

PHYSICAL FITNESS LEVEL MAY BE THE BEST PREDICTOR OF MORTALITY.



Traditionally, your doctor may have assessed your health with a series of tests that indicate your exposure to the archetypal health risk factors.

Typically these metrics may have included blood tests for cholesterol and triglycerides or glucose and insulin levels for diabetes. And perhaps they included blood pressure for hypertension, BMI tests to assess if you are a healthy weight range and maybe they'd enquire if you're a smoker.

But other than asking if you get any physical activity in your life how often would your doctor chuck you on a treadmill or ergo bike to assess physical fitness levels?

Recent research shows that low cardio respiratory fitness (CRF) may be the most significant predictor of mortality, even above obesity, diabetes, high cholesterol, hypertension and even smoking.

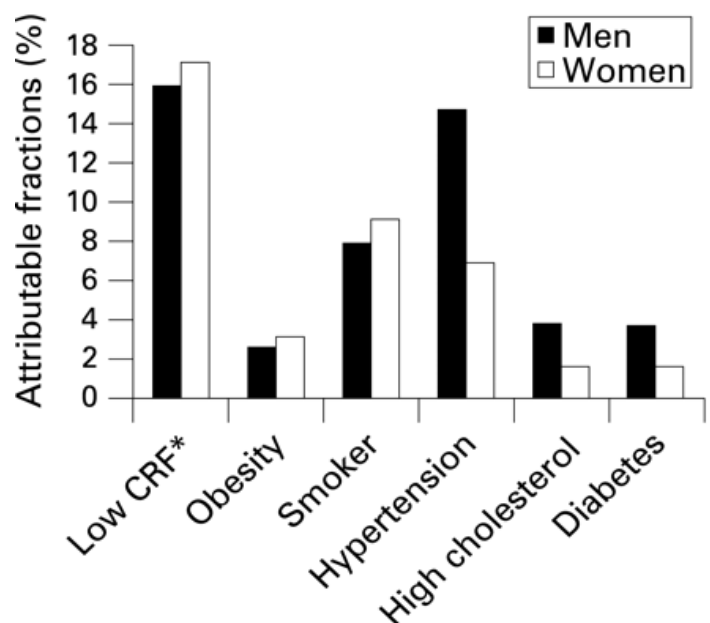
Obesity, smoking and the blood metrics usually cop the brunt of the risk factor warning bells, and while none of these can be overlooked it certainly goes without saying that fitness itself should perhaps become the biggest focus of all.

It might seem obvious to most – “Of course physical activity and fitness is important because this REDUCES obesity, and reducing obesity REDUCES diabetes, so it effects all of these risk factors including the bloods!” Yes, but what the data shows is that fitness also outweighs the other metrics EVEN IN THEIR PRESENCE.

When the researchers look at Obesity and Mortality they obviously see a strong correlation, but when they adjust for fitness levels the association goes away. When they look at Cardio Respiratory Fitness (CRF) and Mortality, however, even after adjusting for Obesity (bodyfat % and waist circumference) the association doesn't go away.

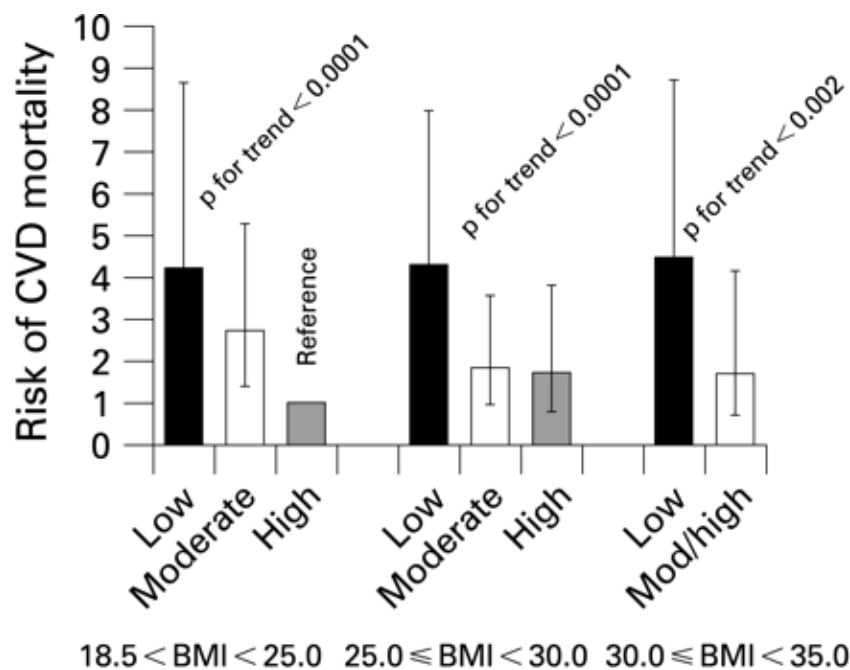
When research data is accumulated they have to essentially measure the 'weighting' that each risk factor has on the mortality rate of a population. The 'Attributable Fraction' estimates the strength of association between an exposure (to that risk) and the outcome as well as the prevalence of that factor in the population.

The graph to the right shows that the factor attributing the greatest 'weighting' is Low CRF, and this is by substantially more than all the other mainstream factors (excluding hypertension in men which is closely behind).



Many times you may have met people that contradict the obese stereotype and despite their overweight appearance can actually possess a pretty decent fitness level. There are many people that train cardio fitness sufficiently but are still overweight. These people make the category of high BMI with high CRF, and the research shows these fat but fit people have less than HALF the mortality rate of their overweight counterparts that don't have the fitness.

The below chart shows three different BMI categories (normal 18.5-25, overweight 25-30, and obese 30-35) each with three different fitness levels (low, moderate and high) and you can see that the risk of death from cardiovascular disease was almost identical throughout the three BMI categories for those with LOW CRF. Even obese people with moderate to high fitness had lower mortality risk than unfit normal-range BMI people, by half!



By no means does this assume that obesity, or any risk factor for that matter, should be overlooked, as it is definitely a key problematic area in modern society and should be curbed as much as possible. However, physical fitness may perhaps be the more important factor to focus on when improving health and decreasing mortality, and hopefully, if extra physical activity and fitness is prioritised it would have a flow on effect of decreasing obesity and improving diabetes, thereby providing an additionally beneficial impact in-directly on the whole health status of an individual.