

*Friends provide a self-esteem boost and a coping mechanism for dealing with stress.*

# Lifestyles of the Healthy and Wise

*You don't need drugs, pricey MRIs or a genetic workup to outsmart chronic conditions.*

By Janet Lee

It's obvious that the future of medicine will be about dialing in diagnoses with better screening and creating more powerful and precise treatments for all patients. But relying solely on algorithms and machines to improve outcomes ignores an area that has a huge impact on health. Lifestyle plays a huge role in many chronic conditions, such as heart disease, stroke, diabetes, and certain cancers, says Dr. Raja Jaber, an associate clinical professor of family medicine and director of the lifestyle and integrative medicine program at Stony Brook University's Renaissance School of Medicine, in New York. "In our country and even in the rest of the world, we have a lifestyle that promotes chronic diseases, and, unless we change that, the number of people who have these conditions will increase exponentially, as will health care spending."

Due to a lack of time or training, physicians often don't address lifestyle habits during office visits, says Dr. Phyllis MacGilvray, a family medicine physician and senior associate dean of academic affairs at University of South Carolina Greenville School of Medicine. But it's become so important that lifestyle medicine is now a specialty track in some medical schools. USC Greenville and Loma Linda University School of Medicine, in California, are the first two medical schools in the U.S. to have fully integrated lifestyle medicine programs, including offering lifestyle-focused electives and required courses and specialty training. "We have a young medical school. We're just finishing our first decade and we've offered it from the beginning," says MacGilvray. Through the program, new medical students learn about the power of lifestyle habits, specifically six components that have reams of research supporting their impact on health: a whole-food, plant-forward diet; exercise; restorative sleep; stress management; avoiding toxic substances and enjoying supportive relationships and social connections.

"Lifestyle interacts with genes," says Jaber. "Whatever you do—how you eat, move and even think, sends information to the system as a whole and that is translated into different genetic expression. Genes aren't set in stone. We change the expression of them, and by doing that, we change our physiology."

Here are some of the ways researchers are learning that key lifestyle factors have a definite impact on health.



*The Mediterranean diet is an excellent example of a plant-forward way of eating that emphasizes vegetables, fruit, beans, healthy fats and herbs and spices, while limiting red meat.*

## A WHOLESOME DIET

Lifestyle medicine advocates eating a plant-forward (some meat is OK), whole-food diet, since it has solid research showing its benefits. A November 2021 research review, published in *Frontiers in Cardiovascular Medicine*, evaluated 13 studies that involved more than 410,000 people. Eating a plant-based diet was significantly associated with a lower risk of cardiovascular-related death and cardiovascular disease. A 2022 study in *Diabetologia* found that predominantly consuming plants reduced the risk of Type 2

diabetes—which accounts for 90% of diabetes cases—in people who were generally healthy.

Dietitians have been trying to get the word out about the importance of food as medicine for decades, and within the next few years it might finally pay off. The Medical Nutrition Therapy Act, which would expand Medicare reimbursement, allowing coverage for seeing a dietitian, is working its way through Congress. “It’s ridiculous that they’d pay for a bypass surgery but not a person to see a dietitian to prevent a heart

attack or shrink arterial plaques,” says Lauri Wright, PhD, RDN, chair of the department of nutrition and dietetics at the University of North Florida, in Jacksonville, and a spokesperson for the Academy of Nutrition and Dietetics. Along with that, the nutrition field is seeing more specialization as well. There are dietitians who specialize in cardiology, kidney health, pediatrics, geriatrics and gastroenterology—so it’s easier than ever to figure out how to eat to address one’s specific health picture, says Wright.



## RESTORATIVE SLEEP

This June, for the first time, the American Heart Association added sleep to its heart health checklist. That’s because chronic sleep disruption has been linked with high blood pressure and cholesterol, metabolic syndrome, diabetes, cardiovascular disease and colon cancer—and that’s in otherwise healthy people. That doesn’t bode well considering three in 10 Americans reported having problems in their daily life due to insomnia, according to a 2022 survey from the American Academy of Sleep Medicine.

One common cause of sleep disturbances is sleep apnea, a condition where you stop breathing for short periods during the night (sometimes hundreds of times). “There is an epidemic of sleep apnea,” says Jaber, who points to obesity as a big culprit (more sensitive diagnostic criteria for the condition means it’s being caught and diagnosed more frequently as well). “There’s almost a two- to four-fold higher odds of having obstructive sleep apnea with weight gain,” says Dr. Vaishnavi Kundel, an assistant professor of pulmonary, critical care and sleep medicine at the Icahn School of Medicine at Mount Sinai, in New York. “It can really lead to significant sleep fragmentation where you’re not getting that nice deep consolidated sleep. That leads you to being tired and sleepy, and it affects concentration and mood. Several studies have shown it can result in increased inflammation and stress to the heart over time and potentially increase the risk of abnormal heart rhythms, heart disease and stroke.” Awareness about sleep and its importance for health is stoking a boom in sleep medicine as a specialty.

*Sticking to a regular sleep cycle—say 11 p.m. to 7 a.m.—is as important as getting adequate z’s.*

## EXERCISE

Being physically active, especially accumulating 150 minutes or more a week of moderate to vigorous intensity exercise, has been linked with numerous health benefits, including better brain, heart, liver, kidney and lung health. It helps improve sleep and mood, makes it easier to lose or maintain weight and reduces blood pressure and the risk of several types of cancer. Since 2009, when the American College of Sports Medicine (ACSM) first started its Exercise Is Medicine initiative, the group has been working to promote the concept of addressing physical activity and exercise within health care and connecting physicians and other providers with exercise professionals. “We are seeing more physicians discussing exercise as part of the prevention and treatment of chronic disease and the promotion of wellness in general,” says Dr. Liz Joy, senior medical director of wellness and nutrition at Intermountain Healthcare in Utah and chair of the ACSM’s Exercise Is Medicine Governance Board. “Increasingly we’re understanding that sedentary behavior is an independent risk factor for premature mortality,” says Joy. “Even if you can’t exercise, we know that accumulating more light activity throughout the day decreases the risk of dying early. All movement counts.”



