

Shannon J, et al. Food and botanical groupings and risk of breast cancer: A case-control study in Shanghai, China. *Cancer Epidemiol Biomarkers Prev* 2005; 14(1): 81-90.

Breast cancer incidence rates more than double in Chinese women as they migrate from China to Hong Kong to the United States, suggesting that environmental factors contribute to the international variation in breast cancer incidence. Several dietary factors, which differ between the United States and the Chinese population, including intake of soy, meat, and fruits and vegetables, have been suggested to affect breast cancer risk. This report describes results from a case-control study of diet and risk of breast cancer nested in a randomized trial of breast self exam in Shanghai, China. Participating breast cancer cases ($n = 378$) and frequency age-matched controls ($n = 1,070$) completed a comprehensive food frequency questionnaire and a risk factor questionnaire. After adjustment for age, total energy intake, and total years of breast-feeding, women in the highest quartile of fruit and vegetable intake (≥ 3.8 servings/d) were significantly less likely to have breast cancer (odds ratio, 0.48; 95% confidence interval, 0.29-0.78) as compared with women in the lowest quartile of intake (≤ 2.3 servings/d). Egg consumption was also significantly inversely associated with risk of breast cancer (odds ratio for ≥ 6.0 eggs/wk versus ≤ 2.0 eggs/wk is 0.56; 95% confidence interval, 0.35-0.91). There was no difference in soy consumption between cases and controls. None of the associations with a single botanical family explained the strong inverse relationship between fruits and vegetables and breast cancer risk. These results provide additional evidence in support of the important role of fruits and vegetables in breast cancer prevention.