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## **Recreational physical activity and the risk of breast cancer in postmenopausal women: the Women's Health Initiative Cohort Study.**

[McTiernan A](#), [Kooperberg C](#), [White E](#), [Wilcox S](#), [Coates R](#), [Adams-Campbell LL](#), [Woods N](#), [Ockene J](#); [Women's Health Initiative Cohort Study](#).

### **Source**

Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle, WA 98109, USA.  
amctiern@fhcrc.org

### **Abstract**

#### **CONTEXT:**

Women who are physically active have a decreased risk for breast cancer, but the types, amounts, and timing of activity needed are unknown.

#### **OBJECTIVE:**

To prospectively examine the association between current and past recreational physical activity and incidence of breast cancer in postmenopausal women. Design, Setting, and

#### **PATIENTS:**

Prospective cohort study in 74 171 women aged 50 to 79 years who were recruited by 40 US clinical centers from 1993 through 1998.

#### **MAIN OUTCOME MEASURE:**

Incident invasive and in situ breast cancer.

#### **RESULTS:**

We documented 1780 newly diagnosed cases of breast cancer over a mean follow-up of 4.7 years. Compared with less active women, women who engaged in regular strenuous physical activity at age 35 years had a 14% decreased risk of breast cancer (relative risk [RR], 0.86; 95% confidence interval [CI], 0.78-0.95). Similar but attenuated findings were observed for strenuous physical activity at ages 18 years and 50 years. An increasing total current physical activity score was associated with a reduced risk for breast cancer ( $P = .03$  for trend). Women who engaged in the equivalent of 1.25 to 2.5 hours per week of brisk walking had an 18% decreased risk of breast cancer (RR, 0.82; 95% CI, 0.68-0.97) compared with inactive women. Slightly greater reduction in risk was observed for women who engaged in the equivalent of 10 hours or more per week of brisk walking. The effect of exercise was most pronounced in women in the lowest tertile of body mass index (BMI) ( $<24.1$ ), but also was observed for women in the middle tertile of BMI (24.1-28.4).

#### **CONCLUSIONS:**

These data suggest that increased physical activity is associated with reduced risk for breast cancer in postmenopausal women, longer duration provides most benefit, and that such activity need not be strenuous.