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ELECTROLYTES	5	2	4	4
CALORIES	10	140	140	120
SUGAR	Og	34g	34g	28g
SWEETENER	STEVIA LEAF	NATURAL	NATURAL	CANE SUGAR
NO ARTIFICIAL FLAVORS/ Colors/preservatives	NATURAL FLAVOR & COLOR	ARTIFICIAL COLOR & Caramel Color	ARTIFICIAL COLOR & Calcium disodium edta (preservative)	NATURAL FLAVOR & COLOR
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When it comes to our planet and its health, the earlier we start educating ourselves and taking action, the better."



Nurturing Growth

e were wrapping up the previous issue of *Experience Life* when I happened upon the inspiration for *this* month's column — an art project made by Lizzy, my 8-year-old daughter. I was struck by her beautiful representation of nature and was curious

about what had sparked her creativity. So, I thought it would be fun to hear her thoughts . . .

Jamie Martin | What was the art project assigned by your art teacher, and how did you make this?

Lizzy Martin | To draw fruits and vegetables and show what happens above the earth and underground when they're growing — it helps us learn about where our food comes from. We used marker paints and water to make it look like watercolor.

JM | How did you decide what to draw? Are these your favorite veggies?LM | The teacher showed us a list of vegetables that are in gardens, and then I got

to pick the ones I wanted to draw. I like cucumbers and potatoes, so I picked those. I named it *Garden of Imagination*.

JM | Why do you think gardening is important?

LM | We wouldn't have fruits and vegetables without gardening. These are some of the healthy foods that we need in life. We need to have good soil because it helps us get the food that we need.

JM | Do you think it's hard to grow your own food?

LM | It can be. It might not work exactly how you wanted. And the food might not look how you think it should, but it actually still



Garden of Imagination by Lizzy Martin

tastes very good, like carrots do. It also takes patience.

JM | What's your favorite thing to eat from our garden? Is there anything new you want to try growing this year?

LM | Tomatoes — the baby ones — are my favorite to eat. I'd like to grow watermelon and strawberries because they're very juicy and delicious.

JM | Anything else you want to add about gardening?

LM | It's important for living and surviving in our environment.

Both the bounty of a garden and the knowledge we gain about any topic we're interested in start from the same place: seeds. To help them grow, we need to nurture those seeds as they send down roots and sprout — and we need to have patience with the time it takes for them to develop and mature. My daughter's understanding of the importance of soil health for gardening, for instance, has been blossoming thanks to a variety of inputs — education at school, conversations at home, and hands-on experience in our family's garden.

When it comes to our planet and its health, the earlier we start educating ourselves and taking action, the better. Earth needs all the understanding, care, and love we can give it, individually and collectively.

In this issue, you'll find lots of ideas and stories (see "Climate Champions," page 64, for instance) with nature in mind. I hope they inspire you to learn a little more, dig a little deeper, and get more involved. Let's get started.

JAMIE MARTIN is *Experience Life*'s editor in chief, Life Time's vice president of content strategy, and cohost of the *Life Time Talks* podcast.

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Talk to Us



AN ACT OF BRAVERY

I just joined the closest Life Time after being hospitalized with COVID last year and losing the use of my right lower leg. At age 68, I must use a cane or walker to ambulate safely.

Before my stay in the ICU, I had been very active. The neurologist I saw told me to sign up for palliative care, which made me so angry that I am going to prove her wrong. I am mentally facing challenges, but I'm moving forward and getting stronger ("The Reciprocal Relationship Between Exercise and Purpose," November 2021).

Having a place to go to work out makes a huge difference in my life, and establishing a routine really makes me feel much happier than I was before losing my independence. But it was an act of bravery to walk into the club and start all over. Ann M.

JOYFUL EATING -AND GOOD EATS

f "Eating Joyfully" (December 2021) was so interesting. I loved it! Holli B.

I've used tamari to cook Brussels sprouts but never lemon juice ("Brussels Sprouts," November 2021) thanks for the idea! @nourishedcoach

 It's amazing to see what simple ingredients can do for our health ("DIY Ginger Wellness Drink," October 2021).
 @mushbloomco

 Yum! I'm making a sheetpan meal right now ("Simple Sheet-Pan Meals," October
 2019) — so easy. They're a regular on my menus.
 @anywherenutrition

WHEN GRIEF IS COMPLICATED

I still have mixed feelings about my father's death ("The Sixth Stage of Grief," November 2021). He was a raging alcoholic who physically, emotionally, and verbally abused me. He committed homicide and suicide in our small upperclass town. We had to leave everything and move across the country. Sometimes I feel relief, sometimes sadness.

What I think I grieve most is the absence of a childhood that prepared me for adulthood. The fear of abandonment runs my life. He left a sick and dying wife with four daughters and very limited finances. I seldom talk about it to anyone except my therapist; that helps, but how do you find meaning in complicated grief? **Daria W.**

We suggest picking up David Kessler's book Finding Meaning: The Sixth Stage of Grief for more specifics on the various types of grief we can experience.

AUTOIMMUNITY AND HEALTH

[On "Autoimmune Disorders: When Your Body Turns on You," July 16, 2019] The timeline you describe in this article correlates to when the government made the decision to take a completely unscientific hypothesis made by a physiologist and base decades of horrendous dietary guidelines upon it.

We must change the government guidelines and remove subsidies for all of the disease-causing "saturatedfat replacements" that we were disastrously told to switch to: high-omega-6 fatty acids and seed/vegetable oils, like canola, soybean, safflower, cottonseed, and even sunflower, to name just a few. They are in everything on the grocery-store shelves and for some reason, even in frozen foods.

Not once in evolutionary history have humans consumed so much refined omega-6 fats as we have in the past 50 years. We simply should not be subsidizing biologically incompatible, disease-causing, highly processed and refined "foods." **Robert J.** I'm happy that the gut is being acknowledged as a root organ for autoimmunities, but I'm dissatisfied that vitamin D is an afterthought in this piece. We need adequate vitamin (hormone) D for a healthy gut and immune system, and most of the global population is deficient in it. Laura F.

Vitamin D is essential for optimal functioning of many biological systems, including gut and immune health. For deeper reading on the topic, see "Vitamin D: What You Need to Know" at ELmag.com/ vitamind.



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Troubles With Coffee Pods

Single-serve coffee brewers, such as the Nespresso and Keurig systems, have exploded in popularity over the past decade. In 2020, 40 percent of coffee drinkers owned a single-cup brewer, up from less than 10 percent in 2011.

Yet the brewing process — water forced through coffee inside polypropylene plastic or aluminum pods at high temperatures and pressures can leach endocrine disrupters into the brew. These chemicals can alter the levels of hormones such as estrogen, causing developmental and reproductive issues and increasing cancer risk.

A study published in *Toxicology Reports* in 2020 measured estrogenicchemical (EC) levels in 22 brands of pod-brewed coffee. Researchers identified nine ECs. Five were detected in capsule coffee.

Of those five, benzophenone was the most common: It was found in six of the 22 samples. Bisphenol A was detected in four, dibutyl phthalate in three, 4-nonylphenol in three, and bisphenol F in two. Three ECs were not found in any of the samples, while the ninth was found only in trace amounts. The level of EC exposure was well below safety limits, even when using the least conservative estimates. Yet the University of Connecticut research team warned that long-term exposure could still be a problem.

"While the typical exposure to ECs from coffee appears to be minimal, coffee consumption is often habitual and typically involves several drinks daily for years or decades," the authors write. "The effects of long-term bioaccumulation of estrogenic chemicals on health [are] not well understood and deserve further investigation."

- MARCO DREGNI

COFFEE-CAPSULE RECYCLING WOES

While many coffee-pod companies claim that their products are easily recyclable, the majority of coffee pods are instead ending up in landfills.

Plastic pods, such as those made by Keurig, are technically recyclable. However, each pod must be disassembled and cleaned, and remnants of the attached foil top removed, before being recycled. And not all municipal recycling programs will accept Keurig's K-Cups, because they're made of No. 5 polypropylene plastic. Aluminum Nespresso pods are not accepted in

municipal systems and must be mailed to specialized Nespresso recycling facilities. After workers remove and compost the coffee grounds, they break down and recycle the aluminum. This system is promising, but it has low adoption rates: Only 29 percent of Nespresso pods are recycled.

Can Exercise Curb Cancer?

As paralyzing as a cancer diagnosis can be, recent research suggests that one of the best antidotes may be to get moving.

Writing in the journal Medicine & Science in Sports & Exercise, a team of scientists at Australia's Edith Cowan University (ECU) reported that a 12-week exercise regimen suppressed the growth of prostate-cancer cells. And a study supported by the National Cancer Institute, published in the Journal of Clinical Oncology, concluded that physically active breast-cancer patients were more likely than their sedentary counterparts to avoid the fuzzy cognitive effects commonly known as "chemo brain" during their treatment.

The ECU researchers took blood samples from prostate-cancer patients before and after the workout program and found that the postprogram samples, when introduced to prostate-cancer cells in the lab, slowed their growth. The exercise regimen apparently boosted the production of cancerfighting proteins called myokines. "Myokines in and of themselves don't signal the cells to die," explains lead study author and PhD candidate Jin-Soo Kim. "But they do signal our immune cells — T cells to attack and kill the cancer cells."

The specific causes of chemo brain aren't clear, making the link between exercise and chemobrain symptoms more difficult to determine. Reanalyzing data from an earlier study of 580 breastcancer patients, Elizabeth Salerno, PhD, MPH, and her colleagues focused on the amount of physical activity these participants reported before, during, and after their diagnosis and treatment.

Those who participated in moderate exercise for 150 minutes per week experienced little cognitive decline, and those who were similarly active prior to their diagnosis and treatment scored higher than inactive participants on cognitive tests six months later — even if they stopped exercising during their chemo treatment.

None of this should suggest that cancer patients dive into an intensive workout program, Salerno tells the *New York Times*. "It is important for patients to show themselves grace."

Still, one of the more gratifying results of her study, she adds, was the fact that many patients were inspired to start exercising after chemo. "They seemed to want to be moving again. There's something beautiful about that."

- CRAIG COX

A SIMPLE SECRET TO Better Running

To boost your running, you've probably tried wearing new kicks, adjusting your stride, eating energy bars, and more. Recent studies offer one easy, proven tip: distraction.

Rather than thinking about what's going on in your body, focusing on external sights and sounds can up your game. That's what researchers concluded in a 2021 study published in Human Kinetics' *Journal of Motor Learning and Development*.

The research team studied 25 novice female runners and found that the more they tuned in to their bodies' pain and fatigue, the more draining their workout became, both physically and psychologically. The converse was also true: The more they distracted themselves, the easier their run felt — and the better their performance.

"Our findings revealed [that] when participants adopted a dissociative-external focus of attention, they consumed less oxygen, [and] had lower blood lactate and a lower rating of perceived exertion compared with trials completed using an associative attention strategy," the researchers write. "The findings of this study demonstrate that running economy is improved and feelings of fatigue are lowest when using a combination of a dissociative-external focus of attention."

Listening to music may be key to running when you are mentally tired, according to a 2021 report in the *Journal of Human Sport and Exercise*. Researchers studied 18 runners who performed 30-minute-long cognitive tests before sprint intervals and, separately, 5K races. Those who ran to music charted moderately better times.

"Mental fatigue is a common occurrence for many of us and can negatively impact many of our day-to-day activities, including exercise," says lead author Shaun Phillips, PhD, of the University of Edinburgh's Moray House School of Education and Sport. "Listening to self-selected motivational music may be a useful strategy to help active people improve their endurancerunning capacity and performance when mentally fatigued."

- MICHAEL DREGNI

Low-Fat Diets LINKED TO LOW TESTOSTERONE

It's fairly common for men to discover their vim and vigor flagging in middle age, as testosterone levels tend to decline in later years. What's less common are dietary treatments for the condition.

Research suggests that overweight men may boost their testosterone by shedding some pounds, but as Randi Hutter Epstein, MD, reports in the *New York Times*, research focusing on specific diets offers counterintuitive — albeit inconclusive — advice. Citing three small studies, Epstein notes that low-fat diets have been associated with lower testosterone levels.

A British research team observed that testosterone levels among 206 study participants who maintained a high-fat diet were 60 points (or nanograms per deciliter of blood) higher on average than those of their counterparts on a low-fat regimen.

Another study involving 25 younger men (18 to 30 years old) produced similar results: After 10 weeks on a highfat diet, testosterone levels increased by an average of 118 points. And a larger analysis found that testosterone levels among those on a low-fat diet were about 30 points lower than the levels of their counterparts eating higher-fat diets.

"The moral is that healthy men who are of normal weight with no significant comorbidities are unlikely to benefit from restrictive diets," says study coauthor Richard Fantus, MD. "I don't think there is a way to game the system to get really large increases by changing the diet."

- CRAIG COX

Tick Smarts

7 EASY WAYS TO PROTECT YOURSELF

Lyme and other tick-borne diseases have become an epidemic, with an estimated 476,000 new cases diagnosed annually, according to the Centers for Disease Control and Prevention (CDC). Protect yourself with these tips.



AVOID WET AREAS. Ticks thrive in shady, moist, wooded areas. Stay on paths and don't blaze trails. And think sunny: Ticks don't like dry, clear areas. If you're picnicking, select open ground.



REPEL TICKS. The CDC recommends using insect repellents, but choose wisely. DEET is the most common, but it can cause eye irritation and, in high doses, neurological problems, such as seizures. Still, the Environmental Working Group (EWG) labels it "generally safer than many people assume" and "a viable option" in tick-infested areas. The EWG advises using permethrin-treated clothes with caution, because the chemical is toxic.



DRESS APPROPRIATELY. Ticks can't jump or fly; they climb onto you from the ground level or from grasses and shrubs. Always wear shoes, socks, and pants in tick habitats. Tucking your pant legs into your socks is an easy way to keep ticks out.



MAKE YOUR YARD TICKPROOF. Reduce your yard's tick habitat by keeping leaves, tall grass, and shrubs out of areas you use regularly.



DO A TICK CHECK. After coming indoors, do a full-body tick check on yourself and your kids. Ticks usually latch on to your lower legs and climb upward in search of a meal. The shower is a good place for a check: Pay attention to your underarms, your groin area, and especially your hair.



INSPECT YOUR PETS. Ticks can hitchhike home on your dog or cat, then attach to you later, so do a tick check on your pets as well. And talk to your vet about tick protection for your animals.

CLEAN YOUR CLOTHES. If you think you may have encountered ticks, toss your clothes into the dryer on high heat for an hour to kill the arachnids, says the CDC.

- MICHAEL DREGNI

WHAT TO DO IF YOU FIND A TICK

If you discover a tick on yourself, there's no risk if it's still crawling around. And the chance of contracting Lyme disease is small if the tick has been attached for less than 24 hours. Still, the odds of contracting any tick-borne disease are minimized if the tick is removed as soon as possible.

Using tweezers, grasp it close to your skin and pull it straight out. Don't twist the tick; it can break off, leaving parts in your skin. Clean the bite area with rubbing alcohol or soap and water.

If you suspect a tick has been attached to you for longer than 24 hours, see a doctor immediately. (Some experts suggest bringing the tick with you, stuck between two pieces of clear tape.) The physician may prescribe the antibiotic doxycycline, which has proven 87 percent effective against Lyme-disease symptoms when taken within 36 hours of infection.

Adolescents' Most Common Mental-Health Issues

A dolescence is a challenging life stage for even the most well-adjusted individuals. Between the hormonal upheaval of puberty, increasing social and academic pressures, and the hunger for independence — plus the friction those issues can cause with parents — the teenage years are rarely easy.

The turmoil inherent to this life stage can create a double bind: Teens are both more vulnerable to certain mental illnesses and more likely to hear parents and practitioners dismiss their symptoms as "just part of being a teenager."

It's certainly important to avoid pathologizing run-of-the-mill adolescent challenges, but spotting and treating true mental-health disorders early can help an individual get their life on track before symptoms escalate.

Depression, social anxiety, and substance abuse represent three of the most common adolescent mental-health disorders. Here's how to differentiate between these conditions and normal "teen angst" — and how parents, teachers, and other adults can offer support.

Moodiness or Mood Disorder?

Roughly one in four children will meet the criteria for a mood disorder sometime during adolescence. These conditions include major depression and bipolar disorder. Menstruating adolescents may also experience premenstrual dysphoric disorder.

As any parent of a teen can attest, moodiness and puberty go hand in hand. So, how to determine whether mood issues are a cause for concern?

First, know that when depressed, teens are especially prone to hypersensitivity — think erupting in response to the slightest criticism.

Next, consider intensity and duration. It's perfectly normal for adolescents to become tearful from time to time; more concerning is if they refuse to get out of bed several days in a row.

Also think of the impact on daily functioning. Mood changes that interfere with a teen's school performance, extracurricular activities, or social life are a red flag.

HOW TO HELP: Start by listening without offering advice. Let them know their feelings are valid and help them identify ways to channel their emotions. Encourage exercise, sleep, and social connection — the basics of good mental health. If they express thoughts of suicide, seek professional help.

Self-Consciousness or Social Anxiety Disorder?

Social anxiety disorder is a specific type of anxiety disorder common among teens. Socially anxious individuals dread social situations because of an intense fear that others will find them stupid, boring, or awkward. But many, if not most, teens feel self-conscious in social situations — and they overestimate how much others notice it. It's another disorder in which the line between typical and troubling often blurs.

To differentiate between social anxiety disorder and ordinary teenage self-consciousness, consider the context: Could the anxiety be tied to a recent situation, such as changes in a friend group, or has it persisted for months no matter what's going on in the individual's life?

Finally, recognize the difference between social anxiety and introversion.

HOW TO HELP: It can be tempting to steer kids away from anxiety-inducing situations — after all, no parent likes to see their child struggle. But there's wisdom to the adage "face your fears": Only by pushing through discomfort do we learn how to tolerate it. Start with easier gatherings and build up.

Experimentation or Substance Abuse?

In theory, there is no such thing as healthy substance use during adolescence. Because of their nascent impulse-control capacities, adolescents run the risk of engaging in dangerous behaviors, such as unprotected sex or reckless driving, when using drugs or alcohol. And studies show that those who begin using in adolescence are more likely to develop a dependency than those who do not use until adulthood.

LEARN MORE

For an expanded version

of this article, visit ELmag.com/

kidsmentalhealth.

Yet it's no secret that many young people do use drugs and alcohol: Before graduating from high school, roughly two-thirds of Americans will try alcohol at least once, and about half will try marijuana. So it's important to differentiate between experimentation and potential addiction.

Substance-use disorders are distinguished by several criteria, including frequency of use, impact on functioning, and inability to stop.

HOW TO HELP: Resist the urge to shame and blame; focus on education, and emphasize safety. Develop a realistic plan for handling situations where alcohol or drugs are present. How can they respond to peer pressure? Who can they turn to for help? •

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Best known for his uplifting music, Grammywinning singer/songwriter Jason Mraz is also a passionate philanthropist, activist, and organic farmer who's inspired to change the world for the better — from the ground up.

BY CLAIRE CONNORS

HOTOS BY JEFF LIPSKI

keep calm and relax during these stressful times, Jason Mraz likes to wake up early, make a cup of hot lemon water, then unroll his yoga mat for a 20-to-30-minute routine of breath work, stretching, and strength work. "Yoga is my meditation," says the two-time Grammy-winning singer/songwriter.

