"LIVE LONG AND PROSPER." Profound words a couple of generations ago from Mr. Spock of Star Trek fame.

The fact is, nearly everyone wants to live longer. And the desire to do so isn’t new. Five centuries ago, the Spanish explorer Juan Ponce de León searched for a fountain of youth. In the 1930s, Americans became enthralled by the Hunzas, a traditional people in the Himalayas, whose members reportedly lived past 100 years of age. Now, many scientists are studying the centenarians of Okinawa.

The science is finally catching up with our pipe dreams, and much of that science now focuses on nutrition. Here’s why: aging results from a deterioration of gene function and cell metabolism. Because nutrients form the foundation of our biochemistry, they can be used to fine-tune how the body functions at its most fundamental levels.

Will supplements enable you to live longer? The research indicates that they can certainly help. How will you be able to tell as your biological clock moves forward? Pay attention to two clues—your energy levels (and a lack of fatigue) and your good health (in comparison to your peers).

Based on the research, these are our top seven youth-preserving nutrients, along with some of the cutting-edge science that put them on our list.

**10 Quick Tips for Adding Years to Your Life**

1. **Eat less.** Fewer calories can increase life expectancy.
2. **Eat more veggies.** They’re loaded with protective antioxidants.
3. **Eat fresh, not processed foods.** Fresh foods are higher in nutrients, while packaged foods tend to contain a lot of additives.
4. **Exercise regularly.** Physical activity enhances metabolic activities.
5. **Practice optimism.** Having a positive outlook on life is associated with longevity.
6. **Read books.** Stimulating the mind helps keep it sharp.
7. **Learn new things.** Like reading, learning to do different things creates new neural connections in the brain.
8. **Enjoy creativity.** Being creative or appreciating the creativity of others, such as their art and music, enhances brain function.
9. **Get married.** Men who are married tend to live longer than those who are single.
10. **Watch your weight.** Excess weight increases your risk of diabetes, heart disease, and cancer—diseases that shorten life.

—Jack Challem

1. **Resveratrol.** This antioxidant, found in purple grape skins, blueberries, and cranberries, caught the attention of scientists when they discovered that it turns on the SIRT1 gene, which protects against many diseases, including diabetes, and lengthens life expectancy. Nearly all of the research has been done on cells, worms, and mice—though they all have the same SIRT1 gene that humans have—and resveratrol increased their life expectancy by 15 percent. That’s about an extra 11 years in human terms.

Should you bet your money on the lab tests on worms and mice? Consider this: last year, a major pharmaceutical company plunked down $720 million to buy a company researching resveratrol, presumably betting on a big payoff. That company gave resveratrol to men with type 2 diabetes, and their blood sugar and insulin levels improved. The improvement is associated with greater longevity. Most resveratrol supplements are now derived from Japanese knotweed (*Polygonum cuspidatum*). Try 100 to 200 mg daily.

2. **Coenzyme Q10.** Nobel laureate Albert Szent-Györgyi, MD, called cellular energy the "currency of life." Indeed, energy levels are a good indicator of overall health, and obviously staying healthy does more for longevity than being sick. CoQ10 was the basis of the 1978 Nobel Prize in chemistry, awarded to Peter Mitchell, PhD. The vitamin-like nutrient is needed to make energy in every cell of the body—it works by helping shuttle around energy-containing electrons.

Studies have found that the most
MIGHTY MAGNESIUM

Everyone needs more magnesium as they age (in fact, aging is a risk factor for magnesium deficiency). Keep in mind that magnesium is low in our soil and in the standard American diet, so supplements are necessary. Magnesium is vital to healthful aging and disease prevention. For example, studies have shown that magnesium is deficient in patients with Alzheimer's and Parkinson's diseases. A deficiency of this mineral can cause muscle pain and spasms, heart disease, high cholesterol, insomnia and fatigue. In addition to supplements, consider taking baths with magnesium salts. Absorbing magnesium through the skin stimulates the production of DHEA, the antiaging hormone.