*Physical activity, including weight training, should be considered an integral part of a healthy lifestyle.*

## AVOIDING HARMFUL SUBSTANCES

During the pandemic, both cigarette and alcohol sales rose, which will add to the negative health impact from COVID-19, says MacGilvray. Everyone knows smoking contributes to a host of diseases, but research on alcohol has been back and forth. A new study published in March in *JAMA Network Open* is swinging the pendulum toward the teetotaling side again. It

included more than 371,000 adults who averaged 9.2 drinks a week. The study found that people who had light to moderate alcohol consumption had the lowest heart disease risk, even compared to the nondrinkers. But the study also discerned that the moderate drinkers also had the healthiest lifestyles—including better diets and more physical activity—and those

factors were responsible for the rosier benefits. In addition, the researchers found that even low levels of drinking (up to seven servings a week) carried an increased risk of cardiovascular disease. Another study of 36,000 adults from researchers at the University of Pennsylvania found that light to moderate alcohol consumption negatively impacted brain volume.



*A recent study from Johns Hopkins Bloomberg School of Public Health looked at 9,500 people between the ages of 61 and 81. It found that smokers developed heart failure at twice the rate of nonsmokers. Former smokers’ risk was also elevated.*

## MANAGING STRESS

If there is one word to describe the American public over the last few years it would be *stressed*. From viruses to politics to jobs to climate change to portfolio values, it's been one thing after another assaulting our collective nervous system. And all that stress is hard on the body. A 2022 review of research, published in *The American Journal of Medicine*, found that stress increases the risk of heart disease as well as having a heart attack or stroke.

"We also know that unmitigated stress leads to telomere shortening,"

says Dr. Kien Vuu, an assistant professor of health sciences at UCLA and author of *Thrive State: Your Blueprint for Optimal Health, Longevity, and Peak Performance*. Telomeres are the protective wrappings that cap the ends of chromosomes, which reside in cells. As telomeres become frayed, the cells die. Experts believe this damage may be why stress has such an impact. (Exercise, smoking, excess weight and mindfulness also affect telomere length, both positively and negatively.) A 2016 study in *Brain Behavior and*

*Immunology* found that short-term psychological stress, including depression, anxiety and trauma, was associated with a small but significant decrease in telomere length, similar to the effect that obesity has on telomeres.

The authors speculated that long-term chronic stress may have a more significant impact on telomeres. Researchers are learning more about how early life stress—the kind associated with family trauma in childhood—affects the stress response and health in adulthood as well.



*More and more people are discovering the feel-good, stress-reducing effects of mindfulness practices, including yoga and meditation. Mindfulness enhances focus and teaches you how to create distance between stressful events or thoughts and your response to them.*

### FROM THE TIME VAULT

## The Advent of Social Prescribing

TAKE TWO DANCE CLASSES AND CALL THE DOCTOR IN THE MORNING.

It took two years and nearly 50 emergency-room visits for Dr. Ardeshir Hashmi to realize he didn't need to prescribe pills for his 93-year-old patient's excruciating chest pains. He needed to prescribe ballroom dance.

Beginning in 2015, a tight, suffocating pressure in her rib cage would prompt Ruth—a pseudonym used for privacy—to call 911. Every two weeks, she arrived at Massachusetts General Hospital and after extensive testing, she'd receive negative test results. Hashmi, now the chair of geriatric innovation at Cleveland Clinic, was baffled as he talked to Ruth about the pain that had receded long before she arrived at the hospital.

Hashmi finally discovered that Ruth's grandson had left for college right before the vicious chest pains began. She was alone in a dark, empty house, and no one would drive her to the neighborhood dance studio anymore. The loneliness triggered panic attacks.

So Hashmi referred Ruth to a geriatric-care manager who would drive her to ballroom dance, accompany her as she swayed in her chair to swing, and reconnect her with her love of music and her friends. Her twice-a-month ambulance habit vanished.

Hashmi had, in effect, written Ruth a social prescription, in which a clinician refers a patient to a community or cultural activity such as an art club, music performance, dance class, volunteer activity or nature walk in order to bolster their mental and physical health.

### RIPE FOR RESEARCH

As logical as the idea sounds, the body of evidence demonstrating its benefits for patients (translated into financial savings for the health care system) is still lacking. In 2015, *The Lancet* published a double-blind study that assigned 1,200 adults with early dementia



*Loneliness can be as toxic as smoking.*

to receive either general health advice or an intervention involving regular exercise, social interaction and a controlled diet. The intervention actually improved patients' cognitive function from their baseline level, while general health advice only slowed cognitive decline. In a meta-analysis of seven arts-based interventions for cancer patients, all patients reported improved well-being, and many experienced reduced stress and anxiety.

In the meantime, it's an intervention without negative side effects. Dan Morse, founder of Social Prescribing USA—an organization supporting the advancement of social prescribing in the U.S.—hosts online "happy hours" for advocates to build networks around social prescribing projects. Attendees range from physicians to music therapists to big-shot developers from Reddit and the National Institutes of Health. "Just think what could happen if there's 10 million more people volunteering in our country," said Morse at a recent gathering. "If there's 10 million more people finding their voice through the arts who are sharing their work and beauty with other people." —Rachel Chen, excerpted from *TIME*, June 15, 2022