Although he completed a 200-hour yoga-teaching training course in 2015, he's never actually taught a class. "I wanted to learn the foundations so that I could do it myself when I was traveling all over the world."

Like other artists, the prolific touring musician — he's done almost 1,000 live shows worldwide in his 20-year career — pressed pause on performing in 2020 and early 2021 because of the pandemic. Like most everyone else, Mraz also stayed close to home, which management company to maintain the property while he continued writing and recording music on the ranch and touring. In 2008, the farm-to-

table food



movement was gaining mainstream awareness, and Mraz bought a few neighboring farms, expanded the orchard, and planted a variety of fruit trees. In 2012 he went totally organic, and by 2015 he was lured into planting coffee by his then-wife, Christina Carano, a longtime java enthusiast and coffee-shop owner. (Although their marriage has since come to an end,

they remain friends and are still partners in the farm.)

"One day, more than two thousand coffee trees showed up at our door," says Mraz, "and that's when I officially turned my backyard into the Mraz Family Farm."

Although he considers himself a "gentleman farmer," Mraz is still best known for his music, and he's been making albums consistently since his 2002 debut studio album *Waiting for My Rocket to Come* and his first hit single "The Remedy (I

Won't Worry)."

The summer of 2019 found him busy writing uplifting reggae tunes for his seventh studio album. Optimistic songs of hope, gratitude, and love poured out of Mraz's soul, culminating in a collection of music fittingly titled *Look for the Good.* "I knew 2020 was going to be heated because we were entering another election year, and I wanted to be a voice in that debate, to help us 'look for the good," he explains. "And then things got bad."

Just as he was finishing up the album, the pandemic hit. Then George Floyd was murdered, and protests



were happening across America. "I felt like we were having this incredible awakening in our country," says Mraz.

Initially he considered not releasing the album. "I wanted to put it on hold. I didn't feel like this was my time to be jumping out on the internet or the world stage and saying, 'Look at me! I've got a new album!'"

Instead, the longtime activist made a different kind of statement: "I decided that whatever money this record generates, I'm going to donate to organizations on the frontlines of this radical transformation that's long overdue in our country."

He released the album on June 19, 2020 — Juneteenth, the day commemorating the end of slavery in the United States in 1865 — and donated every dollar of the album's earnings (including his advance) to organizations and movements championing equality and justice.

"We're healing together," Mraz acknowledges. "2020 showed us what was important, where there were wounds that needed to be addressed, sins that needed to be atoned for, and apologies that needed to be issued."

He rereleased *Look for the Good* with additional songs in 2021, which generated more funds to those causes. "I want to inspire other leaders in business and other leaders in music to do the same."



Jason Mraz on his farm in January 2022.

for him is a magical piece of land he calls the Mranch, his 18-acre avocado, fruit-tree, and coffee-bean farm and recording studio about 45 minutes north of San Diego in Oceanside, Calif.

In a Zoom call from the peaceful property (where we took the photos for this cover story), Mraz says, "Anything that happens on the farm and in the garden is a great de-stresser."

When Mraz bought and moved onto the ranch in 2004, he says, it was "a modest little mission-style hacienda with five acres of all Hass avocados planted in the early '70s." Because he wasn't a farmer, he enlisted a groveOn the Cover



WITH JASON MRAZ

EXPERIENCE LIFE | Tell us about growing up in Mechanicsville, Va. Did you have a lot of farms around you?

JASON MRAZ I I had two households when I was young — my mom was more suburbs, my dad was more rural. But both of my grandparents had fruit trees in the backyard that we were climbing, and gardens where we were picking the okra, which we despised. We were surrounded by fields of rotating crops of corn and soybeans, so it was always in the landscape. It was always something that I saw and was aware of, but I didn't anticipate farming myself when I got older. I just wanted to be onstage playing music.

EL | How did you start performing?

JM | My mother enrolled me in afterschool programs, specifically one in Richmond called SPARC, which stood for the School of the Performing Arts in the Richmond Community. It was a fun place to use our imaginations and sing songs and dance and do goofy stuff.

When I was in my 20s, my mom revealed to me that I had gone to those programs on scholarship; otherwise she wouldn't have been able to afford those classes. It made me aware of how powerful and important it is to have donors support these programs. As soon as I was able, I started donating to SPARC at that very same school where I'd gone.

EL | Is that what inspired you to start the Jason Mraz Foundation in 2011?

JM | Yes, that was really the seed for creating the foundation, which had a lot of different pillars when it began. Over the years, I've continued to narrow it down to programs I feel connected to. Today it provides funds and grants for inclusive arts education, food security, and the advancement of equality.

So far, we've donated more than \$1 million, and last year, we awarded 33 \$2,000 grants to nonprofits. We're hoping to double that in 2022. But it all started because I myself was a recipient of those little donations.

EL | Was "SHINE," the live concert show you did in early 2020, an outlet of supporting arts programming?

JM Yes! "SHINE" is a big musical talent show involving the kids connected to different local organizations and programs the foundation provides grants to. Before the pandemic, in February 2020, we did two shows in San Diego. It was a really sweet show because we provided the music, but the kids provided [their] art for the songs. Some danced, some painted, some played or sang songs with us. The show gave everyone a chance to shine.

EL | Are you working on new music now?

JM I'm currently writing music and hopefully will record later this year.

EL | Why did you decide to build your recording studio on the Mranch?

JM | In 2004, I visited Bob Marley's house on Hope Road in Jamaica. It revealed to me what was possible for a musician's home: a place where both music and food was grown. I also liked the idea of living in the country to have more room for sound.

Shortly after that trip, I started searching for a home outside of L.A. and San Diego. I found this quiet little avocado ranch somewhere in the middle. I didn't dive right into farming, but I knew it was something I would grow into. I can also credit some of the artists behind Farm Aid — Willie Nelson, Neil Young, Dave Matthews — who I started paying attention to at the time. I admired them and chose to follow in their footsteps.

EL | Besides music and avocados, what are you growing on the farm?



JM | We have 40 different fruit varieties, including citrus, passionfruit, and bananas. But we were looking for a commercial crop, and that turned out to be coffee. My former wife, Christina, was the inspiration, because it grew out of her understanding of being a barista and a coffee-shop owner, and my career began singing in coffee shops around San Diego. We saw that commonality and partnered up.

We now have 11 different varieties of coffee, with a large portion being Geisha. Named after the Gesha region in Ethiopia, where the plant is thought to have originated, it stands out for its finish. It's probably the smoothest cup of coffee discovered so far. We have customers who are collectors of Geisha — it's that good.

EL | What are your hopes for the future?

JM | I'm in a constant state of "what's next," so in 2019 I brought my teams together — the music team, the farm team, and the foundation team — and we wrote a "vision statement," which helps us find purpose and remember why we do what we do. We all wrote it together, solidifying what we're striving for and the world we want to live in:

"Our vision for 2030, our vision for a future, is that a global shift in consciousness has occurred in which all people have the same right and opportunities to grow, love, and learn. Dreams are being fulfilled. Regeneration is the model for living, working, and playing. A new paradigm for health and well-being prevails. Mother Earth is honored. Communities are thriving and supporting each other, infused with, and celebrating the magic of, the arts. People are contributing their unique gifts and experiencing freedom, wholeness, and joy. Life is inspiring."

The very definition of "inspiring" is to breathe life into things, and I can breathe life into these projects and ideas, which is truly fulfilling.

CLAIRE CONNORS is an entertainment writer and editor based in New York City.



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How to Use a Neti Po

Try this Ayurvedic practice to ease cold and allergy symptoms.

BY TERRI TRESPICIO

ne of the best remedies for cold and allergy symptoms is also one of the oldest: the Ayurvedic practice of nasal irrigation. Known as *jala neti* in Sanskrit, it's performed with a neti pot, which looks like a cross between a tiny teapot and a magic lamp. The practice flushes out mucus and allergens while easing congestion, reducing the need for over-the-counter drugs.

WHAT YOU'LL NEED

WATER

Use only water that's pure and sterile. If you don't have distilled water on hand, use boiled water that has cooled to a lukewarm (not cold) temperature.

SALT AND BAKING SODA

Combine 3 teaspoons of noniodized salt with 1 teaspoon of baking soda, and add 1 teaspoon of the mixture to 8 ounces of lukewarm distilled or boiled water. (If the water stings your nose, use less salt.)

TERRI TRESPICIO is a writer and lifestyle expert based in New York City. She is the author of *Unfollow Your Passion: How to Create a Life That Matters to You.*

DIRECTIONS

Place the spout in your right nostril and tilt your head to the left and forward 45 degrees over a sink or basin until the water pours out of your left nostril for several seconds. Then switch to the other side. Gently blow your nose afterward. This produces the refreshing and cleansing effect of a good cry (minus the emotions).

TEMPORY

HELPFUL TIPS

For nasal congestion or allergies, use your neti pot once a day. For an acute sinus infection, irrigate two to three times a day. As a rule, don't overirrigate, because this can deplete the protective mucous membrane that supports immunity. Avoid irrigating a recently injured nose; consult with your healthcare provider before using your neti pot after surgery.

HOW TO CLEAN

Strengel St

Clean your neti pot after each use with soap and distilled or boiled water and let it air dry. Seek out a ceramic neti pot, which can last for years. For pots made of other materials, experts recommend replacing every few months to avoid bacteria buildup. **invis is** a smile as strong as your game.

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Wheels Keep On Turning

After 25 years of near immobility and inactivity, a woman rediscovers the joy of movement thanks to a recumbent tricycle.

BY JANE KNIGHT

ome days unfold exactly right: On the afternoon of the recumbent-cycling 5K time trials at the 2019 Arkansas Senior Games, I greeted all my "bent" friends (short for "recumbent," the type of bicycles and tricycles we pedal, in a reclining position) at the check-in area.

At start time, I shot onto the course with a broad grin on my face. Confident and pedaling strong, I was never winded. When I zoomed across the finish line 11 minutes later, my husband, Greg Long, and my service pug, Sweet P, were cheering me on.

Though I won the gold medal in my age category, that was just icing on the cake. The real victory was feeling active and healthy after having been physically dormant for half my lifetime.

In 1982, at the age of 21, I was injured in a horseback-riding accident. Every bone in my skull except my nose was broken when I slammed into a low tree branch while trying to control my bolting horse.

I was in a coma for the following 16 days, and the neurosurgeon told Greg that I had a less than 5 percent chance of surviving. I spent three months in the hospital, and the head injury left me deaf, legally blind, and with permanent balance issues. Extensive damage to my facial nerves required another surgery.

To this day, the left side of my mouth remains paralyzed, and my half-smile is unconventional. Even so, there's a lot to smile about, including my family's never-flagging support.

Making Progress

My muscles atrophied during those months in the hospital, and relearning how to walk was excruciatingly slow. I was as weak as a newborn and had to start from scratch on *everything*.

Before the accident, I had bicycled and played tennis and was an experienced horsewoman. I had also earned a bachelor of fine arts degree in photography. Suddenly I had to find new ways to walk, communicate, and see with what vision I had (20/400 without glasses).

My mother moved into our Houstonarea home for two years to help. She would drive me to a swimming pool and hold me while I practiced walking in water. Little by little, I was able to get around with a walker. Later, I could shop; pushing a grocery cart stabilized me.

After I became deaf, I relied on lip reading to understand others. However, after an experience struggling to under-



Top: Jane Knight and her husband, Greg Long, riding a tandem recumbent trike in 2018. Bottom: Knight on her horse in 1980. Opposite page: Knight with her service pug, Sweet P, in 2015.

stand my young son, John (the doctor had told me I wouldn't be able to get pregnant because of my injuries, but John was a miracle baby born in 1984), I craved a more efficient way to communicate with him. Luckily, I discovered cued speech, a system of eight hand shapes made in four positions around the face while speaking to help visually differentiate between speech sounds.

Four years after the accident, I joined a gym to rebuild my strength. However, when I got a cochlear implant in 1989, the surgeon ordered me to stop lifting — even a bag of flour was too heavy — because my cochlea was just 1 millimeter from being punctured, a result of the injuries I'd sustained. I needed to quit the gym, but the implant was successful, and I was able to hear my 5-year-old son's voice for the first time.

In the 40 years since my life changed so dramatically, I've never been depressed. Instead of focusing on activities I'd never do again, I concentrated on things I *could* do. For example, I was grateful to be able to push John in a stroller. And despite the blindness in one eye, I became an avid quilter and cross-stitcher.

In 1995, I earned a master's degree in deaf studies. As the adult-cuedspeech representative for the National Cued Speech Association, I made presentations nationwide.

Rediscovering My Athleticism

I also never gave up the dream of being active again, and I hung on to hope that something would change. And in 2007, it did — at just the right time.

In my late 40s, I was noticing changes in my body: ballooning weight, high blood pressure, and a sluggish feeling I couldn't shake. While browsing the internet, I spotted a photo of a recumbent trike. *I can do that!* I thought. Because it had three wheels, there was no danger it would fall over, so my lack of balance wouldn't be a problem.

A recumbent is safer and more ergonomically friendly than a bicycle: You get an incredible aerobic and muscular workout without the sore rear end, back, and arms. You can ride farther and longer than on a normal bike — without the forward hunch and neck strain. On a recumbent, you enjoy a normal view.

I found a shop that sold recumbent cycles and tested one. From the first pedal stroke, I felt like someone had unlocked the cell door and set me free. After 25 years, I had true physical independence — and for a second time, my life changed in a flash.



I embraced the physical challenge of going from almost no activity to pedaling. I loved setting and achieving small goals: riding a little faster, a little farther.

As my legs got stronger, I could also walk more confidently. Gradually, my health improved, and I felt more vibrant.

My social life bloomed. I began meeting other recumbent cyclists and suggesting we ride together. Soon I was organizing rides for a group in the Dallas-Fort Worth area.

Later, I created Facebook groups for Texas Recumbent Riders and Recumbent Ladies so that recumbent cyclists around the state, country, and world could share their experiences and knowledge about riding. We also compare our favorite riding songs.

After being isolated for so long, I now have friends all over the world.

Cycling Back to Health

Even though I love recumbent cycling, during my late 50s I tended to slack off if it was hot or I was busy. When concerning symptoms popped up again, I realized I *had* to gear up.

In 2017, the Dallas Senior Games began including recumbent-cycle competitions: a perfect motivator for stepping up my physical training.

On race day, I wasn't in the best shape to handle the grueling uphill course in a strong headwind, but I persevered and won both the 5K and 10K time trials. The biggest prize that day was that I had recommitted to my physical health.

With other races on the horizon, I focused on a healthier diet. That, along with riding 10 miles daily on a stationary turbo trainer with a trike on it, helped me drop more than 50 pounds in a year. Now my vital signs are excellent, and at 64, I feel like I'm going on 34!

In May, I'm heading to the National Senior Games in Florida to compete in the 5K and 10K time trials in recumbent cycling. Winning doesn't matter, though: Whether I'm going all out during an adrenaline-fueled race or leisurely pedaling a tandem with my husband on a scenic trail, recumbent riding is my happy place. ●

Jane's Top 3 Success Strategies



AVOID COMPARING YOURSELF WITH OTHER RIDERS. "It took me years to quit setting goals that were unrealistic or something I didn't care about," says Jane. "Stick to your personal goals. What works for others might not work for you."



MEASURE YOUR SUCCESS BY HOW YOU FEEL. With impaired eyesight, Jane can't read a bike computer. "I never know how fast or far I go, how many pedal strokes I make or calories I burn," she says. "If I'm spooked about going too fast, I am going too fast. Also, I never want to ride so far I wish I were not riding."



KEEP IT FUN – AND KEEP DOING IT! Getting in shape doesn't have to be boring. Jane's upbeat soundtrack for riding her indoor recumbent trike includes "December, 1963 (Oh, What a Night)" by Frankie Valli and the Four Seasons, Elton John's "Philadelphia Freedom," and Olivia Newton-John's "Physical."

TELL US YOUR STORY!

Have a transformational healthy-living tale of your own? Share it with us at **ELmag.com/** myturnaround.



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- Jordan Hoffman, avid night hiker



Get tips for a safe and enjoyable nighthiking adventure.

ADVANTAGE

This off-court routine will improve your range of motion, joint stability, and overall racquet-sport performance.

BY NANCY BRENDEN

Experien

Life I

April 202

acquet sports, like tennis, pickleball, squash, and racquetball, can provide a strenuous full-body workout — so much so that hitting the fitness floor for a postmatch workout may not be a top priority.

But incorporating a sport-specific exercise routine for just 20 minutes two or three times per week can significantly boost your on-court performance and overall functional fitness, says Life Time tennis pro Joe Meier, CSCS.

Meier, who is also a master trainer, nutrition coach, and strength-andconditioning specialist, recommends exercises that focus on building range of motion and stability, especially in the shoulders, hips, and core. "These are the areas of the body that power serves, ground strokes, volleys, and efficient movement patterns," he says.

He also suggests footwork exercises to support flexibility and prevent overuse injuries. By building a strong foundation, you'll start seeing on-court improvement.

Perform two to three sets of 10 reps per side of each exercise, two or three times per week. You can schedule this workout on off days from racquet sports or use it (or parts of it) as a prematch warm-up. Regardless of your level of fitness or expertise, Meier says, avoid training to exhaustion or muscle failure; you don't need to spond longer than 20

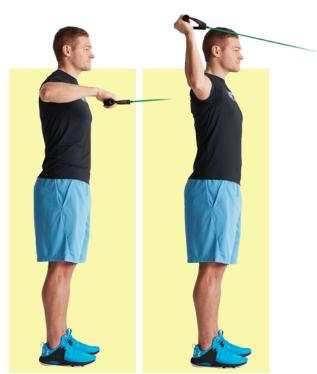
Regardless of your level of fitness or expertise, Meier says, avoid training to exhaustion or muscle failure; you don't need to spend longer than 20 minutes on each workout session to notice significant improvements. Perform each of these moves with the mindset that you're preparing the muscles and joints for play.

STANDING SHOULDER EXTERNAL ROTATION

- Stand facing a band anchored at shoulder height. Grasp the handle in one hand and take a step back to put tension on the band.
- Raise your elbow out to the side to shoulder height. Keeping a 90-degree angle at the elbow, rotate your hand and forearm up and backward against the band's resistance; pause, and rotate forward while keeping your elbow still.

SINGLE-ARM OVERHEAD TRICEPS EXTENSION

- Avoid shrugging your shoulder upward or turning your trunk.
- Repeat on the opposite side.



- Stand holding a dumbbell in one hand. Press the weight overhead so your arm is straight and your biceps is close to your ear.
- Maintaining this arm position, lower your hand behind your head, mimicking the racquet drop of a serve.
- Keeping your elbow still, reverse the movement and reach your hand toward the ceiling, simulating hitting up on the toss. Although this motion is quick when serving, keep this weighted version slow and controlled.
- Repeat on the opposite side.

SQUAT AND REACH

- Squat down until both hands touch the floor.
- Hold the squat and gently twist to reach your right hand toward the ceiling. Apply gentle pressure with your left arm against the inside of your left leg.
- Lower your hand and return to standing. Repeat, returning to standing between each rep.
- Repeat on the opposite side.

STAR LUNGE





- LETINE DETINE DE
- With your right leg as your anchor, lunge forward with your left leg; return to standing. Lunge directly to the left; return to standing. Lunge backward to the left at an angle, allowing your hip to open; return to standing.
- Repeat using the opposite legs to anchor and step.

PALLOFF PRESS

• Stand to one side of a band anchored at chest height.

