

Experience Life

HEALTHY. HAPPY. FOR REAL.

MOVE & PLAY

LIKE A KID AGAIN

PAGE 52

EMBRACE THE JOYS OF EFFORTLESS EFFORT

PAGE 60

IN SEARCH OF GLIMMERS

HOW MICROMOMENTS OF AWE
CAN BOOST YOUR MOOD

PAGE 74

TAKE A CHANCE

OLYMPIC RUNNER **KARA GOUCHER**
ON BEING YOURSELF, TRUSTING YOUR INSTINCTS,
AND GOING THE DISTANCE. PAGE 16

JULY/AUGUST 2025

LIFETIME

Created for FOODIES *by* FOODIES

Food is at the heart of everything we do. Through travel and food, we learn about the world, creating connections and memories that last a lifetime. Travel and food open the door to new experiences and are the most amazing ways to celebrate the world – and the people around us.



“Travel and food are the ultimate ways of bringing people together – to savor unique flavors, experience different destinations and create shared memories.”

GIADA DE LAURENTIIS

Oceania Cruises Culinary and Brand Ambassador



Scan this QR code with your smartphone camera to view our Special Offers.



THE FINEST CUISINE AT SEA®
AWARD-WINNING ITINERARIES
SMALL SHIP LUXURY™

OCEANIA
CRUISES®
YOUR WORLD. YOUR WAY.®

CALL 855-OCEANIA (855-623-2642) | VISIT [OCEANIACRUISES.COM](https://www.oceaniacruises.com) | CONTACT YOUR TRAVEL ADVISOR

CONTENTS

FEATURES



52

Child's Play for Adults

Play is proven to boost physical and mental health — for kids and adults alike. But what does play look and feel like once we're grown? And how can we get more of it in our lives?

By Nicole Radziszewski



60

Trying Not to Try

It's easy to sabotage our efforts by trying too hard, especially when we really want something. The Chinese concept of wu-wei suggests the alternative approach of just being in the moment.

By Edward Slingerland, PhD



66

Melatonin's Many Wonders

Hormone regulator. Immune booster. Mitochondria supporter. Melatonin is much more than a sleep compound. Learn about the many roles this important and versatile molecule plays.

By Mo Perry

Experience Life

July/August 2025

TAKE A CHANCE

IN EVERY ISSUE

4 EXPERIENCE LIFE DIGITAL

7 EDITOR'S NOTE
By Jamie Martin

9 TALK TO US

10 WELL INFORMED
New research on why VO₂ max is a better health metric than BMI; sunglasses and eye health; the call for cancer warning labels on alcohol; and more.

16 ON THE COVER

Running Strong

Olympic long-distance runner Kara Goucher became a crusader for the rights of women athletes and clean sport. She tells how she reclaimed her story — and her power.
By Jill Patton, NBC-HWC

20 IF YOU ASK ME

How Do You Make Time for Play?

EL staffers share the ways they incorporate play into their lives.

22 MY TURNAROUND

Easing the Pressure

A healthcare researcher dials in her diet and fitness routine after struggling to manage gestational hypertension.
By Michelle Emebo

85 WORTHY GOODS

87 PERSPECTIVE

By Bahram Akradi

88 MEDITATION





DEPARTMENTS

Real Fitness

26 THE WORKOUT

Train to Move Odd Objects

A routine for building real-world strength by lifting unruly weights.

By Andrew Heffernan, CSCS

30 EXPERTS EXPLAIN

To Round or Not to Round?

Intentionally performing certain moves with a rounded back may be just what you need to improve spinal mobility.

By Alec Blenis, CSCS, CES, PN2

31 BREAK IT DOWN

The Jefferson Curl

Practice this gentle spinal flexion to enhance your back's strength and flexibility.

By Maggie Fazeli Fard, RKC, MFT-1, Alpha

32 UP YOUR GAME

Solo Athlete, Team Spirit

Five benefits of moving in the company of others.

By Lauren Bedosky and Maggie Fazeli Fard, RKC, MFT-1, Alpha

37 STRONG BODY, STRONG MIND

My Fitness-Routine Pyramid

How our fitness editor is prioritizing movement instead of pursuing perfection.

By Maggie Fazeli Fard, RKC, MFT-1, Alpha

48

Real Food

40 NUTRIENTS

Eating for Eye Health

Food plays a big role in sustaining our vision — and carrots are just the beginning. Discover the best nutrients for eye health.

By Catherine Guthrie

45 FOODSTUFF

Know Your Nondairy Milk

Overwhelmed in the dairy-free aisle? Cut through the confusion with this advice.

By Stephanie Soucheray

48 CONFIDENT COOK

Herbaceously Healthy

Nutritious recipes that make the fresh flavors of herbs the star of the show.

By Kate Morgan



40



78

Real Life

74 BALANCE

In Search of Glimmers

Seeking out micromoments of joy in your daily life can boost your mood and connect you with others.

By Jessie Sholl

77 NATURAL MENTAL HEALTH

Adaptogens for Resilience

Fortify your stress response — and mental well-being — with three supportive herbs.

By Henry Emmons, MD

78 RENEWAL

Let's Take a Trip!

Tips for minimizing the risk for conflict when vacationing with your family or friends.

By Jon Spayde

80 HEAD OUT

Hope on the Great Barrier Reef

A tour of the coral reefs off the coast of Australia reveals inspiring efforts to rehabilitate this critical marine habitat.

By Kaelyn Riley

Experience Life DIGITAL



5 Easy Frozen-Dessert Recipes

Real ice cream is the ultimate summer treat, of course, but if you want a frozen dessert that delivers an extra dose of protein or fiber, try one of our refreshing recipes: coffee granita, banana-peach frozen yogurt, vegan toasted-coconut ice cream, and more. As a bonus, these are “no-churn” recipes, so you don’t need an ice-cream maker or any other special tools. Scan the QR code or go to ELmag.com/frozendesserts.



CONNECT WITH US!

MICRODOSING AND MENTAL HEALTH

Psilocybin, the psychedelic in “magic” mushrooms, has long been considered a tool for expanding consciousness. Researchers are now exploring how microdosing it might support mental health. ELmag.com/microdosing

THE SIDE-BUTT WORKOUT

Prevent pain in your lower back, hips, and knees with a routine designed to build strength in your gluteus medius and gluteus minimus — the muscles that make up your side-butt. ELmag.com/sidebuttworkout

WHAT IS METABOLIC OBESITY?

Rather than looking only at a person’s weight, some progressive healthcare providers have begun to identify obesity by its metabolic effects. ELmag.com/metabolicobesity

SUMMER HYGGE

Most people associate hygge — the Danish concept of coziness and comfort — with the long, cold winter season. But the Danes practice it year-round. Filling a beautiful ceramic pitcher with iced tea, investing in a swinging hammock, or sitting around a backyard firepit are all ways to hygge it up this summer. For more tips on how to practice summertime hygge, scan the QR code or go to ELmag.com/summerhygge.



Fuel your body. Ignite your mind.

Zero Sugar | Zero Caffeine | Premium Ketones



KENETIX®

The official Ketone Drink of Life Time® Training

Experience Life

BY LIFE TIME

OUR MISSION: Empowering people to become their healthiest, happiest, most authentic selves and supporting their enjoyment of a balanced, sustainable, deeply satisfying way of life.

OUR MANTRA: HEALTHY. HAPPY. FOR REAL.

EXPERIENCE LIFE MAGAZINE

EDITOR IN CHIEF **Jamie Martin**

EXECUTIVE EDITOR **Courtney Helgoe**

DEPUTY EDITORS **Craig Cox, Michael Dregni**

MANAGING EDITOR **Courtney Lewis Opdahl**

EDITORIAL DIRECTOR—FITNESS **Maggie Fazeli Fard**

EDITORIAL DIRECTOR—FOOD AND NUTRITION **Kaelyn Riley**

SENIOR COPY EDITOR **Mike Oakes**

SENIOR EDITOR/LEAD FACT CHECKER **Molly Tynjala**

FACT CHECKER/COPY EDITOR **Brett Fechheimer**

CONTRIBUTING EDITORS **Laine Bergeson, Catherine Guthrie, Andrew Heffernan, Jill Patton, Mo Perry, Jessie Sholl, Alexandra Smith, Jon Spayde, Heidi Wachter**

CONTRIBUTING WRITERS **Lauren Bedosky, Alec Blenis, Michelle Emebo, Henry Emmons, Kate Morgan, Nicole Radziszewski, Edward Slingerland, Stephanie Soucheray**

EXECUTIVE CREATIVE DIRECTOR **Lydia Anderson**

PRODUCTION DIRECTOR **Jane Meronuck**

ART DIRECTOR **Jennifer Jacobson**

SENIOR DIRECTOR—DIGITAL **Anjula Razdan**

DIRECTOR—DIGITAL MARKETING AND MEDIA STRATEGY
Laura Lineburg

SENIOR MANAGER—BUSINESS AND CIRCULATION
Carrie Stafford

SENIOR MANAGER—MULTIMEDIA, EMAIL, AND SOCIAL
MEDIA **Tatyana McNamara**

DIGITAL CONTENT SPECIALIST/SPECIAL PROJECTS
COORDINATOR **Christy Rice**

FOUNDING EDITOR **Pilar Gerasimo**

Please address all written correspondence and editorial inquiries to Managing Editor, *Experience Life*, 2145 Ford Parkway, Suite 302, St. Paul, MN 55116 or experiencelife@experiencelife.com.

LIFE TIME

FOUNDER, CHAIRMAN, AND CEO **Bahram Akradi**

PRESIDENT, MEDIA **Kimo Seymour**

Please address all media and advertising inquiries to ltmedia@lt.life.

PICTURE CREDITS

Cover and p. 16–18: Andy Anderson (photographer), Lisa Chamberlain/The Rex Agency (hair and makeup), Lisa Bae/The Rex Agency (wardrobe styling). Wardrobe (On the Cover): shirt, shorts, and shoes by Brooks.

Pages 2–3 (center), p. 4, and p. 39: Terry Brennan (photographer), Betsy Nelson (food styling); p. 7: Sara Rubinstein; p. 10 (center) and p. 85: Terry Brennan; p. 20 (right, second from top): Carrie Stafford; p. 23: Monica Wandrey/Classic Kids Photography; p. 33 (top): Piranha; p. 73, p. 80–82: Kate Slaughter.

The stock images in this magazine were purchased from Getty Images.

LIFE TIME®, LIFE TIME FITNESS®, LIFE TIME ATHLETIC®, and EXPERIENCE LIFE® are all trademarks of LIFE TIME.



EXPERIENCE LIFE Magazine (ISSN 1537-6656) is published six times a year — January/February, March/April, May/June, July/August, September/October, and November/December — by LIFE TIME, 2902 Corporate Place, Chanhassen, MN 55317. SUBSCRIPTION RATE: One year (6 issues) \$27.95; two years (12 issues) \$44.95. LIFE TIME MEMBERS: For member questions, cancellations, or change of address, call Account Services at 888-430-6432 or email accountservices@lifetime.life. NON-LIFE TIME MEMBERS: For nonmember questions, cancellations, or change of address, call 800-897-4056 or email ELFcustserv@cdsfulfillment.com. Periodicals postage paid at Chanhassen, MN 55317 and additional mailing offices. ISSUE DATE: July 2025. POSTMASTER: Send address changes to Carrie Stafford, EXPERIENCE LIFE Magazine, 2145 Ford Parkway, Suite 302, St. Paul, MN 55116.

LIFE TIME
HEALTHY WAY OF LIFE

Copyright 2025 by LIFE TIME. All rights reserved. Printed in USA. Reproduction of this magazine, in whole, or in part, is prohibited unless authorized by the Publisher or its advertisers. The advertising space provided in EXPERIENCE LIFE is purchased and paid for by the advertiser. None of the products or services is necessarily endorsed by LIFE TIME.



The paper used in this publication is certified by the Sustainable Forestry Initiative®. Please recycle this magazine.

The information contained in the magazine is intended to provide broad understanding and knowledge of healthcare topics. This information should not be considered complete and should not be used in place of a visit, call, consultation, or advice from your physician or other healthcare provider. We recommend you consult your physician or healthcare professional before beginning or altering your personal exercise, diet, or supplementation program.

Experience Life shares health-and-wellness information and healthy-way-of-life stories that reflect a wide variety of human experiences. We respect individuals' pronouns and personal descriptors; for this reason, terms may vary from article to article.

FINDING HER WAY

IT HIT ME ON A RECENT MORNING while cheering on our 12-year-old daughter and her lacrosse teammates: *Lizzy is in her happy place.*

I watched with pride as she cradled the ball toward the goal, moving with confidence and intention; as she passed with ease and accuracy; as she went all-out on offense and defense.

Whether she was on the field and part of the play or on the sidelines encouraging her peers, she was trying her best while having so much fun — the big smile on her face proof of her joy.

It was a marked difference from her winter basketball season. As a coach for Lizzy's team, I had a front-row seat to her effort and engagement — and both were inconsistent at best.

Although she believes in herself on the lacrosse field — something you can see and almost feel — she is self-conscious on the basketball court, despite having the necessary skills and abilities and a solid understanding of the sport.

Whereas Lizzy frequently returns home after a lacrosse practice or game eager to talk about her performance or a new technique or play, she rarely wanted to discuss her latest basketball experience.

While she plays lacrosse with a natural ease, she plays basketball like it's work. And not the sort of work she cares that much about.

It's that intersection of ability, joy, and value that sets lacrosse apart for Lizzy. When I asked her recently why it's her favorite sport, her response was simple: "I just get it, and it's fun." That's how I feel about basketball, how her older sister feels about tennis, and how her dad feels about hockey.

