**Longevity**

**Aging-reversal treatment: Scientists studying age-related disease may be one step closer to a therapy that could help reverse the ravages of time. Researchers in the Netherlands have been investigating senescent cells, "zombie" cells that have stopped dividing and that can contribute to illnesses such as heart disease, arthritis, and diabetes. For a new study, the team designed a molecule to selectively kill these cells in mutant mice that age rapidly, without harming healthy cells. The therapy restored the rodents' kidney function, stimulated the growth of their fur, and improved their stamina. The researchers are now studying whether the mice also live longer. They believe the procedure could potentially be used to treat age-related disorders in humans and even to kill cancer cells, which share certain features with senescent cells. "It's definitely a landmark advance," University of Montreal biologist Francis Rodier, who wasn't involved in the study, tells Science. "This is the first time that somebody has shown that you can get rid of senescent cells without having any obvious side effects. *(The Week magazine, April 14, 2017)***

***\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**The disparity in life span between America's rich and poor is widening, according to a new Brookings Institution report. For men born in 1920, there was a six-year difference in the life spans of the top 10 percent and bottom 10 percent of earners; for men born in 1950, there was a 14-year difference. For women, the gap more than doubled during this period, from a 4.7-year difference to 13. *(The New York Times, as it appeared in The Week magazine, February 26, 2016)***

**Americans' shortened life spans: The life expectancy of Americans is lower than that of people living in other high-income countries, and a new study explains why: "We're inflicting earlier death on ourselves with self-destructive behavior. Car accidents, gun violence, and drug overdoses kill 100,000 people in the U.S. each year, which helps explain why American men and women die about 2.2 years earlier than residents of Austria, Denmark, Finland, Germany, Italy, Japan, the Netherlands, Norway, Portugal, Spain, Sweden, and the United Kingdom, according to a new study by the National Center for Health Statistics. American men and women have a life expectancy of 76.4 and 81.2 years, respectively, compared with 78.6 and 83.4 years of their peers abroad. "It seems staggering that we get two fewer years of life just for living here," study author Andrew Fenelon tells the Associated Press. Gun deaths, car crashes, and overdoses are responsible for half that difference, with the other lost year the result of higher infant mortality, health problems related to diet, and other factors. *(The Week magazine, February 26, 2016)***

***\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**Bookworms live longer: Bibliophilia is good for your health: A new study suggests that people who read books regularly may add nearly two years to their lives. Researchers at Tale University examined the reading habits of 3,635 people over 50 and found that the ones who buried their noses in a book for more than 3.5 hours each week -- or 30 minutes a day -- were 23 percent less likely to die over the course of the 12-year study, reports The Christian Science Monitor. Even after variables such as health, education, and income were taken into account, bookworms were 17 percent less likely to die over the same period than their non-reading peers. It's unclear why reading is associated with this "survival advantage," but the researchers suggest delving into novels promoted cognitive processes, such as empathy and emotional intelligence, which can boost longevity. Unfortunately, reading magazines and newspapers may not provide the same benefit. "We uncovered that this effect is likely because books engage the reader's mind more," says researcher Avni Bavishi, "providing more cognitive benefit, and therefore increasing the life span." *(The Week magazine, September 2, 2016)***

**Break a sweat, boost longevity: Walking and gardening are fine, but to get the most benefit from exercise, you'll need to break a sweat. While it has long been acknowledged that any level of physical activity offers health benefits, a new study suggests vigorous exercise is more important than previously thought in helping people live longer. Australian researchers monitored the health and exercise habits of 200,000 people ages 45 and over for six years. They found that those who regularly broke a sweat with activities such as jogging or playing competitive tennis had a mortality rate up to 13 percent lower than those who stuck to more gentle exercise, such as social tennis or household chores. "The benefits of vigorous activity applied to men and women of all ages, and were independent of the total amount of time spent being active," the study's lead author, Klaus Gebel, tells Forbes.com. Previous research has indicated that interval training, which mixes short bursts of maximum effort with longer spells of more moderate exercise, provides optimum benefits. *(The Week magazine, April 24, 2015)***

**A cave man’s life span was only 18 years. (Jack Kreismer, in The Bathroom Trivia Book , p. 75)**

**Before 1800, no country in the world had an average life expectancy at birth beyond 40. Today there is not a country that does not. *(The Economist, as it appeared in The Week magazine, July 21, 2017)***