- Hold the band with both hands close to your chest and take a side step away from the anchor to create tension.
- Push your hands out in front of your chest until your arms are straight; pause, and then pull them back in toward your chest. Resist rotating your body.
- Repeat with anchor to your other side.

CROSSOVER AND SHUFFLE RECOVERY STEP

- Stand with your feet just wider than shoulder width, knees bent, with about 5 feet of space on each side of you (1).
- Start the crossover by stepping one foot over and in front of the other (2), then take one or two small shuffles in that same direction (3–6); end in a shallow lateral lunge (7).
- Repeat immediately in the other direction, starting with the crossover step.



SPLIT STEP WITH DIAGONAL LEAP

- Stand with your feet just wider than shoulder width, knees bent (1). Jump into a split step weight shifted to the lead foot (2).
- Then, leap out diagonally to the left, landing on your right foot and balancing as if you were stretching to hit a volley (3).
- Jump back into a split step (4) and repeat the leap on the other side (5).



NANCY BRENDEN is a Life Time senior copywriter.





Tennis elbow doesn't just affect tennis players. Stay pain-free with these wrist and forearm exercises.

BY LAUREN BEDOSKY

on't be fooled by the term "tennis elbow." This painful condition, also known as lateral epicondylitis, can affect anyone who performs repetitive grip-intensive activities, such as knitting, swinging kettlebells, and using a smartphone.

"It usually affects the dominant arm and occurs when there's frequent and forceful contractions of the wrist extensors, or the muscles that allow us to extend our wrist," explains Peter Ames, PT, PhD, a Minneapolis-based specialist in sports physical therapy.

Tennis-elbow sufferers will feel pain on the outside of their elbow and forearm that often worsens when they grip.

Unlike many overuse injuries, tennis elbow is not an inflammatory condition; it involves a breakdown of healthy tissue in the muscle and tendon. For this reason, popping an over-the-counter anti-inflammatory, like aspirin or ibuprofen, won't do much to alleviate symptoms — but therapeutic massage has been shown to be an effective treatment.

Take frequent breaks from activities that trigger pain. If it creeps in while you're at your computer, step away from the keyboard at regular intervals. If it comes on during a friendly match, build rest periods into your game or take a break from the sport altogether.

For long-term relief, it's best to incorporate targeted exercises into your routine. Ames suggests these three moves to help relieve pain and to gently strengthen injured tissues to promote healing. €

ISOMETRIC WRIST EXTENSION



ECCENTRIC WRIST EXTENSION



SCAPULAR RETRACTION



- Rest one arm on a flat surface, palm down and fingers gently curled.
- Place your opposite hand flat on top of your bottom hand.
- Try to lift your wrist off the surface while resisting the motion with your top hand.
- Hold for five seconds and relax.
- Do two sets of 15 reps, twice daily.
- Hold a light weight (1 or 2 pounds) and rest that arm on a flat surface, with your wrist relaxed over the edge.
- Use the opposite hand to help bend your wrist as far back as you can.
- Release your helping hand and slowly lower your wrist to the starting position.
- Do three sets of 15 reps, twice daily.



- Keeping your neck relaxed, squeeze your shoulder blades back and down. Hold for a few seconds and release.
- Repeat five times, several times per day, as desired.

LEARN MORE For exercise demos – and the why behind these moves – visit ELmag.com/ tenniselbow



workout.

LAUREN BEDOSKY is a Minnesota-based health and fitness writer.



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The Mountain Climber

Maintain a neutral neck position.

This do-anywhere body-weight move combines strength and cardio training with intensity.

BY MAGGIE FAZELI FARD, **RKC, MFT-1, ALPHA**

Keep your hips low and stable. Don't let them shift higher

Avoid unnecessary bouncing or kicking when you switch feet.

shoulders over your wrists and press your hands into the floor. Don't let your shoulders drift back behind your hands.

Keep vour

than shoulder height or into a pike position.

he mountain climber is a compound body-weight move that is sure to raise your heart rate while building strength through your arms, back, shoulders, core, and legs. In addition to boosting cardio and strength in one move, this low-impact exercise also challenges balance and coordination and is suitable for small-space or noequipment routines.

Despite these benefits, many people find the mountain climber hard to love. It is, in a word, intense. Running in

place while holding a plank position for just 20 seconds can leave even dedicated exercisers breathless and spent.

For most people, though, it's not the difficulty that creates problems. It's the misconceptions that you must do it fast (you needn't) and that it's too basic for form to matter (it's not).

As with actual running, it's important to find a right-for-you pace that you can maintain for the duration of an interval or for the number of prescribed repetitions in your workout. And as with any other strength

move, proper form helps ensure that your effort will be effective and won't cause injury.

Once you nail your form, increase your speed (while maintaining control) to increase the cardio challenge. Or slow way down and emphasize the hold at the top of the knee drive to further challenge your stability.

Refine your form with the tips below. While they won't necessarily make you fall in love with the move, they'll likely help you enjoy more benefits from your hard work.



MAGGIE FAZELI FARD, RKC, MFT-1, ALPHA, is an Experience Life senior editor.

Hello, Darkness

Hiking after dark heightens the senses in wonderful ways. Learn about the thrills and the chills — plus the skills you need to undertake this adventure.

BY SARAH TUFF

iking is one of the most popular sports in part because of its simplicity. Hiking at night, however, takes on an entirely new dimension.

"Night hiking is about embracing the darkness and slowing down, even as excitement is amplified while hiking on a dark trail," says Jason McEwen, backcountry guide for the group Hike for Life, which leads trips in Colorado's Pikes Peak region. "While it can be a wonderful experience, it is a rigorous mental challenge that requires you to step out of your comfort zone and change some things about the way you hike."

Nighttime requires a new perspective on hiking even for the most seasoned trail veterans. Your senses are heightened, your awareness is increased, and your heart rate rises. With no distant vistas on which to focus, you're more likely to hear sounds you'd miss during the day.

"Night hiking is unique because you experience nature differently," says Jordan Hoffman, an avid night hiker. "The world feels limited to where your cone of light can reach or the moonlight has illuminated. The lack of resolution of your surroundings makes movement feel faster, and your ears strain to pick up more clues."

During the day, a squirrel running in the bush is simply a squirrel running in the bush. But at night, says McEwen, the sound "will stop you in your tracks. You will question your every decision as you wonder what that noise was — it's exciting."

Then there's the solitude and the beauty of the night sky. "Hiking at night is a sure-fire way to avoid crowded trails," says Mallory Moskowitz, owner of Your Adventure

NIGHT-HIKING TIPS

PREPARE YOUR SUPPLIES IN ADVANCE. Pack everything you would use during a day hike in your specific region and season: ample water, bug spray, special clothing and extra layers, and adequate fuel and nutrition. Also bring multiple light sources, including at least one headlamp. The best ones for night hiking feature red lights, which aid night vision. Some also boast taillights and variable brightness. Additionally, always carry a flashlight and spare batteries.

STUDY THE TRAIL. "I tend to err on the side of caution while night hiking," says Moskowitz, "and purposefully choose slightly easier trails that are well marked or well traveled so that I don't have to worry as much about route-finding in the dark — which can be much more difficult than in the broad daylight."

Hoffman concurs. "Night hiking is not the time to push limits on new terrain," he says. "You might miss a turn or get caught in a weather system and have less safety margin than you otherwise would during a daylight hike." Even if you're familiar with the park or trail, double-check the local rules before heading out. Some areas close their gates at night, which means all cars must be clear from trailheads at dusk.

SLOW DOWN. Arrive at the trail 10 to 20 minutes early and take a seat at the trailhead. Allow your eyes to adjust to the darkness of the trail — and allow your body to adjust, too. Be ready to hike at a slower speed, even on a familiar trail, advises McEwen. Be mindful of footing and trail edges as you move. Remember. while day hikes may be about reaching the summit, night hikes are about the experience of the journey, not the destination. And it's OK to turn back early. **BUDDY UP.** Embarking on a night hike with a friend, family member, or even a guided group has several perks. For one, sharing this unique adventure can heighten the experience and make it more fun. Plus, there's safety in numbers, should an emergency arise.

Whether you choose to go solo or head out with a pal, make sure you tell someone who is not on the hike exactly where you're going and about how long you'll be gone. And plan to check in with them when you return.

RESPECT THE WILDLIFE. "More animal activity happens at night," explains Hoffman. Depending on the region and season, "herds of deer and elk make movements, ground-dwelling mammals come out to forage, and predators such as mountain lions and coyotes come out to hunt."

Proximity to these animals and others is part of the magic of hiking at night and it's important to remember that you are entering their domain. Do so with respect, giving any animals you encounter a wide berth. Making noise as you move (by carrying a bell, for instance) can help ensure a safe distance. If you plan to hike with any pets, Moskowitz advises keeping them leashed.

TAKE PLEASURE IN A REST BREAK. "I like to hike out to a certain spot, overlook, or summit and then just sit with my headlamp off," says Moskowitz. "There's a sense of peace and reassurance in just sitting in the dark, without any lights or screens on, admiring the stars." •

SARAH TUFF is a Colorado-based outdoors, health, fitness, and nutrition writer.

Night hiking is unique because you experience nature

differently."

Coach, who offers hiking advice and resources. "And it's the perfect time to observe the night sky, catch a scenic moonrise, or try to photograph the stars and Milky Way."

Night hiking also opens up opportunities for people with a nontraditional schedule.

Preparation, experts agree, is the key to a successful night hike. If you plan ahead and take necessary precautions, a night hike can be a beautiful way to broaden your horizons, challenge your preconceived notions of your capabilities, and help you build confidence and calm in the face of uncertainty — and even fear.

Inspired to take a night hike? These tips can help you stay safe, feel confident, and make the most of your nocturnal adventure.

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To Step or to Jump?

What yoga has taught our fitness editor about the importance of transitions.

BY MAGGIE FAZELI FARD, RKC, MFT-1, ALPHA

've been practicing yoga since I was 1. Twenty-seven years of group and solo sessions has not made me an expert, but it has helped me create a ritual around meeting myself as I am. My mat is a place where I can push myself and forgive myself, accepting the day-to-day variations of my body, my mind, my energy, and life in general.

At the same time, in almost three decades of practicing awareness, I developed some unintentional habits. One was that when given the cue to "jump or step" my feet from downward-facing dog to meet my hands for a standing forward fold at the top of the mat (a traditional part of a vinyasa flow), I always stepped.

I don't remember ever making a conscious decision to step instead of jump. Jumping is challenging, so maybe I originally wanted to take the easier path. Or maybe, at some point, I felt afraid of falling or failing or looking silly and I chose to protect my body or pride.

Regardless of how I ended up on Team Step, for a long time I was firmly in that camp and didn't give it a second thought. It was as though I had stopped even hearing the instruction to make a choice. My brain and body simply skipped over the option to jump.

That is, until something in the "jump or step" cue changed. In a recent virtual class with yoga instructor Kathryn Budig, the jumping option expanded to include new-tome instructions: Bring the big toes together to touch, bend the knees, raise the heels, gaze forward, and *then* jump. Without thinking, I tried it. Not only did I jump, I landed. Not only did I land, I did so silently, even gracefully. (At least I was silent until I realized what had happened, and then I gasped and did a little cheer. My inner 11-yearold was quite impressed.)

Ever since, when the option arises, I have made a conscious choice to do one or the other. Do I want to jump or do I want to step? What suits my body today? What suits my energy? What might bring me a bit of lightness, a bit of joy?

Transitions do matter. They prepare us for what comes next, laying a foundation for success.

The newfound awareness has not only given back to me a choice I didn't realize I'd been denying myself but opened me up to new ways of moving to the top of the mat. *Maybe I'll take teeny-tiny steps on my tippy-toes*, I thought one day. *Maybe I'll do a little dance*, I thought on another, trying a series of step-ball-changes as my mode of travel.

This might seem like a small shift — an inconsequential one, even. After all, the jump or step is just a transition between big-ticket poses that make up most of an asana practice, right? A jump or step takes only a moment. What difference does it make? I'm here to tell anyone who'll listen: It makes a big difference.

One of the greatest yoga (and fitness and life) lessons I've learned is that the transitions *do* matter. They prepare us for what comes next, laying a foundation for success.

Transitions can be challenging — in this case, a test of balancing engagement and relaxation, control and ease — thus setting us up to "Try again. Fail again. Fail better," to borrow from Samuel Beckett.

We can blow through transitions, moving on autopilot, never pausing, never making a choice. Or we can take a moment to come back to ourselves and to what we're doing, what we're thinking, what we're feeling.

The transition becomes an opportunity for connection — linking not just point A to point B, down dog to forward fold. When I pay attention, transitions become even more substantial, connecting me back to my self.

I don't land every jump I take now. Sure, sometimes I feel like I'm floating. But just as often, I land awkwardly or stumble. I misjudge my center of gravity, mistake speed for power, get distracted, or overthink it.

It's all OK. For me, the yoga mat is a place to play and to welcome lessons that I can carry with me out into the world.



MAGGIE FAZELI FARD, RKC, MFT-1, ALPHA, is an *Experience Life* senior editor.

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10+ GRAMS OF PROTEIN
LOW CARB
LOW SUGAR





Real Food

Soothing as a hot drink, tea can also provide a savory base for cocktails. Learn how to brew the perfect cup — or mix an irresistible apéritif.



Find our recipes for tea-based cocktails at ELmag.com/tearecipes.

REAL FOOD Nutrients

The Raw Story

Raw-foods diets have many passionate advocates, but the benefits differ for different people. Learn how to find a balance that's right for you.

BY CATHERINE GUTHRIE

hen Angela Hofmann was 40 years old, her energy was flagging, her sleep was fitful, and her digestion was out of sorts. "I was struggling," says the now-60-year-old from Cambridge, Mass.

Her doctor suggested sleeping pills, antacids, even antidepressants. But Hofmann wanted to address her issues through diet first. "It just made sense that if my body was feeling sluggish and ill, the foods I was putting into it weren't doing their job to nourish and fuel me."

Hofmann saw a common thread in the nutrition books she read: Eat more vegetables and fruits. She loves a challenge, so she decided to try a vegan raw-foods diet and found plenty of fresh produce at her local grocery store.

But when she began to buy prepared plant-based foods, like cookies and crackers, she was turned off by the cardboard texture and bland flavors. So, she began to make her own.

Today, Hofmann is a chef and

owner of Nüsslin8°, a raw-foods shop in Cambridge. "Raw food taught me how great it feels to fuel my body with plant-based foods," she says. "It was the first time in a long time that I felt energized, positive, and vibrant."

A raw-foods diet, by definition, moves people away from processed foods and toward whole plant foods — and that shift is almost always a good thing, says functional-medicine provider Will Cole, IFMCP, DNM, DC. "A plant-centric, whole-foods diet will beat out a non-nutrient-dense diet any day."

Still, like any strict eating protocol, this approach has its limitations, especially for people coping with digestive issues.

Becoming too much of a purist about food can have its own health repercussions. "Some raw-foodists have an almost religious zeal about them," says Cole. "Anytime our mindset becomes so rigid that pivoting feels like failure, it's a sign to step back and reassess."

As with most diets, different bodies

will respond to raw foods in different ways. Discover the strategies for finding the raw ratio that's right for you.

Raw Benefits

A typical raw-foods diet consists of vegetables, fruits, nuts, and seeds that are never heated above 118 degrees F. Some raw-foodists are vegan; others are vegetarian (enjoying unpasteurized dairy and the occasional raw egg) or omnivores (including sashimi and tartare).

Many adherents, like Hofmann, are drawn primarily to the diet's health benefits. A big part of her motivation to try raw food was a diagnosis of prediabetes. "Faced with the prospect of being on medication the rest of my life, I chose to focus on my diet instead," she says.

Within a few years of pursuing a largely plant-based, raw diet, she saw her prediabetes disappear. She runs 15 miles a week, practices yoga, and stands all day in her kitchen — capacities she attributes to good nutrition.

In terms of nutrients, a raw-foods





diet easily trounces the standard American one. Decades of nutrition research have shown an inverse relationship between daily servings of vegetables and fruits and the risk of type 2 diabetes, heart disease, and many types of cancer.

Along with a wealth of plant-based vitamins and minerals, raw foods provide plenty of fiber, which is the basic building material of plants and is abundant in raw foods. Studies have shown that plants' fiber, specifically, lowers the risk of type 2 dia-

betes, heart disease, and chronic inflammation.

Yet the average American consumes only half the The digestive fire recommended needs to be robust so daily allowance, it can burn up, break which is 25 grams down, and digest for women and 38 grams for men. Many functional-medicine practitioners think that general recommendation is too low and we should aim for 30 to 50 grams.

When we eat a variety of fiber (soluble, insoluble, and prebiotic), we support elimination and nourish the gut microbiome's flora, which feed on prebiotic fiber, says Cole. A healthy gut microbiome also transforms fiber into the short-chain fatty acids that are vital for a strong immune system and digestive health.

"A raw-foods diet is going to support bacterial diversity and shortchain-fatty-acid production," Cole says. "And those two things are the name of the game for people who live long, healthy lives."

The Digestive Challenge

Given the quantity of plant foods it contains, a raw-foods diet can offer a wealth of benefits — but there are caveats.

First, eating raw food triggers a digestive workout, and not everyone's system is up to the job. A 2018 study in the American Journal of Gastroenterology found that nearly two-

thirds of Americans have gastrointestinal distress,

including bloating, gas, constipation,

and heartburn. This is not a setup for success with raw foods.

"Gastrointestinal symptoms can be exacerbated by increasing dietary

fiber," explains functional nutritionist Jesse Haas, CNS, LN. "Is fiber inherently a good thing? Yes. But will it improve someone's diet right off the bat? Not necessarily."

the energy in

foods.'

Many healing traditions, including Ayurveda and Traditional Chinese Medicine, believe that one needs a cast-iron gut to handle raw foods and that it's best to consume them minimally if gut health is an issue. In his functional-medicine practice, Cole sees many people with irritable bowel syndrome, small intestinal bacterial

overgrowth (SIBO), and leaky gut, and he generally has them steer clear of too much raw food. "Eating raw can create a stressful work environment for a gut that is trying to heal."

For someone struggling with digestive issues, a healthcare provider may recommend a low-fiber diet, such as low FODMAP, to soothe digestive issues. (For more on the low-FODMAP diet, see ELmag.com/fodmaps.) Haas is more likely to have clients reduce their fiber intake temporarily and then gradually increase their tolerance. Once the gut is stronger, they can usually handle more high-fiber foods.

"Ayurveda sees the digestive process as a cauldron over a fire," explains Haas. "The digestive fire needs to be robust so it can burn up, break down, and digest the energy in foods."

A raw-foods diet also can create nutritional deficiencies. It may lack vitamins B12 and D; minerals selenium, zinc, and iron; protein; and the omega-3 fatty acids DHA and EPA. Combinations of particular raw foods can deliver some of these, but protein and fats are often stubbornly lacking. And vitamin B12 deficiency can cause nerve damage.

Though plenty of plants, including nuts and seeds, contain protein, the gut will struggle to absorb them if it is inflamed or irritated. Most people on a raw-foods diet don't consume enough plant protein, says Cole.

Similar challenges are involved in getting sufficient omega-3 fatty acids from plant sources, such as hemp





seeds, flaxseeds, and walnuts. Plantbased omega-3 fats must be converted to animal-based omega-3s in the body. But less than 10 percent of the omega-3s survive the conversion process.