This feeling isn't just limited to sports, though: It can happen in any area of our lives in which we feel a sense of effortless effort, or wu-wei, as author and scholar Edward Slingerland, PhD, writes in "Trying Not to Try" (page 60). "Wu-wei is a state of mind where you lose the sense of yourself as an agent and are completely absorbed in what you are doing. You are spontaneous, unselfconscious, and relaxed. . . . [This] often amounts to greater success in everything you do."

I feel fortunate to witness Lizzy experiencing wu-wei on the lacrosse field — and to now be aware of the different ways she engages in her activities. As a parent and coach, I pushed her pretty hard during the basketball season. I was often frustrated with her demeanor: I could see her potential, but I couldn't figure out why she didn't seem to care.

It turns out basketball probably isn't that just-right mix of what lights her up. The reality is that a lot of what I might suggest for her won't be. And that's OK.

As her mom, I can only hope that she seeks out or stumbles upon things that tap into her innate abilities, that bring her joy, and that she cares about as she grows. I can hope she stays true to herself and her desires, even in the face of pressure or "shoulds." Even if that means taking chances. Especially then.

Because it's when we step outside our comfort zone that we often find that sweet spot where purpose, belonging, and contentment meet. Right now, that's lacrosse for Lizzy. Down the road? Who knows, but I plan to be there, always cheering her on.



I can only hope that she seeks out or stumbles upon things **that tap into her innate abilities, that bring her joy, and that she cares about as she grows.**

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.



**YOUR
THOUGHTS?**

Email us at
[Experiencelife@
 experiencelife.com](mailto:Experiencelife@experiencelife.com).

You don't *have* to tell them it's good for them.

Just smile when they fall in love with NuGo. All delicious flavors are high in protein and certified gluten free, they're the snack that sneaks in strength. Just don't expect leftovers.



Available In:
LIFE CAFE

Scan to Learn More



TALK TO US

THE POWER OF PICKLEBALL

🧑 Thank you for such a beautiful story (“How Pickleball Helped a Woman Rebuild Her Life After a Stroke,” March/April 2025). I love Elise Laedtke’s determination and spirit. I suffered a traumatic brain injury, and there are so many things I can no longer do. But I can play pickleball. Although my speech is sometimes limited, I am learning the game and loving every moment. It makes me feel alive again.

Pat H.

MINDING MENTAL HEALTH

📧 Thanks for sharing your article “3 Supplements to Support Your Mental Health” (January/February 2025). In terms of supplements, it’s important to note the different types of magnesium available. Magnesium glycinate is the best option for sleep. @renacisne.co

📧 I love the STOP acronym in “4 Tips for Finding Mindfulness” (January/February 2025). It’s such a quick and effective way to increase self-awareness and build capacity for self-regulation. @gracefulmind.therapy

📍 I absolutely hate the cold (“Get Outside Every Day,” January/February 2023). But once I get out there in the woods and mountains that surround me, I feel pure, strong, and ready for the challenges ahead — all of them!

Kate H.

📍 You are absolutely right about ketamine (“Can Ketamine Therapy Help Treat Depression and Other Mental Health Disorders?,” February 2025). I experienced it as an anesthetic after I was injured in a car accident, and it destroyed my depression in three months.

Jason G.

CONSUMPTION CONSIDERATIONS

🧑 This is good information to have (“Why We Need More Protein as We



Age,” February 2025). We have been led to believe that we don’t need as much protein in our later years as we did when we were young.

Cember C.

📍 Yes, gluten-free buns aren’t that healthy (“Anatomy of a Gluten-Free Hamburger Bun,” March/April 2025). But if you can’t eat gluten because of celiac disease or gluten sensitivity of some kind or a wheat allergy, you just want something kinda normal.

Randi S.

Experience Life welcomes your comments and suggestions. Email experiencelife@experiencelife.com, connect with us on social media, or send feedback to:

Letters to the Editor
Experience Life
2145 Ford Parkway, Suite 302
St. Paul, MN 55116

Please include your city and state. We reserve the right to edit letters for length, grammar, and clarity, and to publish at our discretion. All submitted copy and materials become the property of the magazine. We do not return or guarantee the publication of unsolicited materials. For reprint and publication requests, please contact experiencelife@experiencelife.com.

📍 Getting a young adult to care about their health more than all the marketing and flavor is a daunting task (“The Dangers of the New Energy Drinks,” March/April 2025). Many people seem to believe that if it’s sold, it’s approved and just fine.

Nancy H.

UNDERSTANDING SUGAR

📍 High insulin and insulin spikes will also cause arterial inflammation and plaque buildup in arteries (“How Does Eating Sugar Affect Insulin?,” January/February 2025). For that matter, studies have shown that in mice, even aspartame causes insulin spikes that lead to inflammation and heart disease.

Robert J.

📍 Thank you for this amazing article (“Nutrition for Addiction Recovery,” November 2019). I can relate to all of this through my own experience. Sugar cravings were big for me. I will try the potato before bed, because I still get the urge to eat late at night.

Real Food 4 Recovering

A NOVEL HEART-HEALTHY APPROACH

[On “Rethinking Heart Health,” August 2016]

🧑 This heart-health article is excellent and clearly written. I certainly appreciate your focus on the functional-medicine experts’ recommendations for lifestyle changes that can improve overall heart health.

Karen F.

🧑 Thanks for a very informative and comprehensive article. Lifestyle behaviors account for 50 percent of the health status of a population. I like that your recommendations go beyond the individual and address important community variables. I hope this gets into the awareness of all healthcare providers.

Marilyn B., MD

RETHINKING HEALTH METRICS

Why cardiorespiratory fitness is more important than BMI.

STEP INTO most doctors' offices, and the scale is usually your first stop. Body mass index (BMI) — an estimate of your body-fat percentage based on weight and height — is used by many healthcare providers to gauge your health risks, even though it's been critiqued as a shortsighted measure of overall health.

A better marker of health is cardiorespiratory fitness, according to a 2024 *British Journal of Sports Medicine* meta-analysis.

The investigation involved 20 studies conducted since 1980. Combined, they include data on 398,716 people. Compared with previous research, the results came from a greater proportion of women (33 percent) and a more globally diverse sample.

"The takeaway message of our study is that, from a health perspective, the risks of being unfit are far worse than the risks associated with carrying extra weight," says corresponding author and physiologist Siddhartha Angadi, PhD, a University of Virginia associate professor of kinesiology.

Healthcare's reliance on BMI is representative of a public health strategy that is largely focused on weight loss, the review authors state.

Cardiorespiratory fitness, on the other hand, is the capacity of the cardiovascular and respiratory systems to supply oxygen to the muscles during

exercise. When you work out, your heart beats faster to deliver the oxygen from your lungs to your muscles, explains Samantha McKinney, RD, who helps lead nutrition and LTH supplement education at Life Time. Your muscles use that oxygen to generate energy in the form of adenosine triphosphate, or ATP. This energy production is a sign of aerobic fitness and the ability to handle more activity and stress.

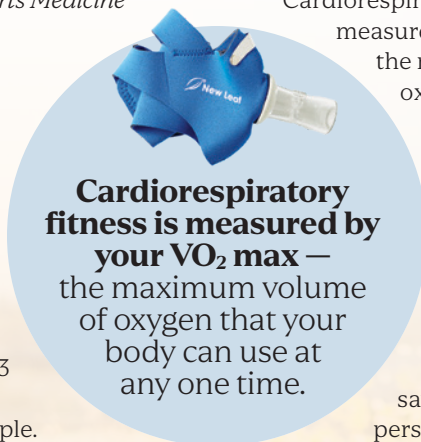
Cardiorespiratory fitness is measured by your VO_2 max — the maximum volume of oxygen that your body can use at any one time. Though there are ways to estimate it, measuring VO_2 max requires a more complex test than simply stepping onto a scale, which Angadi says is a key reason "BMI persists as the primary health indicator."

Most notably, the meta-analysis found that cardiorespiratory fitness yielded significant benefits for participants' health regardless of their BMI.

"Unfit individuals, whether they're considered normal weight, overweight, or obese, had a two- to threefold greater risk of mortality compared to fit individuals across weight categories," Angadi explains. "Importantly, once fitness status was accounted for, there were no increases in the risk of death in overweight and obese individuals."

(For more on assessing your cardiorespiratory fitness and VO_2 max, see ELmag.com/VO2.)

— MICHAEL DREGNI



Cardiorespiratory fitness is measured by your VO_2 max — the maximum volume of oxygen that your body can use at any one time.



SUNGLASSES: MORE THAN A COOL ACCESSORY

One of the best ways to safeguard your eyesight is to don sunglasses outdoors. The sun's rays comprise a wide spectrum of light, including ultraviolet (UV) radiation and blue light. Both can be harmful to your eyes.

UVA and UVB radiation cause sunburn, and they may also contribute to cataracts. This type of radiation can damage proteins in your eye lenses, which then cloud over.

"Blue light . . . penetrates the eye more than other colors due to its higher energy and shorter wavelength and minimal absorption by the cornea and lens," explains integrative optometrist Neda Gioia, OD, CNS, IFMCP. "[This results] in deeper penetration into the retina compared to the rest of the visible light spectrum." Blue light also generates more free radicals, which can harm the cells in your eyes.

A lifetime of sun in your eyes can contribute to the onset of macular degeneration, eye or eyelid cancer, or even painful growths on the eye itself — including pterygium, also known as surfer's eye.

Given that too much sunlight is hazardous for vision, many sunglasses are regulated as medical devices by the U.S. Food and Drug Administration's Center for Devices and Radiological Health.

With the right UV protection, drugstore sunglasses can be just as protective as designer brands. Choose a pair with lenses that filter both UVA and UVB radiation (marked as 100 percent UV or UV 400 protection) and opt for ones that are amber tinted, which filter blue light.

And don't hesitate to go big. The larger the lenses, the fewer rays that can sneak in around the sides. Add a wide-brimmed hat, and your eyes will thank you.

— CATHERINE GUTHRIE

YOUR BRAIN ON ULTRAPROCESSED FOODS

Ultraprocessed foods (UPFs) can be hard on your gut and heart — and they may also affect your brain, according to several recent studies.

Researchers haven't found an exact mechanism for this, but they suspect that the chemicals used in UPF production may hurt our vascular health and harm our brains — all while displacing healthy nutrients and fiber from our diets.

Here are some of the findings.

Higher Dementia Risk:

People who eat about two servings per week of highly processed red meat — such as hot dogs, bacon, sausages, and bologna — have a 14 percent higher risk of dementia compared with those who eat less than three servings a month. That's among the results of a 43-year study following more than 130,000 Americans delivered at the 2024 Alzheimer's Association International Conference.

Conversely, the researchers found that replacing one serving of processed red meat with a serving of nuts, beans, or tofu every day may lower dementia risk by 20 percent.

Declines in Cognitive Performance: In a study of 10,775 Brazilians that was published in 2022, those who



got more than 20 percent of their daily calories from UPFs had a 28 percent faster rate of decline in their cognitive performance and executive function. The study doesn't specify the UPFs consumed, but the authors note that common examples of UPFs include processed meats, snack foods, breakfast cereals, sugar-sweetened beverages, ready-to-eat frozen meals, and more.

Increased Chance of Mental Health Disorders:

A 2022 meta-review published in the journal *Nutrients* examined 17 international studies with a combined 385,541 participants. The researchers concluded that the more UPFs participants consumed, the greater their risk of depression and anxiety. On the other hand, whole foods supported better mental health. In the authors' words: "These findings build upon the extensive body of evidence that demonstrates healthier dietary patterns . . . are associated with reduced risk of mental disorders such as depression."

— MD

Replacing one serving of processed red meat with a serving of nuts, beans, or tofu every day may lower dementia risk by 20 percent.





HOW MUSCLES REMEMBER — AND REGAIN LOST STRENGTH

Most of us have experienced muscle memory, the neuromuscular ability that helps us confidently ride a bike or swing a tennis racket — even if we haven't done those activities for years.

Recent research suggests that muscle memory may also explain how previously trained muscles can rapidly regain their size and strength after months without lifting.

Surprised at how quickly his own muscles recovered after an extended break from training, Eeli Halonen, a doctoral student in exercise physiology at Finland's University of Jyväskylä, assembled a research team. They recruited 55 people with no weightlifting experience and led them through a 20-week workout program. About half of the participants took a 10-week break midway through the program before resuming their workouts for another 10 weeks.

When they measured the participants' muscles during the break, researchers found they had decreased in size and strength. Once back in the gym, however, these individuals regained their lost muscle mass in a mere five weeks.

Scientists are still trying to understand rapid muscle regeneration. One theory posits that the nuclei in skeletal muscle cells remain even as muscle fibers shrink, poised to reactivate when called upon. Another theory suggests that strength training rewires the muscles' DNA, allowing certain genes to switch on more readily when workouts resume.

"It's a positive finding for those [who] need to take time off for whatever reason," notes Kevin Murach, PhD, a professor of exercise science at the University of Arkansas, in an interview with NPR. "You can rest assured that your muscles will readapt quite readily."

— CRAIG COX

A CALL FOR WARNING LABELS ON ALCOHOL

Cigarettes carry a cancer warning label — and alcoholic beverages should too, according to a January 2025 advisory report, *Alcohol and Cancer Risk*, issued by then-U.S. Surgeon General Vivek Murthy, MD.

"This advisory highlights alcohol use as a leading preventable cause of cancer in the United States, contributing to nearly 100,000 cancer cases and about 20,000 cancer deaths each year," Murthy's report states.

