

Physical Fitness Cuts Heart, Death Risk¹

Study Shows Cardiorespiratory Fitness Helps Reduce Risk of Heart Disease

By Jennifer Warner WebMD Health News May 20, 2009

Indledning af Leading Education ©

Denne artikel omhandler effekten af fysisk aktivitet set i forhold til for tidlig død samt forskellige hjertesygdomme.

Termen "Cardiorespiratory fitness, forkortet CRF" i artiklen, kan oversættes med konditionstræning eller kredsløbstræning.

Enheden "1 Met (Metabolic Equivalent)" er lig med iltoptagelsen i hvile (VO_2 max. i hvile) og har værdien 3,5 ml O_2 /kg/min. Så hvis man har en iltoptagelse på 10 Met, så skal tallet altså ganges med 3,5 for at få konditallet, som i dette tilfælde vil blive 35, svarende til et normalt kondital for mænd i alderen 40-49 år.

People who are physically fit, as measured by a high level of cardiorespiratory fitness (CRF), are less likely to develop heart disease and less likely to die from any cause, a study shows.

Researchers say it's rare for doctors to consider cardiorespiratory fitness in evaluating a person's risk of future heart disease or death, mostly because the degree of risk reduction associated with different levels of physical fitness was unclear.

But a review of studies shows that people with a low level of cardiorespiratory fitness have a 70% higher risk of death from any cause compared with those with a high level of fitness.

"We suggest that CRF, which can be readily assessed by an exercise stress test, could be useful for prediction of [heart disease] and all-cause mortality risk in a primary care medical practice," write researcher Satoru Kodama, MD, PhD, of the University of Tsukuba Institute of Clinical Medicine in Ibaraki, Japan, and colleagues in the *Journal of the American Medical Association*.

Cardiorespiratory Fitness for Long Life

In the review, researchers analyzed the relationship between physical fitness, expressed by cardiorespiratory fitness, and the risk of death found in 33 different studies involving nearly 190,000 people.

¹ Kilde: Heart Disease Health Center, via Sports Medicine Bulletin from ACSM (American College of Sports Medicine).



Cardiorespiratory fitness is measured through exercise stress testing, in which participants typically exercise by walking on a treadmill until they become fatigued or feel exhaustion. CRF was then estimated as maximal aerobic capacity expressed in metabolic equivalents (METs).

METs indicate the amount of oxygen the body consumes during activity and represents a standard scale on which to measure exercise workload. One MET is equivalent to the oxygen the body uses at rest. Being able to attain a high degree of oxygen use during exercise, and therefore have a high MET level, is an indicator of physical fitness.

The researchers found that compared to those with a high CRF, those with low cardiorespiratory fitness had a 70% higher risk of death from any cause and a 56% higher risk of heart disease events, such as heart attack or stroke. Compared to those with an intermediate level of physical fitness, those with a low CRF had a 40% higher risk of death from any cause and 47% higher risk of heart events.

Researchers say a minimal level of cardiorespiratory fitness of 7.9 METs may be important for overall health. Expressed in terms of walking speed, men around 50 years of age should be able to walk at a continuous speed of 4 miles per hour and women should be able to walk 3 miles per hour, on level ground, or be able to complete at least six minutes of a standard treadmill stress test (which involves walking up an incline, but at a slower pace).

They found even a 1-MET increase in physical fitness was associated with a 13% lower risk of death from any cause and 15% lower risk of heart disease. To put that in perspective, the difference between riding a cart and walking while playing golf is 1 MET level.