On a raw omnivorous diet, you could meet your omega-3 needs with raw fish, but you'd need to eat 3 to 4 ounces of fatty coldwater fish salmon, tuna, sardines, mackerel, and others — a few times a week.

To be fair, Haas says, consuming enough omega-3 fats is a challenge no matter your diet, but eating only raw foods makes it harder, especially for people who don't have easy access to fresh seafood.

Eating uncooked animal foods also requires additional safety pre-

cautions. Heat kills potentially harmful bacteria that can lead to food poisoning, one of the greatest digestive enemies of all. Safe consumption requires choosing your supplier carefully.

"If you are eating raw animal products, you want to make sure the animal is being raised, slaughtered, and processed in a clean, healthy environment," says Haas. "This is critical because otherwise the pathogenic opportunity is just too great."

Many experts agree that the healthiest approach to adopting a raw-foods diet is to try it during seasonal transitions, which can be a natural time to detox, or during summer months when access to fresh, seasonal vegetables and fruits peaks.

"The optimal diet is something fluid that can change depending on the seasons and circumstances," advises integrative-medicine physician Akil Palanisamy, MD, author of *The Paleovedic Diet*.

Find Your Balance

The optimal diet

is something fluid that

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circumstances."

Consuming food raw may seem to be in harmony with our origins as a species, but many anthropologists believe the advent of cooking food helped develop our early ancestors' brains. Heat makes the nutrients in plant foods more available

by softening the cellular matrix, which releases nutrients that the body absorbs during digestion.

> Cooking food also decreases the energy the body must use to extract calories. That savings may

have allowed people to develop greater executive functioning.

And while an overcooked vegetable can be a deep disappointment, heat doesn't inevitably destroy all its nutrients. There are plenty of gentle cooking methods that make vegetables easier to digest and leave them nutrient-dense. Cole and other experts believe a small tradeoff is worthwhile. "Sometimes cooking lowers the nutrient content, but the nutrients that remain are going to be more available," he says.

Haas usually suggests eating a 1:3 raw-to-cooked ratio. She prefers gentle cooking techniques — water sautéing, steaming, blanching, and braising that allow more nutrients to remain in the food. Because heat will still leach certain nutrients from plant cells, such as vitamin C, Haas saves her cooking water (sometimes called pot liquor) and uses it to make rice, beans, or stock.

Heat can also interfere with the plant enzyme necessary to produce sulforaphane, a potent anticancer compound found in broccoli and other cruciferous vegetables. But British researchers have discovered that powdered mustard seeds, wasabi, and horseradish contain a heat-resistant version of the enzyme. So you can add a small amount to cooked cruciferous veggies and reap the same rewards that their raw form offers. This is good news for those who find raw crucifers tough to digest.

In some cases, cooking a vegetable actually delivers more nutrients. Lycopene, the pigment that gives tomatoes their distinctive deep-red hue, is more easily absorbed from cooked tomatoes than raw.

Fermented foods, meanwhile, offer a middle ground between cooked and raw. The fermenting process relies on microorganisms instead of





heat to soften plant-cell walls and release their nutrients. "Fermentation predigests foods, making nutrients more bioavailable," says fermentation expert Sandor Ellix Katz.

"There is definitely a place in a raw diet for fermented foods," he adds. "Everybody can benefit from building greater biodiversity in the gut."

In the end, the best guiding principle remains your body's feedback.

Haas encourages her clients to embrace the most diverse diet they can, and to avoid a black-and-white attitude toward food. "You can have a beautifully balanced diet, but if you aren't digesting and absorbing the nutrients, who cares?"

Even Hofmann's strictly vegan raw diet lasted only about six months. "My kids, ages 4 and 7 at the time, were adventurous eaters, but a raw diet pushed them to their limit, not to mention my husband," she says. "I needed to find a diet to heal myself and feed my family, so I began to make modifications."

Today, Hofmann still eats mostly plants, but in her home kitchen, she finds cooking essential, especially during the Northeast's long, cold winters.

"I try to strike a balance of what is best for my health while still enjoying a wide variety of foods," she says. "Now I know how great I can feel, so when I start to feel off, I know I can rebalance my diet and get that feeling back." •

CATHERINE GUTHRIE is an *Experience Life* contributing editor.



Tips for Eating Raw

If you want to experiment with a raw-foods approach, experts suggest trying it for a few weeks — ideally during spring or summer — and then evaluating how you feel. These tips will help you stay on friendly terms with your digestion.



Start with a 1:1 ratio of cooked and raw foods and see how you feel, says functional-medicine provider Will Cole, IFMCP, DNM, DC. He recommends letting your bathroom habits be your guide. If your stools are loose, reduce the amount of raw foods and eat more cooked soups and stews. If constipation crops up, dial up your raw-food intake.



2 If you experience bloating and gas, consider adjusting your ratio of vegetables to fruit. "People with underlying gut issues tolerate more fruit better than more vegetables because fruit fiber is gentler," says Cole.



Add a splash of apple-cider vinegar or lemon juice to a glass of water and drink with meals, suggests functional nutritionist Jesse Haas, CNS, LN. This helps improve stomach-acid production for stronger digestion.



If bloating or gas is still a problem, try taking digestive enzymes before meals to help your stomach process the roughage, says Haas.



5. Drink plenty of water to help keep things moving through the digestive tract.



Add warming spices, such as ginger and turmeric, says Akil Palanisamy, MD. This is an Ayurvedic way to help increase digestive "fire."



Keep tabs on your energy, mood, cognition, and stamina, says Haas. "Be open to feedback from your body on whether a raw-foods diet is working for you or not."

Your Eco-Friendly Kitchen

Try these tips to cut back on food and plastic waste in your kitchen.

BY CAMILLE BERRY

e've all been there before: opening the fridge to find a browned, wilted cabbage or a dull, shriveled zucchini tucked away in the crisper, days past its prime, destined for the trashcan. In the United States, we throw away more than 200 pounds of food per person annually — about 30 to 40 percent of all food purchased.

There's no denying we have a profound food-waste problem, but it's within our power to fix. With minor tweaks to our daily routines, we can each reduce the amount of trash coming out of our own kitchens, shrink our carbon footprints, and lower the burden on our landfills.

These ideas will start you on your way to a more eco-friendly kitchen.



Plan Ahead

One of the simplest and most effective ways to curb food waste is to buy only what you need. Plan meals in advance, write a grocery list and stick to it, and take special care to avoid overbuying perishable items. Planning ahead also allows you to flex your culinary skills and take advantage of what's local and in season. (Find more meal-planning tips at ELmag.com/ foodprep.)

"I like to draw inspiration from restaurant menus or the prepared-food counter of the health-food store," writes environmental activist Bea Johnson in *Zero Waste Home*. "This approach feeds my creativity and fits my shopping style of buying seasonally."

Get Organized

Be aware of expiration dates and arrange your pantry and fridge so you'll reach first for the items that are set to go out of date soonest. No one wants to discover a carton of yogurt that's sprouting mold in the back of the fridge.

Before grocery shopping, review the contents of your pantry and fridge. This will help prevent you from accidentally doubling (or tripling) up on products you already have on hand.



Save Your Scraps

Rather than relegating them to the trash, save kale stems, carrot tops, onion peels, and other scraps for making stocks and soups. As Lindsay-Jean Hard

notes in her book, *Cooking With Scraps*, "[It] shouldn't be intimidating or overwhelming or feel like a chore: They're just ingredients."

With that in mind, use your apple cores and peels to make vinegar; candy those citrus rinds; and turn your stale bread into croutons. (Find five of Hard's food-scrap recipes at ELmag.com/foodscraprecipes.)

Wait to Wash Produce

Wash your veggies and fruits only when you're about to use them instead of running them under the tap as soon as you unpack them at home. Washing produce before storing it causes some items to spoil more quickly.



Share the Wealth

Made too much veggie stir-fry or chicken curry? If you find yourself laden with leftovers, you can always freeze them or better yet, offer some to your neighbors. It's not only a way to reduce your food waste; it's a great way to foster community.

Skip the Plastic . . .

Be Flexible

If you're making a recipe that calls for onions but

have only leeks on hand, make the swap. Recipes are just guidelines, and cooking is an organic

process. Improvise as you cook, and don't feel like

turns out. (Find a few of our favorite flexible dishes

- plus tips for stocking a pantry that will make it

easy to improvise — at ELmag.com/stockapantry.)

you absolutely must follow a recipe to the letter. Use the ingredients you have on hand — you

might be surprised by how delicious your dish

It's difficult and expensive to recycle plastic, so even if you put that empty almond-butter jar in your recycling bin, it's likely to end up in a landfill instead. That's why it's important to purchase plastic-free products at the grocery store whenever possible.

If you find items you regularly buy in those pesky plastics — containers of rice, for example — consider buying from bulk bins. It's a stellar option for dried spices and herbs, because you can create spice blends at home rather than buying tons of individual bottles. (Get more tips for living with less plastic at ELmag.com/lessplastic.)



... Or Reuse It

Some plastics are unavoidable. Instead of throwing out those empty takeout containers, as long as they're marked with number 2, 4, or 5, you can reuse them. They're great for storing leftovers, homemade condiments, and make-ahead meals. You can also wash and reuse plastic bags — just don't put plastic in the dishwasher or microwave.

Say No to Single-Use Products

Freeze It

Meal-prep fans already

the freezer is for long-

term storage — and on the journey to reduce your food waste, it's your closest ally. Stash a pint

of mushy berries there

to add to smoothies,

bake into a cobbler, or

turn into a jam. Freeze

overripe bananas for

banana bread or use

with a bit of organic

extra-virgin olive oil.

When you're ready to use

the herbs, just add a cube

directly to a hot skillet.

frozen beets for pickling.

Even fresh herbs can be frozen and saved for later: Chop them up and pop them into ice trays

know how indispensable

To move away from plastic wrap and bags entirely, invest in beeswax paper. This clever reusable alternative has antimicrobial properties, so it not only is more sustainable but also may help limit food spoilage. You can also buy silicone sandwich bags, which can be washed and reused.

Coffee drinkers might consider switching to reusable coffee filters (and don't forget, those coffee grounds can be used as fertilizer for your acid-loving plants). If you're a tea drinker, opt for loose-leaf tea or buy only brands that use biodegradable teabags.

As for paper towels? Trade paper for cloth towels and use them whenever possible. "If you stop buying single-use products for your kitchen," Johnson writes, "you will quickly realize that living without them is quite possible."

Make It Yourself

We all fall victim to convenience. How simple is it to add a bottle of ketchup or jar of mayonnaise to your shopping cart? Instead, consider making them at home. You'll be buying fewer plastics, and the condiments you create will be completely preservative-free. You can also make Greek-style yogurt, granola, and hummus at home with relative ease. (Find some of our favorite scratch-made recipes at ELmag.com/scratchrecipes.)

Compost It

"Even after using every possible part of your food and storing it properly, you're still going to have some food waste," writes Hard. "Those scraps don't need to be sent to a landfill; they can be composted to return valuable nutrients to the soil."

Those apple cores, veggie peels, and tea leaves can all be used to nourish the soil in your garden. Mix coffee grounds into the soils planted with roses, blueberries, lilies, cabbage, and hydrangeas.

Don't have a garden? Collect scraps in a bin and use curbside compost, if available, or reach out to your local community garden to see if they accept compost. (Get our tips for beginner composting at ELmag .com/composting.) �

CAMILLE BERRY is a wine and food writer based in San Francisco.

REAL FOOD Confident Cook

A World of Beas

Different cultures have various ways of enjoying this age-old beverage. Try one of these recipes to make teatime more delicious.

BY ROBERT HANSON

y introduction to the world of teas came during a trip to Hong Kong. Sitting in a restaurant high above Victoria Harbour, I sipped cup after cup of steaming oolong, amazed at the exalted aromas of melon, spice, and exotic flowers.

Since then, I've continued to travel and enjoy teas around the globe — spiced chai in India, hearty black teas in Australia, and delicate green varieties in Vietnam and Japan.

I have seen firsthand that tea really is the world's favorite beverage. Today, 2 billion people drink two or more cups daily, and the tea market is expected to grow by more than 6 percent annually over the next several years.

What's behind tea's growing popularity? One factor may be the mounting evidence that its abundant antioxidants particularly a polyphenol called EGCG (epigallocatechin gallate) — can help lower blood pressure, reduce inflammation, and boost the immune system. But that's hardly a complete list.

A 2018 Korean study, for example, found that frequent green-tea drinkers were 21 percent less likely to suffer from depression. And a 2021 Japanese study looked at survivors of stroke and heart attack and found that frequent tea drinkers had about a 60 percent lower risk of death from all causes.

While it might seem that we are just starting to understand tea's many benefits, historians would likely disagree. For millennia, Chinese scholars have been extolling the medicinal uses of the tea plant, *Camellia sinensis*. At the same time, they were celebrating what it can do for our spirit — namely, restore a sense of well-being with a ritual that, regardless of where we travel, is always close at hand.

Global Tea Regions

Tea originated in China, and that country remains one of the world's top producers, along with India and Sri Lanka. But cultivation has spread to locations as varied as Mauritius, the island nation located in the Indian Ocean; Colombia, which only began producing in the 1950s; and even the United States, notably in Hawaii and South Carolina. Kenya has become a top tea exporter, to the tune of more than 400,000 tons per year. The excellent growing conditions along the equator allow tea gardens there to be cultivated and harvested nearly year-round — though the region is highly vulnerable to climate change, which is likely to lead to reduced yields in coming years. Meanwhile, a new emphasis on specialty teas grown in the highlands of East Africa's Great Rift Valley is under way.



Tips for Tea Preparation

WATER: One of the most important points is also one of the most fundamental: Pay attention to water quality. Select the best-tasting water possible, and heat only cold, fresh water.

TEMPERATURE: Water temperature is another key factor, especially when preparing green and white teas, which can turn bitter quickly when steeped in water that is too hot. For those varieties, heat water to a temperature between 160 and 180 degrees F. Black tea needs boiling water to bring out the robust flavor of the leaves.

TIME: The taste and aroma of your tea — and the amounts of antioxidants and caffeine it contains — are determined by how long the leaves remain in the water. Green and white teas should be steeped for three minutes or less. Black tea usually needs three to five minutes, but shorter infusion times may produce a milder, less caffeinated cup. Multiple infusions will bring out different flavor profiles.

EQUIPMENT: When preparing whole-leaf teas, infuse with a device (such as a pot with integral screen, or a large tea filter or ball) that provides space for the leaves to fully unfurl.

REAL FOOD Confident Cook

Full-bodied black teas from India and China can make a great swap for a morning cup of coffee.

Bold Black Breakfast Tea

Makes one serving

• 8 oz. water

- 1 heaping tsp. Assam tea (options: a robust Chinese black tea, such as Keemun, or an Irish breakfast tea, which is typically based on Assam)
- 1 tbs. milk of choice (optional)
- 1 tsp. honey or preferred sweetener (optional)

Heat water to a full boil and load loose tea into a tea ball or tea filter. Pour water into a mug, add tea, and steep for three to five minutes.

Remove tea and add milk and sweetener, if desired. Serve.

Leaves of *longjing* (or Dragon Well), one of the finest and most famous Chinese green teas, are relatively large, with a flattened, spear-shaped appearance and a slightly glossy sheen.

Dragon Well Chinese Green Tea

Makes one serving

- 8 oz. water
- 1 tsp. *longjing* tea (a.k.a. Dragon Well)

Heat water to a full boil, then allow to cool to 180 degrees F. Load tea leaves into a tea ball or filter. Pour water into a mug or a cup, then add tea and steep for three minutes. Remove tea and serve.

Chai With Toasted Spices

Makes two servings

- 5 green cardamom pods, lightly cracked
- 2-inch piece of cinnamon, broken
- 5 whole cloves
- 6 whole black peppercorns
- 2 or 3 slices of fresh ginger, about 1½ inches in length, skin removed
- 16 oz. water
- 3½ tsp. Assam tea (options: Irish breakfast tea or another quality black-tea "breakfast blend")
- 2 tbs. agave nectar or preferred sweetener (optional)
- ¹/₂ cup unsweetened almond milk or milk of choice

Place the cardamom pods, cinnamon, cloves, and peppercorns in a dry skillet over medium heat, and lightly toast until fragrant, about three minutes, stirring occasionally.

Place toasted spices, ginger, and

water in a small saucepan. Bring to a boil and then remove from heat. Cover and allow to rest for eight minutes.

Return to heat and bring just to a simmer, then remove from heat. Add tea, sweetener (if desired), and milk; stir once and allow to sit, uncovered, for three and a half minutes.

Stir once more and strain tea into mugs or small pitcher. Serve.

In Hindi, this recipe is a "masala chai," meaning spiced tea. It's popular throughout the Indian subcontinent and South Asia, where there are many different regional variations. Darjeeling tea is sold in two main varieties: first flush and second flush. For iced tea, the somewhat more assertive notes of second-flush teas are ideal.

Afternoon Darjeeling Iced Tea

Makes one serving

- 8 oz. water
- 1½ tbs. agave nectar or preferred liquid sweetener (optional)
- 3¹/₂ tsp. Darjeeling tea (option: a quality Darjeeling blend)
- Ice

Heat water to a full boil, then pour into a small pitcher. Add liquid sweetener, if desired, and stir to dissolve. Place loose tea in pitcher and steep for four minutes.

Fill a large jar with ice, then strain hot tea over ice and stir quickly to chill. Pour chilled tea into glasses with more ice and serve.

Kashmiri-Style Tea With Saffron and Almonds

Makes two servings

- 5 green cardamom pods, lightly cracked
- 1-inch piece of cinnamon, broken
- 2 whole cloves
- 16 oz. water
- 2 tbs. sliced almonds
- 2 tsp. gunpowder tea or other Chinese green tea
- 1 tbs. agave nectar or preferred sweetener (optional)
- 2 strands saffron

Toast the cardamom, cinnamon, and cloves in a dry skillet over medium heat until fragrant, about three minutes, stirring occasionally.

Place the spices, water, and almonds in a small saucepan and bring to a boil over medium heat.

Remove from heat and cover, then let rest for five minutes.

Remove cover and allow mixture to cool to 180 degrees F, about three to four more minutes.

Add tea leaves and sweetener, if desired; stir once, and cover for an additional three minutes.

Stir one more time and strain into cups for serving. Use one saffron thread and a few slices of almond from the pot to garnish each cup. Kashmiri-style tea brings together the intoxicating aroma and flavors of spiced tea with the freshness of a green tea.

ROBERT HANSON is a food and travel

writer based in Southern California.

CHEERS!

Find our recipes for tea-based cocktails at ELmag.com/ tearecipes.





Sherry Poss wakes up most days excited for her 5 a.m. workout. Five mornings a week, she does Alpha classes at Life Time; she also often cycles two to three times, and depending on the season, runs a few times as well.

It's a routine she's stuck with for nearly four and half years, and one that's part of a healthy, active lifestyle that began 15 years ago, when she set out to lose weight and improve her health.

After achieving her original weight-loss goal, Poss was motivated to keep going and committed to continuing to work out regularly. That drive and determination lead her to Life Time in 2016, where she connected with a trusted community.

LIFE'S TWISTS & TURNS

Poss's foray into Alpha wasn't immediate; if fact, she observed the class from afar for a while, initially feeling intimidated by its Olympic-style lifting and conditioning focus. Once she gave it a try though, she was hooked; she's been an avid member of the program and community since 2018.

