

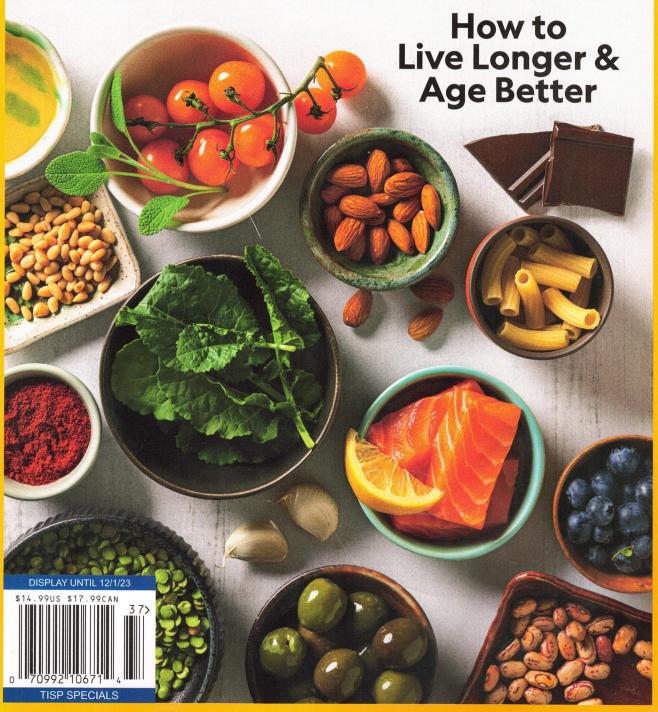
What Impacts the Aging Process?

Can Certain Foods Extend Your Life?

Does Exercise
Ensure Healthy
Aging?

THE SCIENCE OF

LONGEVITY



THE IDEA OF "CURING" AGING CASTS IT AS PATHOLOGY. PUBLISHED STUDIES START, RELENTLESSLY, WITH BAD NEWS.

ageist biases have gotten worse. She and her colleagues developed a computerized linguistic program and analyzed a database of more than 400 million words from books, newspapers, magazines, and academic journals going back 200 years. The team looked at adjectives that appeared most frequently with "elderly" and similar words, and at synonyms for "old people." The language was generally positive until the late 1800s, when life expectancy for white people in America was 41 years. (Researchers at that time did not track life expectancy for other populations.) Since then, old-age-related verbiage has steadily become meaner and more dismissive. For example, the word "geezer," which first appeared in 1900, became 11 times more frequent through the 20th century.

Older people may be the last group our society feels free to mock, Levy says. She points to news reports about cruel jokes early in the COVID-19 pandemic, when people over age 65 were dying at exceptionally high rates and the term "boomer remover" became a widely shared meme on Twitter.

Reading research by scientists trying to unravel the mysteries of aging can make it hard to feel good about growing older. The idea of "curing" aging casts it as pathology. Published studies start, relentlessly, with bad news. "Aging is a degenerative process that leads to tissue dysfunction and death," begins a typical paper.

"I think by labeling aging as a disease, it ignores the many strengths of aging and the many ways that there can be growth in later life," Levy says.

The Future of Medicine

HE MORE I learned about the science of longevity, the more excited I felt about the prospects for discoveries that will benefit all of us as we grow older. But as I approached 68, I couldn't shake off nagging images of the tissue dysfunction and cell death occurring inside me.



2.8

THIRTY-YEAR-OLD MEN UNDER HEAVY STRESS SHORTEN THEIR LIFE EXPECTANCY BY 2.8 YEARS.





Steve Horvath, developer of epigenetic clocks to measure biological age, offered to run one on me-a test with the anxiety-producing name of GrimAge. I sent him two tiny vials of my blood. A few months later I received the results: My biological age was 3.3 years lower than my chronological age. The report offered a cheerful "congrats" and said, "You are already beating the clock!" Still, I felt let down. I certainly wasn't in league with some of the longevity scientists I met, like David Sinclair, who exercise religiously, fast, take supplements or off-label drugs, and seem to buck the tempest of time.

Then I thought about my mother, still enjoying life in her late 90s.

Levy's research convinced me that my mom's outlook at least partly explains her vitality. I've never heard her grumble about her birthday or say she can't do something because she's too old, a complaint I'm starting to hear from friends my age.

"No," she says, when I point this out.
"I'm not too old. I might do it slower, and I might do less of it. But I'm not too old to dance or walk or do anything I like to do."

She pauses. "Well, I wouldn't swim anymore."

"Because you haven't done it in a long time?"

"Because I don't like the way I look in a bathing suit."

- A Taking a spontaneous midday break from the restaurant she runs in Limon, Maria del Carmen Yoursrecha Paterson (at right) dances to pulsating music in a nearby bar. For Costa Ricans, living moment to moment comes naturally, as does taking the time to socialize with family and friends.
- A couple in their 80s kiss on a street in Los Angeles. They met in a senior care facility, a place they thought embodied loneliness and solitude until they fell in love.

OBODY KNOWS WHEN the innovative therapies that work so well in laboratory experiments will translate into treatments that eliminate, or even significantly ease, the illnesses that bedevil us as we grow old. Some experts believe it will happen soon, given the breathtaking pace of research.

Tzipi Strauss is one of a group of respected high-profile physicians around the world who are establishing centers for longevity medicine to harness the latest discoveries about the biology of aging. These are not shoddy strip-mall clinics that claim to dish out elixirs for long life, but clinical services with state-of-the-art technology for screening patients as they age,

tailoring guidance on prevention through lifestyle, detecting problems such as hearing loss and cognitive decline earlier than ever, and testing and dispensing promising new drugs.

Strauss plans to open one of the world's first hospital-based longevity clinics at the prestigious Sheba Medical Center, based in Tel Aviv, possibly in late 2023. She is not a specialist in gerontology but a pediatrician. Meanwhile, she serves as the hospital's director of neonatology, caring for the sickest newborns.

Her background surprised me, but she tells me it shouldn't.

"Every baby that is born today will actually live up to 100 years," she says. That may be overly optimistic, but as

WOMEN WITH HIGHLY OPTIMISTIC OUTLOOKS INCREASE THEIR LIKELIHOOD OF HEALTHY AGING BY 23 PERCENT.

she sees it, her job is not to simply make sure babies survive infancy and grow up healthy. She wants to give them their best shot at reaching the century mark with strong bodies, clear minds, and a good quality of life. "Aging," she says, "starts the minute we are born."