Alcohol consumption is associated with a greater risk for at least seven types of cancer, according to the National Cancer Institute and the U.S. Department of Health and Human Services. These include cancer of the breast, mouth, throat, voice box, esophagus, liver, and colon and rectum.

Researchers suspect alcohol works in four ways to cause cancer:

- It can break down into acetaldehyde, which may damage DNA.
- It can induce oxidative stress and increase inflammation. This may promote greater cancer risk by harming DNA, proteins, and cellular health.
- It may alter the levels of multiple hormones, including estrogen, which can increase breast-cancer risk.
- It can promote greater absorption of other carcinogens.

The World Health Organization stated in 2023 that there is no safe limit for alcohol consumption, and 47 countries worldwide currently require warnings on alcoholic drinks. Still, cancer is rarely noted on these — although South Korea has a label warning about liver cancer, and Ireland plans to introduce labels in 2026 noting there's a "direct link between alcohol and fatal cancers."

Murthy's report called on Congress to mandate the warning on alcohol containers. But Murthy left office in January 2025, and it's uncertain whether the federal government will act on his advisory. (For more on the health effects of alcohol, see [ELmag.com/alchoholeffects](https://www.ELmag.com/alchoholeffects).)

— MD

Alcohol consumption is associated with a **greater risk for at least seven types of cancer.**





THE TROUBLE WITH RECYCLING

IN SEPTEMBER 2024, the State of California sued ExxonMobil, accusing one of the world's largest petrochemical companies of "misleading the public on plastic's recyclability and polluting California's environment and communities."

Upon filing the suit, California Attorney General Rob Bonta said, "For decades, ExxonMobil has been deceiving the public to convince us that plastic recycling could solve the plastic waste and pollution crisis when they clearly knew this wasn't possible. ExxonMobil lied to further its record-breaking profits at the expense of our planet and possibly jeopardizing our health."

Plastic requires anywhere from 20 to 500 or more years to degrade, so concerns about plastic waste are warranted. As of 2017 (the most recent year for which data is available), some 6.3 billion metric tons of plastic waste had been generated worldwide. In the United States, a mere 9 percent of plastic was recycled.

The lawsuit raises broader questions concerning what other items might not be truly recyclable — or are simply not being recycled.

"Just because an item is 'recyclable' does not mean that it will actually

get recycled," says David Allaway, senior policy analyst for the Oregon Department of Environmental Quality and coauthor of a comprehensive 2020 meta-analysis of studies on packaging recycling. This is what we know about some other materials.

Paper and Glass: American domestic reclamation of paper and glass continues, although much of our sorted recyclables are now being dumped into landfills or incinerators because there aren't enough facilities to recycle it all.

Aluminum: This metal is often lauded by industry sources as "infinitely recyclable."

"Aluminum is one of the most recycled — and recyclable — materials in use today," claims the Aluminum Association.

So, is aluminum a more sustainable choice? The answer is complex.

Aluminum production has a large carbon footprint. The metal is made from bauxite, which is stripped and then smelted, requiring

massive amounts of water, heat, and energy. Smelting furnaces generate greenhouse gases, and producing an aluminum can is estimated to release twice as much carbon dioxide into the environment as making a plastic bottle.

Because aluminum doesn't rust, it can be remelted and reused. Industry sources claim that recycling it requires only 5 percent of the energy needed to produce the metal — but that still bears an environmental price tag.

And then there's human behavior. According to the Environmental Protection Agency, only about half of all aluminum beverage cans were recycled in 2018, the most recent year for which there is data.

"As a predictor of environmental goodness, 'recyclability' is about as reliable as a coin toss," Allaway says. "Using fewer materials in the first place typically results in far greater environmental benefits than recycling or using 'recyclable' materials." 🌱

— MD

"As a predictor of environmental goodness, 'recyclability' is about as reliable as a coin toss."

× TEN THOUSAND



MALCOLM REYNOLDS IN THE INTERVAL SHORT

THE ONLY
TRAINING GEAR
YOU'LL EVER NEED



TENTHOUSAND.CC

RUNNING STRONG

How Olympic long-distance runner Kara Goucher reclaimed her story — and her power.

BY JILL PATTON, NBC-HWC ● PHOTOS BY ANDY ANDERSON

FROM THE OUTSIDE, it seemed that American long-distance runner Kara Goucher was on top of the world. After medaling at the 2007 World Championships in Osaka, securing her place on the 2008 U.S. Olympic team, and finishing top three at the New York City Marathon, Goucher was at her career peak.

She was part of the Oregon Project, an elite, Nike-sponsored professional training team coached by running legend Alberto Salazar. Her image appeared on billboards, in malls, and on the sides of buses all over the United States.

Behind the scenes, though, Goucher was suffering emotional and sexual abuse at the hands of Salazar, which left her isolated and afraid. She was also witnessing the questionable if not outright illegal use of medications and other substances by certain teammates, directed by Salazar and other Oregon Project staff.

When she and her husband (also a former Oregon Project athlete) decided to start a family, she was assured by Nike executives that her contract would be secure during her pregnancy as long as she stayed

“relevant” by participating in media interviews, photo shoots, and other events. Yet Nike suspended her pay due to what they termed her “medical condition” that kept her from competing.

It would take years for Goucher to summon the courage to speak out about her own abuse and the doping she observed. Her testimonies

against Salazar and Nike

between 2018 and 2021

— first to the U.S.

Anti-Doping Agency

(USADA) and then

to the U.S. Center

for SafeSport,

regarding sexual

and emotional

misconduct —

contributed to

Salazar’s lifetime

ban from coaching

USA Track and Field

athletics. She tells her

story in a 2023 memoir, *The*

Longest Race.

Now 46, Goucher is retired from racing but serves on the board of the USADA and as a commentator for distance running for NBC Sports. She also hosts the *Nobody Asked Us* podcast with fellow runner Des Linden, on which the duo discuss “all things running.”

We caught up with Goucher to learn more about her journey from elite competitor to advocate for women athletes and clean sport.

“I just want to be who I am, and it’s a really nice place to be in my life.”

Q & A

WITH KARA GOUCHER

EXPERIENCE LIFE • In your book, you describe struggles with self-confidence going back to high school — and how that left you vulnerable as a young athlete at the Oregon Project.

KARA GOUCHER • From a young age, I was really driven and a bit of a perfectionist, but I never was the best at anything. The term “imposter syndrome” wasn’t something we talked about then, but that was me to a T. I’d line up on the start line and think, *I’m fooling everyone that I belong here.*

The Oregon Project was a men’s team, and at first I thought I should just be grateful to be there. We had unlimited resources from Nike, and it was intoxicating to be part of that group, to have that exclusivity.

Because my dad died when I was very young, I was always looking for some sort of male guidance in my life, and I turned to Alberto. I also had the ability to push away things that hurt me, whether physically or emotionally. All of this set me up to be taken advantage of.

EL • Yet you overcame your fears to tell your story on a very public stage. How did you build up the courage to do this?

KG • It was a slow burn, finally deciding to testify against Alberto for USADA’s investigation and then for SafeSport. What drove me to write the book, though, was that there were high-profile people writing about me who spoke with authority against me but who had never met me. I was never quoted. I was never asked.

I got so frustrated that the story being told about me wasn’t real. I wanted to tell my story where nobody could cut me off. I wanted it in my own words so I could move on and have peace.

EL • Your family wasn’t aware of the abuse until you decided to blow the whistle. As you look back, what did you learn from this experience?

KG • My family loved me before I ran, and they love me just as much now,



“I’m exploring things I like, and I’m not trying to be perfect.”

when I don’t run [competitively]. I think I wanted to protect them from what was happening because I knew how much they just wanted me to be happy.

I’ve learned that when you’re all in on something, whether it’s your job, sport, music, or whatever, sometimes you lose track of who you are. When you’re lying on your deathbed, you’re no longer a runner or a musician — that’s just something you pursued and worked at. You’re all the moments in between with your family, all the memories with your friends who showed up for you and who you showed up for. That’s who you truly are.

EL • You have written and spoken about the role of therapy in your life. How has therapy helped you heal?

KG • It’s so important to be able to be vulnerable enough to talk about things. My husband and I have been in marriage counseling, not because we want a divorce but because so many things happened to us, and it’s helpful to talk about them with a neutral party. There’s so much power in releasing things that feel like secrets, that you’re ashamed of, that you feel embarrassed about. Releasing these in safe spaces gets rid of the power they have on you, and you start to regain your own power.

EL • In 2022, you were diagnosed with focal dystonia [a neurological movement disorder that causes involuntary muscle reactions] in your lower left leg. How are you doing?

KG • I have repetitive movement dystonia, which means my brain wires sometimes get tripped up. When I do a motion I’ve done repeatedly, like running, instead of just contracting the muscles I need to do that motion, every muscle from my knee down contracts.

It’s been hard because running has been my release. Sometimes I even have problems walking, and I have to use a cane on days when it’s really bad. I get Botox treatments four times a year, which helps. Today was a good day: I met a friend to run three miles, and we ended up running seven. When I have days that are good, I take advantage of them.

EL • Over your career, you have put yourself out there as an elite athlete, an author, a commentator, a podcaster, and an advocate for clean sport. How do you see yourself now?

KG • I never saw myself as a leader, but I think there is a kind of quiet leadership that comes with being comfortable with who you are, with taking risks, and with doing something outside the structure you’ve always been in. I think that’s where I am in my life now — I’m exploring things I like, and I’m not trying to be perfect. Some things have been great, and some things haven’t been. I just want to be who I am, and it’s a really nice place to be in my life. 🧘

JILL PATTON, NBC-HWC, is an *Experience Life* contributing editor and an integrative health and wellness coach.



NON-ALCOHOLIC BEER

ATHLETIC BREWING CO.[®]

FIT FOR
ALL TIMES[®]





How Do You MAKE TIME FOR PLAY?

EL staffers share how they let loose.

My grandson shows up every Sunday afternoon and teaches me how to be an 8-year-old again.

— **Craig Cox**, deputy editor

With a 10-year-old and an 8-year-old and a new puppy, play is the heartbeat of our home!

— **Courtney Lewis Opdahl**, managing editor



I try to turn certain essential tasks and humdrum chores into fun. Walking the dog, vacuuming the house, taking out the garbage, and especially **commuting to work** can become a hide-and-go-seek session, a sing-along, dance time, and/or exercise.

— **Michael Dregni**, deputy editor

A WEEKLY TEE TIME for my newfound love: golf! I've forged amazing new friendships that have extended beyond the greens to home gatherings, concerts, and more. Plus, the laughter we share on the course is the ultimate remedy for even the most stressful days.

— **Christy Rice**, digital content specialist/special projects coordinator



JUMPING IN ANY FORM — jumping rope, bouncing on a mini trampoline, box jumps, pogo jumps, hopscotch, and even just bopping around in my pajamas while waiting for my coffee to brew — is a quick, fun way to infuse my day with play.

— **Maggie Fazeli Fard**, editorial director—fitness



It's easy to play when you have a 3-year-old and a 4-year-old! I can't say no to their cute little faces. The pile of dishes or load of laundry can wait. A **family dance party** is more fun anyway!

— **Carrie Stafford**, senior manager—business and circulation



My fiancé and I have a ritual when we get home: The first thing we do is grab a dog toy and **romp with our golden retriever** for a few minutes. The way her eyes light up when we get down on her level and play tug awakens a sense of play in me that I thought had gone dormant long ago.

— **Molly Tynjala**, senior editor/lead fact checker

LIFETIME® Events

Experience Life Outside with Life Time Events

With 30+ premium experiences nationwide, including the Miami Marathon and Half, Leadville Trail 100 Run and MTB, and the Chicago Half Marathon, Life Time Events provide a platform for athletes of all levels to highlight and fulfill their training goals.



Find Your Next Event.





Easing the Pressure

How a healthcare researcher learned to manage gestational hypertension with quality nutrition and exercise.



BY MICHELLE EMEBO

BEFORE GIVING BIRTH in May 2015, I developed gestational hypertension. Despite concerns that it could lead to additional health complications — such as placental abruption, premature birth, or organ damage — I delivered a healthy baby girl.

Over the next year, my blood pressure remained high, and I wasn't able to lose weight. At a checkup, my doctor noted that Black women tend to be overweight, and he recommended increasing the dose of the hypertension medication I'd started after my daughter was born. He did not suggest lifestyle modifications, like changing my diet or exercising more.

I'm a healthcare researcher, so I knew that his statement concerning Black women was statistically correct. Based on the data, the number of higher-weight Black women is disproportionate compared with other demographic groups for reasons that aren't entirely understood. A partial explanation is well-established, however: Body mass index overestimates obesity in Black people because it doesn't account for differences in body composition.

Nevertheless, this didn't necessarily apply to me — I hadn't been hypertensive or overweight before I tried to get pregnant. I wanted to find the root cause of my hypertension and weight

retention, and I wanted to focus on lifestyle changes before I treated the problem with more medication. I hoped to find another physician to partner with on this wellness journey.

RISING PRESSURE

I got pregnant in 2014, about a year after marrying my college sweetheart. I was a little underweight after my first trimester, so I started drinking protein shakes with breakfast.

I wanted to find the root cause of my hypertension and weight retention, and I wanted to focus on lifestyle changes before I treated the problem with more medication.

Living in Chicago helped too — the city is full of great food. My husband and I enjoyed eating at nearby burger joints, taco bars, and pizza places. I made friends with the baker at a local doughnut shop, who always waved me in and gave me one of my favorite glazed long johns.

