

CAN YOU AGE BACKWARD?



YOU MAY be doing all you can to stave off the aging process—eating healthfully, wearing sunscreen, exercising regularly—but if you’ve been thinking that perhaps you could do more, well, you’re right.

At least that’s what some scientists are arguing when it comes to keeping Father Time at bay. Epigenetics, the study of how genes express themselves in response to environmental factors, has become all the rage among the anti-aging cognoscenti. “If the genome is the computer, the epigenome is the software,” says David Sinclair, a professor of genetics at Harvard Medical School.

The theory is that everything from radiation to stress impacts cell function and can—most dramatically—lead to diseases such as cancer, and can also prevent cells from behaving as they did when you were younger. Reduce the genetic interference and you’ll be healthier, live longer, and look like a better, more youthful version of your biological age.

So how can you do this? Sadly, it’s not by bingeing on cupcakes and episodes of *Succession*. Intermittent fasting may be one way. “Fasting activates cell defenses and turns on the trash compactor” to gobble up old proteins that slow down cells, says Sinclair, who advises going without food for 16 to 18 hours. And that’s not the only boost you get when you skip meals, whether you’re doing it daily or going on a five-day fast quarterly. “Intermittent fasting spikes growth hormone, which helps with repair and increases levels of NAD, a molecule cells use for energy,” says Richard Firshein, D.O., an integrative medicine doctor in New York. “So it’s a neat way to get some benefits of a health and longevity program without having to do a lot.”

If you can’t part with three squares a day, there’s still hope. “We don’t know if cold makes you live longer, but the science

*If you want to turn back the clock, it’s not just about the latest filler or face cream, but a lifestyle practice. By Megan Deem*

says that if you chill the body it boosts cells’ energy,” explains Sinclair. Turns out, biological stress—whether in response to extreme temperatures or hunger—can be good for our system. “It tells the body to get off its behind and do a better job of protecting us from the onslaught of chemicals and radiation,” he says. And you don’t have to freeze yourself in a cryotherapy tank (although you can); extreme temperatures can also mean high heat. “A Finnish study followed more than 2,300 men who used a sauna for two decades and found

that those who went four times a week or more and stayed in for at least 20 minutes had remarkable health benefits,” says cardiologist Jeffrey Gladden, M.D., founder of Apex Health, Human Performance & Longevity Optimization in Dallas. “Reductions in dementia, Alzheimer’s, cancer, and heart attack and stroke, to name a few.” Gladden believes that we’ve become too accustomed to luxury (escalators instead of stairs, driving instead of walking) and that even the minor stress of hiking up two flights at the office can have a positive impact. “You want to make yourself a bit uncomfortable,” he says. “That’s actually good for you.”

Still, not everyone agrees that epigenetics can thwart aging. “Aging is a really complex process, and epigenetics will certainly play a role in it,” says British biologist Nessa Carey, author of *The Epigenetics Revolution*. “However, when we say we’d be able to turn back aging, that’s a huge interpretative leap. The epigenetic system is so vast,” adds Carey, who is skeptical that one action can stop the clock. Gladden begs to differ: “We know that it’s possible to accelerate aging. Why wouldn’t the converse be true?” ■