

# Exercise & Health Alert

**FOX CHASE  
CANCER CENTER**

Philadelphia, Pennsylvania 19111  
1-888-FOX CHASE  
www.fccc.edu

## For Good Health, Add Exercise to a Balanced Diet

The updated Food Pyramid, unveiled in April 2005 by the U.S. Department of Agriculture's Center for Nutrition Policy and Promotion, adds a new element to the image of a balanced diet. Now the guidelines recommend regular physical activity—at least half an hour daily—to promote psychological well-being and a healthy body weight.

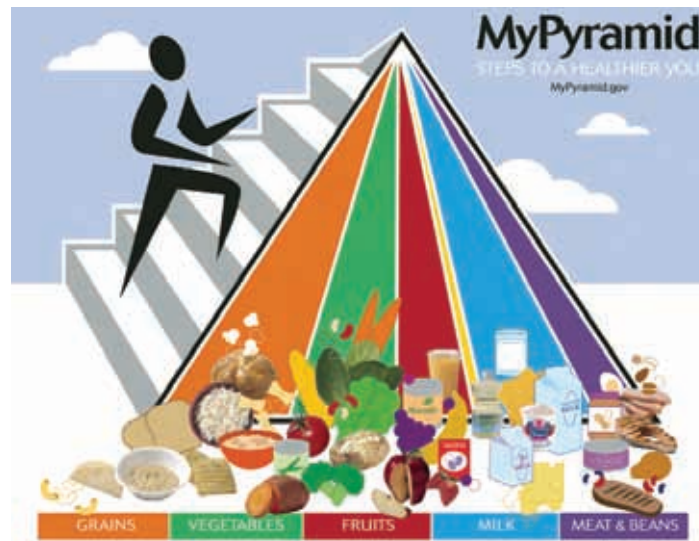
Being physically active and avoiding excess weight helps reduce the risk of several common cancers and other diseases of aging.

Preventing weight gain means using up as many calories as you take in. The guidelines suggest making small reductions in what

you eat and drink and increasing exercise to an hour a day. For people who've lost weight and want to keep it off, the advice is for an hour to an hour and a half of daily

exercise.

Exercise doesn't require a gym membership, workout video or special equipment. Your routine activities count too.



## Exercise Lowers Risk of Common Cancers

Keeping fit is an important reason to exercise, but the benefits don't stop there. Numerous scientific studies suggest that exercise actually cuts the risk of some of the most common cancers as well as reducing the risk of heart disease, stroke, high blood pressure and cholesterol, diabetes, brittle bones (osteoporosis), stress and depression.

Some cancers, such as breast and colon cancer, are associated with excess weight. However, exercise not only helps you maintain a healthy weight but also decreases levels of hormones that circulate in the bloodstream. Some hormones help promote certain cancers, such as estrogen and breast cancer.

## Housework and Walking Help Sweep Away Cancer Risk

Though it's classed as non-vigorous exercise, no one disputes that housework can be hard work. But the physical and personal rewards go beyond a clean, tidy home.

Research presented in late March 2004 at the 95th annual meeting of the American Association for Cancer Research showed the benefits of exercise in relation to both cancer risk and to survival after a cancer diagnosis.

### Endometrial Cancer

In one study, moderate exercise such as housework and walking lowered by as much as 40% a woman's risk of develop-

ing the most common cancer of the uterus—endometrial cancer, which affects the uterine lining (endometrium). Vanderbilt University Medical Center and

Shanghai Cancer Institute researchers collaborated in the study.

*(continued on page 2)*

## Burn Away a Pound a Month

The kind of extra weight that increases the risk of cancer, heart disease, high blood pressure and diabetes is body fat, especially excess fat around the middle. This is often called "middle-aged spread" because many people gain belly fat as they grow older and less active without cutting down on food intake.

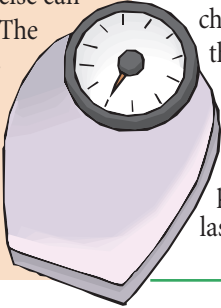
Aerobic exercise—any type of brisk activity that temporarily raises your heart rate and your need for oxygen—burns body fat. By taking a fast-paced walk of at least a mile every day, a medium-sized adult can burn about 3,500 calories a month: the equivalent of one pound of body fat every 30 days.

