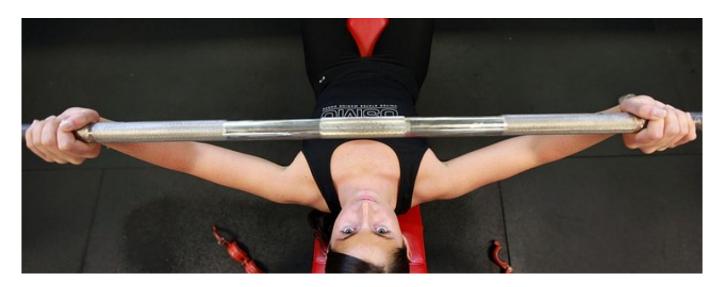


published in Reader's Digest, 13 July 2015

link to Reader's Digest article [1]

heart [2] stroke [3]



Your heart is about the size of your fist. Recent media reports suggest that as well as telling you something about the size of your heart, your hand can tell you your stroke, heart attack and death risk.

# What has grip got to do with life expectancy?

This idea is not new. After the atomic bombing of Hiroshima in 1945, studies were carried out on thousands of survivors, testing all aspects of bodily function over many years. Radiation did not affect grip strength; however, a surprise finding was that **grip strength in general was a strong indicator of life expectancy**. In a separate study starting in 1965, involving thousands of World War 2 war veterans living in Hawaii, grip strength again seemed to go hand-in-hand with life expectancy.

The <u>largest study to date</u> [4], involving nearly 140,000 people in 17 countries, reported in 2015 that **people with lower grip strength had a higher mortality rate and were more likely to suffer a heart attack or stroke**. Grip strength was even suggested to be a more accurate <u>test than blood pressure</u> [5]! And you have to hand it to the researchers: they did not include those who became ill soon after the study started in their results. In this way they could be sure that poor grip strength was not simply the consequence of a pre-existing condition which shortened the participant's lifespan—we all know how weak we become as soon as we are ill.

# What grip strength can reveal about your health

A strong grip is a sign of big muscles (at least in the upper arm, but probably throughout the body, unless you've been exclusively exercising your arms). Muscle is a valuable store of glucose, protein and fat: all important energy supplies. What's more, the glucose stores can protect against diabetes [6], whilst the protein stores are vital in the immune system. So big muscles are good news for health. Strong muscles are also a sign of a healthy nervous system: essential to make the muscles contract.





### Muscles can act as windows to your past and present health

If you were struck with a debilitating illness in early-life, this might have weakened your muscles and shortened your lifespan. Good muscle strength could also be an indicator of better childhood and current nutrition, which will make for a healthy heart too. And of course, muscle strength indicates how physically active you are, and exercise has a host of health benefits.

### Anyone for grip training?

Grip training is gaining popularity, and real contests take place called 'World's Strongest Hands' and 'Mighty Mitts'. Events include ripping phonebooks in half and bending metal horseshoes into hearts. A word of caution, however: **strong hands do not always indicate** <u>a strong heart</u> [7]. Especially not in the case of some bodybuilders who have used anabolic steroids for strength and died tragically young of a heart attack.

Others with strong hands but heart trouble include super-strong Arnold Schwarzenegger, born with a faulty heart valve, and the memorable ex-bodybuilder star of *The Green Mile*, Michael Clarke Duncan, who died unexpectedly from a heart attack. Conversely, a strong heart but weak hands can occur due to trauma or <u>arthritis</u> [8].

Let's not grip this research too tightly then, but use it as a guiding hand to encourage general strength and wellbeing.



Source URL: https://helencowan.co.uk/strong-hands-strong-heart-does-grip-strength-show-life-expectancy

#### Links

[1] http://www.readersdigest.co.uk/health/health-centre/strong-hands-strong-heart-does-grip-strength-show-life-expectancy [2] https://helencowan.co.uk/../tags/heart [3] https://helencowan.co.uk/../tags/stroke [4] http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)62000-6/abstract [5] http://www.readersdigest.co.uk/health/health-a-z/blood-pressure/high-blood-pressure-treatments-and-remedies [6] http://www.diabetes.co.uk/body/muscular-system.html [7] http://www.readersdigest.co.uk/health/health-centre/how-does-heart-keep-beating-without-getting-tired [8] http://www.readersdigest.co.uk/health/health-a-z/arthritis/what-arthritis-remedies-and-treatments

