

OVULATING?

- Remember to call at 612-968-9589 when you get a positive with the ovulation kit.
- Testing with the ovulation kit is best done in the afternoon at the same time each day.
- Read the test between 3-5 minutes to see if you got a positive.

KEEPING
TRACK

Clinic Visits

Start of
period (Day 1)

End of period

Ovulation
testing

Positive
ovulation

Signs and
symptoms

Exercise
schedule

Girls, young women can cut risk of early breast cancer through regular exercise

St. Louis, May 13, 2008 — Mothers, here's another reason to encourage your daughters to be physically active: Girls and young women who exercise regularly between the ages of 12 and 35 have a substantially lower risk of breast cancer before menopause compared to those who are less active, new research shows.

In the largest and most detailed analysis to date of the effects of exercise on premenopausal breast cancer, the study of nearly 65,000 women found that those who were physically active had a 23 percent lower risk of breast cancer before menopause. In particular, high levels of physical activity from ages 12 to 22 contributed most strongly to the lower breast cancer risk.

The study, by researchers at

Washington University School of Medicine in St. Louis and Harvard University in Boston, will be available online May 13 in the *Journal of the National Cancer Institute*.

"We don't have a lot of prevention strategies for premenopausal breast cancer, but our findings clearly show that physical activity during adolescence and young adulthood can pay off in the long run by reducing a woman's risk of early breast cancer," says lead investigator Graham Colditz, M.D., Dr.P.H., the Niess-Gain Professor and associate director of Prevention and Control at the Siteman Cancer Center at Washington University School of Medicine and Barnes-Jewish Hospital. "This is just one more reason to encourage young girls and women to exercise regularly."

One-fourth of all breast cancers are diagnosed in women before menopause. Numerous studies have shown that physical activity reduces the risk of postmenopausal breast cancer, but the few studies that have looked at the influence of exercise on breast cancer risk before menopause have produced conflicting results.

For the current analysis, researchers examined data on a subset of women enrolled in the Nurses' Health Study II, a prospective study of registered nurses ages 24 to 42. These 64,777 women had filled out detailed annual questionnaires about their levels of physical activity from age 12 on. After six years of follow-up, 550 women had been diagnosed with breast cancer. *Continued to next page....*

Put this number in your phone 612-968-9589

Alma Smith, PhD student in Nutrition, is coordinating the clinic appointments for the WISER Study. As you proceed with your time in the study, get to know this number as your best contact for the WISER Study.

If there is no answer, please leave a message with your name, the date and the question you have or the date of your positive ovulation or your day 1.

We will be sure to get back to you with your next steps in the study the next day or as

soon as possible. You can rely on the WISER Staff to keep you on track to finish the study and all the requirements of it.

If you have any concerns or questions, please call this number, 612-968-9589 or email us at wiser@umn.edu. We want to hear from you!

Girls, young women can cut risk of early breast cancer through regular exercise

For the current analysis, researchers examined data on a subset of women enrolled in the Nurses' Health Study II, a prospective study of registered nurses ages 24 to 42. These 64,777 women had filled out detailed annual questionnaires about their levels of physical activity from age 12 on. After six years of follow-up, 550 women had been diagnosed with breast cancer.

The researchers found the age-adjusted incidence rates for invasive breast cancer dropped from 194 cases per 100,000 person-years in the least active women to 136 cases in the most active. The levels of physical

Ground breaking research is being funded by NCI.

activity reported by the most active women were the equivalent of running 3.25 hours a week or walking 13 hours a week. The benefit of exercise was not linked to a particular sport or intensity but related to total activity.

"You don't have to be a marathon runner to get the risk-reducing benefits of exercise," Colditz adds.

One leading theory to explain the lower risk of breast cancer among active young women is that exercise reduces their exposure to

estrogens. Numerous studies have shown that the more estrogen a woman is exposed to, the greater her risk for breast cancer. Thus, women who begin menstruating later or enter menopause early have a lower risk of breast cancer. And young women who are physically active are more likely to start their periods later and less likely to have regular cycles when they begin their periods.

SOURCE:

http://www.eurekalert.org/pub_releases/2008-05/wuso-gyw050908.php

"You don't have to be a marathon runner to get the risk-reducing benefits of exercise," Dr. Colditz

CITATION:

Maruit SS, Willett WC, Feskanich D, Rosner B, Colditz GA. A prospective study of age-specific physical activity and premenopausal breast cancer. *Journal of the National Cancer Institute*. May 13, 2008 (advance online publication).

The research was funded by grants from the National Cancer Institute and the American Cancer Society.

Washington University School of Medicine's 2,100 employed and volunteer faculty physicians also are the medical staff of Barnes-Jewish and St. Louis

Children's hospitals. The School of Medicine is one of the leading medical research, teaching and patient care institutions in the nation, currently ranked third in the nation by U.S. News & World Report. Through its affiliations with Barnes-Jewish and St. Louis Children's hospitals, the School of Medicine is

Put this number in your phone 612-968-9589

Alma is working on her thesis with the WISER Study. She is using the menstrual logs that you are all filling out each month to calculate the length of your cycle in its totality, as well as the length of each of the luteal and follicular phases (the two halves of the cycle). She will also be available to speak to

you at clinic. She will be there to help you plan out what is next for you in the study.

We have many staff members to help with this process, but if you are in doubt, please contact Alma at the phone number above. She will get your information to the correct person.

We welcome any questions about our research plans or the outcomes of the protocols in WISER Study. We will be looking for papers to come out in 2009 or 2010. If you are interested in getting an email when those papers are available in their journals.