Of course, this works only if you don't add snacks or other extra calories to make up for the exercise. Do drink plenty of calorie-free water, especially in warm weather.

**Provided as a community service by Fox Chase Cancer Center, one of the country's comprehensive cancer centers designated by the National Cancer Institute, this publication is not intended to replace personal medical advice. Please consult your doctor about your individual health needs. For information about cancer prevention, detection and treatment programs, call 1-888-FOX CHASE or visit our web site, [www.fccc.edu](http://www.fccc.edu).**

### 10 Pounds Versus 30 Minutes

Eating 100 calories a day more than you need adds 10 pounds in a year. Adding half an hour of daily exercise can keep that weight off. The combination of exercising and watching your diet is the most flexible and effective approach to weight control.



## Exercise May Fight Cancer-Related Fatigue

Cancer-related fatigue affects most patients during cancer treatment, either as a side effect of chemotherapy or radiation therapy or as a result of the cancer itself. While fatigue may be mild and temporary for some patients, others find it lasts months after

treatment and severely limits daily activities.

Getting proper nutrition, discussing fatigue symptoms with your doctor and taking medication if appropriate are important steps to combat this problem. Some research, including ongoing quality-of-life studies by nurses at Fox Chase Cancer Center, suggests that regular

exercise can help maintain or improve energy levels.

To help prevent or lessen cancer-related fatigue, it's important to begin a light exercise routine, throughout the week, before or at the very start of cancer treatment. If you wait until fatigue sets in, you may lack the energy for even light exercise.

## Is Yoga Good for Cancer Patients?

The word yoga means union and comes from the ancient Sanskrit language of India. Yoga embraces several different schools of thought and offers many practices that help people relax. The practice of yoga, including exercises and meditation, may reduce both physical and mental stress reactions.

A growing number of cancer

centers and other hospitals are making yoga classes available to cancer patients. Stress reduction alone may be a good reason for some to consider yoga during treatment.

Studies around the world have attempted to document other potential benefits for people with cancer. In an article called "Yoga for Cancer Patients and Survivors" in the July 2005 issue

of *Cancer Control*, researchers from the University of California at Los Angeles examined nine small studies. They ranged from an early 1980s trial in India, with 50 patients receiving radiation therapy, to research with American lymphoma and breast cancer patients published in 2004 and 2005.

Most trials used gentle poses and stretching that were easy for

patients to do. Only the most recent trials compared the yoga group with a control group, so results have to be considered preliminary. So far, the research suggests that yoga may help improve sleep quality, mood, stress, cancer-related distress and symptoms and overall quality of life, according to the UCLA authors.

### Housework and Walking (continued from page 1)

Because endometrial cancer rates have climbed sharply in the Shanghai region of China, the study compared two groups of more than 800 women aged 30 through 69—one group with and one group without endometrial cancer. Data included information about long-term patterns of physical activity, such as intentional exercise, walking, bicycling as primary transportation and housework.

Although vigorous exercise such as cycling seemed not to affect cancer risk, ordinary activities such as housework and walking definitely reduced endometrial cancer rates. Women who reported moderate physical activity both as teenagers and

adults were 30% to 40% less likely to have endometrial cancer than women who were inactive during both age periods.

Even women who got such exercise only as adults cut their risk by at least 20%. Women who did at least four hours of housework or walked for an hour or more each day had a lower risk than those who did housework for two hours or less or walked less than 30 minutes daily.

### Ovarian and Breast Cancers

A similar study by Canada's Public Health Agency found that moderate exercise was associated with a lower risk of ovarian cancer. Reported May 16, 2005, in *The International Journal of Cancer's* online edition, the study surveyed women between 20

and 76 years old. Moderate physical activity was considered equivalent to walking three to six times a week or golfing once or twice weekly. Like the Shanghai study, this one found that vigorous exercise did not affect cancer risk.

