

Bitter melon extract attacks breast cancer cells

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The extract from a vegetable that is common in India and China shows promise in triggering a chain of events that kills breast cancer cells and prevents them from multiplying, a Saint Louis University researcher has found.

Ratna Ray, Ph.D., professor in the department of pathology at Saint Louis University and lead researcher, said she was surprised that the extract from the bitter melon she cooks in stir fries inhibits the growth of breast cancer cells.

"To our knowledge, this is the first report describing the effect of bitter melon extract on cancer cells," Ray said. "Our result was encouraging. We have shown that bitter melon extract significantly induced death in breast cancer cells and decreased their growth and spread."

Ray said she decided to study the impact of bitter melon extract on breast cancer cells because research by others have shown the substance lowers [blood sugar](#) and cholesterol levels. Bitter melon extract is commonly used as a folk medicine to treat diabetes in China and India, she said.

Ray conducted her research using human breast cancer cells in vitro - or in a controlled lab setting. The next step, she says, is to test bitter melon extract in an [animal model](#) to see if it plays a role in delaying the growth or killing of [breast cancer cells](#). If those results are positive, human trials could follow.

While it's too early to know for sure whether bitter melon extract will help breast cancer patients, the question is worth studying, Ray said.

"There have been significant advances in breast cancer treatment, which have improved patient survival and quality of life. However women continue to die of the disease and new treatment strategies are essential," Ray said.

"Cancer prevention by the use of naturally occurring dietary substances is considered a practical approach to reduce the ever-increasing incidence of cancer. Studying a high risk breast cancer population where bitter melon is taken as a dietary product will be an important area of future research," Ray said.

She cautioned against seeing bitter melon extract as a miracle cure for breast cancer.

"Bitter melon is common in China and India, and women there still get [breast cancer](#)," Ray said.

The research was published in the March 1 edition of *Cancer Research*, a journal of the American Association for Cancer Research.

Provided by Saint Louis University

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