By the middle of my third trimester, I had gained almost 55 pounds. My blood pressure had also increased —

so much so that my physician advised me to come in every other week for checkups. At the time, I didn't think much about the condition. I felt OK and I'd been reassured that my numbers would normalize after giving birth.

People with hypertension may not experience symptoms, so the condition is not always taken seriously. But it is a genuine threat to health, known as a "silent killer." Gestational hypertension increases blood-vessel resistance, reducing blood flow to the mother's essential organs and the placenta. This has the potential to deprive the developing baby of necessary nutrients and oxygen.

We were lucky. Although my blood pressure remained high during the weeks leading to my due date, my baby, Sarai, was born in good health.

THE FOURTH TRIMESTER

Four months after I gave birth, my healthcare provider advised that I start taking a low-dose medication to manage my blood pressure.

I was having a difficult time recovering physically and emotionally from childbirth. The experience had been hard on my body, and adjusting to life with a newborn was a challenge — even with the help of my mother and mother-in-law. Sarai

wasn't feeding well, and she was sleeping all day and awake all night.

At a six-week follow-up visit, I was diagnosed with postpartum depression. I started seeing a therapist on a regular basis, and she helped me learn how to prioritize my own needs while figuring out how to take care of Sarai. I began by simply making sure I was eating, showering, and getting some sleep.

By November 2015, I was starting to adjust to my new life. But my blood pressure remained high. For months I had been living in survival mode. I ate as I had during pregnancy, not thinking about sodium or macronutrients, and I felt more stressed. I lacked the capacity to focus on better nutrition or exercise.

But now that I was finding balance in other areas of my life, I felt ready to address the root causes of my high blood pressure.

I found a new doctor who was willing to focus on nutrition and exercise before increasing my medication. It was the motivation I needed to make a change.

TAKING BACK MY POWER

I began working with a nutritionist who recommended I reduce sodium and take a month off from eating out. To follow this advice, my husband and I became more intentional about grocery shopping. I focused on produce and meat and was mindful of food labels. On Sundays, I prepped food for the week ahead.

I also made exercise a priority. I'd been athletic as a child and young adult: I played basketball and volleyball in high school and continued with basketball through college. But fitness took a back seat after I graduated. With my health

on the line, it was time to tune in to my once-active spirit. I started by attending fitness classes two or three times a week.

Although results came slowly and gradually, I



Michelle pictured with her husband, Marcus, and daughter, Sarai.

never felt like I was sacrificing. I maintained a regular workout routine; chose whole foods over processed ones; modified portion sizes to match my nutritional needs; opted for a salad over a burger when I ate out; and requested one pump of syrup instead of two in my coffee drink.

It all took about 18 months, but I was committed. Consistency was more important than a quick fix.

By fall 2018, my blood pressure had normalized and I had lost 75 pounds.

My doctor said I could go off the meds — cold turkey. My blood pressure was stable when I saw him again a month later, and it's remained stable ever since. Today, it's in the range of 110–120/80, and I only see my doctor once a year for a wellness exam.

I now know what my body needs to be healthy.

REACHING AND KEEPING THE GOAL

My goals have changed since my blood pressure stabilized. In 2018, I joined Life Time, motivated by the amenities offered for children. Sarai was an active toddler by then, and I wanted her to learn how to have fun with fitness at a young age.

I started working with a personal trainer who created a routine that I can adjust as needed. I add more yoga classes during stressful times. I've also trained for and competed in a variety of races, including obstacle-course events and a half-marathon. I like the opportunity to modify my training and connect with other people in the fitness community.

I love being active with Sarai, who is now 10. We like to throw the football or shoot hoops together, and I'll run alongside while she bikes.

Nutrition is an important part of our lives, and my husband and I have incorporated the phrase “nutrient-dense foods” into the family vocabulary. I hope my journey teaches Sarai she has the power to take control of her physical, mental, and spiritual health.

I'm also preparing to return to medical school. I hope to join an emerging field of physician nutrition specialists who work with patients with chronic disease. My dream is to run my own team and conduct research that incorporates nutrition. I want to help more patients learn how to improve their health outcomes through manageable lifestyle adjustments — like I was able to do for myself. 🌱

Michelle's Top Takeaways

1.

Take control of your health. “I was waiting on doctors to cure me, until I realized I had to partner with my doctor and help myself,” says Michelle.

2.

Take hypertension seriously. “What starts with obesity and hypertension becomes cardiac disease, then kidney disease, [and this can] lead to death. Try to prevent that early on.”

3.

Make small changes over time. We often expect a quick snapback after birth, she notes. Huge change is not realistic. Reach the goal, then keep the goal.



TELL US YOUR STORY

Have a transformational healthy-living tale of your own? Share it with us at

**ELmag.com/
myturnaround.**



stelo by Dexcom

Fuel smarter with Stelo

Your personal
glucose biosensor
for every activity

Gain insights into how your meals affect
your body's glucose response so you can
enhance your performance and recovery.¹

Discover Stelo at stelo.com/LifeTime




The official glucose
biosensor of Life Time®

¹Holzer R, et al. Continuous glucose monitoring in healthy adults—possible applications in health care, wellness, and sports. *Sensors*. 2022;22(5):2030

STELO SAFETY INFORMATION: For full information on risks and benefits, visit stelo.com.

INDICATIONS FOR USE: The Stelo Glucose Biosensor System is an over-the-counter (OTC) integrated Continuous Glucose Monitor (iCGM) intended to continuously measure, record, analyze, and display glucose values in people 18 years and older not on insulin. The Stelo Glucose Biosensor System helps to detect normal (euglycemic) and low or high (dysglycemic) glucose levels. The Stelo Glucose Biosensor System may also help the user better understand how lifestyle and behavior modification, including diet and exercise, impact glucose excursion. The user is not intended to take medical action based on the device output without consultation with a qualified healthcare professional.

Dexcom, Dexcom Clarity, Dexcom Follow, Dexcom One, Dexcom Share, Stelo, and any related logos and design marks are either registered trademarks or trademarks of Dexcom, Inc. in the United States and/or other countries. ©2025 Dexcom, Inc. All rights reserved. MAT-8378

A photograph of a woman in the foreground, smiling warmly at the camera. She has dark hair pulled back and is wearing a white tank top. Her arms are crossed. In the background, two other women are visible, one in a blue top with arms raised and another in a grey top, both appearing to be in a fitness or outdoor activity setting. The scene is lit with warm, golden light, suggesting a sunset or sunrise. The background shows a blurred landscape with hills and trees.

FOR MANY OF US,
fitness is a solo pursuit.
But clubs, teams, and
classes dedicated
to solo sports can
exponentially enhance
their rewards. On
page 32, discover five
benefits of moving
your body in the
company of others.

REAL FITNESS

TRAIN TO MOVE ODD OBJECTS

Build real-world strength by embracing awkward positions and unruly weights in this strongman-inspired routine.

BY ANDREW HEFFERNAN, CSCS

AT MOST HEALTH CLUBS

and fitness facilities, symmetry is the name of the game. Weights are solid and easy to grip. Machines run smoothly and evenly. Floors are level and often padded. “In the gym, everything is kind of perfect,” says strength and sports performance coach Zach Even-Esh, SSPC, CSCS, founder of Underground Strength.

Outside the gym, it’s a different story: The sidewalk is uneven. Your duffel bag refuses to fit into the overhead compartment. Your new puppy is a lot squirmier than a kettlebell. Even if you’re a regular exerciser, real-world challenges can expose vulnerabilities that a training routine doesn’t fully address.

“Ask someone who’s over 40 how they injured their back,” says Even-Esh. “They’ll say something like, ‘I was walking my dog’ or ‘I was putting on my seatbelt.’”

To fill the gap between conventional fitness and the demands of the real world, trainers like Even-Esh turn to odd-object training.

This is a form of exercise that exalts asymmetrical loading, awkward positions, and unexpected implements, like kegs, tractor tires, atlas stones, and chains. (The sport of strongman, which has its roots in the centuries-old Scottish tradition of stone lifting, is the competitive version of odd-object training.)

You can get a similar workout using sandbags and heavy medicine balls, available in most fitness centers, or — in a pinch — using a single dumbbell.

“Odd-object training builds in-between strength,” explains Even-Esh. It fortifies not just your squatting muscles and your pulling muscles but also your side-bending muscles and your rotating muscles —

the ones you need to be strong in the awkward positions that life forces us into from time to time.

“You’re training for lifting toddlers, clearing brush, doing yard work,” he says. “You’re training for life.”

If you’ve been working out regularly, even for a few months, and feel comfortable with moves like conventional squats, deadlifts, and overhead presses, the following workout, designed by Even-Esh, might be a fun challenge to test your strength.

Sub this workout in for a full-body training day once per week for up to four weeks. Or, for a full dive into odd-objects work, perform the workout three times a week on nonconsecutive days for up to four weeks.

“On the first two weeks, focus on learning technique,” says Even-Esh. “The last two, focus on breaking records” — trying to increase the resistance or reps on each movement.

1

MED-BALL STRENGTH

Perform the 1A and 1B moves as a pair. Do a set of the first move, rest for 30 to 60 seconds, and then perform a set of the second move and rest again. Continue alternating movements until you've completed five total sets.



1A

MED-BALL LUNGE 5x6/SIDE

- Assume a shoulder-width stance behind a heavy medicine ball.
- Squat down and grab the ball firmly.
- Keeping your lower back in its natural arch, stand rapidly, hoisting the ball onto your left shoulder.
- Take a long stride forward with your left leg.
- Bend both knees, slowly descending until your right knee touches or almost touches the floor.
- Reverse the movement, stepping your left leg back to a shoulder-width position.
- Repeat the move on the same side for a total of six reps.
- Lower the ball to the floor, then repeat the process, lifting the ball to your right shoulder and stepping forward with your right foot.



1B

MED-BALL FLOOR CRUSH PRESS 5x5

- Lie on your back with a heavy medicine ball on the floor to your right.
 - Roll to your right side, hug the ball to your chest, then roll onto your back.
 - Place your hands on either side of the ball and crush the ball between your hands. This is your starting position.
 - Press the ball to arm's length over your chest.
 - Slowly lower the ball back to the starting position.
 - Repeat for five reps.
- No med ball? Perform the move with a single heavy dumbbell.

2

CARRY + CALISTHENICS

Perform moves 2A and 2B as a pair. Do a set of the first move, rest 30 to 60 seconds, then perform a set of the second move and rest again. Note that the 2B move changes with each round. Continue alternating movements until you've completed four sets.



2A SANDBAG FARMER'S CARRY 4x20 SECONDS PER SIDE

- Hoist a heavy sandbag onto your left shoulder.
 - Walk forward (or in a circle or figure eight) for 20 seconds (or 40 steps).
 - Switch arms and repeat on the other side.
- No sandbag? Hold a single heavy dumbbell by your side.

2B CALISTHENICS 4x10



ROUND 1: PUSHUP

- Assume a pushup position: hands and balls of your feet on the floor, slightly wider than shoulder width, body straight from your heels to the crown of your head.
- Keeping your body rigid, slowly bend your elbows and retract your shoulder

- blades, lowering your chest as close to the floor as possible.
- Reverse the movement and repeat for a total of 10 reps.
- Too tough? Perform the move with your hands elevated on a bench or box.



ROUND 2: INVERTED ROW

- Take hold of the handles of a TRX, facing the anchor point.
- Extend your arms in front of you and walk backward a few steps until the straps are taut.
- Keeping your upper body in place, walk your feet forward until your body forms about a 45-degree angle to the floor. Straighten your body so that it creates a line from your head to your heels. This is your starting position.

- Keeping your body straight, simultaneously retract your shoulder blades and bend your elbows, lifting your chest as far forward as possible.
- Slowly return to the starting position and repeat for a total of 10 reps.



WATCH AND LEARN

To see these moves in action, visit ELmag.com/odobjects.



3 SLED WORK

Perform this section as a straight set — meaning you won't pair the movement with another exercise. Rather, you'll perform a different variation of sled work in each of the three rounds. (No sled? Hop on a treadmill, set the incline to 12 to 15 percent, and walk at a pace that challenges you for one to two minutes.)



ROUND 3: PLANK WITH HEEL-RAISE

- Assume a pushup position.
- Without lifting your hips or bending either leg, lift your right leg, hold for a one-count, and return to a pushup position.
- Repeat the move with your left leg.
- Continue alternating sides for a total of 10 reps per side.



ROUND 4: FOUR-COUNT MOUNTAIN CLIMBER

- Assume a pushup position: hands and balls of your feet on the floor, slightly wider than shoulder width, body straight from your heels to the crown of your head.
- Keeping your body straight, alternately draw your knees to your chest — right, left, right, left. That's one rep.
- Repeat for a total of 10 reps.

ROUND 1: SLED PUSH

- Load a sled with a medium-heavy weight.
- Stand behind the sled, grab the handles, straighten — but don't hyperextend — your arms, and push the sled forward as smoothly and powerfully as possible for 10 to 20 yards.
- Turn around and push the sled back to the starting position. Rest 60 seconds.



ROUND 2: SLED PULL

- For the second set, attach a TRX strap to the sled, grasp the handles, and walk backward for 10 to 20 yards.
- Turn around and pull the sled to the starting position. Rest 60 seconds.



ROUND 3: SIDE STEP

- For the third set, grasp the TRX handles and perform resisted side shuffles — to your left on the way down and to your right on the way back. ➡



To Round or Not to Round?

You've undoubtedly been told to maintain a "flat" back while lifting. But breaking this rule for select moves might help you gain strength, mobility, and resilience.

