Fitness Level Predicts Likelihood of Death

Death Risk Doubles for Women Under 85% Average Fitness for Age

Aug. 3, 2005 -- A new tool tells women and men how fit they are -- and how that affects their risk of death.

The tool is a simple-looking chart. It lets you see how your personal fitness level matches up with the fitness of other people your age. You may be seeing it soon in your doctor's office -- and in your gym.

To use the chart, you have to know how much exercise you're able to do. This can be learned in a gym, using a treadmill or other device that gives readings in units called METs. It can also be done in a doctor's office equipped with a stress testing device. Seeing a doctor is a good idea for anyone not already exercising regularly.

Fitness charts have long been available for men. Before now, nobody had ever collected the data needed for a women's fitness chart. That's changed, thanks to the nearly 6,000 Chicago-area women who underwent exercise stress tests as part of the St. James Women Take Heart Project. Rush University researcher Martha Gulati, MD, led the team that analyzed the data.

Fitness Breeds Longer Life

"Having a good fitness level for one's age predicts better survival," Gulati tells WebMD. "If you are below the fitness level for your age, you are more likely to die."

Indeed, Gulati finds that women double their risk of death if they can't exercise at 85% of the level normal for their age.

Gulati's study appears in the Aug. 4 issue of *The New England Journal of Medicine*. Accompanying the paper is an editorial co-authored by Duke University researcher Pamela S. Douglas, MD. Douglas is the president of the American College of Cardiology.

"We doctors usually look at electrocardiograms [EKGs] and other tests to see heart trouble -- but it turns out how long you can exercise is almost as important," Douglas tells WebMD. "If you are well, how long you can exercise is more important than any other variable in determining how long you live."

Exercise Prescriptions

The women Gulati and colleagues studied had no obvious symptoms of heart disease. But like many U.S. women, they weren't exactly healthy. The study measured fitness in terms of METs -- metabolic equivalents -- which provide a measurement of the amount of oxygen a person can breathe at a given workload.

At rest, a person burns about 1 MET. A woman who jogs at 5 miles per hour for 30 minutes would burn about 8.7 METs, Gulati says. Some of the women in the study were able to tolerate exercise of only 1.2 to 1.4 METs.

Using the chart devised by Gulati and colleagues, an active 45-year-old woman would normally be fit enough to burn just under 11 METs.

"The important thing is how much you can push yourself," Gulati says. "We have a 30-minutes-of-exercise-a-day guideline -- but it is the intensity of the workout that counts. If your exercise feels too comfortable, it probably is. It does not push you to your fitness level."

So how can a woman or a man find out what she or he needs to be fit? Gulati recommends getting an "exercise prescription."

Get a Fitness Checkup

"I want people to know what their fitness level should be," Gulati says. "They can do this with the help of their doctors. Ask to have your fitness screened at your next visit. And ask for an exercise prescription."

What might such a prescription look like? Just as with any prescription, Douglas says, your doctor first has to be sure that exercise is right for you.

"The best program is whatever form of exercise you will do," Douglas says.
"Ballroom dancing, walking, riding a bike, swimming -- it doesn't matter. You need to move."

Douglas warns that many people who think of themselves as active are getting much less exercise than they need. That's why she says pedometers are a great idea. The devices measure how many steps you really take in a day.

"Some of my patients say, 'I am active. I get out in the garden, I work around the house.' But the pedometer shows they do 3,000 or 5,000 steps -- not the recommended 10,000," Douglas says. "These people are up and out but not getting the exercise benefit they need. The good thing about the pedometer is it gives you credit for what you already do and lets you know how much more you have to do."