**Dogs boost longevity: Any dog owner can tell you a canine companion makes life better. But new research has found a pooch can also make life longer and healthier -- particularly if you live alone. Scientists in Sweden examined the health and dog-ownership records of some 3.4 million people between 40 and 80 years old. They found that for those who live alone, owning a dog is associated with a 33 percent lower risk of death and a 36 percent lower risk of dying from heart disease over a 12-year period. The study found that dog ownership was also beneficial for those who didn't live alone, cutting their overall risk of death by 11 percent, reports CNN.com. The researchers say it's unclear whether the companionship and emotional support a dog provides alone explains their findings, or whether lifestyle changes associated with owning a dog -- including taking Fido out for walks -- are also a factor. "There are numerous studies showing that dog owners get more physical activity, which could help to prolong a healthy life," says senior researcher Tove Fall. It's also possible that exposure to a dog's germs, fur, and slobber could also strengthen the immune system. *(The Week magazine, December 8, 2017)***

**Eccentrics live five to 10 years longer than conformists, says a medical authority at Royal Edinburgh Hospital after a lengthy longevity study. Eccentrics just aren't all that worried about things, including physical complaints they may have. They don't care as much and have less stress. *(L. M. Boyd)***

**Family boosts longevity: It's become conventional wisdom that having lots of friends is essential to happiness and longevity. But a new study at the University of Toronto suggests that family bonds are far more important to adult's well-being than friendships. Researchers surveyed some 3,000 people between 57 and 85, asking about their closest relationships, health, and well-being, and found that those who felt "extremely close" to several family members had a 6 percent risk of dying within five years. By contrast, people who lacked close family ties had a 14 percent mortality risk over the same period. Even those who weren't close to their relatives had lower odds of death than people with little or no family. "Because you can choose your friends, you might expect that relationships with friends would be more important for mortality, since you might be better able to customize your friend network," study author James Iveniuk tells WashingtonPost.com. "But it is the people who in some sense you cannot choose, and who also have little choice about choosing you, who seem to provide the greater benefit to longevity." *(The Week magazine, September 9, 2016)***

**The last surviving person born in the 19th century died at her home in northern Italy last week. Emma Morano, 117, was the world's oldest person, and attributed her longevity to her genetics and her diet of three eggs a day -- two of them raw -- as well as her decision to stay single. Violet Brown, who was born in Jamaica on March 10, 1900, is now the oldest person on Earth. *(The Guardian.com, as it appeared in The Week magazine, April 28, 2017)***

**Baseball: Connie Mack took a liking to Philadelphia and set a record for managerial longevity -- 50 years -- that likely will never be surpassed. Of course, it helped that he was the owner of the club all that time. *(Jim Benton, in Rocky Mountain News)***

**The mole rat's longevity secret: Naked mole rats -- hairless rodents that reside underground in East Africa -- have amazed scientists with their longevity. Though they are the same size as their mice cousins, they can live for 30 years, whereas mice live only about two. Now researchers have discovered one possible reason for the mole rats' extraordinary lifespan. They are extremely accurate at producing proteins, the building blocks of cells. In humans and other animals, the accumulation proteins that contain errors, known as "junk" proteins, clogs cells and leads to signs of aging: sagging skin, slower metabolism, and diseases such as Alzheimer's. But in producing proteins, naked mole rats make up to 10 times fewer mistakes than mice do. Researchers say understanding how mole rats stave off aging could lead to new treatments for people. "Every time we look at the naked mole rat," study author Vera Gorbunova of the University of Rochester tells LATimes.com, "there's something unexpected and something that could be potentially useful to humans." Another example: Mole rats never get cancer. *(The Week magazine, October 25, 2013)***

**The oldest person in the world, Jeralean Talley of Michigan, turned 116 last week. The two oldest persons ever known to science, Sarah Knauss of Pennsylvania and Jeanne Calment of France, reached 119 and 122, respectively. *(FiveThirtyEight.com, as it appeared in The Week magazine, June 5, 2015)***

**Longevity Secrets Revealed: Scientists struggle to estimate exactly how much one specific unhealthy behavior -- such as smoking or drinking -- can affect longevity. But a team at the University of Edinburgh claims to have found a way, reports ScienceDaily.com. The researchers analyzed the genetic makeup of more than 600,000 people from three different continents and focused on genes that have been linked to lifestyle choices such as alcohol consumption or addiction. This method limited the chances that findings for specific behaviors would be affected by other factors. The researchers concluded that people lose two months of their life for every kilogram they are overweight, and seven years if they smoke 20 cigarettes a day. On the upside, smokers who quit can essentially claw back those lost years, and every additional year of schooling adds 11 months to a person's life span. The study also identified two genes that affect longevity: One is linked to cholesterol levels and cuts life expectancy by about eight months; the other is connected to the body's immune system and adds about six months. Co-author Peter Joshi says although genetics affects longevity, people have "even more influence" through their lifestyle choices. *(The Week magazine, November 3, 2017)***