BY ALEC BLENIS, CSCS, CES, PN2

WE'VE ALL HEARD the exercise mantras "Lift with your legs, not your back" and "Keep a flat back." These cues reinforce a neutral-spine position as opposed to a flexed- or rounded-spine posture. The idea is that the less you move your spine, the more you'll be able to safely load other muscle groups and reduce your injury risk.

But the evidence supporting this advice isn't clear-cut. And avoiding round-back movements entirely may do more harm than good if it means you're not prepared for the demands of real life.

The human body is capable of working outside of a narrow spectrum of "safe" movements. Spinal flexion is unavoidable in daily life, so strengthening the tissues around the spine with intentional round-back training can improve your body's resilience, especially as you age.

PREPARATION VS. AVOIDANCE

The gym is a controlled environment where you can regulate weights, reps, and ranges of motion to adhere to strict technique standards. But real life is chaotic, and you're often picking things up from awkward positions, carrying odd objects, and bending and twisting in unfamiliar ways. The strength you build with traditional exercise is valuable, but technique guidelines do not always apply to the variety of positions you assume outside of the gym.

Associating certain movements with pain and injury can also become a self-fulfilling prophecy. For exam-

ple, if you hurt your back while bending to pick up a laundry basket, you're likely to avoid that position in the future. Over time, this avoidance can create a weak spot, and the next time you perform the movement, you'll be even more vulnerable to injury. This further reinforces the belief that this movement should be avoided.

This cycle can produce strong ideas about which movements are good and bad for your body.

Instead of labeling movements this way, you can consider the demands of an exercise relative to your capacity. If the demands exceed your capacity, you're more likely to get injured. Doing nothing is a safe bet in the short term. Yet this will cause your capacity to decline over time — and reinforce that cycle of fear, avoidance, and injury.

You can improve your physical and psychological capacity for round-back training with a methodical approach called graded exposure. This is the process of meeting your body where it's at — and facing the fear of injury you might associate with certain exercises — by introducing small doses of stress over time. This allows you to gradually build upon your success as your strength and capacity improve.

HOW TO BEGIN

Good form and proper technique play important roles in lowering injury risk during any training program, including an unconventional one. However, evidence suggests that you



Keep your legs straight, with no more than a microbend in your knees.

can safely implement a wide range of techniques if you've developed your tolerance gradually and perform exercises within your capacity. The specific techniques and exercises that work for someone else may not be right for you, but exploring some unconventional movements may be just what you need to feel less fragile.

Interested in getting started with round-back training? A body-weight Jefferson curl (see next page) is a gentle way to get some spinal flexion into your routine.

Remember to always introduce new positions gradually. Monitor how you feel over the first couple of weeks doing the Jefferson curl: Is the movement becoming easier and more fluid? Is your breath staying even and controlled? Is there more articulation between the vertebrae?

When you're ready, add a light weight, continuing to add more every few weeks. (For guidance, visit ELmag.com/jeffersoncurl.)

ALEC BLENIS, CSCS, CES, PN2, is a strength and endurance coach and ultraendurance hybrid athlete.



Keep your chin tucked and your gaze toward your belly button.

Keep your breath even and relaxed throughout the movement.

Lower only as far as you can without bending your knees.

The Jefferson Curl

Improve your back health and resilience with this gentle introduction to spinal flexion.

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

THE JEFFERSON CURL is a move that builds back-muscle mobility, strength, and resilience. It's a great entry point for exploring the advantages of training with a deliberately rounded back.

Anyone who's picked up a weight has probably been warned to keep their back straight. It's a long-standing rule for lifting and moving heavy objects in the gym and in daily life: Maintain a flat back with a neutral spine and braced core, and avoid the

egregious error of rounding your back while you lift. The goal is to avoid back strain, pain, and injury.

But a growing number of fitness professionals and movement specialists are reconsidering this advice.

The Jefferson curl can aid spinal flexibility and resilience while strengthening the deep-core muscles and hamstrings. It can help improve posture and body mechanics while strengthening the back to withstand the effects of vulnerable positions.

By requiring the attention necessary to articulate through each vertebra of the spine, it can also boost body awareness and proprioception.

The key is to move slowly — both within each rep and over time. Avoid doing too much in each session and progress the movement gradually. Performed mindfully, the Jefferson curl is a great way to explore the unconventional exercise technique of round-back training.

INSTRUCTIONS

1.

Stand tall with your arms hanging at your sides. Initiate the move by first tucking your chin.

2.

Moving slowly and with control, round through your spine from the top down, one vertebra at a time, until you're in a forward fold.

3.

Reverse the movement, again trying to articulate through each vertebra as you roll up to standing. Keep your legs straight and head heavy; your chin should be the last part to rise. Perform one or two sets of five to 10 reps.



PROGRESS THE MOVE

Learn how to add weight to your Jefferson curl at ELmag.com/jeffersoncurl.

Solo Athlete, Team Spirit

Just because you rock a solitary sport doesn't mean you can't be part of a community.

BY LAUREN BEDOSKY AND MAGGIE FAZELI FARD, RKC, MFT-1, ALPHA

THE ACT OF lacing up her sneakers and heading out for a run has been a lifelong through line for Sarah Murphy. It's a thread unspooling from her very first race at the age of 5, a one-mile fun run with her dad; through high school and college in cross-country and track; and following her pregnancies, in 2009 and 2011, when she would buckle her son and daughter into a jogging stroller so they could join her as she traversed their neighborhood in St. Paul, Minn.

"Even as my kids got older, I would just fit in running when I could," says Murphy, 44. "I guess it was important to me to continue being fit and take care of myself. But it wasn't the priority: Running and racing got put on the back burner."

That changed last year, when Murphy decided it was time to reprioritize her hobby. Her kids were older; at 13 and 15, they were more self-sufficient and had taken up running themselves.

"Seeing my daughter compete and have a blast with her team made me miss that experience," Murphy says. "I thought maybe I could recapture a bit of that feeling of camaraderie

and support — and fun — that I remembered from my high school and college teams."

And so, in January 2024, Murphy joined the Mill City Running race team, an inclusive group of runners of varied ages and abilities who train and race together all year long.

"For the past 20 years, I primarily ran on my own," she says. "Joining the team has empowered me to prioritize my running. It's motivated me to train harder and to get out and race again. The team also helped me enjoy racing in a way I was never able to as a younger, nervous athlete."

As a member of Mill City's master's team — for runners over 40 — Murphy placed in the top 10 in her age group in all but one event she ran in 2024, a highly competitive 10-mile road race.

But even that was no disappointment: She finished 11th in her age group with a new

personal best. "I could never have run that time without the great training and encouragement from the team over the last year."

For many people, fitness is a solitary pursuit. But just because an activity lends itself to solitude doesn't mean it can't also foster community. Clubs, teams, and classes dedicated to solo sports like running, cycling, lifting, skiing, hiking, rucking, and others can enhance the rewards of these sports exponentially.

"When we're solo athletes but we're in a group, we have the best of both worlds," says Olympic sports psychologist JoAnn Dahlkoetter, PhD, a licensed clinical psychologist and performance coach in San Carlos, Calif.

Consider these five reasons for making your next training session a group event.



1. MOTIVATIONAL PUSH

Motivation is fickle. When it runs high, you feel like you can accomplish anything. When it fizzles out, it can be difficult to work steadily toward your goals. Joining another person or group can bridge the motivation gap and push you to show up for your workout, whether you're starting a new sport or trying to maintain consistency with your current one.

"There's an accountability piece that comes with working out with others," says Lisa Hobson Stoner, CPT, a Life Time master trainer and group fitness instructor based in Minnesota. "When you know you're meeting other people to work out, or they expect to see you in class, that gives you motivation to get out of bed on days when you want to hit snooze."

Adds Dahlkoetter: "You don't want to let your friends down."

The motivational push you get from being part of a team can help you develop a more steadfast commitment to your training. And in time, you'll be able to nurture a habit that doesn't rely on motivation to boost your energy or get you in the mood to train. (For expert tips on mindful motivation, visit [ELmag.com/motivated](https://www.ELmag.com/motivated).)



2. IMPROVED PERFORMANCE

Working out in a group can improve your performance in many ways. For starters, other people might push you to work harder than you would on your own. Running with someone who's faster than you, for example, can inspire you to pick up your pace. "We all have a little competitiveness in us, and we don't want to get left behind," says Frankie Ruiz, Life Time's chief running officer.

"Sometimes, being in a group of mixed abilities can show us that we're more capable than we think we are when we're out alone," adds Hobson Stoner.

If you're new to your sport, joining a group can shorten your learning curve. You can get gear recommendations, workout tips, and clarity on the rules of your sport while focusing more closely on improving your performance.

Group members can also offer encouragement to help you get through tough workouts, competitions, and personal setbacks.

In some cases, joining a group is the safest way to level up. Powerlifting, for example, is about hoisting the heaviest weight you can manage for three exercises: squat, bench press, and deadlift. Though

you could lift weights safely in your garage, you might challenge yourself to lift heavier when you're surrounded by a supportive community that can monitor your form. "It makes a big difference," says Kyle Young, head coach of Team USA for the United States Powerlifting Association.

Before Halle Sawicki started powerlifting, in March 2023, the 16-year-old athlete had played softball and volleyball. But training for team sports had helped her build strength, inspiring a family friend to suggest she enter a powerlifting competition.

Sawicki surprised herself by qualifying for nationals and immediately falling in love with the solo sport.

"It's not really a competition; it's just a fun time," she says. "Of course you have competitors, but the people you're competing against are supporting you and you're supporting them."

Since then, Sawicki has set world records for her age division — and enjoys competing in a sport that allows her to build strength and friendships. "The environment is very motivating," she says. "Powerlifting is a solo sport, but we use each other to get better." (Learn more about the performance benefits of working out in a group at [ELmag.com/groupworkout](https://www.ELmag.com/groupworkout).)

3. NEW FRIENDSHIPS

Practicing your sport with like-minded people is a great way to make new friends.

“Shared experiences create a sense of camaraderie and low-stakes social interaction, especially for those who are nervous or wary of building relationships,” explains Hobson Stoner.

Building these social connections offers numerous benefits for overall health and vitality, especially as you grow older. Studies have found that loneliness can increase the odds of early death by 26 percent — a risk factor comparable to smoking. And social isolation is associated with cognitive dysfunction and, according to the Centers for Disease Control and Prevention, a 50 percent greater risk of dementia.

“At my age, sometimes people don’t make new friends or expand their circle,” adds Murphy. “The race team is a diverse and intergenerational group, and my teammates have been so welcoming and lovely, inviting me to join them on a long run, following each other on [the fitness-tracking app] Strava, even getting together outside of running.” (Learn more about why social bonds are so important to our health at ELmag.com/socialbonds.)



4. COGNITIVE BOOST

Exercise is great for your brain. Moving your body can improve alertness, coordination, concentration, memory, mood, imagination, and more. And Dahlkoetter notes that it boosts neuroplasticity, the brain’s ability to build new neural connections, which is especially helpful for slowing cognitive decline.

Working out with other people can amplify these brain-health benefits, she says. “When you’re exercising with other people, you’re challenging your brain to not only move

your body but also to relate to other people — by negotiating a common space as well as by having close conversations.”

Additionally, social bonding increases levels of oxytocin, also known as the love hormone. This may ease depression, anxiety, and other mental health conditions. (Learn more about the many brain benefits of working out at ELmag.com/brainonexercise. And find more information about how exercise can support mental health at ELmag.com/exercisementalhealth.)

5. SENSE OF MEANING

You might pursue your chosen sport for the health benefits, the stress relief, the athletic challenge, the longevity potential, or the simple joy of movement.

Whatever your reasons, practicing your sport alongside other people can foster a sense of belonging and give you a greater sense of purpose. This can transcend your training and imbue the rest of your life with meaning.

“When your workout is also a place of social connection, support, camaraderie, or encouragement,” Hobson Stoner says, “sticking to your routine is easier and reaching your goals can be more meaningful.” 🏆

LAUREN BEDOSKY is a Minnesota-based health and fitness writer. **MAGGIE FAZELI FARD, RKC, MFT-1, ALPHA**, is *Experience Life’s* editorial director of fitness.





“Strength lives within one’s foundation, and embracing the natural connection between your feet and the earth is where it all starts.”

– David Freeman

Life Time® Senior National Director
of ALPHA Signature Group Training

Scan for
20% OFF
your first order



XEROSHOOES®
Natural Comfort. Peak Performance.

Official barefoot minimalist footwear of Life Time®
Dynamic Personal Training & ALPHA Signature Group Training.

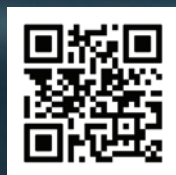


Give the gift
that inspires them to embrace
healthy habits all year long!



Experience
Life

HEALTHY. HAPPY. FOR REAL.



Visit ELmag.com/LTMemberGift
or scan the QR code to order a gift subscription.

My Fitness-Routine Pyramid

Prioritizing movement without pursuing perfection.



FITNESS
"TREATS"



INTENTIONAL
CARDIO



SUFFICIENT
SLEEP



STRENGTH
TRAINING

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

IN A PERFECT WORLD, my fitness routine would look like this:

- Three or four 60- to 90-minute strength-training sessions each week
- 180 minutes of cardio each week (including one high-intensity workout and one long-duration endurance effort)
- 10,000 incidental steps each day (in addition to whatever cardio I might do)
- Two or three targeted mobility/neurobics sessions each week
- A daily outdoor walk within 30 minutes of waking up
- A daily bedtime yoga and meditation practice
- Seven to nine hours of uninterrupted sleep each night
- 0.8 to 1 gram of protein per pound of my body weight daily

Alas, the world is far from perfect. I can recall no single week during which I've been able to check each and every one of these goals off my list.

