

Large Study Links Sustained Weight Loss to Reduced Breast Cancer Risk

Results show that higher breast cancer risk from excess body weight can be reversed with weight loss



A large new study finds that women who lost weight after age 50 and kept it off had a lower risk of breast cancer than women whose weight remained stable, helping answer a vexing question in cancer prevention. The reduction in risk increased with the amount of weight lost and was specific to women not using postmenopausal hormones. The [study appears in JNCI](#).

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In the United States, more than two in three adult women are overweight or obese. And while high body mass index (BMI) is an established risk factor for postmenopausal breast cancer, there has not been adequate evidence to determine if that risk is reversible by losing excess weight.

To learn more, investigators from the American Cancer Society, Harvard T.H. Chan School of Public Health, and others used the Pooling Project of Prospective Studies of Diet and Cancer (DCPP) to estimate the association of sustained weight loss in middle or later adulthood on subsequent breast cancer risk. Their analysis included more than 180,000 women aged 50 and older from ten prospective studies. The new analysis is the first with a large enough sample size to examine the important question of whether sustained weight loss can impact breast cancer risk with statistical precision. Weight was assessed three times over approximately 10 years: at study enrollment; after about five years; then again about four years later.

The results showed women with sustained weight loss had a lower risk of breast cancer than women whose weight remained stable, and the larger the amount of sustained weight loss, the lower was the risk of breast cancer. Women who lost 2 to 4.5 kg (about 4.4 to 10 lbs.) had a 13% lower risk (HR= 0.87, 95% CI: 0.77-0.99) than women with stable weight. Women who lost 4.5 to 9 kg (10- 20 lbs.) had a 16% lower risk (HR=0.84, 95% CI: 0.73-0.96). Women who lost 9 kg or more (20+ lbs.) had a 26% lower risk (HR=0.74, 95% CI: 0.58-0.94).

In addition, women who lost 9 kg or more and gained some (but not all) of the weight back had a lower risk of breast cancer compared with those whose weight remained stable (HR=0.77, 95% CI: 0.62-0.97).

“Our results suggest that even a modest amount of sustained weight loss is associated with lower breast cancer risk for women over 50,” said Lauren Teras, PhD, lead author of the study. “These findings may be a strong motivator for the two-thirds of American women who are overweight to lose some of that weight. Even if you gain weight after age 50, it is not too late to lower your risk of breast cancer.”

[Article](#): Sustained weight loss and risk of breast cancer in women ≥ 50 years: a pooled analysis of prospective data. JNCI: Journal of the National Cancer Institute; DOI: 10.1093/jnci/djz226