**Centuries-old sharks: A her recent death, a female Greenland shark was nearly 400 years old, new research suggests, making her the longest-lived vertebrate on record. In other words, the charcoal-colored fish was swimming the North Atlantic while Rembrandt was turning out selfies and the Pilgrims were settling Plymouth, Mass. Greenland sharks have a well-established reputation for longevity. In the 1930s a Danish researcher tagged several hundred and discovered that they grow less than half an inch per year, suggesting it would take centuries for them to reach their maximum length of about 22 feet. In the new study, a team from the University of Copenhagen verified this theory by examining 28 female Greenland sharks and carbon dating their eye lenses, which contain proteins that accumulate over time and give clues to the animal's age. The researchers determined that the oldest died at 392. The sharks' anti-aging secret remains something of a mystery, though it's believed their frigid habitat slows down biological processes. The research "definitely tells us that this creature is extraordinary," study author Julius Nielsen tells The Guardian (U.K.). "It should be considered among the absolute oldest animals in the world." *(The Week magazine, September 2, 2016)***

**Smart people live longer: People with high IQs enjoy many advantages in life, and new research suggests greater longevity is one of them. A team at the University of Edinburgh looked at health data for over 75,000 people born in Scotland in 1936, all of whom took standardized intelligence tests at age 11. The researchers found that over the 68-year study period, ending in 2015, those with higher IQ scores were likely to live longer than their peers. Greater intelligence was linked with a 28 percent lower risk of death from lung disease, a 25 percent drop in the risk for heart disease, and a 24 percent lower risk for stroke. The kids with higher IQs were also less likely to die from injuries, digestive disease, dementia, or smoking-related cancers -- regardless of their sex or socioeconomic status. The researchers speculate that people with higher IQs are more likely to take care of their health, leading them to exercise more, smoke less, and seek out medical attention when they need it. "We don't know yet why intelligence from childhood and longevity are related, and we are keeping an open mind," researcher Ian Deary tells The New York Times. "Lifestyles, education, deprivation, and genetics may all play a part." *(The Week magazine, July 21, 2017)***

**There's a theory around that if a fellow doesn't smoke, drink, overeat, or go with girls, he'll live a lot longer. The trouble is, we won't know for sure until somebody tries it. *(Jack Wasserman, in Vancouver, B.C., Sun)***

**Life expectancy will jump across industrialized nations in the next two decades -- but not in the U.S. By 2030, a new study found, women in South Korea will be able to expect to live to 91, while women in France, Japan, Spain and Switzerland will have life expectancies of 88. Average life expectancy in the U.S, will climb by less than three years in the same period, with women reaching 83 and men79. Experts attribute the differences to diet, income inequality, and access to health care. *(WashingtonPost.com, as it appeared in The Week magazine, March 10, 2017)***

**Soviet medical researchers after lengthy studies decided these seem to be what contribute most to the longevity of their healthy elderly people: hard work, marriage, children, living in high places, eating moderately, drinking well water and talking a lot. *(L. M. Boyd)***

**Whole grains linked to longevity: Consuming more whole grains can lead to a long life span and significantly decrease the risk of death from cardiovascular disease, a new study has found. Researchers at the Harvard School of Public Health looked at the dietary habits of 118,000 Americans who participated in periodic health surveys over 25 years. They found that individuals who ate at least 28 grams -- roughly one serving -- of whole grains a day reduced their overall risk of dying during the study period 5 percent, and their risk of dying from cardiovascular disease 9 percent. Those who replaced one daily serving of red meat with a serving of whole grains reduced their mortality nearly 20 percent. It's unclear what "dose" of whole grains is most beneficial, but the current evidence suggests "the more the better," study author Qi Sun tells Reuters.com. Whole grains, such as whole wheat flour, brown rice, and whole oats, are rich in fiber and healthy compounds such as magnesium and lignans, and do not cause a rapid rise in blood sugar, the way refined grains do. *(The Week magazine, January 23, 2015)***

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