

Obesity raises breast cancer survivors' risk of dying of the cancer

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Women with a healthy body weight before and after diagnosis of breast cancer are more likely to survive the disease long term, a new study finds.

The study, conducted in nearly 4,000 [breast cancer survivors](#), found that [obesity](#) is strongly linked to death due to breast cancer. In particular, overweight or [obese women](#) with a history of [estrogen receptor-positive breast cancer](#), but not those with estrogen receptor-negative cancer, had a higher risk of dying of their disease, said the study's lead author, Christina Dieli-Conwright, PhD.

"This relationship between dying and being obese or overweight may depend on whether the type of breast cancer is hormonally dependent," said Dieli-Conwright, assistant research professor at City of Hope National Medical Center in Duarte, Calif.

The research involved participants of the large California Teachers Study who, between 1995 and 2006, received a diagnosis of [invasive breast cancer](#)-cancer that has spread beyond the breast ducts. Of the 3,995 women studied, 262 died of breast cancer through 2007, the authors reported in their abstract.

They defined obesity as a body mass index (BMI, in kg/m²) of 30 or higher. The authors obtained BMI, a measure of height and weight, from questionnaires showing each participant's self-reported height and weight at baseline and at age 18. Baseline was the beginning of the study and was near, but necessarily at, diagnosis, according to Dieli-Conwright.

Women who were obese at baseline had a 69 percent higher risk of dying of their breast cancer than did nonobese women, Dieli-Conwright said. This same increased mortality, or death, risk was present in women who were overweight (BMI of 25 to 29) at age 18.

The researchers also analyzed the mortality risk by estrogen receptor status (whether the hormone estrogen fuels the breast cancer). They found that the higher the BMI, the greater the risk of dying of breast cancer for women with estrogen-dependent cancer. They saw no such link in women with estrogen-negative breast cancer. Women who are obese or overweight tend to have higher levels of circulating estrogen, which likely explains this difference, Dieli-Conwright said.

Their findings add to the growing scientific evidence that obesity raises the risk of both developing breast cancer and dying of it.

"What we know now is that there is a strong link between dying from [breast cancer](#) and being obese," Dieli-Conwright said. "And it's not just your BMI near the time you're diagnosed that's important."

She continued, "With the obesity epidemic on the rise, weight management programs using exercise and diet are vital in cancer prevention and survivorship."

Provided by The Endocrine Society

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