

Glycemic index, glycemic load and breast cancer risk

Glycemic index measures how quickly foods drive up blood glucose levels. Foods such as sugars and refined carbohydrates have high glycemic index values. Glycemic load is a similar measurement that takes into account how much of a high glycemic index food is eaten. A group of 61,433 Swedish women who had mammograms filled out diet questionnaires, and were then followed for breast cancer cases over the next 17 year. Their diets were evaluated for overall glycemic index and glycemic load, as well as total carbohydrate intake. Researchers found that women whose diets had high glycemic load were significantly more likely to be diagnosed with breast cancer. Cancers that have estrogen receptors (ER+) but lack progesterone receptors (PR-) were more common in women with the highest carbohydrate intake (by 33%), the highest glycemic index (by 44% and the highest glycemic load (by 81%). There was no correlation with cancers that lacked both estrogen and progesterone receptors (ER-, PR-) or that had both estrogen and progesterone receptors (ER+, PR+). Thus, women whose diets are high in refined carbohydrates and sugary foods may be at high risk for this particular type of breast tumor.

Larsson SC et al. Glycemic load, glycemic index and breast cancer risk in a prospective cohort of Swedish women. *Int J Cancer*. 2009 Jul 1;125(1):153-7.

To summarize: Women with diets that are high in refined carbohydrates, leading to a high glycemic index or glycemic load, are more likely to be diagnosed with a particular type of breast cancer.