"Alpha helped me grow stronger physically," says Poss, who is mom to an 11-year-old daughter and works full-time. "I was able to lift heavier weights every week and accomplish more in less time. I also grew stronger mentally — I realized I can do hard things."

That improved mental strength became especially important in July 2020. Poss had started feeling sore all the time, and while she often pushed her body to the limit during her workouts, this seemed extreme. So she went to get checked out at an urgent care, where the doctor suggested she had a pinched nerve and prescribed rest for a few weeks.

But the soreness only got worse. "Within a week, I started retaining fluid," said Poss. "I looked like I was six months pregnant." She went to the emergency room, where doctors did a CT scan and ran blood tests. "Within an hour they told me I had cancer — not what I expected to hear. I was admitted to the hospital that day.

"The first night was the scariest because the doctors came in with very sad faces — or more like sad eyes, because that's all I could see behind their masks," Poss recalls. "I thought, 'Oh my

Movement Therapy

Life Time member Sherry Poss credits her health and fitness regimen as an essential tool in helping her beat cancer.

> Poss's HOKA ONE ONE shoes of choice are the Clifton 8 (pictured here) and Bondi 7 (above). Find your go-to pair at HOKAONEONE.com.

gosh, I'm going to die.'"

The next day, she was diagnosed with Double-Hit Diffuse Large B-Cell Lymphoma with Central Nervous System Involvement, stage IV. Lymphoma is a blood cancer, but it can also cause solid tumors; Poss had three in her abdomen. Tests also revealed cancer in the bone marrow in her right hip and cancer in her spinal fluid.

right hip and cancer in her spinal fluid. Her diagnosis was serious, yet the prognosis

was optimistic: The cancer was curable. "Staging with lymphoma is different than other cancers," Poss explains. "While stage IV is very serious, it means the disease has spread beyond your lymphatic system."

Terrifying as the diagnosis was, it sparked her determination. "Once the doctors narrowed down my cancer type, their demeanor changed," Poss reflects. "At that point, I knew I could beat this and that changed my focus to start doing whatever I needed to do to survive. It was very mental. I mean, it sucked that I got cancer - Icouldn't change any of that. I could only control how I responded to it."

That first hospital stay lasted eight days and included various tests and procedures, including a bone-marrow biopsy and her first round of chemo. After that, Poss was in and out of the hospital seven more times over the next several months, for a total of 51 nights. The experience was long and challenging, but she found ways to make it more tolerable.

Due to the pandemic, Poss was already working remotely, and she continued to do so in the hospital. "Working actually helped me. I would work around my chemotherapy appointments, and sometimes during my treatments because I was connected to the chemo for 24 hours at a time. I never got chemo brain," said Poss.

She also used the treadmill in the physical therapy wing of the hospital for walking and staying active (to an extent). "I realized that for me to be able to sleep at night, I had to be both mentally and physically exhausted. So I added workouts in."

After a round of chemo, she would be sent home for a couple of weeks, then begin the cycle again. At her three-month PET scan in October, however, Poss learned the chemo was not working and the tumors in her abdomen that initially shrunk were growing again.

In consultation with her healthcare team, Poss adjusted course in hopes of qualifying for a clinical trial for CAR-T immunotherapy. It took a few months — and several unsuccessful chemo treatments — before the clinical trial sponsor approved Poss for the therapy.

On February 2, 2021, she received her T cells, which had been harvested back in October. "The first day or two was fine, and then cytokine release syndrome kicked in. I was basically in bed for eight



days experiencing a high fever, fatigue, nausea, and no appetite."

During the first 60 days after treatment, Poss was unable to drive, and had to have a caregiver — primarily her husband — with her 24 hours a day in case she developed any late-stage side effects. "Thankfully I did not have any of those effects once I was released from the hospital," Poss recalls.

She visited her clinic regularly for follow-up lab work and monitoring. "My first PET scan wasn't until 90 days after I received my cells. However, I had a few ultrasounds leading up to it, so I knew the tumors were shrinking."

LIFE RENEWED

In May 2021, Poss finally heard the two words she'd been hoping for since her diagnosis: "Complete Response" — she was cancer free. "It was one of the best days of my life," she recalls.

Now, she reflects on her journey and how her priorities have shifted: "I don't take my time for granted," says Poss. "I want to stay more focused on experiences over things, and quality time with people."

And she's resumed the fitness regimen that she credits with helping her be here today. "Being physically fit prior to having cancer and staying active throughout treatment helped me recover and get back to the level of fitness I was at before my cancer diagnosis. Chemotherapy and immunotherapy are very hard on your body, and I feel incredibly grateful that I am back doing all the activities I love.

"Exercising is like therapy for me," Poss continues. "And I value my Alpha class and the peers I work out with. It all helps me stay mentally grounded and calm."



Life Time has partnered with performance footwear and apparel brand HOKA ONE ONE to amplify voices and inspire people to move by spotlighting Life Time members and team members within Humans of HOKA athlete stories.

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REAL FOOD Ingredients

Dates

Whether as a standalone snack or an ingredient in your next recipe, this sweet fruit deserves a place in your kitchen.

BY CALLIE FREDRICKSON



DISCOVER

The fruit of the datepalm tree is chewy and intensely sweet, with notes of toffee and butterscotch. Large, caramelly Medjool dates are the most standard variety, though smaller, nuttier Deglet Noor dates are also widely available. Dried varieties are more common than fresh dates because of their longer shelf life. You can cook with dates, eat them whole as a snack, or use them as a natural sugar substitute or sweetener.



SHOP AND STORE

Look for plump, shiny dates that aren't too shriveled or dry. Keep an eye out for white spots on the skin, which indicate older fruits whose sugars have begun to crystallize. Store them in an airtight container in the refrigerator for several weeks or freeze them for up to a year. Because of their high sugar content, dates won't freeze solid, and they'll retain their characteristic chewy texture.

KNOW YOUR NUTRIENTS

Dates are rich in insoluble fiber. They're also a source of calcium and potassium, and they contain phytonutrients with antioxidant, antiinflammatory, and immune-boosting properties. Their naturally occurring sugar also delivers an energy boost — just be sure to pair dates with a source of fat. like nut butter, to moderate the blood-sugar response.

MIX 'EM UP

Because of their chewy, sticky texture, dates make ideal binding ingredients for energy bites and bars. Learn how to make your own at ELmag.com/energybars. Need a make-ahead appetizer for your next dinner party? Try our Pecan and Goat Cheese-Stuffed Dates at ELmag .com/stuffeddates. Or have your dates for breakfast with our Almond-Cardamom Chia Pudding at ELmag.com/ chiapudding.

CALLIE FREDRICKSON is a Life Time content editor.

MAKING PEACE WITH

NCR BES

WHY A LITTLE EXPOSURE TO GERMS AND VIRUSES IS GOOD FOR YOUR HEALTH.

BY MO PERRY

our body hosts multiple microbial communities — in the gut, on the skin, in the lungs, and elsewhere. This collection of flora, better known as the microbiome, is home to more than 38 trillion bacteria. And they're not alone: Viruses outnumber bacteria in the microbiome by about 10 to one, with an estimated 380 trillion viruses making up what is now called the "virome." A healthy dose of fungi and protozoa keep them company.

"We all carry around a massive load of microbes," notes immunology expert Mary Ruebush, PhD, author of *Why Dirt Is Good: 5 Ways to Make Germs Your Friends.* "The very fact that you have so many microbes of so many different kinds is what keeps you healthy most of the time." Some of the viruses in the microbiome, called phages, help manage our bacterial populations; they act as natural antibiotics that target harmful bacteria while leaving helpful bugs alone. Others were long ago incorporated into our DNA, driving the evolution of the placenta, among other things.

The diverse flora that compose a healthy microbiome compete, interact, and generally occupy a lot of space, explains Ruebush. As with a thriving garden that crowds out weeds, there's not much room left for the minority of bacteria that are dangerous to humans. "They generally can't get enough of a foothold to start reproducing fast enough to outplace the normal flora."

Well before 2020, healthcare providers had begun to recognize the health benefits of a thriving microbiome. They were also realizing that an overzealous approach to cleanliness could have grim consequences for it.

Some healthcare providers began to suggest less-frequent showering. Triclosan and 18 other antimicrobials were banned from household and personal-care products as researchers grew more concerned about the chemicals' contribution to antibiotic resistance. And some of us began making our own fermented foods to cultivate more diverse microbial populations in our guts — or at least eat more high-quality yogurt.

Then along came a new coronavirus, knocking the microbiome out of the spotlight. Hand sanitizer, antimicrobial wipes, face masks, and gloves became features of everyday life. Even as research made clear that surfaces were not the primary mode of transmission, many of us felt reluctant to abandon sanitizing rituals: They helped us feel like there was something we could do to protect ourselves and one another.

Today, as the pandemic continues to evolve, we're equipped with new forms of protection: vaccination, natural immunity, more knowledge, and better treatments. Meanwhile, our renewed attachment to hypersanitizing might actually be weakening our immune systems, even as we strive to help them thrive and protect us from whatever comes next.

Learn why developing a more accurate understanding of the risks *and* rewards of microbial exposure can leave us even healthier and better protected in the long run.

MICROBES AND IMMUNITY

That thriving garden of bacteria, viruses, fungi, and protozoa in the microbiome both trains and develops the immune system, playing a critical role in preventing illness. A depleted or imbalanced microbiome can leave us more susceptible to infection by bacteria, viruses, and parasites. It's also associated with certain types of cancer, autoimmune diseases, and chronic conditions such as irritable bowel syndrome.

The seeds of our protective microbial garden are planted mainly in childhood. The "old friends" hypothesis argues that early exposure to beneficial microbes (the "old friends") that coevolved along with humans is essential for the immune system to develop properly. These microbes teach the immune system to recognize invaders and react to them appropriately.

"If you don't have that exposure, the immune system doesn't get educated," explains Mitchell Grayson, MD, chief of the Division of Allergy and Immunology at Nationwide Children's Hospital in Columbus, Ohio. A poorly educated immune system is prone to misbehave.

"Our immune system is designed to negotiate life with microbes," explains functional-medicine physician Kara Fitzgerald, ND, IFMCP. "If you take the microbes out, our immune system is still going to react, often against the self — with autoimmunity — or against a benign environmental compound, such as pollen, dander, or food, as happens with allergies." (For more on allergies, see ELmag.com/allergies.)

The more diverse organisms you're exposed to as a child, the more likely you are to have better protection from illness. You're also less likely to



develop immune disorders. "In the first 10 years of life, we're hardwired to be experimenting with the environment immunologically," explains Ruebush. "If the body is happily occupied dealing with things that could endanger it, then it's not developing allergies, asthma, and autoimmunity."

Eager young immune systems find their microbial teachers mainly through contact with other people and the great outdoors. In the United States, Amish children who grow up interacting with animals, soil, and airborne sediment and microbes on their farms report lower rates of asthma and allergies than their genetically similar counterparts whose communities use modern agricultural technology.

Researchers have concluded that the hands-in-the-dirt life of the Amish produces less-reactive airways and lower levels of allergy-related cells. This is just one example of support for the hygiene hypothesis, which states that too much cleanliness leads to immune dysfunction.

In the 2000s, Finland was found to have the world's highest rate of autoimmunity-based type 1 diabetes among children. Finland shares a border — as well as a genetically similar population and subarctic environment — with Russia; there, however, the rate of type 1 diabetes was six times lower.

Researchers found that Russian children spend the first years of their lives fighting off a host of infections, including hepatitis A, the parasite *Toxoplasma gondii*, and the stomach bug *Helicobacter pylori*. These expo-



LIKE THE MICROBES THAT FILL OUR GUTS, THE MICROBES ON OUR SKIN RARELY CAUSE DISEASE. IF ANYTHING, THEY MAY HELP PROTECT US FROM DISEASE."

sures are far less common across the border in wealthier Finland.

Without question, industrialized nations' advances in sanitation have prevented countless early deaths — but the flip side of this positive development is that they may also be contributing to immune disorders. "In modernized societies where we bathe every day and use antibacterial soaps, our higher rates of autoimmunity and allergies might be related to us being too clean," says Grayson.

One in 12 Americans is diagnosed with an autoimmune condition (a number that's rising steadily); industrialized nations in Asia are catching up.

Exposure to other people matters, too. A study published in 2020 found that most toddlers who engaged with multiple kids in a childcare environment were better protected against developing asthma than those who stayed home. And kids living with older siblings tend to report lower rates of asthma and allergies, possibly because they're exposed to their siblings' germs at a young age. Pets also play a salutary role.

In short, letting kids play in the dirt, preferably in the company of other children, seems to be a great strategy for long-term immunological health.

"When you create a hygienically controlled atmosphere, diseases like autoimmunity and allergy can occur," notes Fitzgerald. "Paradoxically, what you don't want to happen can happen. The wholesale damage from an attempt to control microbes leads to less immunological control."

THE GUT-SKIN AXIS

The gut microbiome is not the only garden worth tending. The skin has a community of microbes of its own — one as large and diverse as that in your gut.

"The skin and the gut are both massive organs at the interface of self and not-self, and the skin- and gut-associated immune systems are responsible for making decisions around what's safe and not safe, what to react to or not," says Fitzgerald. "Furthermore, what's happening on the skin can influence the gut, and what's happening in the gut can impact the skin."

The intimate relationship and communication between these organs is called the gut-skin axis. Both can affect the immune system.

The skin is a barrier that repels bad bugs, antigens, toxins, and harmful UV light, Fitzgerald explains. It relies on a thriving microbiome for its integrity.

"If we disrupt that with excessive hygiene or toxins in the lotions and potions we put on, we're disrupting this living, interacting ecosystem and breaking down that barrier." In his book *Clean: The New Science of Skin and the Beauty of Doing Less*, James Hamblin, MD, explains how bathing temporarily alters the skin microbiome, either by removing some microbes or altering the resources available to them. And that's not always a good thing.

1111111111111111

"Like the microbes that fill our guts, the microbes on our skin rarely cause disease," he writes. "If anything, they may help protect us from disease."

Handwashing is a time-tested strategy for warding off contagious bugs and harmful pathogens. Yet there's wisdom in not overdoing even this protective measure.

Creating holes in the skin's microbial garden creates openings for weeds — those less desirable bugs — to take up residence. Along with the excessive use of antibiotics, antibacterial soaps and cleaning products are driving the evolution of "superbugs" — pathogens that can't be killed by the usual sanitation methods or drugs.

The best routine, says Ruebush, is good old soap and water. "Warm, soapy

water is good enough for just about anything you want to clean."

THE IMMUNITY MUSCLE

During 2020, much of the world didn't experience normal cold or flu seasons. Although COVID ran rampant, other common viruses were notably absent, including respiratory syncytial virus (RSV), a highly contagious virus that normally circulates in the winter and can be particularly dangerous for children.

When RSV made a surprising, out-of-season return in the summer of 2021, it caused dramatic spikes in child infections and hospitalizations around the world. Experts blamed the surge on "immunity debt" — the failure to build up immunity against common viruses, in this case due to widespread mitigation measures for COVID.

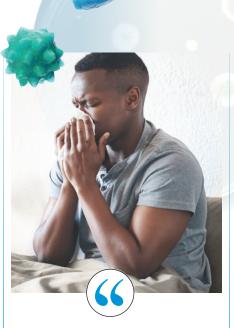
How does the immune system usually stay up to date and out of debt? Through exposure.

Whether from vaccination or infection, the immune system learns how to combat pathogens through practice. (Vaccines act more like a friendly tutor to the immune system; infections provoke a real-time battle.)

Like a muscle, the immune system needs exercise to stay in shape. "White blood cells multiply in response to challenge: Each exposure to a germ gives you more immune cells to respond faster and more aggressively the next time that germ tries to attack," explains Ruebush.

B and T cells are two critical components of the adaptive immune system. They recognize specific attackers, produce antibodies to destroy them, and regulate the action of other immune cells. These cells can have long lifespans, providing protection against pathogens they've met before, sometimes for decades.

"But if we don't keep them on their toes by showing them they're doing a great job guarding the environment, they can become quiescent and die," notes Ruebush. "Then you need to start from scratch, with immune cells learning by bumping into pathogens, which happens slowly."



EACH EXPOSURE TO A GERM GIVES YOU MORE IMMUNE CELLS TO RESPOND FASTER AND MORE AGGRESSIVELY THE NEXT TIME THAT GERM TRIES TO ATTACK."

Keeping these cells busy helps them stay in fighting shape. "In normal circumstances, if you're less than perfect about personal hygiene, relaxed about your environment, and hugging people at church, that gives those cells more of a kick in the butt to keep them interested in what's going on around them," she says.

There's even evidence that battling a cold recently may provide some immune protection against the virus that causes COVID. In a study published in *Science* in 2020, researchers found that T cells trained to respond to common-cold-causing coronaviruses will cross-react to the virus's spike protein.

Multiple studies have also found that a recent cold correlates to less severe symptoms in those who later contract COVID.

While vaccination remains the best tool to prevent severe outcomes from COVID, this research suggests that keeping your immune system primed by engaging with the world may be a worthwhile addition to your immunological toolkit.

"What keeps our immune response

strong is being experienced in dealing with things in the environment and managing them," says Ruebush. "That makes us stronger and causes us to react more normally to the things around us."

STRIKING A BALANCE

So, what's the best way to balance the need to protect ourselves from illness and the need to protect our immune systems from depletion?

All of our experts agree that vaccination is a critical tool. "People should be vaccinated for the things we can be vaccinated against," says Grayson. It's a gentle and effective way to educate the immune system and keep it on its toes.

Beyond that, Grayson encourages a more relaxed approach to protecting against germs. "Sometimes having a cold is a good thing, because it jazzes the immune response," he notes.

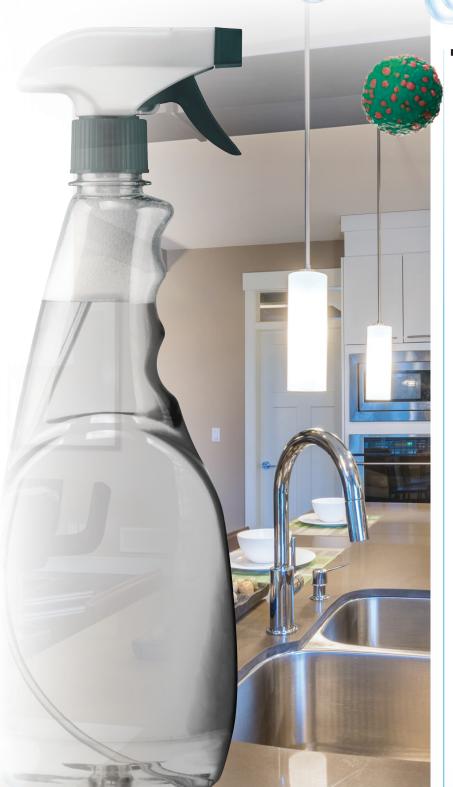
While the desire to ward off colds and flu is understandable, he thinks masking solely for this may be shortsighted. "At some point, if you stop wearing a mask, you're not going to have an immune response to that virus. Your illness might be more severe because your immune system won't have seen it for that period of time."

Once you're vaccinated for COVID, he suggests, take the long view if you do get an infection. "If you get exposed to COVID as a vaccinated person and have a mild or asymptomatic case, that's a booster response, and over time you'll be less likely to get sick from it."

Fitzgerald adds that hypervigilance can carry immunological costs of its own, noting that "the stress hormone cortisol can suppress the immune system." Still, she recommends going at your own pace when relaxing protocols, especially if you're anxious about letting your guard down.

