

Body Mass Index gain throughout adulthood may increase risk of postmenopausal breast cancer

April 20 2010

Reported mid-life increase in body mass index (BMI) may lead to substantially higher risk of postmenopausal breast cancer, according to results of a prospective cohort study presented at the American Association for Cancer Research 101st Annual Meeting 2010, held here April 17-21.

In previous studies, excess weight has been linked with increased risk of postmenopausal breast cancer. Scientists have speculated that in [postmenopausal women](#), [estrogen](#) produced in adipose tissue, or body fat, may promote breast cell proliferation. Relatively few studies have looked specifically at increase in BMI and its timing in relation to postmenopausal breast cancer risk, which this study investigated.

The researchers analyzed information from 72,007 women in the Prostate, Lung, Colorectal and Ovarian [Cancer Screening](#) Trial cohort, who were 55 to 74 years old at study entry. The analysis included 3,677 cases of postmenopausal breast cancer, which makes this one of the larger studies of its kind, according to the researchers.

The researchers observed the strongest associations among women who had never used menopausal hormone therapy; results were shown only for this group of women.

"Compared with women who maintained approximately the same BMI,

those who had an increase of 5 kg/m² or more between age 20 and study entry had a nearly twofold increased risk of breast cancer," said Laura Sue, M.P.H., a cancer research fellow at the National Cancer Institute (NCI).

Results showed that nearly 57 percent of the study population's BMI increased 5 kg/m² or more between age 20 and study entry. A BMI increase of 5 kg/m² is equivalent to a woman of average height, 5'4", gaining approximately 30 pounds.

Women who reported a BMI increase of 5 kg/m² or more between age 20 and 50 were at an 88 percent increased risk of developing postmenopausal breast cancer, compared with women who reported a stable BMI. For women who reported a BMI increase of 5 kg/m² or more between age 50 and study entry, risk increased 56 percent, compared with women who maintained BMI. BMI gain both before and after age 50 independently contribute to increased risk of postmenopausal [breast cancer](#).

Provided by American Association for Cancer Research

Citation: Body Mass Index gain throughout adulthood may increase risk of postmenopausal breast cancer (2010, April 20) retrieved 26 April 2024 from <https://medicalxpress.com/news/2010-04-body-mass-index-gain-adulthood.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.