An earlier study presented at the U.S. Department of Defense's Breast Cancer Research Program in September 2003 found that women who engaged in moderate activity over the course of their life significantly cut their risk of breast cancer. Women approaching menopause who had a long history of exercise reduced their risk by one-third. Women past menopause, who are most at risk, still had a 26% lower risk

than less active women in their age group.

Nearly 30 studies have revealed the power of muscles to reduce breast cancer risk with regular, moderate to vigorous exercise at least three hours a week. The research includes the National Institutes of Health's

Women's Health Initiative studying more than 74,000 women.



### Don't Have Time to Exercise?

There are 1,440 minutes in every day. Set aside just 30 of them and get moving.

## Step Up Exercise to Cut Down Colorectal Cancer

A number of studies over the past several years have demonstrated that physical activity lessens the risk of colon cancer. The Health Professionals Follow-Up Study, surveying more than 47,700 male health professionals aged 40 to 75, found that activity decreased colon cancer rates. Obesity, particular excess abdominal weight, increased the risk.

The most active people had a 50% lower risk of colon cancer than inactive people, according to an analysis in the July 1997 issue of *Cancer Causes and Control*. Results have been less consistent for rectal cancer, but a more recent study using the same questionnaire as the 1997 analysis found a similar drop in the risk of rectal cancer as well (reported Aug. 1, 2003, in the *American Journal of Epidemiology*.)

A 2004 study (*Cancer Epidemiology Biomarkers & Prevention*, December 2004) focused on measuring the amount, type and timing of recreational activity that might reduce colorectal cancer risk. This research found that risk declined notably as total hours of weekly activity rose. For rectal cancer, this was true only for older men and women.

Scientists believe exercise helps ward off colon cancer in several ways, such as improving metabolism, increasing insulin sensitivity and reducing blood concentrations of insulin and related growth factors. These effects also help prevent type 2 or adult-onset diabetes, in which cells grow resistant to insulin so the body needs to produce higher levels. Type 2 diabetes has been linked with higher risk of colon and pancreatic cancer.

### Brisk Walks Aid Patients Too

In May 2005, at the 41st Annual Meeting of the American Society of Clinical Oncology, physicians from the Dana-Farber Cancer Institute in Boston were the first to report findings that exercise not only helps prevent colon cancer but even helps those who have had the disease. For patients who exercised regularly, the risk of dying of colon cancer or having it return fell by 49% within three years after surgery and chemotherapy.

This study measured physical activity in 832 people starting about a year after surgery. The lower risk occurred in those with the highest activity levels—the top 40% of the group—compared to the lower 40% of the group.

The beneficial activity was equivalent to a brisk hour's walk six days a week. Similar weekly exercise levels would result from jogging two to three hours or playing tennis a few times each week.



## Tips for Starting a Daily Exercise Program

- ▶ Choose a moderately intense activity you enjoy the most, such as walking or noncompetitive swimming.
- ▶ Warm up before each session with some gentle stretching exercises and cool down the same way.
- ▶ Gradually add a few minutes every few days or so to the time you spend in the activity, until you can comfortably do it for at least 30 minutes a day.
- ▶ As this minimum amount grows easier, gradually increase the intensity of the activity, the length of time you do it or both.
- ▶ Start varying your activities, both to hold your interest and extend the range of benefits.
- ▶ Explore new activities. (Tennis or dance classes, anyone?)

## Fast-Paced Exercise Slows Down Prostate Cancer

Regular exercise helps men 65 and older reduce their risk of developing advanced prostate cancer and dying of the disease—the most common cancer in men. The new study (reported May 9, 2005, in *Archives of Internal Medicine*) scrutinized exercise habits and prostate cancer among the men taking part in the

Health Professionals Follow-Up study from 1986 to 2000.

The 14-year follow-up included reports on weekly activ-

ities, including vigorous exercise such as hiking, jogging, bicycling, swimming, tennis and rowing or nonvigorous activities such as walking and climbing stairs. After age 65, three hours of vigorous exercise a week was linked with a 70% decrease in the risk of advanced prostate cancer or prostate cancer death. This connection did not appear in younger men.

