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Int J Cancer. 2003 Jun 20; 105(3): 413-8.

Intake of fruits, vegetables and selected micronutrients in relation to the risk of breast cancer.

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High fruit and vegetable intake has been linked with a reduced risk of breast cancer, but evidence is not consistent. We investigated the associations of breast cancer risk with vegetables, fruits and related micronutrient intake in a population-based case-control study among Chinese women in Shanghai, where dietary patterns differ substantially from other study populations. Included in the study were 1,459 incident breast cancer cases and 1,556 frequency-matched controls. Usual dietary habits were assessed by in-person interviews. Logistic regression was used to compute adjusted odds ratios (ORs) and 95% confidence intervals (CIs) to measure strength of the associations. There was no association between breast cancer risk and total vegetable intake. The risk of breast cancer declined, however, with increasing intake of dark yellow-orange vegetables (trend test, $p = 0.02$), Chinese white turnips (trend test, $p \leq 0.001$), and certain dark green vegetables (trend test, $p \leq 0.001$) with adjusted OR in the highest quintile being 0.79 (95% CI = 0.60-0.98), 0.67 (95% CI = 0.53-0.85) and 0.65 (95% CI = 0.51-0.83) respectively. Intake of fruits, except watermelons and apples, was inversely associated with breast cancer risk (p -values for trend tests ≤ 0.05). Our study suggests that high intake of certain vegetables and fruits may be associated with a reduced risk of breast cancer. Copyright 2003 Wiley-Liss, Inc.