

Physical Activity Reduces Breast Cancer Risk

According to a study published in the journal *Cancer Epidemiology Biomarkers & Prevention*, women who engaged in five or more hours of vigorous physical activity per week had a 38% lower risk of breast cancer than women who reported no regular physical activity.

Cancer prevention is an important and active area of public health research. Physicians and individuals have recognized that the best "treatment" of cancer is to prevent its occurrence in the first place. Preventive measures that have been investigated for breast cancer include diet, physical activity, and medications such as tamoxifen.

Several studies have reported that women who engage in regular physical activity are less likely to develop breast cancer than women who are inactive. Questions remain, however, about the level of activity required to produce a benefit and whether the extent of the benefit varies by factors such as family history of breast cancer.

To investigate the relationship between physical activity and risk of breast cancer, researchers in France evaluated information from 90,509 women. All women were between the ages of 40 and 65 in 1990. Between 1990 and 2002, 3,424 of these women developed breast cancer.

* A decreasing risk of breast cancer was observed with increasing levels of both moderate and vigorous physical activity.

* Compared to women who reported no recreational physical activity, women who reported five or more hours a week of vigorous physical activity had a 38% lower risk of breast cancer.

* The benefit of vigorous physical activity persisted regardless of weight, family history of breast cancer, use of hormone replacement therapy, or reproductive history.

The researchers conclude that the reduction in risk of breast cancer was particularly apparent with vigorous physical activity. They recommend additional studies to confirm the importance of exercise intensity and to determine the biologic mechanism for a link between exercise and breast cancer risk reduction.

Reference: Tehard B, Friedenreich CM, Oppert J-M et al. Effect of Physical Activity on Women at Increased Risk of Breast Cancer: Results from the E3N Cohort Study. *Cancer Epidemiology Biomarkers & Prevention*. 2006;15:57-64.