The researchers said more research is needed on how exercise affects prostate cancer risk at all ages. However, the new study adds to growing evidence that physical activity may slow prostate cancer progression—at least among older men, who are most at risk of prostate cancer.

**For walking, jogging or other outdoor exercise, don't forget the sunscreen!**



### Top 10 Reasons to Exercise

According to the Centers for Disease Control and Prevention, active people have lower premature death rates than people with low activity levels. Moderate or vigorous exercise on a regular basis can:

- Lower the risk of heart disease and stroke, including reducing the risk of a second heart attack in people who have already had one
- Reduce total blood cholesterol and triglycerides and raise the “good” cholesterol (high-density lipoproteins or HDL)
- Decrease the risk of high blood pressure and lower blood pressure in people who already have hypertension
- Reduce the risk of developing adult onset (type 2) diabetes
- Cut the risk of developing colon cancer by up to 50%
- Help achieve and maintain a healthy body weight (which reduces the risk of several cancers, diabetes and high blood pressure)
- Decrease feelings of anxiety and depression
- Reduce feelings of stress and promote psychological well-being
- Help build and maintain healthy bones, muscles and joints
- Help older adults preserve strength and ease of movement with less risk of falling or excessive fatigue

### Easy Ways to Boost Your Activity Level

Use leg or bicycle power instead of horsepower whenever possible and practical. By taking short trips on foot or by bike instead of driving, you'll not only add exercise but also save money on gas. Carrying your shopping home boosts the workout and may help you cut costs by making fewer impulse buys.

When you must drive, park at the farthest point to your destination. Take stairs instead of elevators or escalators whenever possible.

Gardening and lawn mowing can also account for lots of exercise. Just don't use a riding mower. TV time can be exercise time

too. Do an exercise routine while you watch or use a stationary bicycle, treadmill or stairclimber.

Add dancing to your social life. Or just dance to your favorite music at home.



### Exercise Promotes Cancer Survival

A study at Fred Hutchinson Cancer Research Center study indicated that overweight menopausal women who got moderately intense exercise on a regular basis had lower levels of two markers for inflammation than less active women. Both markers

have been shown to signal increased risk of developing cancer and decreased survival after a cancer diagnosis.

These inflammation markers—C-reactive protein and serum amyloid A—are also signs of higher risk of heart disease. The study was presented at

the 2004 annual meeting of the American Association for Cancer Research (AACR).

#### Breast Cancer

Another study presented at the 2004 AACR meeting showed that the most physically active women had the highest survival rates after treatment for breast cancer. The improvement ranged

from 19% to 54%, depending on the type and length of activity.

Even walking for as little as one to three hours a week benefited breast cancer survival. The research was part of the Nurses' Health Study by scientists at Brigham and Women's Hospital and Harvard University.

Fox Chase Cancer Center's unique cancer-risk assessment programs provide screening, education and early detection for healthy people with a personal or family history of certain cancers or other special risk factors. Participants may also have the opportunity for genetic testing and counseling when appropriate and the option of enrolling in available prevention trials.

• **Gastrointestinal Tumor-Risk Assessment Program: 215-728-7041 or 1-888-FOX CHASE**

For people with an increased risk of gastrointestinal cancers due to family or past personal history of colorectal polyps or cancers of the colon, rectum, pancreas or other gastrointestinal organs

• **Margaret Dyson Family Risk Assessment Program: 1-800-325-4145**

For women with a personal history of noncancerous breast changes or a family history of breast and/or ovarian cancer

• **Melanoma Family Risk Assessment Program: 215-214-1448**

For people with a family history of melanoma, the most serious form of skin cancer

• **Prostate Cancer Risk Assessment Program: 215-728-2406**

For men with increased risk of prostate cancer, including family history or being African American

**For free educational videos about various cancers, call 1-888-FOX CHASE or visit our web site at [www.fccc.edu](http://www.fccc.edu).**

**FOX CHASE  
CANCER CENTER**

Philadelphia, Pennsylvania 19111

1-888-FOX CHASE

[www.fccc.edu](http://www.fccc.edu)