In the past, especially when I was new to training, I berated myself for failing to meet these demands. For years, my fitness to-do list — in hindsight more of a wish list — was a major source of stress and self-flagellation.

Like a child asking Santa for a real-life dinosaur, I set expectations that were unrealistic and routinely led to disappointment. Even as my efforts to get stronger and fitter blessed me with numerous gifts, all I could see was what I didn't get — the perfection I never achieved.

It's taken me years to get to a place where I can look at this daunting list as a source of inspiration rather than motivation. I no longer expect that I can or even want to make time for it. Instead, these goal behaviors serve as guidelines rather than hard-and-fast rules — nice-to-haves rather than can't-live-withouts. For me, it's been helpful to envision them in a pyramid format.

The base is strength training. No matter how busy my life gets, if I do nothing else, I lift weights. Why? Because it builds muscle, boosts bone density, improves cardiovascular functioning, balances hormones, inspires creativity and cognitive functioning, supports mood and mindset, keeps me mobile, and supports healthy aging. And I genuinely love to lift. (Learn more about these and other benefits at ELmag.com/caseforstrength.)

The next tier is sufficient sleep, which is key to health, vitality, and well-being. Moreover, it's an integral part of adapting to and recovering from my fitness pursuits. (Explore our collection of sleep articles at ELmag.com/sleepcollection.)

Above that is conditioning, which I like to think of as intentional cardio. Cardio was once the base of my pyramid — which was great, until it wasn't: I quite literally ran myself to injury by doing too much for too long.

Now, I understand that my best cardio routine is one with plenty of variety — in intensity, duration, and type. (Learn more at ELmag.com/cardioutine.)

The top of my pyramid is reserved for all the other fitness "treats" that make me feel extra good but aren't quite powerful enough on their own to form the foundation of my routine. I integrate mobility and neurobics into my strength and cardio sessions to keep my body moving well and my brain on point. (Learn more about neurobics at ELmag.com/neurobic.)

I get outside, do yoga, and meditate when I can and want, rather than force those activities into specific times of day. I no longer track my steps or my protein intake, confident in my ability to move intentionally and fuel intuitively.

This is my right-now pyramid. It's built on scientific evidence as well as personal experience. And it will almost certainly change over time.

More than anything, I've learned that, just as the world isn't perfect, there is no perfect fitness routine that works for everyone or forever. As my priorities, circumstances, and preferences undoubtedly change, so too will the way I move and care for my body.

In this way, fitness is not my whole life, but I am able to integrate movement and wellness into a big, beautiful life I love.

MAGGIE FAZELI FARD, RKC, MFT-1, ALPHA, is *Experience Life's* editorial director of fitness.



GIVE THE GIFT OF A HEALTHIER TOMORROW.

At the heart of our future lies the commitment we make today to nurture both our **youth** and our **planet**.

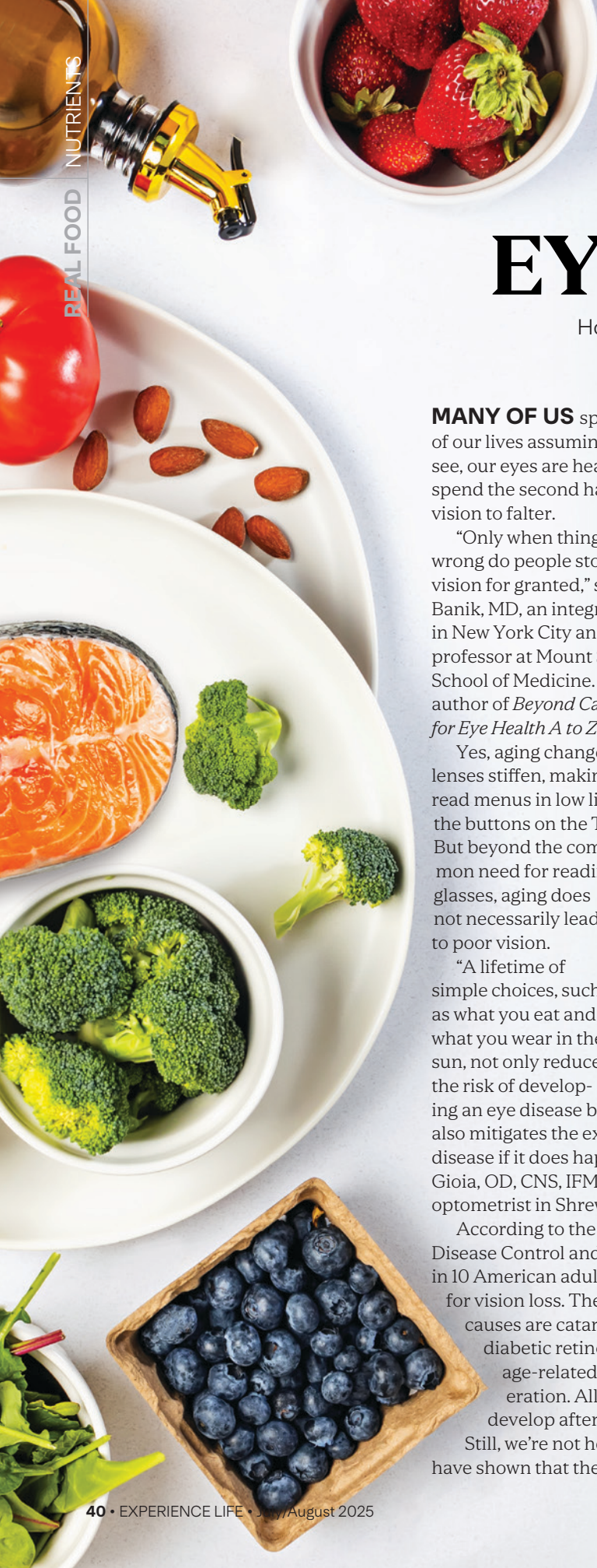
Donate to the Life Time Foundation, a public 501c(3) nonprofit that supports mission-driven programs nationwide that focus on the health of the next generation and our environment.





REAL FOOD

AROMATIC HERBS are often used to complement dishes, but the four recipes starting on page 48 bring herbs' fresh flavors and plentiful health benefits to the fore. Find the recipe for these Chewy Basil-Date Cookies at ELmag.com/herbrecipes.



EATING FOR EYE HEALTH

How food can help protect your vision.

BY CATHERINE GUTHRIE

MANY OF US spend the first half of our lives assuming that if we can see, our eyes are healthy. Then we spend the second half expecting our vision to falter.

“Only when things start to go wrong do people stop taking their vision for granted,” says Rudrani Banik, MD, an integrative eye doctor in New York City and associate professor at Mount Sinai Icahn School of Medicine. She’s also the author of *Beyond Carrots: Best Foods for Eye Health A to Z*.

Yes, aging changes the eyes. The lenses stiffen, making it difficult to read menus in low light and identify the buttons on the TV remote. But beyond the common need for reading glasses, aging does not necessarily lead to poor vision.

“A lifetime of simple choices, such as what you eat and what you wear in the sun, not only reduces the risk of developing an eye disease but also mitigates the extent of disease if it does happen,” says Neda Gioia, OD, CNS, IFMCP, an integrative optometrist in Shrewsbury, N.J.

According to the Centers for Disease Control and Prevention, four in 10 American adults are at high risk for vision loss. The most common causes are cataracts, glaucoma, diabetic retinopathy, and age-related macular degeneration. All are likeliest to develop after age 50.

Still, we’re not helpless. “Studies have shown that the best thing you

can do to support the overall health of your eyes is to make healthy nutrition choices,” Banik says.

The more colorful your food choices, the better. In the plant kingdom, color signals antioxidants, and antioxidants are your eyes’ bulwark against free-radical damage.

That protection is vital. While the eyes are relatively small organs, visual processing involves a lot of brain power: An estimated 50 percent of the brain’s cortex is devoted to the visual pathways, Banik notes. This processing uses a lot of energy, which leads to free-radical production.

The cells inside the retina are so metabolically active that pieces of the rods and cones

constantly break off and need to be hauled away, explains optometrist Jeffrey Anshel, OD.

“Think of it like taking out the garbage,” he says. “If debris builds up, the system breaks down.”

Antioxidants,

especially a subset called carotenoids, are the eye’s trash collectors. The natural world bursts with hundreds of varieties of these bright plant pigments, but only a few dozen have woven their way into the human diet. Even fewer shoulder the outsize role of cleaning up after the eyes. If the volume of trash chronically overwhelms the available carotenoids, vision can get glitchy.

But stocking up on carotenoids isn’t difficult. Turn to these nutrients to maintain long-term ocular health.

In the plant kingdom, color signals antioxidants, and antioxidants are your eyes’ bulwark against free-radical damage.



LUTEIN AND ZEAXANTHIN

Best sources: Kale, spinach, and eggs for lutein; goji berries for zeaxanthin

Most important effect: Protects the retina from blue light

Two carotenoids are nonnegotiable for eye health: lutein and zeaxanthin. Differing only in their arrangement of atoms, they contribute to the bright red, orange, and yellow pigments found in plants.

These nutrients are unique in their ability to cross the blood-retina barrier to reach the macula, a small part of the retina that's responsible for central vision. Once there, they concentrate in the retina's center to take the brunt of the sun's high-intensity, short-wavelength blue light. Banik describes them as nature's sunglasses.

Our bodies can't make carotenoids, so we need to get them from food. Lutein resides in dark leafy greens, broccoli, and egg yolks. Less-

plentiful zeaxanthin is found in corn, persimmons, and orange peppers. Fun fact: The food with the most zeaxanthin is the goji berry.

While shielding the retinas from blue light, lutein and zeaxanthin also increase contrast, boost visual acuity, lower oxidative stress, and cool inflammation. Gioia says the importance of lutein and zeaxanthin to ocular health is unequivocal. Aim to eat dark leafy greens and eggs several times a week.

An egg yolk is lutein-rich, adds Anshel, so be sure to eat more than just the whites. He also suggests cooking greens in extra-virgin olive oil because fat increases the body's absorption of these nutrients.

There is no official recommended daily intake for either lutein or zeaxanthin, but some research clocks a benefit with a daily 10 milligrams of lutein and 2 mg of zeaxanthin.

Worth noting is that the typical American diet includes just 1.7 mg of lutein a day, so you may want to consider taking a supplement. Multiple studies suggest lutein and zeaxanthin supplements can address mild vision complaints, like glare sensitivity, and help prevent more serious conditions, such as age-related macular degeneration.

GLUTATHIONE

Best sources: Avocados and asparagus

Most important effect: Protects the lenses from oxidation

Our eyes' lenses are bombarded with high-intensity, shortwave blue light for much of the day. Sunlight is a huge source of oxidative stress, as are computer screens.

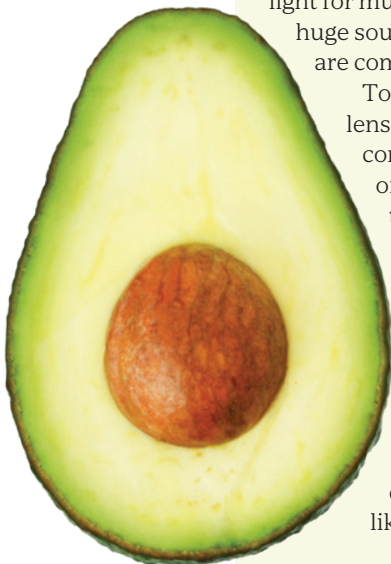
To protect itself, the pea-size lens has one of the highest concentrations of glutathione found anywhere in the body.

Glutathione is often called the master antioxidant, but "superhero" is more accurate. It can regenerate after neutralizing free radicals and wields enough power to bring other exhausted antioxidants, like vitamin E, back to life.

"Glutathione is essential for keeping oxidative stress in check," says Banik.

The glutathione we produce naturally declines as we age, so researchers are exploring whether a lack of the nutrient leaves the eyes more vulnerable to oxidative stress and, therefore, age-related vision troubles. Several studies have found decreased levels of glutathione in patients with age-related macular degeneration, but the mechanisms are still not understood.

Because glutathione supplements are poorly absorbed through the gut, the best way to boost levels is by enjoying a variety of antioxidant-rich vegetables and fruits. In addition to avocados and asparagus, sulfur-rich crucifers like kale, cabbage, and broccoli, as well as alliums like onions, garlic, and shallots, are good choices.



ASTAXANTHIN

Best sources: Shrimp, salmon, and lobster

Most important effect: Protects against dry-eye disease

Astaxanthin is the carotenoid responsible for the reddish-pink tint of salmon, shrimp, and lobster. Although less well studied than other carotenoids, astaxanthin is one of the strongest antioxidants found in nature. It has up to 1,000 times the potency of vitamin E, 200 times that of tea polyphenols, and 10 times more than lutein or zeaxanthin.

“Effectively, it is a super-antioxidant,” says Gioia. “It is a powerful player in the carotenoid family.”

It also plays a very specific role in eye health. Astaxanthin minimizes oxidative stress and downregulates inflammatory cytokines around the glands that lubricate the eyes. Without enough moisture, the eyes become susceptible to dry-eye disease (DED). This condition — characterized by irritation, burning, and stinging — affects up to a third of people over 50.

In a study published in *Frontiers in Nutrition*, 60 patients with mild to moderate DED experienced significant improvements after taking 6 mg of astaxanthin tablets twice daily for about 30 days.

Research on astaxanthin supplementation is relatively thin, so for now, food sources are your best bet.