"Don't push yourself if you're not ready," she says. "We need to engage in good immune-supportive self-care and ultimately have our eyes on moving back out toward the world." •

MO PERRY is an *Experience Life* contributing editor.



THE FACTS ABOUT SURFACE TRANSMISSION

Most marketing campaigns for cleaning products want you to believe that the surfaces in your environments are teeming with terrifying bacteria and viruses, waiting to leap onto your skin and food and make you ill. You need the company's arsenal of sprays, solutions, and wipes to keep them at bay.

Not so fast. It's true that some viruses, such as influenza and respiratory syncytial virus, can transmit via droplets and surfaces — and you really don't want to share a spoon with an actively sick person. But the risk of catching COVID-19 from surfaces has been overblown.

Research now suggests that COVID spreads primarily through airborne transmission — that is, we breathe it in more than we touch it in. Surface transmission of COVID is rare.

"Research is clear that all the sanitizing we've been doing to prevent COVID-19, like endlessly cleaning surfaces, hasn't been worth the tradeoff. We need to back off of that," says functional-medicine physician Kara Fitzgerald, ND, IFMCP.

While it might seem like a harmless exercise in caution, disinfecting surfaces does have consequences. Antimicrobial cleaning products don't discriminate between harmless or beneficial bugs and bad ones. Ridding your environment of good bugs can create more openings for unwanted ones. Wipes may serve to spread germs around rather than destroy them, and each discarded sheet winds up in a landfill.

"I'm not too worried about surfaces," says immunology expert Mary Ruebush, PhD. "But I do worry about how many chemicals we introduce in our desire for cleanliness, especially around kids." Not only do many cleaning products contain antimicrobials, but they often also host hormone-disrupting ingredients, like phthalates.

Ruebush notes that pathogens we ingest orally are less likely to cause disease than those we breathe, because they have to live through the acid bath of the stomach. "I'm more cautious with things I'm breathing," she says. "I try not to touch my face too much, but I've gotten rid of chemicals in my home, and I clean with soap and water." **Cycling enthusiasts** and experts explain the many ways that hopping on a bike, whether indoors or out, can boost your overall health — and just maybe help build a better world.

ealthy

BY MICHAEL DREGNI

"Life

is like riding a bicycle. To keep your balance, you must keep moving."

Those healthy-living words of wisdom come from none other than Albert Einstein. He was a cycling enthusiast of sorts; most of us have probably seen the photo of him riding a bicycle with a great big grin on his face. It's widely believed that he conceived the theory of relativity while riding a bike.

One of the glories of bicycles, however, is that they're *not* rocket science. In fact, they're almost the opposite: simple, earthbound tools offering myriad wellness benefits. Here, we explore three key healthy aspects of cycling — all backed by research — plus offer a few insights from Einstein and other cycling aficionados.



BUFF UP YOUR PHYSICAL HEALTH

"Get a bicycle. You will not regret it, if you live." So advised Mark Twain in the essay "Taming the Bicycle" (which he only just managed to do).

Bicycles were a relatively newfangled thing in the late 1800s, but people quickly hopped on. They enjoyed the speed and sense of freedom — and soon also realized the health benefits the two-wheelers delivered.

You need to keep moving not only to maintain your balance, as Einstein recommended, but to improve your health as well. Physical activity works like magic, yet it's scientifically proven in study after study. Understanding the benefits of movement has become a huge area of research in recent decades, to the point where progressive healthcare providers are even prescribing activity.

And bicycling — along with walking, running, and swimming — is one of the simplest forms of movement. "It sounds trite, but the adage 'It's just like riding a bike' exists for a reason: Cycling isn't complicated," says Life Time Academy master instructor Emily Booth. "The nature of cycling makes it uniquely accessible and effective for a wide variety of individuals. All you need to do is get on the bike and pedal." "And with all of the innovation in bike technology, there are options for individuals of nearly every fitness level to engage in some form of cycling," Booth explains. "There are traditional road bikes, mountain bikes, gravel bikes, commuter bikes, recumbents, adaptive bikes for those with disabilities, a variety of stationary bikes, and, most recently, e-bikes. Different pedal strokes for different folks!"

For such a simple activity, cycling is a boon for health, she adds — and other experts agree.

"Cycling 30 to 60 minutes per day has been linked with numerous health benefits," explains Appalachian State University professor David C. Nieman, DrPH, FACSM, a pioneering researcher in exercise and nutrition immunology. He lists some of the key benefits of cycling:

- Fights chronic inflammation, which can play a role in conditions including heart disease, type 2 diabetes, stroke, cancer, and Alzheimer's, as well as depression and other mentalhealth issues.
- Lowers all-around risk of hypertension, type 2 diabetes, and cardiovascular disease.
- **Decreases risk of cancer,** such as bladder, breast, colon, endometrial, esophageal, kidney, lung, and stomach cancer.
- **Improves joint health,** cardio function, and metabolism.
- Helps maintain weight by burning fat and by building lean muscle mass, particularly in the core and legs.
- Boosts mobility and all-around physical function while also reducing the risk of falls and related injuries, which is especially important for older adults.
- Enhances sleep quality.
- Lowers all-cause premature mortality.

A study published in the *BMJ* in 2017 found that regular cycling cut the risk of death from all causes by more than 40 percent, lowered the risk of cancer by 45 percent, and reduced the risk of heart disease by 46 percent among 263,450 study participants. (For more on the many benefits of activity, see ELmag.com/madetomove.)

Other forms of exercise are also beneficial, though, so what is it about cycling that makes it such a health promoter?

One of the key factors is that the bicycle — and not your hips, knees, or feet — bears most of your weight as you move. And because your legs work in a single plane, those joints also experience less lateral stress.

Plus, cycling is often considered a "life sport": You can experience its benefits over the long term because there's less wear and tear on the body.

In one study, Nieman compared cyclists and runners during a three-day period of intense training and found that cyclists experienced substantially less muscle damage, muscle soreness, and systemic inflammation for the same amount of effort. "Cycling is easy on the muscles," he explains. Cyclists can put in longer workouts "and won't feel as sore the next day."

As for Twain's "if you live" quip, bicycling — especially commuting can indeed be dangerous. But that threat is far outweighed by the health benefits.

A 2018 study found that bicycle commuters are exposed to fewer toxic air pollutants compared with car drivers, who tend to sit in traffic longer. In regard to the potential for accidents, a study published in the *BMJ* in 2020 involving 230,390 British commuters concluded that "the benefits offset the risks."

If you remain concerned about the outdoor downsides, there's a whole world of indoor cycling to explore.



1817

The year the first bicycle was invented. A steerable, two-wheeled, humanpropelled contraption was first designed by Karl von Drais in Germany. Early bicycles were known as draisines, velocipedes, and dandy horses.







BOOST YOUR BRAIN

"When the spirits are low, when the day appears dark, when work becomes monotonous, when hope hardly seems worth having, just mount a bicycle and go out for a spin down the road, without thought on anything but the ride you are taking."

This prescription for mental health was published in *Scientific American* magazine in 1896 by a doctor named Arthur Conan Doyle, a provincial British physician who spoke of what he knew: He often pedaled a bicycle on his rounds to visit patients (or as a break from creating another confounding case for Sherlock Holmes — but that's another story).

Like most other physical activities, cycling enhances cognitive function, making us smarter, happier, and more resilient. Some scientists even believe building muscles and conditioning our hearts and circulatory systems are side effects: Exercise is really about our brain.

"The real reason we feel so good when we get our blood pumping is that it makes the brain function at its best," says John Ratey, MD, associate clinical professor of psychiatry at Harvard Medical School and author of Spark: The Revolutionary New Science of Exercise and the Brain.

Abundant studies support this view. Ratey says that research has found that exercise heightens alertness and perception, reinforces movement and coordination, enhances attention and concentration, aids learning and memory, and keeps the brain young.

Along the way, physical activity also *protects* our cognitive health: It induces the brain to create enzymes that chew up the beta-amyloid plaque associated with Alzheimer's disease, and reduces inflammation. It may help slow cognitive decline, too.

Cycling, in particular, has long been known to help hone our executive

functions of coordination, planning, and working memory. Plus, a *PLOS ONE* study published in 2019 found that along with aiding our cognitive function, it boosts our overall sense of well-being.

This type of exercise "balances" our brain, too, Ratey explains. Movement helps our brains stabilize hormone levels, inoculating us against toxic stress, easing anxiety, helping to alleviate depression, protecting our mental health, and balancing our mood.

A 2018 analysis in the American Journal of Psychiatry that reviewed 49 studies involving 266,939 individuals of all ages concluded "physical activity is associated with a decrease in the risk of developing depression."

Doyle's prescription was correct, based on his anecdotal experience, but it's now official — cycling can make you happier. A meta-review published in the *Journal of Happiness Studies* in 2018 found that even a small amount of exercise can have an outsize effect on our happiness: People who exercise even once a week or for as little as 10 minutes a day tend to be more cheerful than those who never exercise.

In sum, you're just a bike ride away from a better mood.



50+%

Proportion of people worldwide who know how to ride a bicycle, according to the World Bank.

1 billion+

Estimated number of bicycles in use around the globe – although other sources, such as the World Bank, report that there are more than 2 billion.

"When the spirits are low, when the day appears dark, when work becomes monotonous, when hope hardly seems worth having, just mount a bicycle and go out for a spin down the road, without thought on anything but the ride you are taking."

- ARTHUR CONAN DOYLE



BUILD A BETTER WORLD

"Let me tell you what I think of bicycling. I think it has done more to emancipate women than anything else in the world." So proclaimed abolitionist and suffragist Susan B. Anthony in an 1896 newspaper interview.

Bicycling continues to help bring change today — on even more fronts. When we consider the benefits of the activity, we usually think of our health, but we can't overlook the environmental, economic, and even social impacts.

Cycling offers the chance to combat the climate crisis with every pedal stroke: Commuting by bicycle benefits the environment, explains cyclist and activist Monica Garrison.

"Do your part to save the planet by adding carbon-neutral cycling to your bag of tricks," she says. "Bikes are simultaneously ideal for short trips and long journeys of self-discovery. Arriving at your destination with only the power generated by your legs, your pumping heart, and your determination is amazingly satisfying."

Cycling can do more than even that, as Garrison is proving: It can make the world a better place for all. When, as an adult, she rekindled her childhood love for biking, she discovered firsthand the health benefits of cycling, and she sought to share them. So, in 2013, she started a Facebook group called Black Girls Do Bike; it has since blossomed into a movement boasting more than 100 chapters from Alaska to Antigua to London. The group promotes cycling advocacy, self-care, and camaraderie.

"The bicycle has been called a joy machine — some enthusiasts say riding a bike is almost like flying," Garrison says. "A bicycle ride is one of the best ways to clear your mind and feed your soul — all while taking in the sounds, smells, and textures of your environment." A 2015 Rice University exploration of cycling's social effects found that it builds community while empowering diverse age, racial, and socioeconomic groups: Bikes "can become powerful vehicles for breaking down economic and social barriers to equality as well."

"Cycling can build a community," says Kristi Mohn, marketing manager for Life Time's UNBOUND Gravel, Big Sugar, and The Rad events, as well as podcast cohost of *Girls Gone Gravel*. "It truly brings people together, being active and outside."

And during the pandemic, cycling boomed — as a mode of transportation, a pastime, and simply an escape.

A meta-review published in the journal *Sustainability* in 2021 cheered for the changes and suggested them as a road map for the future: "A monolithic procar ethos, and an urban-development narrative strongly tied to it, is something that we need to leave behind; this was simply not good enough, and this is an opportunity for a positive and permanent change fueled by the success stories of active mobility, in general, and cycling, in all its facets, in particular."

Such possibilities were not lost on cycling enthusiasts of yore, either. British author H.G. Wells wrote *The Time Machine, The War of the Worlds,* and other pioneering science-fiction novels in the 1890s, but when it came to prophesying times to come, he was hopeful. In a 1905 novel titled *A Modern Utopia,* he augured that "cycle tracks will abound in Utopia."

He's also oft-quoted as having stated, "Every time I see an adult on a bicycle, I no longer despair for the future of the human race." Whether he actually wrote those words or not, the sentiment is certainly inspiring. 0

MICHAEL DREGNI is an *Experience Life* deputy editor.

42,559

Miles of dedicated bicycle routes in the United States. This includes 17,734 miles of official U.S. Bicycle Route System roads connecting urban and rural communities, as of 2021. It also includes 24,825 miles of rail-totrail routes; an additional 9,175 miles are currently being developed. There's no official tally of the myriad miles of city and state bicycle pathways and lanes yet available.

"Let me tell you what I think of bicycling. I think it has done more to emancipate women than anything else in the world."

- SUSAN B. ANTHONY

48.9 million

Number of bicyclists in the United States as of 2019. This is about a 23 percent increase over 2006. And while statistics are not yet available, the number of cyclists is believed to have skyrocketed during the pandemic, growing so fast it's been difficult to count.

On the Bike

"Next to a leisurely walk I enjoy a 'spin' on my tandem bicycle.... The rapid rush through the air gives me a delicious sense of strength and buoyancy, and the exercise makes my pulses dance and my heart sing for gladness."

Disability-rights activist Helen Keller wrote this in her 1903 autobiography *The Story of My Life*. Her joyfully poetic description just touched on bicycling's health benefits; below are a few more.

CYCLING AND RECOVERY AND REHABILITATION

Bicycling is body-friendly: Riding a bike is largely non-load-bearing, so it's easier on our muscles and joints, explains exercise physiologist Anoop T. Balachandran, PhD, NSCA-CSCS, assistant professor at the City University of New York's Queens College.

But it also offers another benefit that makes it ideal for recovery: "Cycling mainly involves concentric contraction with no eccentric contractions, compared to running or walking," he adds.

In concentric contractions, muscles shorten while generating force and overcoming resistance; in eccentric contractions, they elongate. "Eccentric contractions are more damaging to muscles than concentric contractions."

All these benefits make cycling ideal for recovery as well as cross-training. Riding a bike indoors or out offers endurance athletes as well as weightlifters a thorough cardio workout. The simple movement also flushes your muscles with fresh blood, helping to speed along supercompensation, or the rebuilding of muscles.

Life Time Academy master instructor Emily Booth attests to these benefits. She recently injured her anterior cruciate ligament, or ACL, one of the key ligaments connecting the thighbone (femur) to the shin (tibia) and supporting the knee. "While it was painful to walk, I could comfortably ride at a relatively hard intensity — cycling saved me."

Biking — especially on a stationary model — can be an ideal recovery strategy for many injuries, Booth explains. "Because of its low-impact nature, cycling is an excellent way to improve circulation to the muscles. It is also one of the few activities that many individuals who have undergone a surgery such as hip or knee replacement can engage in to accelerate their recovery and maintain their fitness."

(For more on recovery, see ELmag.com/ exerciserecovery.)

CYCLING AND YOUR IMMUNE HEALTH

We not only are made to move but *need* to move to support our immune system in fighting everything from stress and chronic inflammation to routine colds and viruses, including COVID-19. Our lymph system is a network of organs, tissues, and vessels that transport lymph fluid throughout the body with white blood cells to fight off infection.

This system requires the helping hand of contracting muscles to support circulation, making exercise key. And again, cycling is an easy, low-impact form of exercise that's safe for most people, regardless of fitness level or health status.

A long-term study published in JAMA Internal Medicine in 2021 including 7,459 people with types 1 and 2 diabetes found a 24 percent lower mortality rate among cyclists and a 35 percent lower risk of mortality in those who took up cycling over a fiveyear period.

"There is no medication or nutritional supplement that even comes close to having all of the effects exercise does," says David C. Nieman, DrPH, FACSM, an exercise and nutrition immunology researcher. "It's truly the best medicine we know of."

(For more on how exercise supports the immune system, see ELmag.com/exerciseimmunity.)

CYCLING AND JOINT HEALTH

Staying active is a great way to preserve, and even improve, joint health as we age. The hips, knees, and feet involve complex joints, and cycling helps keep the knees in particular mobile, supple, and lubricated with synovial fluid.

In fact, researchers now find that many of the joint issues we consider chronic or a result of aging can be prevented or ameliorated by activity. And the Arthritis Foundation recommends cycling as one of the most effective workouts for people with arthritis — whether you ride indoors or out, and whether you break a sweat or not.

Cycling's benefits don't necessarily carry through to bone strength, though. Studies published in 2011 and 2018 find that athletes competing in non-weightbearing sports like cycling and swimming can be at risk of developing low bone-mineral density.

To offset this, experts advise supplementing cycling with weight-bearing exercise, such as walking or dancing, and resistance training. Strength training is ideal for building sturdier bones: It can include both low-impact and weight-bearing movements.



Climate Champions

Protecting icecaps and restoring the ocean floor are just a couple of the transformative climate projects that are bringing some hope for the future.

BY ELIZABETH MILLARD

hen it comes to the health of the planet, there is plenty of reason for concern. In 2021, the United Nations (UN) issued a report that the secretary general described as a "code red for humanity." Temperatures are rising faster than anticipated, and we're "perilously close" to crossing the threshold of 1.5 degrees C above preindustrial levels of global heating.

The catastrophic effects of these increasing temperatures include rising seas, stronger storms, and accelerating species extinction.

So it isn't surprising that, for many of us, climate change feels like the battle of our lifetimes. And without a doubt, taking a fierce attitude toward flagrant polluters is often exactly what's needed to protect watersheds from toxins, or species from the threat of extinction.

Yet thinking about climate advocacy solely as a fight can also backfire. Longtime activist and advocate Paul Hawken has suggested that if we want to make a positive contribution, we may need to shift to an affirmative mindset rather than an embattled one wherever possible. "You cannot fight change," Hawken notes. "The language and mindset of healing the earth and atmosphere needs to employ these words: restore, renew, rejuvenate, regeneration, connect, purpose, meaning, and respect." Other activists agree. "Of course, what's happening is frightening, and it's natural

to feel as if you need to take charge and push back as a way to be in control," says Melody Brenna, CEO and cofounder of Reef Life Foundation.

> "But how about taking a step back instead?" she suggests. "Let's look at climate-adaptation strategies that work with the environment, that restore and replenish in a way that respects the natural world."

In this spirit, we're sharing the stories of some organizations that are taking an affirmative, regenerative approach. Whether rethinking ice melt or restocking oyster beds, these groups are working *with* the climate as it changes rather than against it. In the process, they're offering myriad ways we can partner with the natural world as we move forward — with a little more hope — into whatever future awaits us.

The language and mindset of healing the earth and atmosphere needs to employ these words: **restore**, **renew**, **rejuvenate**, **regeneration**, **connect**, **purpose**, **meaning**,

and respect."



RISING TEMPERATURES are wreaking havoc everywhere, but especially in the Arctic. In 2018, the National Oceanic and Atmospheric Administration (NOAA) estimated that since 1985, about 95 percent of the Arctic Ocean's oldest sea ice had melted.

This ice loss has led to the near extinction of polar bears and triggered more extreme winter weather everywhere. It's also contributing to rising sea levels and increased drought.

According to the nonprofit Arctic Council, temperatures in the region —

which covers some 5.5 million square miles — are rising at three times the global annual average.

One organization is proposing a stopgap measure to buy time for researchers seeking to slow rising temps: Until we can cool it all down, make the Arctic ice older. Not colder, but older.

