

Postmenopausal women whose diet contains high amounts of lignans, estrogen-like chemical compounds found in plants, may have a reduced risk of breast cancer, according to a study in the March 21 issue of the Journal of the National Cancer Institute.

Lignans, which are found in flaxseed and a variety of fruits, vegetables and whole grains, belong to a family of compounds called phytoestrogens. Because of their hormone-like properties, phytoestrogens can bind to estrogen receptors, and some have suggested they may play a role in preventing breast cancer. Studies of Asian populations have found that women whose diets contain many foods made of soy, which are rich in another type of phytoestrogen, have a lower breast cancer risk.

Marina Touillaud, Ph.D. of the National Institute of Health and Medical Research in France, and colleagues administered a diet history questionnaire to 58,049 postmenopausal French women to examine the association between the consumption of four types of plant lignans and the risk of invasive breast cancer.

After a median follow-up of 7.7 years, 1,469 of the women were diagnosed with breast cancer. Among women with the highest total lignan intake, there were 376 cases of breast cancer per 100,000 person-years compared with 411 cases among women with the lowest intake—corresponding to a 17 percent relative decrease in the risk of breast cancer. The association was limited to breast cancers positive for estrogen and progesterone receptors.

"Although the possible role of plant foods in breast cancer prevention is still debated, increasing dietary lignan intake may be an interesting potential preventative approach. ...In view of the epidemiologic results of this study, the recommendation that women should consume diets that consist largely of fruits, vegetables, and cereals—all foods rich in lignans—should continue," the authors write.

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