Vigorous Activity Protects Against Breast Cancer

Normal-weight women who carry out lots of vigorous exercise are approximately 30% less likely to develop breast cancer than those who don't exercise vigorously. A study of more than thirty thousand postmenopausal American women, reported in BioMed Central's open access journal Breast Cancer Research, has revealed that a sedentary lifestyle can be a risk factor for the disease - even in women who are not overweight.

While an Investigator at the National Cancer Institute of the U.S. National Institutes of Health, Michael F. Leitzmann led a team of researchers who followed the 32,269 women for eleven years and found that vigorous activity may protect against breast cancer, independent of body weight control. Vigorous activity was judged to include things like heavy housework (scrubbing floors, washing windows, heavy yard-work, digging, chopping wood) and strenuous sports or exercise (running, fast jogging, competitive tennis; aerobics, bicycling on hills, and fast dancing).

Leitzmann said, "Notable strengths of our study include its large sample size, prospective design, high follow-up rate, and availability of relevant known or suspected breast cancer risk factors. These features enabled us to minimize any effects from other factors apart from exercise."

Interestingly, the authors found that non-vigorous activity, such as light housework (vacuuming, washing clothes, painting, general gardening) and light sports or exercise (walking, hiking, light jogging, recreational tennis, bowling) was not protective. Furthermore, vigorous activity was only protective in lean women and not those who were overweight or obese. According to Leitzmann, "Possible mechanisms through which physical activity may protect against breast cancer that are independent of body mass include reduced exposure to growth factors, enhanced immune function, and decreased chronic inflammation, variables that are related both to greater physical activity and to lower breast cancer risk".

The authors added, "An alternative explanation for the stronger apparent effect of vigorous activity among lean over heavy women is that heavier women may misreport non-vigorous activities as vigorous ones".

Article adapted by Medical News Today from original press release.

Notes

1. Prospective study of physical activity and risk of postmenopausal breast cancer
Michael F Leitzmann, Steven C Moore, Tricia M Peters, James V Lacey, Arthur Schatzkin, Catherine Schairer, Loiuse A Brinton and Demetrius Albanes
Breast Cancer Research (in press)
Article available at journal website: http://breast-cancer-research.com/
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2. *Breast Cancer Research* is an international, peer-reviewed online journal, publishing original research, reviews, commentaries and reports. Research articles of exceptional interest are published in all areas of biology and medicine relevant to breast cancer, including normal mammary gland biology, with special emphasis on the genetic, biochemical, and cellular basis of breast cancer. In addition, the journal publishes clinical studies with a biological basis, including Phase I and Phase II trials.

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Source: Graeme Baldwin