

UP YOUR EXERCISE CAPACITY—AND LOWER YOUR MORTALITY RISK. THAT'S WHAT A NEW, SIGNIFICANT STUDY OF MORE THAN 15,000 U.S. MILITARY VETERANS SHOWS.

Circulation—a journal of the American Heart Association—published the study that was led by Peter Kokkinos, director of the Exercise, Testing and Research Lab in the cardiology department at the Veterans Affairs Medical Center in Washington, DC.

The researchers assessed "the association between exercise capacity and mortality" in 6,749 black and 8,911 white men—whose average age was 60, with or without cardiovascular disease and having successfully completed a treadmill test (between May 1983 and December 2006) at the Veterans Affairs Medical Centers in Washington, DC, and Palo Alto, California.

The determined fitness categories were based on "peak metabolic equivalents (METs) achieved." At rest, a person would use 1 MET; using over 1 MET denotes "work." Therefore, achieving a higher MET level equates to being more fit.

Fitness categories were low (5 METs), moderate (5-7 METs), highly (7.1 to 10 METs) and very highly fit (over 10 METs). Subjects were to exercise until tired; follow-ups were done for 7.5 years on average. As VA patients, all participants had equal access to healthcare.

## The findings . . .

- Men who achieved >7 METs "highly to very highly fit"—demonstrated a 50%-70% lower mortality risk than "low fit" subjects
- Mortality risk—13% lower for every 1-MET increase in exercise capacity
- Achieving "highly fit" level—no personal trainer or gym membership needed
- Cutting death risk in half—with exercise capacity attained with 30 minutes per session, 5-6 days per week; if 30 minutes is too much for some people, splitting the routine into 10-15 minute segments (morning/evening) gives the same benefits

In a Reuters article ("Exercise sharply cuts older men's death rate: study") by Julie Steenhuysen, Kokkinos said, "The message here is exercise works on anybody, regardless of race or income."

According to Kokkinos, "It is important to emphasize that it takes relatively moderate levels of physical activity — like brisk walking — to attain the associated health benefits. Certainly, one does not need to be a marathon runner. This is the message that we need to convey to the public."

Word to patients and healthcare professionals. The study also made this suggestion: "Because higher exercise capacity is associated with a lower risk of mortality, physicians and other healthcare professionals should encourage individuals to initiate and maintain a physically active lifestyle consisting of moderate-intensity activities (brisk walking or similar activities). Such programs are likely to improve exercise capacity and lower the risk of mortality."

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KEEP YOUR ROUTINE FUN WITH AEROBICS SUCH AS BRISK WALKING, JOGGING, RUNNING, SWIMMING, ROLLER SKATING, DANCING, BIKING AND FITNESS CENTER ACTIVITIES USING ELLIPTICAL MACHINES, EXERCISE CYCLES, TREADMILLS, STAIR-STEPPERS, ETC.

## **AQUATIC HEALING**



"The best time to reduce your body fat is in the morning before breakfast."

"Efficient weight training is the second secret to decreasing body fat."

"Maintaining the right heart rate is essential for aerobic benefits."

The aerobic factor. An aerobic workout funnels oxygen to large muscle groups. Performed at moderate intensity, aerobics use stored carbohydrates and fats for fuel. The longer and more vigorous the workout—the more total calories burned.

Aerobic exercise also offers several health benefits.

- Increased health span: A study following Harvard grads for 30 years showed those moderately active were at substantially decreased risk of death.
- Decreased health risks: Strengthens the heart muscle for good circulation, decreases blood pressure and reduces stroke risk.
- Reduced stress: With a moderate intensity workout of 20 minutes or more.
- Increased muscle endurance: Making daily activities easier.
- Improved sleep quality: Researchers at Stanford, Emory and the University of Oklahoma reported older people doing brisk walking and/or low-impact aerobics four times a week went to sleep faster and slept an hour longer than before (*Harvard Health Letter*, March 1997).

**Exercise tips.** Keep your routine fun with aerobics such as brisk walking, jogging, running, swimming, roller skating, dancing, biking and fitness center activities using elliptical machines, exercise cycles, treadmills, stair-steppers, etc.

The best time to reduce your body fat is in the morning before breakfast, which increases your energy level for three to four hours after you eat. You can opt for evening exercise, two hours after a light dinner, but before 8 pm. (Exercising after a large meal can increase cardio risks; working out late disrupts your sleep.)

Efficient weight training is the second secret to decreasing body fat. Aim for 10-12 reps for upper bodywork and 12-15 reps for lower bodywork—with no more than a 60-second rest between each set. Shorter rest periods mean you're burning more fat.

Maintaining the right heart rate is essential for aerobic benefits. Aim at keeping your heart steady at a rate appropriate for your age: 220 minus your age times 70%. So if you're 60, a good training heart rate would be 220 – 60 x 70%, or 112. As with any sensible program, first get the "medical green light" from your physician.

The Cenegenics advantage. We offer a proactive approach with customized programs and proven protocols, based on solid science and comprehensive evaluation. The Cenegenics program centers on four components: exercise, low-glycemic nutrition, hormone optimization (when clinically indicated) and nutraceutical supplementation.

Cenegenics' patients are given a **Gold Standard Fitness Assessment** during their comprehensive evaluation process, detailing these areas:

- Body composition
- Cardiovascular endurance—using sophisticated Vo<sub>2</sub> technology for dynamic evaluation of oxygen consumption
- Muscular strength and endurance
- Flexibility
- Posture, balance and core strength
- Stability testing

This information establishes a baseline for a patient's fitness level and allows for an appropriate exercise prescription to meet health goals.

Typically, Cenegenics recommends patients work out six days per week, which includes both cardiovascular exercise and strength training routines.

The cardiovascular can be for as little as 20 minutes, including high-intensity intervals. Strength training can be done in 45 to 60 minutes, 3 days per week hitting each major muscle group at least once and working it to fatigue. Routine is changed every three weeks to avoid boredom and adaptation.

Stay healthy and live well longer. Learn more about personalized Cenegenics programs and the science behind age management medicine.