with conventional therapies, and strengthen the body's defenses,” affirmed [Andrew Weil, MD](#), Founder & Director, Professor of Medicine and Public Health, Arizona Center for Integrative Medicine, University of Arizona.

Donald Abrams, MD, President of the Society for Integrative Oncology, added, “Physicians are constantly seeking evidence to support the use of non-toxic natural products as potential immune-enhancing therapies. These new well-controlled research findings offer a step in the right direction.”

“The mode of action (MOA) is still being determined. Cancer is notorious for its ability to evade immune detection. One theory is that when patients ingest our Turkey Tail mycelium, the immune system’s increased populations of NK cells and their associated CD8 glycoproteins are better able to discover and bind to receptor sites on the stroma of tumors, thus allowing NK invasion. If true, then the use of this medicinal mushroom as an adjunct or preventive therapy may help many patients better fight the battle when challenged with tumor-forming cancers”, stated Paul Stamets, Director of Research, and Founder of [Fungi Perfecti, LLC](#), which provided the Turkey Tail products used in this study.

Stamets continued, “Although the focus on immune response has been on activating binding sites via toll-like receptors (TLRs), other factors appear working, synergistically, including the anti-oxidative properties from medicinal mushrooms.”

The next phase of this study will evaluate patient survival.

The mushroom used in this study comes from the USDA-certified organic farm of Fungi Perfecti just outside of Olympia, Washington.

“We are proud that our [Host Defense®](#) mushrooms meet the strict standards required for medical research,” stated Stamets.

The recently announced research is only the latest effort to identify and better understand the wide range of beneficial uses for medicinal

mushrooms. Fungi Perfecti LLC has become the pre-eminent source for testing by several universities. More research results from on-going studies will be released when ready.

### About Fungi Perfecti, LLC

Fungi Perfecti, LLC was founded in 1980 by mycologist and author Paul Stamets. The family owned firm is located in Kamilche Point, near Olympia Washington. The 20-acre farm includes research labs, clean rooms and grow rooms for hundreds of species of mushrooms. The company is doubling its capacity by expanding their distribution center to a 25,000 square foot facility. Fungi Perfecti sells gourmet mushrooms, mushroom supplements, mushroom supplies for growers, books and offers workshops and information on mycology. Mr. Stamets is an expert on the medicinal properties of mushrooms. He is the author of 6 books including *Growing Gourmet & Medicinal Mushrooms*, *The Mushroom Cultivator*, *MycoMedicinals*, and *Mycelium Running: How Mushrooms Can Help Save the World*. A frequent lecturer, Paul Stamets has appeared at TED, holds several patents, and leads Fungi Perfecti's research efforts, focusing on protecting human and habitat health through the use of mushroom mycelium.



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