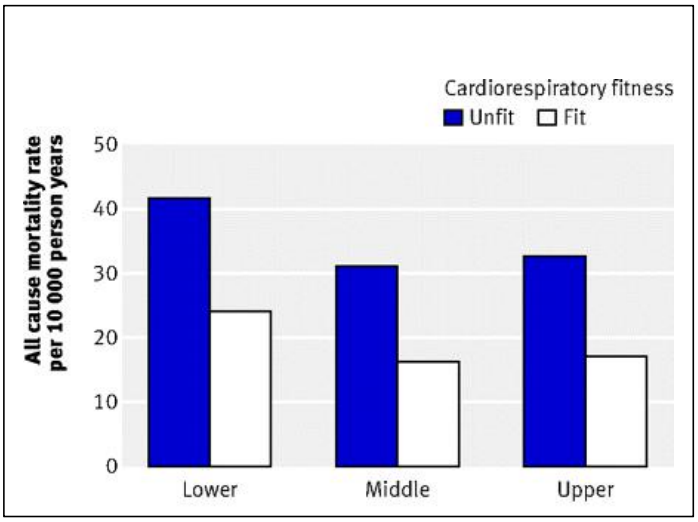
Weight Training vs Aerobics vs Both: Effect on Men's & Women's Mortality Rate

The graph below is taken from one of the rare studies that directly compares the effect of weight training, cardiorespiratory fitness and a combination of both on men's mortality rate. It was taken from this study which included nearly 9,000 men over almost 19 years. Each section of the graph represents the strength levels of each group from lowest to highest. It shows a much larger effect of cardiorespiratory fitness alone on mortality rate than weight resistance alone.



There was a 42% decrease in mortality over people that did little or nothing of either one (the first bars on the left). While weight training without cardiorespiratory fitness decreased mortality about 26% (the 2nd blue bar compared to the 1st blue bar). But a combination of both had a remarkable 61% decrease in mortality! (the 3rd white bar compared to the 1st blue bar). This shows an additive effect of weight training on mortality rate over and above cardiorespiratory fitness alone.
The cardiorespiratory fitness levels correspond to approximately the excellent category as shown in the VO2 fitness chart on the calculator page. It's important to note that there was no mortality benefit for strength increases beyond the middle group. The middle group category corresponds to a bench press 1 rep max of 90% of one's body weight while the leg press is 170%. To estimate the equivalent 8 rep max see the conversion calculator on the calculator page.

Also, this study on women showed a similar additive effect when comparing cardiorespiratory fitness to weight training. Women in this study achieved an additional reduction in mortality rate of 20% more than women that did just cardio exercise for 150 minutes or more a week. Women only had to weight train for between *1 to 19 minutes a week* to achieve this. With no significantly lower mortality benefits for more training. However, in this study the intensity of the aerobic exercise was not defined, only the volume. If you combine this finding with the conclusion for women in my article "How much cardio exercise do you need for maximum health benefits?", that just 15 minutes a day of very brisk walking gives maximal mortality to women. Then women could achieve maximum mortality benefits with just 105 minutes a week of high end moderate intensity aerobic combined with less than 20 minutes a week of weight training. See the fitness page for workout routines based on these findings.

In conclusion once again we see that the combination of aerobics and weight resistance is the most powerful one two punch there is to achieve not only the longest life, but your greatest "health span". Which is simply having the best overall health and fitness at any age that you can possibly achieve. One thing you should realize is that the strength levels quoted above for men can easily be achieved by an average man with minimal time in the gym. While the cardiorespiratory fitness levels can be achieved by following the recommendations from my research article entitled "How much cardio exercise do you need for maximum health benefits?"