



## Mushrooms and Cancer Research Overview

*Note: This document is intended to provide a snapshot of the recent research exploring mushrooms positive effect on cancer as background for your conversations with retailers regarding the pink mushrooms tills.*

Researchers at City of Hope, one of “America’s Best Hospitals” in cancer, according to *U.S. News & World Report*, are speeding findings about mushrooms’ potential cancer-fighting properties from animal labs to human clinical trials. After showing that mushroom extract slows breast cancer growth in mice, the team has begun human clinical studies involving breast and prostate cancers.

The California Breast Cancer Research Program, the American Institute for Cancer Research and the National Institutes of Health supported the lab studies, and since 2002, the Mushroom Council has provided more than \$700,000 in grants to City of Hope for research on mushrooms and cancer.” To read more from the City of Hope news, click [here](#).

### **Breast Cancer**

The Mushroom Council is currently funding human trials at City of Hope to confirm the dose of white button mushrooms necessary to significantly decrease estrogens as well as investigate their effect on immunity. These findings will help provide a greater understanding about the effects of mushrooms on hormone-dependent breast cancer.

Beyond Mushroom Council-funded research, studies from around the world are being conducted on mushrooms to determine if they have a potential therapeutic or preventative effect on breast cancer and colon cancer.

Research abstracts supporting these findings include:

- [Anti-aromatase activity of phytochemicals in white button mushrooms \(\*Agaricus bisporus\*\)](#). (City of Hope)
- [A case-control study on the dietary intake of mushrooms and breast cancer risk among Korean women](#). (Hanyang University, Seoul, Korea)

### **Prostate Cancer**

The Mushroom Council is supporting a Phase II trial at City of Hope as more research is needed for human trials regarding the prostate-specific antigen (PSA) levels, after animal experiments confirmed that white button mushrooms as a dietary component may aid in the prevention of prostate cancer.

Research abstract supporting this finding includes:

- [White Button Mushroom \(\*Agaricus Bisporus\*\) Exhibits Antiproliferative and Proapoptotic Properties and Inhibits Prostate Tumor Growth in Athymic Mice](#). (City of Hope)

### **Other Research**

While additional research is needed in humans, an accumulating body of evidence already exists on mushrooms and cancer.

Research abstracts supporting these findings include:

- [Dietary mushrooms reduce mitogenesis and induce apoptosis and cytotoxicity in MCF-7 human breast cancer cells](#). (Arizona State University)
- [The effects of whole mushrooms during inflammation](#) (The Pennsylvania State University)

For more information on any of the research mentioned above, contact the Mushroom Council at:  
(408) 432-7210 or [info@mushroomcouncil.org](mailto:info@mushroomcouncil.org).