VITAMIN A

Best sources: Sweet potatoes, carrots, and liver

Most important effect: Prevents night blindness and dry-eye disease

Vitamin A helps convert light energy into nerve energy inside the retina, says Anshel. Without ample vitamin A, the retina struggles to rebuild its rods and cones, specialized cells that respond to light and are essential for vision.

Rods govern peripheral vision and operate in low light, enabling night vision; cones handle central vision, calibrating the color and high-intensity light that come with daytime.

In the retina, vitamin A forms rhodopsin, a light-sensitive protein that responds to light as it enters the eye.

Vitamin A deficiency is the leading cause of preventable blindness in children worldwide, but a milder deficiency may show up as nyctalopia (night blindness) or xerophthalmia (extremely dry eyes).

“The hardest thing we ask our eyes to do is drive at night,” says Anshel. The brightness of oncoming headlights contrasted against the darkness of the road forces the eyes to switch between prioritizing the cones and the rods. Abundant vitamin A makes that job easier.

Most of us get plenty of this nutrient from the beta-carotene — a carotenoid the body turns into vitamin A — in our diets (think carrots). There’s also vitamin A in fish, organ meat, dairy, and eggs. The recommended daily allowance for vitamin A is 700 micrograms for adult women and 900 mcg for adult men.

Too much vitamin A can be harmful, so if you supplement, take care not to exceed 3,000 mcg daily.

OMEGA-3 FATTY ACIDS

Best sources: Oily fish and flaxseeds

Most important effect: Eases eyestrain

Best known for fighting inflammation, omega-3 fatty acids may also help alleviate DED and digital eyestrain.

Estimates suggest that up to 90 percent of people experience visual discomfort after spending time on screens. The most common complaints are eye soreness, headaches, and blurry vision.

Growing evidence also shows a connection between screen time and dry eyes. Blinking lubricates the eye, and normally we blink about 15 times a minute. Our per-minute blink rate plummets to a half or a third of that when we stare at a screen.

Fatty acids can help. The connection between DED and omega-3 fats was first established in 2005. Data from more than 32,000 participants in the Women’s Health Study found that those who consumed fatty fish

multiple times a week slashed their DED risk by as much as 68 percent. In the 20 years since, several studies have suggested that supplementing with omega-3 fatty acids could significantly improve symptoms of DED.

Gioia suggests the acronym SMASH for identifying some of the fish richest in omega-3s: salmon, mackerel, anchovies, sardines, and herring. And omega-3s frequently travel alongside eye-supportive astaxanthin, as in salmon. “Salmon is a rich source of eye-healthy nutrients,” she says.

You can also protect against digital eyestrain by sitting an arm’s length from your screen, looking up and away from your screen at regular intervals, and opting for glasses instead of contacts.





VITAMIN C

Best sources: Citrus, tomatoes, bell peppers, and kiwi

Most important effect: Protects the eyes from the sun

Another potent antioxidant, vitamin C is found throughout the body, but concentrations in the aqueous humor — the clear liquid in front of the eye's lens — are up to 70 times greater than in plasma. This points to vitamin C's importance in protecting the eyes from free-radical damage.

The lens is a unique structure in our bodies, says Anshel. "It requires oxygen to grow but has no blood supply because you can't see through blood. The lens needs to be transparent so light can reach the retina."

As we age, the lens continues growing — and as it grows, it thickens. The thicker the lens, the less flexible it becomes,

which is why we lose the ability to focus on things up close, he notes.

And without a blood supply, the lens must get all its nutrition through the aqueous humor.

Scientists suspect that the vitamin C in the humor shields lenses from UV damage, which in turn helps prevent cataracts, the leading cause of blindness worldwide.

Reaching the recommended 200 mg of vitamin C daily is easy if you eat at least five servings of vegetables and fruits, especially citrus, tomatoes, bell peppers, and kiwi. Since the body cannot absorb more than 250 mg of vitamin C a day, anything more than that will be flushed out in the urine.

ANTHOCYANINS

Best sources: Bilberries and other berries

Most important effect: Targets light-induced oxidative stress in ocular tissue

Anthocyanins — the pigments that give berries their bright reds, deep purples, and near-black blues — have a storied reputation for sharpening vision.

During World War II, British pilots reportedly ate bilberry jam to enhance their night vision. Although postwar studies didn't find convincing evidence that bilberries support better vision at night, scientists have noted the berries' capacity to soothe digital eyestrain.

In recent studies, people who significantly upped their intake of anthocyanins reported improvement in the telltale sensations of eyestrain after they'd concentrated on a screen for up to an hour. This included relief from fatigue and blurred vision.

Other studies suggest bilberry extract might alleviate the symptoms

of DED. Bilberries are high in delphinidin-3,5-O-diglucoside, an anthocyanin that limits free-radical formation in the tear glands. This helps lubricate the eyes and the surface of the cornea.

Berries also have a low glycemic index, making them especially beneficial for people with diabetes, which often leads to vision damage. When blood-sugar levels are erratic, the spikes and drops can damage the blood vessels that lie on top of the retina, says Anshel. "Eventually, the blood vessels break down, which can cause blurry vision or even blindness."

Bilberry extracts are largely safe, especially when consumed in amounts that approximate a serving or two of the berries themselves. 🍓



RxSugar®

We've Raised The Bar

Satisfy Your Cravings & Your Macros



The World's Best-Tasting, Non-GMO Project Verified, Keto Certified, Plant-Based Certified Sweetly Snax!

All RxSugar® Products Are Made With Allulose Sugar, Which Boosts GLP-1, Naturally Curbing Appetite.

Available Every Day!
Life Time® Health Store
<https://shop.lifetime.life>

 LIFECAFE

Scan To Shop Now!



OFFICIAL CHOCOLATE PARTNER OF



BE RxTRAORDINARY AND FOLLOW US! Tag us @RXSUGAR #CHOCOLATEREIMAGINED

Know Your NONDAIRY MILK

The dairy-free milk aisle can be overwhelming. Cut through the confusion with this advice.

BY STEPHANIE SOUCHERAY

TAKE A STROLL down your grocery store's dairy-free milk aisle, and you may feel a bit dizzy. Gone are the days of the lone soy option. Instead, you might see oat, coconut, almond, pea, and even quinoa-based products.

The demand for nondairy milk has risen exponentially in recent decades. In 2010, only one in five U.S. households had purchased dairy-free milk; by 2022, that number had risen to about two in five. As of 2024, the global market value for plant-based milks was estimated at \$21.1 billion — and the market continues to grow.

But is selecting the right milk alternative simply a matter of taste? Or are some options healthier than others?

There's no easy answer, says Samantha McKinney, RD, who helps lead nutrition and LTH supplement education at Life Time. "Typically, dairy-free milk is a substitute for the usage of cow's milk rather than the nutrition of cow's milk — meaning it can be swapped in for baking, protein shakes, and more," she explains. "How it ranks compared to cow's milk varies based on the source."

The crucial step in choosing a dairy-free milk is reading the nutrition facts

and ingredient list. These products come with a health halo — a perception that they're automatically healthy because they're plant-based.

But dairy-free milks are processed foods, and they typically contain added ingredients to improve taste, texture, and shelf life.

Because they can be made from nuts, grains, or legumes, their nutritional profiles are vastly different from each other. "Oat, coconut, almond, macadamia, hemp, rice, and soy are all extremely variable in their nutrition, and so the liquid extracted from processing them will also be highly variable," says McKinney. "Oat or rice milk [is] higher in carbohydrates and lower in fat, while coconut milk tends to be higher in fat and lower in carbs."

Wondering how healthy your nondairy milk is? Take a closer look at the following items on the nutrition label.

PROTEIN

Cow's milk is a good source of protein, with about 8 grams per cup. If you're using dairy-free milk as a replacement, you may want to find a product with similar protein content, which can be difficult.

Soy-based and pea-based milks deliver more protein than other dairy-free options, McKinney explains, but they might not be suitable for everyone to consume daily due to allergies or digestive issues.

She notes that "many dairy-free milks are not significant sources of protein at all." Rice, hemp, and unfortified almond milk are all relatively low in protein, for example.

Vegans and vegetarians, in particular, need to prioritize protein, vitamin D, and calcium content, advises Stephanie Wells, MS, RD, a registered dietitian based in Dallas who is vegan.

"Ideally, if you're not eating animal products, your nondairy milk should have vitamin B12," she says. If you do eat animal products, including meat, additional B12 may be less important.

Many dairy-free milks are fortified, which means nutrients have been added during manufacturing. Some nondairy milks are even fortified with extra protein — but they could still contain other troubling ingredients. "You should always check the ingredient list for quality," McKinney says.

ADDED SWEETENERS

Cow's milk contains natural sugars, and dairy-free milks are often sweetened to approximate that flavor. Occasionally using a sweetened nondairy milk won't cause health problems for most people, Wells says, as long as the rest of their diet is relatively low in sugar. "But small amounts can add up quickly, so choosing an unsweetened version is an easy way to keep added sugars low."

McKinney agrees that choosing a product with the lowest amount of added sugars should be a goal.

"Added sugars can be big contributors to total sugar and caloric intake — and, in excess, can contribute to a host of preventable chronic diseases," she says. "Most people are consuming too many added sugars, so it's important to consider total intake and try to limit added sugars whenever possible, including those found in dairy-free milk."

The American Heart Association recommends no more than 6 to 9 teaspoons of added sugar each day. Depending on your body composition, that's an amount easily reached with a sweetened coffee drink or smoothie made with some nondairy milks containing added sugar.

Some dairy-free products contain natural added sweeteners, such as monk fruit or stevia. "Natural, noncaloric sweeteners can be a good option for those looking to add sweetness without the impact of added extra sugar," says McKinney.

Even though these natural sweeteners don't cause the same problems as added sugar does, they can create other issues, including gastrointestinal distress and the potential for increased sugar cravings. (Learn more about sugar alcohols and other alternative sweeteners at ELmag.com/altsweeteners.)

SEED OILS

Many nondairy products contain added seed oils (such as canola, sunflower, or soybean oil) to boost fat content and enhance texture. This is especially true of barista blends, which are used to create a more stable foam for coffee beverages.

The omega-6 fatty acids found in seed oils have a reputation for contributing to chronic inflammation and overall poor health. But much of this problem, McKinney argues, is linked to an overabundance of seed oils in a person's total diet, not in a single product.

"Most people are consuming excess seed oils in their overall diet, since they're such a prevalent component of processed foods as well as food prepared in restaurants," she explains. The easiest way to avoid overconsuming seed oils is to choose "foods that are closer to their natural form," she says.

If you want to avoid seed oils in your nondairy milk, seek out products with a higher natural fat content, like coconut milk or unsweetened almond milk. Check the label and look for brands with a minimal ingredient list.

(To learn more about omega-3 and omega-6 fatty acids — and how to achieve the right balance in your diet — see ELmag.com/omegabalance.)

GUMS AND EMULSIFIERS

Ingredients such as guar gum, xanthan gum, carrageenan, and soy lecithin help thicken and stabilize nondairy milks, which can separate or taste watery without these added emulsifiers. But, for some people, these ingredients can trigger gastrointestinal disorders.

"The amounts of gums and emulsifiers used in dairy-free milk typically determine the level of concern," says McKinney. "Usually, these amounts are small and tolerable. But sensitive individuals can experience digestive distress even with small quantities."

NATURAL FLAVORS

Most nondairy milks contain "natural flavors" to make the product taste more like its main ingredient. Still, these products, which are derived from plants or animals, can also include chemical additives you may prefer to avoid — including solvents, preservatives, and other additives.

Much like nondairy milks themselves, "natural flavors" come with a health halo, but you shouldn't assume they're good for you just because of the "natural" designation.

These additives can be a real problem for those with dietary restrictions especially, because manufacturers are not required by the Food and Drug Administration to disclose their ingredients. (The exception is if they contain common allergens, like eggs or shellfish.)

Ideally, your choice of a dairy-free milk will balance your personal preference with an attention to nutrition labels. Prioritizing products with whole foods and minimal ingredients is the best way to find something that tastes good and is good for you.

If you want to be certain that your nondairy milk fits your dietary specifications, you're in luck: It's quite easy to make your own plant-based milk at home. Give it a whirl with our recipe template at ELmag.com/nondairymilk. 🌱



Sweet Loren's

BETTER FUEL FOR BUSY LIVES

FIND IN  LIFECAFE[®] TODAY



GLUTEN FREE

VEGAN

FREE FROM THE TOP 9 ALLERGENS

4g PROTEIN*

19g WHOLE GRAIN*

GOOD SOURCE OF FIBER**

**per serving*

***contains 8g total fat per serving*



SCAN AND SAVE \$1 ON ANY OF OUR PRODUCTS

Offer valid 6/31/25 through 8/31/25.

