

Spring Chicken – FUN FACTS

- Worldwide, life expectancy in the longest-lived populations has been increasing at a steady rate of 2.4 years per decade—since the 1840s. Yet in some areas of the US, among some populations, life expectancies are beginning to *decline*, due to factors like obesity and poor diets. 70 percent of Baby Boomers are overweight or obese.
- There are more people over age 65—in the US and even in places like India and China—than ever in history; in the US, 10,000 Baby Boomers celebrate their 65th birthdays every single day.
- Human beings are among the longest-lived animals on earth, but not even close to bowhead whales (200 years) or ocean clams (500+ years), among others.
- Some very long-lived animals, including certain bats, lobsters, some species of fish, and the naked mole rat, display almost no signs of aging at all.
- Women live longer than men—everyone knows that—but men 85 and older tend to be healthier and more functional than women the same age.
- One of the great pioneers in the study of aging in the 1960s was a British scientist named Alex Comfort, better known as the author of *The Joy of Sex*. (Pretty sure there's a connection there.)
- Americans spent \$1.4 billion on human growth hormone (HGH) in 2012, much of it for (illegal) “anti-aging” purposes. Many scientists believe excess growth hormone actually *accelerates* the aging process.
- In the lab, scientists have doubled the lifespan of lab mice (in part, by knocking out their growth-hormone receptors) and achieved a *tenfold* lifespan increase in nematode worms.
- Caloric restriction has been known since 1935 to increase lifespan in many animals, by as much as 50 percent. But short periods of fasting have also shown equal or even greater health benefits in some cases.
- Some studies have shown that intermittent fasting can produce weight loss similar to strict dieting, even though one is eating just as many calories as normal.
- There is even evidence that intermittent fasting can make chemotherapy more effective.
- People who run for 100 minutes per week can expect to live seven years longer than those who do nothing.

- Simple endurance exercise, in addition to being good for cardiovascular health, has been shown to slow or reverse the aging of muscle tissue at the level of gene expression.
- Exercise also staves off the aging of our mitochondria, the powerplants of our cells.
- After Alzheimer's, loss of muscle is the second-leading cause of nursing home admission.
- A large study has shown that up to 50 percent of Alzheimer's cases may be preventable, by addressing factors such as obesity, high blood pressure, and poor cholesterol.
- The standard three-part cholesterol test used by doctors in the US is virtually useless for predicting heart-attack risk; there is another, more detailed blood panel that is widely used in Europe but almost unknown here.
- One study found that regular users of ibuprofen were 44 percent less likely to develop Alzheimer's disease.
- Resveratrol and curcumin, two widely touted natural supplements (found in red wine and turmeric, respectively), both have extremely poor bioavailability—very little gets into our system.
- Taking antioxidant supplements does not reduce mortality risk—and may actually increase it. The supplements appear to block the body's own, natural antioxidant mechanisms.
- A widely-used diabetes drug, metformin, has been shown to increase lifespan in lab animals—and may also do so in humans. Studies have found that people taking metformin have substantially lower cancer risk.
- Another drug called rapamycin, originally found in the soil of Easter Island, is being tested right now as a possible anti-aging drug, in both dogs and humans.
- More than 60 percent of adults over 65 have herpes—an invisible member of the herpes family called CMV, which produces few symptoms but which ties up the immune system, making older people vulnerable to opportunistic infections
- Experiments involving parabiosis, or surgically attaching two lab animals, have identified factors in young blood that systematically rejuvenate older animals. Some of these factors are being researched as possible anti-aging drugs