

Women with breast cancer who consume soy food have lower risk of cancer recurrence

December 8 2009

Although there is a concern regarding the safety of soy food consumption among breast cancer survivors, researchers have found that women in China who had breast cancer and a higher intake of soy food had an associated lower risk of death and breast cancer recurrence, according to a study in the December 9 issue of *JAMA*.

"Soy foods are rich in isoflavones, a major group of <u>phytoestrogens</u> that have been hypothesized to reduce the risk of <u>breast cancer</u>. However, the estrogen-like effect of isoflavones and the potential interaction between isoflavones and tamoxifen have led to concern about soy food consumption among breast cancer patients," the authors write.

Xiao Ou Shu, M.D., Ph.D., of Vanderbilt University Medical Center, Nashville, Tenn., and colleagues examined the association between soy isoflavone intake with breast cancer recurrence and survival. The researchers analyzed data from the Shanghai Breast Cancer Survival Study, a large, population-based study of 5,042 female breast cancer survivors in China. Women ages 20 to 75 years with diagnoses of breast cancer between March 2002 and April 2006 were recruited and followed up through June 2009. Information on cancer diagnosis and treatment, lifestyle exposures after cancer diagnosis, and disease progression was collected at approximately 6 months after cancer diagnosis and was reassessed at three follow-up interviews conducted at 18, 36, and 60 months after diagnosis. A Shanghai Vital Statistics Registry database was used to obtain survival information for participants who were lost to follow-up.



After a median (midpoint) follow-up of 3.9 years, 444 total deaths and 534 recurrences or breast cancer-related deaths were documented among the group of 5,033 surgically-treated breast cancer patients. Soy food intake, as measured by either soy protein or soy isoflavone intake, was inversely associated with mortality and recurrence. Patients in the group with the highest intake of soy protein had a 29 percent lower risk of death during the study period, and a 32 percent lower risk of breast cancer recurrence compared to patients with the lowest intake of soy protein. The adjusted 4-year mortality rates were 10.3 percent and 7.4 percent and the 4-year recurrence rates were 11.2 percent and 8.0 percent, respectively, for women with the lowest and highest groups of soy protein intake.

"The inverse association was evident among women with either estrogen receptor-positive or -negative breast cancer and was present in both users and nonusers of tamoxifen," the researchers write.

"In summary, in this population-based prospective study, we found that soy food intake is safe and was associated with lower mortality and recurrence among breast cancer patients. The association of soy food intake with mortality and recurrence appears to follow a linear doseresponse pattern until soy food intake reached 11 grams/day of soy protein; no additional benefits on mortality and recurrence were observed with higher intakes of soy food. This study suggests that moderate soy food intake is safe and potentially beneficial for women with breast cancer."

More information: JAMA. 2009;302[22]:2437-2443.

Source: JAMA and Archives Journals (<u>news</u>: <u>web</u>)



Citation: Women with breast cancer who consume soy food have lower risk of cancer recurrence (2009, December 8) retrieved 13 January 2023 from https://medicalxpress.com/news/2009-12-women-breast-cancer-consume-soy.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.