

## Cancer Advances: Obesity and Weight Gain Associated with Poor Breast Cancer Survival

Posted online on January 31, 2005 on [www.jco.org](http://www.jco.org) [1].

[Read the original study](#) [2]

A new study shows that women who are overweight prior to breast cancer diagnosis, or who are lean but gain weight following diagnosis, are more likely to have their disease return or to die of the disease. The study will be published in the *Journal of Clinical Oncology* (JCO).

To evaluate the relationship between weight gain and breast cancer survival, researchers examined lifestyle and medical history information of 5,204 breast cancer patients participating in the Nurses' Health Study (NHS), a study of the health of 121,700 female nurses conducted between 1976 and 2000.

Researchers used body mass index (BMI)â€”the ratio of a person's height in meters to their weight in kilogramsâ€”to classify women as normal weight (BMI of 18.5 to 24.9), overweight (BMI of 25 to 29.9), or obese (a BMI above 30). Researchers also analyzed whether women gained, lost, or maintained weight before and after diagnosis.

Researchers found that being overweight prior to diagnosis was associated with poorer survival and that this was particularly evident among women who had never smoked. Never smokers who had BMI of 25 or higher at diagnosis were nearly twice as likely to die than women who were normal weight.

Futhermore, women who gained weight after their breast cancer diagnosis were also more likely to see have their disease return or to die, and this risk increased as weight gain increased. Again, this was most evident in women who had never smoked. Never-smoking women who gained an average of 17 lbs were 1.5 times more likely to have their disease return or to die during follow-up than women who maintained their weight.

Researchers speculate that obesity may cause or worsen cancer by raising the body's levels of sex hormones, such as estrogen. However, including smokers in an analysis of weight and survival may mask the true relationship between these factors because smoking may promote the formation of less biologically active estrogens and has been related to lower levels of weight.

Although other studies have addressed the link between obesity and breast cancer survival, researchers noted that no prior studies have separated smokers from nonsmokers, and underscored that more research needs to be done to better explain how weight and smoking influence survival.

### What Does This Mean for Patients?

While it's important for everyone to maintain a healthy weight, women recently diagnosed with breast cancer or those at high risk for the disease should take steps to maintain a healthy weight.

Women who want to lose weight should talk to their doctors about proper nutrition and an appropriate weight loss program. Women who smoke and want to quit should also talk to their physicians about an appropriate program for quitting smoking.

### Additional Resources

[Guide to Breast Cancer](#) [3]

#### Links:

[1] <http://www.jco.org/>

[2] <http://www.jco.org/cgi/content/full/23/7/1345?ijkey=ldr5cUy1PAbGo&keytype=ref&siteid=jco>

[3] <http://www.cancer.net/patient/Cancer+Types/Breast+Cancer>