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NATURAL CALM from Peter Gillham’s Natural Vitality features a highly absorbable form of magnesium powder. It helps restore healthful magnesium levels and balance calcium intake.

energetic tissues, such as the heart and brain, have the greatest CoQ10 requirements. High doses of the nutrient have been used to reverse cardiomyopathy (a disease of the heart muscle) and heart failure. Some research also suggests that it can boost the energy of immune cells and help them fight cancer. Take 30 to 100 mg preventively, 200 to 400 mg to protect against serious diseases.

3. Carnitine. Carnitine helps transport fats in the cells so they can be used as a fuel source. Several related molecules, including acetyl-L-carnitine, work closely with CoQ10 in energy produc-
TURN BACK THE CLOCK!

For a longer and healthier life, make the following “attitude adjustments” about aging:

1. BREAK FREE FROM DENIAL. Acknowledge that one day all of us will be old—if we are fortunate. Some people avoid learning about aging out of fear. Or they believe if they don’t think about it, it will never happen. Ironically, avoidance can lead to premature aging. A recent study showed that a positive attitude about the topic of aging could add an average of 7.5 years to a person’s life.

2. START THINKING LONG-TERM. When ragtime composer Eubie Blake hit 100, he famously said, “If I had known I was going to live this long, I would have taken better care of myself.” You’re never too young to think about healthy aging. Your risk for an unhealthy future can be greatly reduced by lifestyle choices you start making today.

3. AVOID A “WHAT’S-THE-USE?” MIND-SET. No matter how long you’ve been a junk food junkie or couch potato, it’s never too late to enhance your quality of life. Family history and genetics account for about one-third of life expectancy. The remaining two-thirds is a combination of nutrition, physical activity, and attitude.

4. NURTURE YOUR SPIRIT. Studies on centenarians have found that spirituality and a sense of humor are the most common traits in people who reach that longevity benchmark—all over the world and at every socioeconomic level.

5. RECOGNIZE THAT YOU ARE NOT ALONE. We are in the midst of what has been called an age wave. Every 8 seconds, someone in the United States turns 50. Do what you can to stay healthy and ride the wave.

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tion, boosting cell function. In a recent study, doctors used 2 g of carnitine (or placebos) daily to treat 66 centenarians suffering from age-related fatigue. After six months, the carnitine supplements led to significant reductions in physical and mental fatigue, with improvements in cognition and muscle mass.

Studies in animals have found that a combination of acetyl-L-carnitine and alpha-lipoic acid can reverse age-related declines in both physical and mental functioning. A human study has been completed, but the results have not yet been published.

Take 1 to 2 g of carnitine or acetyl-L-carnitine daily. Consider adding 1,000 mg of vitamin C and 200 mg of alpha-lipoic acid.

4. B-Complex Vitamins. Vitamin B12, folic acid, and vitamins B2 and B3 play key roles in maintaining normal gene synthesis, repair, and regulation—i.e., in keeping genes on track as we age. Supplements can reduce gene damage in otherwise healthy people. Some B vitamins, including vitamins B1, B2, and B3, work hand in hand with CoQ10 and carnitine in energy production. Take a high-potency B-complex or multivitamin supplement daily.

5. Cat’s Claw. Researchers at Lund University, in Sweden, found that extracts of cat’s claw (Uncaria tomentosa), a tropical rain forest plant, can enhance DNA repair—a key step in slowing the aging process and reducing the risk of cancer. In human studies, 250 to 350 mg of the extract, known as AC-11, stimulated the repair of DNA, compared with placebos. Take 350 mg daily.

6. Vitamin C. Vitamin C is a multitasking nutrient needed for immunity, strong bones, and healthy skin and other tissues. Nearly all animals make their own vitamin C from blood sugar, but humans do not—the consequence of a genetic mutation millions of years ago.

Expert Prevention Tip: Nutrition

The best-known antioxidants are vitamins E and C, but others are important as well. Antioxidant flavonoids and carotenoids form pigments in plants, defending them against damaging ultraviolet rays, insects, and other stresses. Flavonoids include quercetin, proanthocyanidins, and curcuminoids. Carotenoids include beta-carotene, lutein, and lycopene.