

Soy isoflavone supplements did not provide breast cancer protections

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Soy isoflavone supplements did not decrease breast cancer cell proliferation in a randomized clinical trial, according to a study published in *Cancer Prevention Research*, a journal of the American Association for Cancer Research.

Lead researcher Seema A. Khan, M.D., professor of surgery at the Robert H. Lurie Comprehensive Cancer Center of Northwestern University, said the results of this study are consistent with the findings of previous studies that were designed to test cancer prevention benefits of dietary supplements.

"Simply put, supplements are not food. Although soy-based foods appear to have a protective effect, we are not seeing the same effect with supplementation using isolated components of soy, so the continued testing of soy supplements is likely not worthwhile," said Khan.

Khan said that beta-carotene and selenium supplementation have also been shown to lack benefit in lung cancer prevention studies.

"Foods are very complex and there are likely traveling companions that we haven't identified that are protecting against cancer," said Khan.

For the current study, Khan and colleagues randomly assigned 98 women to receive a mixed soy isoflavones supplement or placebo. Isoflavones are components of soy foods that were expected to have anti-estrogen activity.

These women had more than 4,000 [breast cancer](#) epithelial cells identified by fine needle aspiration biopsy. At six months, researchers evaluated the levels of Ki-67, an established protein marker of [cancer cell growth](#). In the overall population, no difference was seen after six months in either group. However, among pre-menopausal women, the level of Ki-67 increased from 1.71 to 2.18, suggesting a negative effect of the supplementation.

"This was a small finding, but one that should suggest caution," said Khan.

Provided by American Association for Cancer Research

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