Here's why: With ice, age brings power. When ice is at least four years old (and especially when it is decades or centuries old), its formidable thickness makes it more durable against the melting effects of sunlight. By comparison, the paper-thin ice that forms when parts of the Arctic Ocean freeze in autumn is more vulnerable to sun melt, as well as fracture from wind and destruction from waves. When this young ice stops turning into old ice, we'll be in even bigger trouble than we are now. That's where the Arctic Ice Project comes in.

"The Arctic is our planet's heat shield," says executive director Tom Light. "When the ice melts, you lose that protection, and the open sea water absorbs the sun's heat. Our technology can stop the ice from melting."

Their nontoxic covering is made from silica (a compound derived from silicon and oxygen) and looks like fake snow. When used to coat young ice, it protects it from melting so it can age.

"The ice loss in the Arctic is contributing to 25 to 50 percent of global temperature rise," Light says. "By stopping the melt, we can provide time for the world's economies to decarbonize and stave off the worst climate risks."

One Tree Planted onetree planted.org

PLANTING TREES is a more complicated and controversial sustainability effort than it might seem. The logging industry sometimes promotes it to justify clear-cuts instead of more sustainable harvesting methods. Yet those newly planted trees take decades to mature, and they rarely re-create the biodiversity that's lost by clear-cutting.

That's why One Tree Planted, a nonprofit based in Vermont, focuses on a bigpicture reforestation strategy, says founder Matt Hill.

Through more than 300 partnerships with local networks in 44 countries, One Tree Planted supports projects that offer benefits for the landscape and communities. It planted over 1.2 million trees in California in 2021 for forest-fire recovery, with a broader goal of reducing soil erosion, lowering flood risk, and restoring biodiversity.

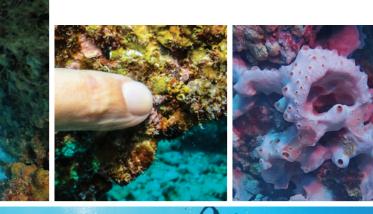
Another effort in Rwanda is creating agroforestry jobs for women's empowerment. Meanwhile, a planting initiative in Canada aims to restore dwindling caribou numbers: Tree density reduces sightlines for their predators and expanded habitat supports mating.

An effort in Iceland is helping to sequester carbon by introducing trees to areas that were grazed down centuries ago, and another in Indonesia is creating more habitat for orangutans and other endangered wildlife by restoring rainforest.

"Trees help clean the air by releasing oxygen, but they also contribute to healthy ecosystems," Hill says. "A project to plant 1.5 million trees in riparian zones in the Pacific Northwest will help clean polluted waters and support the salmon population. That, in turn, helps the Southern Resident orca whales through cleaner water and a better food supply."

Another initiative, in Arkansas, is designed to create cleaner drinking water in low-income areas. "Trees are filters that improve soil quality and water quality, but it just goes well beyond that," he explains. "We're not just replacing trees that were cut down through logging or lost to wildfires. We're looking at what trees can do for an area in terms of biodiversity, economic growth, and climate adaptation."

"Carbon offsets have their place, but our philosophy is that you can't buy away your environmental sins," he adds. "You need to focus on not creating pollution in the first place, and supporting restoration to bring back natural ecosystem services. We believe trees have a major role in that."





WARMER OCEANS are killing coral reefs. The UN has reported that 70 percent of the world's reefs are under threat, with 24 percent at imminent risk of collapse and 20 percent now damaged beyond repair.

"There's not enough biodiversity left," says Melody Brenna of the Utah-based Reef Life Foundation. "We might have a decade, if we're lucky, to save what's remaining."

Her organization is committed to the effort. That's because coral reefs aren't just pretty locales for divers; they play a significant role in protecting ocean health. A quarter of the



world's marine species are dependent on coral reefs at some point in their lifetimes, and coral reefs protect coastlines from erosion.

People have tried to rebuild reefs by stacking old tires, concrete blocks, and steel pipes alongside them, Brenna notes. It's unclear whether these artificial reefs will support coral and multispecies growth over time, but they carry the risk of introducing more toxins into the water. Concrete, for instance, is alkaline, and can burn fish scales. Solving one problem creates another.

In 2006, researchers and activists seeking a better method approached Brenna, who had studied structures built with natural minerals that mimic the ocean floor. Coral is a tiny marine animal, and coral structures are made of thousands of tiny coral polyps that attach themselves to rocks or other hard, submerged surfaces.

Brenna's mineral mixtures, called Oceanite, feature compositions similar to the surfaces to which coral usually attaches. Together the groups began developing a product called Intelli-Reefs. They were placed in three ocean beds off Sint Maarten in the Caribbean, where they were an instant hit.

"The next day, we had divers taking photos of goatfish napping in these reefs," she recalls. "The divers had never seen this happen so fast. Then, coral started to grow, and you've got a family of octopi living in the middle. That's when we thought, *Maybe we've* got a shot in this race against time."

IntelliReefs are now being tested in other locations. A site in Canada is helping to rebuild kelp forests along the Eastern Shore. This not only protects coastline but restores sea life.

The UN and UNESCO recently endorsed IntelliReefs, which may help encourage government investment in reef rebuilding. These efforts would support tourism in coastal communities as well as support marine plant and animal species. "We simply can't lose the ocean," Brenna says. "We don't have a minute to waste."



SCAPE Studio scape studio.com

LANDSCAPE ARCHITECTURE combines built and natural environments to support human communities. But the practice can also design environments to support other creatures, such as oysters.

Based in New York City and New Orleans, SCAPE Studio created a method — dubbed "oyster-tecture" that partners with oysters to protect New York City's shoreline from storm surges and erosion. Originally commissioned by the Museum of Modern Art in 2009, the project uses a web of woven rope and plenty of eelgrass to create a living reef in the New York Harbor filled with oysters and mussels.

Not only does the reef create a breakwater for waves, but it also provides a natural filtration system that cleans millions of gallons of harbor water, thanks to the biotic cleansing abilities of the grass and mollusks. This restores biodiversity to the tidal marshes and improves water quality for residents — human and shelled alike.

Oyster-tecture is one feature of a larger SCAPE-led project called Living Breakwaters, which employs a variety of sustainable materials to build protective reefs. These are presently being tested near a handful of vulnerable coastlines, including the marshes around New Orleans.

Kiss the Ground ^{kissthe} ground.com

HOW FOOD is grown, ranched, and fished can play a major role in climate shifts, contributing to drought, floods, and other disruptive forces that, in turn, often lead to greater dependence on unsustainable methods — like using more water and pesticides — to maintain food production.

A regenerative-agriculture model takes a different approach. It seeks to work with the land and even the weather, rather than escalating the war between farm and environment.

But implementing this type of farming takes education, funding, and other forms of support. That's where Kiss the Ground (KTG) comes in. The California-based organization aims to make it easier for farmers to adopt sustainable practices.

Cofounder Ryland Engelhart describes the group's work as a "mission to awaken" people about the possibilities of regenerative agriculture. And it's working.

"Soil is suddenly 'sexy," says Engelhart. "Some of the world's biggest brands have come to adopt the regenerative view and language, which is to understand that we must do more than sustain a broken system."

A group of concerned friends launched KTG in 2013 after researching regenerative land practices. They discovered an approach that "views land as a living system to participate in," Engelhart says. He recently coproduced a Netflix documentary on regenerative farming — also called *Kiss the Ground* — to help boost public awareness of the need to climate-adapt our food systems.

Today KTG's stewardship program offers training in soil health and regenerative methods for home gardens and neighborhoods. They also provide mentorship, as well as scholarships and financial assistance, to farmers and ranchers — especially those who are low-income, people of color, immigrants, or LGBTQIA+, and seeking to shift to a regenerative approach.

"Plenty of data show that a more biodiverse and biologically healthy system will outperform and outlast a conventionally and chemically dependent agricultural system during extreme weather events," Engelhart says. "Just like a healthy immune system can ward off potential pathogens, healthy ecosystems can similarly ward off the pressures that come with a changing climate."



Santa Cruz Mountains Stewardship Network

> **THE SANTA CRUZ REGION** is home to redwood forests, grasslands, and coastline, as well as some tourist-dependent towns, farms, and universities. Groups with a stake in the future of the land include Native tribes, logging companies, community residents, utilities, farmers, and conservation agencies.

> Helping these diverse stakeholders collaborate to protect their shared land is the role of the Santa Cruz Mountains Stewardship Network (SCMSN).

"All of these different organizations want different things from the land,"

GRID

Alternatives

gridalternatives.org

FOR HUMANS to have a

chance of successfully

adapting to climate change,

it will take everyone getting

onboard. This is currently

a major stumbling block, in

part because economically

disadvantaged communities

may not have the resources

says manager Dylan Skybrook. "They need a way to come together to ensure they can address those needs but also think at a landscape scale to care for the region as a whole."

The SCMSN provides the research that fosters that perspective. For example, the organization recently commissioned a climate-change vulnerability assessment that reviewed nine important species and 10 habitats in the region. That report will help direct attention and money to the most effective climate-adaptation efforts. Skybrook's job involves explaining why certain aspects of the report such as protecting the area's endangered species — matter to everyone, not just conservation groups. The endangered species include coho salmon, the San Francisco garter snake, and the California red-legged frog.

"Because when you start taking nodes out of the food web, the whole thing stops functioning," he notes. "This isn't just about frogs, snakes, or salmon. Ensuring their survival keeps this ecosystem intact."

Organizations like the SCMSN provide members with the big-picture view that's easy to miss from an individual-stakeholder perspective. "Climate change affects all of us on a larger scale, not just a propertyby-property scale," says Skybrook. "That means we need collaboration, not conflict."

to participate in sustainability efforts — even if they're eager to do so.

One example is solar power. Installing solar panels on homes and businesses is a boon to energy savings, but the upfront cost of the panels is prohibitive, and utility rebates cover only so much.

For the past two decades, GRID Alternatives has been working to address this gap by creating access to renewable energy. "You shouldn't have to go into debt to be green," says Ashley Christy, executive director of GRID Alternative's Greater Los Angeles office.

The California-based organization maintains eight offices and a tribal program in the United States, as well as an international program that serves Nicaragua, Nepal, and Mexico. Since its founding in 2001, GRID has installed over 17,000 solar systems and trained more than 45,000 installation professionals, with a particular emphasis on jobs for women and people of color.

The group also provides solar-energy education to K-12 students and offers programs to high school students to create career paths in the solar industry. GRID partners with community groups to develop shared solar arrays that benefit individual homeowners and affordable-housing programs, too.

"As climate change progresses, our reliance on clean energy is going to increase," says Christy. "We need a workforce that is trained to get us where we need to be, and the technology needs to be available to everyone. Why should a 75-year-old grandmother on a fixed income be considered less worthy of a solar system just because she doesn't have the \$25,000 to invest in one?"

Christy's ambitious goals include providing solar panels for every house and apartment building and growing the green-energy workforce by hundreds of thousands. She admits that leaving no one without access to clean energy is a lofty goal. But it's the big dreams that sustain the momentum.

"Let's get to the point where everyone is part of the green economy," she says. "We all need to be part of the solution, now more than ever." •

ELIZABETH MILLARD is a writer and editor based in northern Minnesota.

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Real Life



Gardening with natives instills an understanding of our natural world — its cycles, changes, and history. Communing with nature has a positive, healing effect on human beings."

 Lynn M. Steiner, author of Grow Native



Learn about the advantages of growing native plants, shrubs, and trees — such as saving water, easing allergens, and more.

Bravel Bravel Bam

If your grandest aspirations are lying dormant or barely creeping along, it's time to leap ahead.

BY JILL PATTON, FMCHC

hen my husband and I bought our home, it was surrounded by lawn, uniformly green and meticulously weed-free. Despite my ambivalence toward suburban "lawnscapes," I felt a responsibility for that grass, which the previous owner had clearly worked hard to maintain. But my heart wasn't in it (my husband's even less so), and the yard soon showed signs of neglect.

As I surveyed our struggling turf, I started dreaming of gardens. Lots of them: shade gardens, lush and riotous rain gardens, swaths of native grasses, all escaping their fence line and marching into the yard.

The idea took root in my mind, but I hesitated. What did I know about gardening? (Not much.) What did I know of landscape design? (Even less.) So, I read books and perused seed catalogs and bought a membership to the local landscape arboretum. I even wrote an article about the health benefits of gardening. (Check it out at ELmag.com/gardeningforhealth.)

As my imagination teemed with ideas, though, my confidence recoiled. For three years, I did not so much as pick up a shovel.

Sleep, Creep, Leap

There's an adage in gardening that perennials (plants whose lifespans extend beyond one season) "sleep" their first year in a garden, establishing their roots in the earth. Then they "creep": New shoots poke tentatively toward the sun, while transplants offer just a few blossoms. Finally, if well-nurtured, perennials "leap" into their full glory.

Pursuing your dreams is a lot like growing a perennial garden.

This thought occurred to me recently as I tended one of the gloriously imperfect dream gardens I eventually created in my yard.



Leaping is when you give yourself permission to step into your vision now, but without overhauling your life in doing so."

But countless people's dreams remain asleep in a hazy daze of discontent. Even dreams we can clearly envision - writing a book, moving abroad, launching a business, exhibiting our art — get caught in a prolonged creep phase of preparation and stalling. Why do so few of us leap into our dreams? And how can we know when we're ready?

We might start by redefining the "leap."

"To me, the leap is not some big, grand plan, some dramatic change," says Tara Mohr, author of *Playing Big*: Practical Wisdom for Women Who Want to Speak Up, Create, and Lead. "Leaping is when you give yourself permission to step into your vision now, but without overhauling your life in doing so."

If you're stuck in sleep or creep mode, this advice may move you more confidently toward your dreams.

Leap Early

In the Playing Big program Mohr created to empower women to step into their visions, she asks participants to articulate what is calling to them. And then she challenges them to start living that dream today.

"This actual day. So, if it's Wednesday, we're talking about 'How do I live it on Wednesday?" she says.

It's true I could have picked up a shovel any old day of the week. But what if your dream is to become a graphic designer? Or a doctor?

"We're looking for the scrappy, lightweight form of living that calling, not the form of it on LinkedIn," Mohr says. "That's probably going to require training, which can happen in parallel. But for now, we want to get to the essence of the calling."

So, if you want to be a dancer, turn on some music and dance. If you want to be a doctor, sign up today to



volunteer at a hospital. If you want to be a graphic designer, look at what's behind that desire: Is it to be more playful? To surround yourself with color and ideas? Brainstorm ways to feed that desire right now.

Leap Often

"It's never just one leap," explains Roo Harris, a coach who guides burned-out professionals in reshaping their lives to align with their values and passions. "There often is a big leap, but it's one leap among many."

If you know something has to change in your life but don't yet know what that looks like, Harris recommends the kind of leaps that cultivate qualities you'll need as your vision comes into focus.

"Try going out salsa dancing on a Thursday night on your own. Or wear a bold outfit to work that's different than what you ordinarily wear," she says. "Practicing everyday acts of courage is an important way to build momentum and expand your comfort zone. It's a muscle."

Find Your Own Path

"I'm a big believer that we reap what we sow, and that we're planting all the time," notes Harris. However, if you're not in tune with your own values and desires, you may be cultivating someone else's garden, not your own. Next thing you know, you're studying for the bar exam when what you really want is to teach high school Spanish.

"You might have to do some work to get in touch with your inner voice," she adds. And this can be a process that requires time and exploration.

"Take some actions to connect with yourself in some way, perhaps meditating or spending time in nature. Put down your phone. In those quiet moments, you can begin to hear your own thoughts more clearly."

Make Bold Moves

Women, in particular, have often been conditioned to be "good students," says Mohr — to diligently prepare and research, to defer to others' authority, to perform to others' expectations. They tend to overcomplicate their plans with unnecessary first steps and fine-tuning.

To break out of these stalling and hiding strategies, she recommends taking bold but manageable leaps that can be started and finished within two weeks.

"We think we need an incubation phase when we're already way past that," she notes. "We assume we have to become a certain kind of expert when we already have an idea or a voice or a story or an approach to share that would be very valuable."

How will you put your dream out into the world? Can you trust that you're ready to present your new idea at the next PTA or city-council meeting? Will you hit "publish" on your controversial blog post? Will you lead a workshop on that topic you know inside out — even if it doesn't reflect your official title?

Keep Going

"I never see people regret a leap, but they are surprised to realize that now they have to plant the next crop, make the next leap," says Harris. "In the process of the leap, you gain tools that were missing before, and now you're armed for the journey forward."

"It's just more leaps," adds Mohr. "Leaps are never done in isolation. They're part of a cycle, a feedback loop. Leaps put you in contact with people you want to reach. They help you learn something about yourself in relation to your dream."

I don't know what compelled me to start leaping, but I finally broke ground on my lawn. Focusing on one garden bed a year has been a manageable yet steady pace. Each garden has been rife with mistakes and happy accidents that taught me valuable lessons.

And I've come to realize that, though this dream garden of mine may never be finished, I am a gardener now. Which, it turns out, was the dream all along. •

JILL PATTON, FMCHC, is a health journalist and certified functional-medicine health coach based in Minneapolis.

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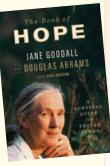
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Sustaining

BY DARA MOSKOWITZ GRUMDAHL

ane Goodall changed our understanding of the world when, in the 1960s, she

went into the wilds of what is now Tanzania and emerged with proof that humans and chimpanzees share similar aspects of behavior, including using



tools, declaring war, and embracing those in mourning. In 1977, she launched the Jane Goodall Institute, working internationally to conserve chimpanzee habitat, stop primate medical research, protect great apes from poaching, and inspire humans to live in harmony with wildlife.

As Goodall has focused on halting the climate crisis in recent years, she has seen many people losing hope in the face of our present-day calamities. So, she collaborated with Douglas Abrams to create *The Book of Hope: A Survival Guide for Trying Times*, a collection of conversations between Goodall and Abrams, which shares comforting evidence that supports her own unshakable, world-changing outlook.

How has she personally sustained her body and mind to fight the good fight, decade after decade? Through insights and practices like these, which she shares in *The Book of Hope*.

DARA MOSKOWITZ GRUMDAHL is an award-winning writer based in Minneapolis. Although the future may seem bleak, Jane Goodall seeks to inspire us all with faith, resiliency, and awe.

ACKNOWLEDGING ECO-GRIEF

Wildfires, extinctions, destroyed forests, floods — the media and our own eyes bring us bad news about the climate every day. Admitting to the harm we have inflicted and addressing the pain and suffering we feel is an essential part of the discussion of hope, Goodall says: We must feel and acknowledge our grief so we can heal and find the strength to go forward.

"It's impossible not to grieve for the harm we have inflicted, the suffering of people and wildlife alike." *Expressing* your grief can help activate you, she believes. "It's really important for us to confront our grief and get over our feelings of helplessness and hopelessness — our very survival depends on it."

"People are so overwhelmed by the magnitude of our folly that they feel helpless," she adds. "We must find ways to help people understand that each one of us has a role to play, no matter how small. Every day we make some impact on the planet. And the cumulative effect of millions of small ethical actions will truly make a difference. That's the message I take around the world."



FEEDING HER SOUL WITH NATURE

Every year Goodall tries to go to the Platte River in Nebraska during the migration of the sandhill cranes and snow geese. It's a dramatic reminder of resilience, she says: "Despite the fact that we have polluted the river, despite the fact that the prairie has been converted for growing genetically modified corn, despite the fact that the irrigation is depleting the great Ogallala Aquifer, despite the fact that most of the wetlands have been drained — the birds still come every year, in the millions, to fatten up on the grain left after the harvest. I just love to sit on the riverbank and watch the cranes fly in, wave after wave against a glorious sunset, to hear their ancient, wild calls it is something quite special. It reminds me of the power of nature."



WALKING EVERY DAY

"It's good to have at least one walk a day. Though I don't really like to go for a walk without a dog," she says. "A dog gives a walk a purpose."



MAINTAINING A SPIRITUAL PRACTICE

Goodall grew up in England during World War II and was raised in a Christian family. She cites her faith as a source of endurance and resilience. She particularly loves her grandmother's favorite Bible verse, from Deuteronomy: "As thy days, so shall thy strength be." Ever since childhood, she's tried to connect daily with her sense of spirit, which she describes as "my energy force, an inner strength that comes from my sense that I'm connected to the great spiritual power that I feel so strongly — especially when I'm in nature."



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Take It Outside

How nature supports our mental health – and how to get a little more of it.

BY HENRY EMMONS, MD

y family owns a cabin in northern Minnesota, near the million acres of protected wilderness known as the Boundary Waters. We spend as much time there as we can, in part because there are few things as restorative to the mind and spirit as being out in nature.

When I need to get centered, I get in my canoe and paddle to one of my favorite spots. The sound of the wind, the activity of the wildlife, and the hypnotic view of the waves are usually all I need to settle my mind and heart.

I'm certainly not the only one who turns to nature for solace: Humans have known about the restorative effects of the natural world for as long as we've existed. The history of art and culture is full of evidence. And recent research has begun to quantify what many of us have long understood intuitively — that nature offers concrete benefits for mental health.

Several studies have found that even a brief walk in a natural environment — really any place with plants and trees — can spark more positive thoughts, reduce anxiety and stress, improve attention, and encourage prosocial behaviors, such as kindness. How does this happen?

My colleague Tim Culbert, MD, is a fellow outdoors enthusiast who has written about how time in nature supports mind and mood. Here, he describes some of its most salient impacts on mental health.

Tim Culbert, MD, on Nature's Mental-Health Benefits

AWE AND WONDER. The experience of awe and wonder in natural settings has been correlated with lower levels of inflammatory chemicals called cytokines, which have been linked to depression. Awe-inspiring moments also appear to facilitate the release of dopamine in the brain. Dopamine is the neurotransmitter associated with reward, motivation, desire, and euphoria.

CHEMICAL UPSIDES. Indoor air lacks many of the healing components of outdoor air, especially the air near greenery, which is full of chemicals called phytoncides. These natural compounds include the scent molecules that help protect trees and plants from insects and disease. We breathe in these chemicals when we're around plants and trees, and they appear to support the human immune system as well as the forest ecosystem.

NERVOUS-SYSTEM RESTORATION. According to various studies, time in nature can help tone down the stress response and increase the relaxation response in the nervous system. This involves physical changes like lowered blood pressure and increased heart-rate variability (HRV), which is a positive marker for general health and wellness.

REST FOR THE BRAIN. Natural settings may encourage a meditative state, which can ease the brain drain of our multiple devices. Engaging with electronics 24/7 requires the constant engagement of the brain's prefrontal cortex. This depletes cognitive resources and brain energy. By contrast, a stroll outdoors encourages the mind to wander, reducing the active use of brain resources. Research suggests that this helps turn on the brain's default mode network (DMN), which supports creative thinking. The DMN works best when we are not *actively* thinking.

RESET FOR THE BODY ELECTRIC. Our electronic devices also emit positive ions that can disrupt the electrical balance in our bodies. The earth, by contrast, is a reservoir of negative ions. Restore balance by taking about 20 to 30 minutes each day to get "grounded" on (or in) dirt, grass, rock, unpainted concrete, or water.

Ready to Head Out?

Work more outdoor time into your schedule — even if you're busy — with these ideas:

IF YOU HAVE 5 MINUTES:

- Stand outside with the sun on your face.
- Gaze out the window at trees and plants.
- Step onto the grass in your bare feet.

IF YOU HAVE 25 MINUTES:

- Take a slow walk; breathe in the fresh air.
- Find an outdoor space to eat lunch.
- Conduct your next meeting or phone call outside.

IF YOU HAVE 2 TO 3 HOURS:

- Pack a picnic meal and invite friends to join you.
- Explore nearby parks, trails,
- or sidewalks.
- Relax in a hammock.

IF YOU HAVE ALL DAY:

- Pack a lunch and a water bottle and spend the day exploring a state park.
- Rent a kayak or canoe and
- spend a day on a lake or river.
- Take an all-day bike outing.

HENRY EMMONS, MD,

is an integrative psychiatrist and cofounder of NaturalMental Health.com. He is the author



of The Chemistry of Joy, The Chemistry of Calm, and Staying Sharp.

Gardening With Native Plants

Occurring naturally in the region where they evolved, native plants, shrubs, and trees are the ecological basis upon which the environment and creatures depend — including us.

BY MICHAEL DREGNI

hen Doug Tallamy, PhD, and his wife, Cindy, began building a home in Pennsylvania in 2000, he noticed something strange about the landscape. Their 10 acres had previously been a hay field, but invasive plants had taken over: multiflora rose, Oriental bittersweet, autumn olive, Japanese honeysuckle, and the like.

Where these nonnative plants thrived, few birds, insects, or other pollinators visited. But the surviving patches of native plants — native oaks, cherries, and others — were abuzz with bugs and birds.

The Tallamys removed the invasive plants; then they researched and replanted native ones. The ecosystem soon came alive again.

Doug, a University of Delaware entomology professor and author of *Nature's Best Hope: A New Approach to Conservation That Starts in Your Yard*, says seeing this dichotomy firsthand woke him up to a common problem.

Most landscaping and gardening in the United States features imported plants that come from ecosystems on the other side of the globe or are genetically modified cultivars. They're pretty, and they're decorative, but they're basically biologically dead to local pollinators and other insects.

Native plants, shrubs, and trees exist naturally in the region where they evolved. They form the ecological basis upon which the ecosystem depends, including the insects, butterflies, birds, and other animals — and even people — that coevolved with them. Bees and butterflies spread their pollen; birds feed on their seeds. The ecosystem is a living cycle.

"Nonnative plants cannot support the insects, which are the little things that run the world," Tallamy explains. "If we removed insects from the planet, humans would disappear in a matter of months. So they're vital yet all we do is think about how we can kill them. The fact that we have global insect decline is another serious issue, and people just shrug and say, 'Who needs insects?' Well, *everybody* needs them.

"Native plants are the plants that have delivered the energy from the sun to all the species that run our ecosystems — forever."

Plant Power

Native plants also boast other benefits, such as for gardeners, explains Lynn M. Steiner, author of several guides to native plants, including *Grow Native*.

"For many gardeners, the initial attraction comes from native plants' reputation of being lowermaintenance than a manicured lawn and exotic shrubs," she says. "Because they have evolved and adapted to their surroundings, native plants tend to be tolerant of tough conditions, such as drought and poor soil. Native plants are better adapted to local climatic conditions and better able to resist the effects of native insects and diseases."

Native plants have evolved to form interdependent plant communities and usually do not require fertilizers or excessive doses of pesticides. And they need less water than lawns do: They're often used in arid regions for xeriscaping — a gardening technique using drought-resistant plants to help conserve water.

Finally, native species' "reduced maintenance results in less depen-

dence on fossil fuels and reduced noise pollution from lawnmowers and other types of equipment," says Steiner.

"Natives may not all be as bright and showy as a lot of introduced plants, but their subtle beauty can be just as effective in landscaping," she adds. "When given proper conditions and room to grow, most native plants produce larger and better flowers than their invasive counterparts."

And Steiner argues that their reputation as a source of allergies is misplaced. "The truth is, most native plants are insect-pollinated rather than wind-pollinated. Kentucky bluegrass has the potential to produce more allergens than any native plant."



Native plants are the plants that have delivered the energy from the sun to all the species that run our ecosystems – forever."

A less tangible, but possibly more important, reason to use native plants is the connection you make with nature when raising them.

"Gardening with natives instills an understanding of our natural world — its cycles, changes, and history," Steiner says. "Communing with nature has a positive, healing effect on human beings. Learning how to work with, instead of against, nature will do wonders for your spiritual health. By observing native plants throughout the year, a gardener gains insight into seasonal rhythms and life cycles. You will experience intellectual rewards that are somehow missing if you only grow petunias or marigolds."

The Big Picture in Your Small Yard

Although we may not be able to do much about the ongoing devastation of the Amazon rainforest, for instance, Doug Tallamy believes that we can and need to — do something about our own yards.

"The big picture is that we are all products of nature: We are totally dependent on the life-support systems that nature delivers us. Yet we are destroying nature and those systems. It directly affects our health, because we won't be here without the natural world to support us."

"Everybody on the planet requires a healthy ecosystem," he adds. "But we've assigned Earth stewardship to a few ecologists and conservation biologists, and everybody else seems to have a green light to wreck everything. That's what we've got to change."

Tallamy thinks that we all share responsibility for Earth stewardship. How can we be better land stewards?

If you own property, you can swap in native plants, he advises. Reduce nonnatives and especially get rid of invasives (nonnatives that spread easily) — they don't have natural competition. And if you don't own property, help somebody who does.

"This is a huge job!" Tallamy says. "But we've got 330 million people in just this country to work on this. We can do it." •

MICHAEL DREGNI is an *Experience Life* deputy editor.





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Determining whether information is reliable can be tough, especially on social media. Use these tips to help cut through all the noise.

BY KAELYN RILEY

uring the early days of the coronavirus pandemic, the World Health Organization identified another troubling outbreak: a massive "infodemic." Too much information was making it difficult for people to find trustworthy, reliable guidance when they needed it most.

While some of the information in our social-media ecosystem is verifiably true, plenty of it is not. And research shows that lies tend to spread farther and faster than accurate information, particularly online. Some psychologists suggest that our brains have trouble letting go of misinformation, even after it's corrected — a concept known as the continued-influence effect.

Although it may primarily spread on digital platforms, inaccurate information has real-world consequences. Researchers estimate that between January and March 2020, specious medical advice about COVID-19 sent nearly 6,000 people around the globe to the hospital. Whether they had been led to believe that the virus was no worse than the flu or that it could be cured by gargling vinegar or drinking bleach, exposure to rumors and conspiracy theories directly affected their health.

We're also contending with disinformation, which differs from misinformation in its intent. If you unknowingly share an inaccurate article on Facebook, you're spreading misinformation. Disinformation, on the other hand, means purposefully spreading falsehoods, often with the intention of manipulating a public narrative or influencing politics.

To make matters more complicated, this monster has a third head. Some researchers call it "gray-area misinformation," and bad actors are using it to outsmart recent efforts by social-media platforms to crack down on falsehoods. Gray-area misinformation isn't outright untrue — which means it's harder to moderate — but it gets shared in a way that drives a misleading narrative.

Take the example of the U.S. women's soccer team and its final pre-Olympic match on July 5, 2021. Before the game, World War II veteran Pete DuPré performed the national anthem on his harmonica, and during his performance, some of the players turned to face the American flag at one end of the field. Posts to a Facebook page called Hold the Line mischaracterized the players' actions, stating that they had "turned their backs" on DuPré in a "disgrace to America!"

Similar posts proliferated on Facebook and Twitter, referring to the team as "shameful" and "disrespectful," with some individuals calling for the team's disqualification from the 2021 Olympics in Tokyo.

The story itself was true: Some players did turn, but it was to face the American flag, in accordance with national-anthem etiquette recommended for civilians. The implication that they did so as a gesture of disrespect toward DuPré, though, was false.

The age of social media means that everyone can have a platform — and therefore everyone has the ability to amplify content. That's a tremendous responsibility, and learning to be more cognizant of what we're reading and sharing is one way to be part of the solution to our misinformation problem.

The next time you encounter a post that doesn't seem quite right, take a moment to ask yourself some of these questions, which can help you learn to spot misinformation in the wild.

WHO SAID IT?

If possible, always try to trace information back to its source. Then, ask yourself: Who are they? Who

do they work for? What's their goal in sharing this? What is their expertise? Thinking critically can help you identify whether a source is trustworthy or if it has an ulterior motive.

Often, simply figuring out who's behind the post can help you know whether to take it seriously. The Center for Countering Digital Hate traced almost two-thirds of anti-vaccine content on social media to a group consisting of just 12 activists. The Disinformation Dozen have built massive online followings, which they've used to cast doubt on the safety of coronavirus vaccines.

If the post itself doesn't offer many clues about its source, see if you can trace the claims to a news article or another website. Then, consider whether that site is a reliable source of information: Who's behind the project? Does the article link to primary or secondary sources? Is it riddled with spelling errors or biased language? Can you verify the information elsewhere?

Depending on the topic, you may need to explore several different sources to get a sense of the whole picture. Whatever you do, don't just read a headline and assume you get the gist.

Also, be mindful of satirical news sites, many of which mimic the tone and appearance of actual news. Research has shown that many Americans have trouble differentiating one from the other.

WHAT'S THE EVIDENCE?

If the post makes a particular claim — for example, that eating carrots will make your hair fall out — try to evaluate whether enough evidence exists

to support that view. Does the post link to a study or a news article with more information?

Don't believe it just because your neighbor says that her brother used to love carrots until he went bald. Such anecdotal evidence is usually not reliable, especially if it's not buttressed by other forms of scientific data. Considering the evidence is especially important when evaluating information on socialmedia platforms, where it's easy for anyone on the internet to create a meme with a misleading statistic or two. These memes are usually intended for laughs or virality, not for sharing important, reliable info.

DOES IT CONFIRM A BELIEF YOU ALREADY HOLD?

We are wired to seek out content that reinforces our beliefs, a principle known as confirmation bias. "You notice the things you agree with," says media psychologist Pamela Rutledge, PhD. "You share them because you're reas-

suring yourself that your way is the right way."

Psychologists sometimes call confirmation bias "selective collection of evidence," because we tend to retain information that supports our beliefs and reject conflicting evidence. One way to counter this is to make a conscious effort to diversify your media diet, seeking out information and viewpoints from outlets outside of your usual bubble.

DOES IT APPEAL TO YOUR EMOTIONS?

Misinformation often plays on your feelings to circumvent your critical thinking. When you see a headline that is especially emotionally resonant whether it makes you feel angry, scared, excited, or sad — consider that it's likely an

attempt to grab your attention or to get you to share the information without thinking.

One example of this is #SaveTheChildren, which went viral in August 2020. At first glance, many of these posts — purported to raise awareness around child sex trafficking — may have seemed heartfelt or even morally righteous. But lurking behind the hashtag? QAnon, a baseless conspiracy theory spreading false statistics and emotional appeals designed to draw unwitting social-media users into its broader movement.

IS IT

Plenty of people

tweet angry, but if you're seeing posts that seem especially cruel — particularly if they target marginalized groups — consider that a red

flag. Extremists often use social media to spread conspiracy theories and hate speech, and they're often rewarded with increased exposure and new followers.

Some evidence suggests that algorithms also amplify harmful content, because polarizing posts are more likely to go viral. Some of these algorithms drive users toward more extremist content by recommending more violent or hateful posts, a concept dubbed "algorithmic radicalization."

IS IT TOO SOON?

Social media moves faster than traditional media. Immediately in the aftermath of a tragic event or a novel discovery — such as COVID falsehoods often pour in to

fill the void left by experts and organizations that are hesitant to make immediate statements.

If you're reading a post about a developing topic with lots of unanswered questions, take a beat. (Check out WNYC Studios' *Breaking News Consumer's Handbook* for more guidance on how to interpret breaking news.)

IS IT ALREADY VIRAL?

Fake news is more likely to go viral than a true story, no matter the subject, according to one study published in *Science* in 2018. Unsurprisingly,

false statements about politics frequently perform best. "The top 1 percent of false-news cascades diffused to between 1,000 and 100,000 people, whereas the truth rarely diffused to more than 1,000 people," the authors noted. They concluded that a false story reaches 1,500 people about six times faster, on average, than it would take for a true story to reach the same number of people. ●

KAELYN RILEY is an *Experience Life* senior editor.

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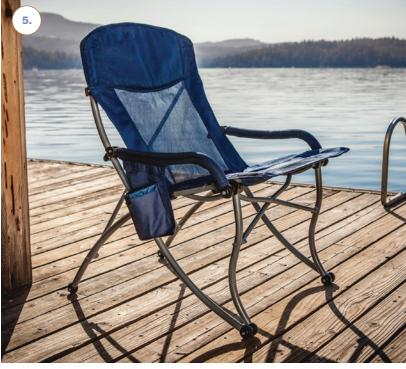
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Straight-Line Simplicity

Want to make a situation or decision less complicated? Think about going from point A to point B.

BY BAHRAM AKRADI

In the field of engineering, the

concepts of optimization and minimization are central, with principles like the shortest distance between two points is a straight line, and the most logical, elegant solutions are generally the simplest.

One of nature's laws, however, is that the more complex things become, the greater the chance of encountering inefficiencies and confusion. Perhaps that's why Albert Einstein believed that things should be as simple as possible, but no simpler.

That is still wise counsel for virtually any situation or decision, yet it seems that humans, as a species, are hardwired to do the opposite. Every day — with more data, information, and global knowledge at our fingertips — we constantly make simple things more complex.

In our work lives, for instance, we're surrounded by processes and other people. Process, while intended to streamline, can be easily bogged down by red tape and bureaucracy. Even the most eager and curious among us can get caught up in complexities, becoming confused or paralyzed, and repeating familiar patterns even if they're no longer working.

Without a constant focus on how to move things from point A to point B, it's difficult to progress.

Think about our health, and nutrition, in particular. The basics are clear: Stick to fresh, whole foods. Strive for variety and balance. Eat plenty of plants. Avoid artificial ingredients, refined sugars, and preservatives.

Yet we often get distracted by macronutrients, calories, milligrams, point systems, and trendy diets. We get frustrated that nothing is working as we move from one weight-loss program to the next.



If there's a goal you want to attain, or a change or decision you're ready to make in your life, start by identifying where you are and where you want to be."

We see it time and again: After years of grappling unsuccessfully with diets, a person finally embraces a super-simple, nutrition-boosting, crud-clearing approach and starts seeing results. With these fundamental elements in place, we allow the body to fire up its metabolic engines and engage its naturally extraordinary healing capacities.

It's this kind of logic that's applicable to so many things we want to accomplish. If there's a goal you want to attain, or a change or decision you're ready to make in your life, start by identifying where you are and where you want to be. Then, draw a straight line between those two points. In essence, this means starting with the end goal and working backward as directly as possible to where you are. Note the functional problems that will need to be solved, and watch for unnecessary material and moving parts that can be eliminated.

There will be challenges and obstacles, and you'll inevitably end up off course at times. But if you keep course-correcting and tackling the next problem, simply and clearly, you'll make progress toward your destination — and learn plenty along the way.

You may even discover that you're more satisfied with how things are going when you're intentional about how and where you're exerting your energy and attention. Simple questions like "Does it have to be so complicated?" and "Do I really need more?" can help relieve the pressure on our personal time, as well as the finite resources our world provides.

The marvel of this planet is that it allows us to be both stewards and students: At the same time that we do our best to care for it, the natural world gives us all sorts of reminders of the brilliance of simple efficiency: As seeds are planted and buds burst forth each spring, we observe one of the most beautiful examples of moving from point A to point B.

BAHRAM AKRADI is the founder, chairman, and CEO of Life Time — Healthy Way of Life.

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