HERBACEOUSLY HEALTHY

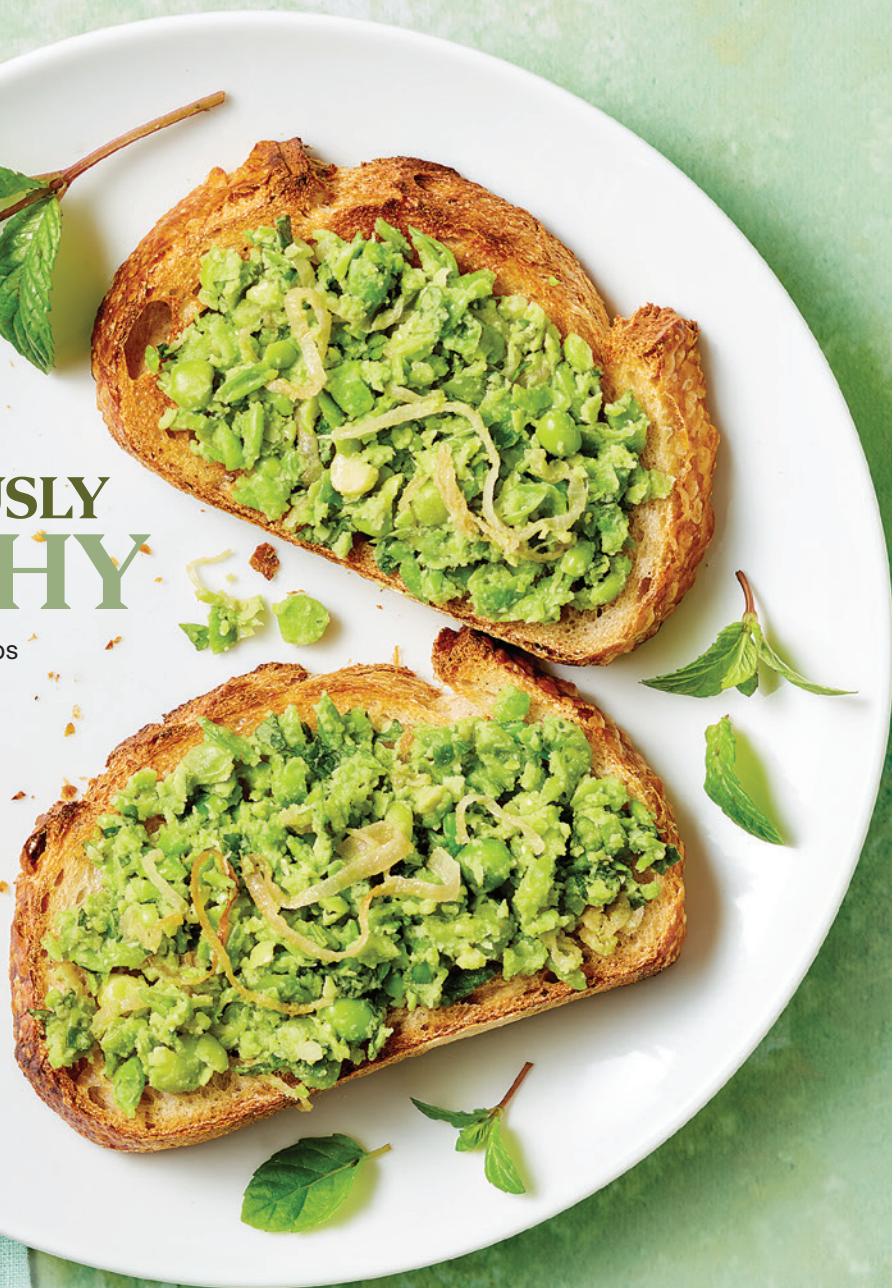
These recipes make fresh herbs the star of the show.

BY KATE MORGAN

MANY RECIPES call for one kind of herb or another, often as a seasoning to complement a dish, not as the main character. But in larger quantities, fresh herbs can enliven even the simplest meal — and they deserve to take center stage more often.

The health powers of common herbs are almost too numerous to list. They're full of phytochemicals that reduce inflammation and antioxidants that can help prevent and reverse cell damage. Rosemary, for example, can help relieve congestion and reduce depression and stress. Basil and parsley are great sources of vitamins A, C, and K. Mint can improve digestion, while sage supports memory and cognition.

When you use herbs only sparingly, you miss out on the full health potential of these potent plants. Treat yourself to one of these recipes that cast herbs in the lead role.



Smashed Peas With Mint and Caramelized Shallots

Makes two to four servings

Prep time: 10 minutes

Cook time: 35 minutes

- 1 tbs. grassfed butter
- 1 tsp. extra-virgin olive oil
- ½ cup thinly sliced shallots
- 1 tsp. red-wine vinegar
- 12 oz. frozen sweet peas
- 12 oz. frozen sweet peas
- ⅔ cup water
- 3 tbs. minced fresh mint leaves
- Sliced sourdough bread, toasted
- Flaky sea salt

In a small saucepan, melt the butter and oil over medium-low heat. Add the shallots and cook, stirring regularly, until caramelized and golden brown, approximately 15 to 20 minutes. Stir in the vinegar and remove from the heat.

In another pot, bring the peas and water to a boil over medium heat and continue to cook until the peas are softened, about eight to 10 minutes. Drain the peas and transfer them to a bowl, then use a potato masher or a fork to roughly mash. Mix in the mint and caramelized shallots. Spread over sourdough toast and top with a sprinkle of flaky sea salt.



Grilled Rosemary Chicken Skewers

Makes three servings

Prep time: 45 minutes

Cook time: 20 minutes

- 2 tbs. soy sauce
- 1 tbs. honey
- 3 tbs. extra-virgin olive oil
- 1 tbs. lemon juice
- ½ tsp. garlic powder
- ½ tsp. ground coriander
- ¼ tsp. dried oregano
- ½ tsp. smoked paprika
- ¼ tsp. sea salt
- 6 boneless, skinless chicken thighs, cut into 2-in. pieces (about 1½ to 2 lb.)
- 6 sprigs rosemary, approximately 8-in. long, with woody stems
- 6 wooden or metal skewers

Mix the soy sauce, honey, olive oil, and lemon juice in a medium bowl. Add the herbs, spices, and salt, and stir to combine. Then add the chicken and toss to coat. Refrigerate and allow to marinate for at least 30 minutes or up to overnight.

Meanwhile, soak the rosemary sprigs in cold water for at least 30 minutes. If you're using wooden skewers, soak those as well.

Heat the grill to 375 degrees F.

Assemble your skewers: Hold one rosemary sprig against a skewer, then

pierce each chicken piece and thread it on, starting at the bottom so the chicken pieces slide up over the rosemary leaves. Leave a bit of space between each piece.

Grill for approximately 20 minutes, turning after 10 minutes, until the chicken is blackened around the edges and an inserted meat thermometer reads at least 165 degrees F.

Alternatively, roast the skewers on a baking pan in the oven at 375 degrees F for 20 minutes, flipping half-way through roasting, and finish under the broiler for three minutes. Serve.



Fresh Bay Butter Beans With Seared Steak

Makes two servings

Prep time: 20 minutes

Cook time: 30 minutes

FOR THE STEAK

- 2 New York strip steaks, approximately 8 oz. each, preferably organic and grassfed
- 2 tsp. sea salt
- ¼ tsp. freshly ground black pepper
- 2 tsp. ghee
- 3 tbs. grassfed butter
- 3 fresh bay leaves

FOR THE BUTTER BEANS

- 2 tbs. extra-virgin olive oil
- 1 tbs. minced garlic
- 1 dozen fresh bay leaves
- 2 tbs. diced roasted red pepper
- 1 15-oz. can butter beans, drained
- ½ cup chicken broth
- ½ tsp. sea salt
- ⅛ tsp. freshly ground black pepper
- Red-pepper flakes, to taste

Place a cast-iron pan over high heat. While it's heating, pat the steaks dry with a paper towel. Salt and pepper the steaks on both sides. Add the ghee to the hot pan, then place the steaks in the pan and sear for approximately four minutes, until they release easily. Flip the steaks, then add the butter and bay leaves to the pan. Tilt the pan and use a spoon to baste the steaks with butter. Cook for another five to seven minutes, or until an inserted meat thermometer reads 150 degrees F. Remove the steaks from the pan and allow to rest.

While the steaks are resting, make the beans. Wipe out the cast-iron pan and discard the bay leaves, then place the pan over medium heat and add the oil. Add the garlic and fresh bay leaves, and cook until fragrant and sizzling, approximately two minutes. Add the remaining ingredients and stir to combine. Bring the mixture to a simmer, then reduce the heat to low and cover.

Cook until most of the liquid is absorbed, approximately seven to 10 minutes. Remove the bay leaves and divide the beans between two plates. Slice each steak against the grain; arrange alongside the butter beans and drizzle with any accumulated juices.



Roasted Potatoes With Parsley-Sage Pesto

Makes four servings

Prep time: 10 minutes

Cook time: 55 minutes

- ½ cup sage leaves
- ½ cup parsley leaves
- 2 garlic cloves, roughly chopped
- 1 tsp. lemon juice
- ½ tsp. sea salt
- ¼ cup extra-virgin olive oil
- 2 tbs. chopped walnuts
- ½ cup grated Parmesan
- 1½ lb. small red potatoes

Preheat the oven to 425 degrees F.

In a food processor, blend the sage, parsley, garlic, lemon juice, and salt until well combined. Drizzle in the olive oil and blend until smooth. Add the walnuts and Parmesan, and pulse several times to mix.

Cut any large potatoes in half. In a roasting pan, toss them in the pesto until well coated. Cover and bake for 35 minutes. Uncover and roast for 20 minutes more, stirring periodically, until potatoes are golden brown with crispy edges. Serve. 🍴



ENJOY MORE

For a sweet treat, try our recipe for Chewy Basil-Date Cookies at ELmag.com/herbrecipes.



A man with a beard and brown hair, wearing a red t-shirt, is hanging from a white pull-up bar at a park. He is smiling and looking upwards. The background is a clear blue sky with some blurred buildings in the distance. A large yellow circle is overlaid on the image, containing the title text.

CHILD'S PLAY FOR ADULTS

IDEAS FOR MOVING LIKE A KID AGAIN.

BY NICOLE RADZISZEWSKI

I'LL NEVER FORGET the time my husband decided he was going to move like a kid again. He had taken our two boys to a kid's birthday party at an inflatable obstacle course and, without thinking twice, proceeded to join in and attempt a jump from one giant bouncy ball to another.

I was not at the party, but I soon learned the outcome of his exuberance: I received a call informing me he was in the ER with a fractured and dislocated shoulder.

As enticing as those oversize red balls looked, there's a reason my husband was the only parent playing at the party. For many adults, running, jumping, or swinging with abandon is not only intimidating but also risky. Our mature bodies typically lack the stamina, mobility, and strength-to-bodyweight ratio of their childhood counterparts. That can make the prospect of revisiting "children's activities" — sprinting, climbing, jumping rope, crossing monkey bars, and more — feel daunting. As a result, the well-intentioned advice to "just move like a kid" becomes easy to ignore.

Yet playful movement can be incredibly beneficial for adults. Even my husband — now fully recovered — is still a believer. Play has been shown to relieve stress, boost creativity and productivity, and strengthen relationships. Physical play can encourage you to move more and have fun while doing so.

"Playful physical activity ends up meeting more than just your body's need for movement — it can bring you joy," says biomechanist Katy Bowman,

MS, founder of Nutritious Movement and coauthor of *I Know I Should Exercise, But . . . : 44 Reasons We Don't Move and How to Get Over Them*. "Play is often associated with not being aware of how much time has passed, so playful physical activity can be easier to stick with, helping you stay physically active overall. You're likely to do it for longer and more often.

"Playful physical activity ends up meeting more than just your body's need for movement — it can bring you joy."

"Playfulness is also positive, so it can be a mood booster, and that positive state of mind can linger beyond the bout of movement."

Play is a fundamental part of being human, says Stuart Brown, MD, founder of the National Institute for Play. "Play is embedded in the subcortical area of brains in the instinctive survival areas. It is a part of our survival."

Yet just because an activity has a playful reputation doesn't necessarily mean you're playing while doing it, explains Brown. Two people can be throwing a ball while only one is actu-

ally playing. To play requires you to be fully engaged and unaware of the passage of time. "I think we all know when we've been playing," he notes. "It's really a state of being."

Brown recommends pursuing activities that intrinsically move you toward a playful state. If you love nature, you might feel more playful while climbing a tree than while jumping rope in a gym. If tumbling was once your jam, you might feel especially playful reviving your cartwheel.

"You can usually find the kind of core joyfulness that is intrinsic to who you are," he notes. "Finding that and putting that into your workouts — or *playouts* — is central to allowing play to infiltrate your being."

Brown suggests gradually leaning into the discomfort of a movement that seems scary or doesn't come easily to you. "Managing mild fear, in accord with realistic risk for you, is a way of improving your play life."

Ryan Hurst, head coach and program director for GMB Fitness, agrees, noting that challenging our fears and embracing some risk can pay real dividends.

"The goal is physical autonomy — to really have freedom in your body to do things in a way that serves you," he explains. "This is where play happens. The better you move, the better everything becomes."

Swinging, jumping, climbing, and cartwheeling might feel different now from when you were a kid, but they can still bring you joy as an adult — and enhance your fitness. The following tips can help you safely rediscover what play means for you.



JUMPING & RUNNING

Hopscotch

Playing hopscotch can offer incredible benefits by steadily improving your capacity for high-impact movements, says Mark Schneider, a Minneapolis-based strength coach and founder of The Retreat Strength Gym. Because the game offers some structure, it can also be a great way to encourage playful movement with a sense of direction and purpose.

“Structured games like hopscotch encourage focused attention on the task at hand while still allowing the body to solve problems in its own way,” Schneider explains. “There’s no emphasis on perfect form — just a simple set of constraints to guide exploration.”



HOW TO DO IT:

- Draw a hopscotch grid on the ground with chalk or scratch it into some dirt. Or, if you are doing this indoors, imagine the hopscotch grid on the floor in front of you.

- Begin hopping through the grid. If you’re using a drawn grid, land inside of each solo square on one foot and land on both feet simultaneously in the side-by-side squares. (If using an imaginary grid, alternate landing on either one or two feet with each hop forward as if you were jumping into squares.)

Once you get to the end, turn around and hop back.

- Increase the challenge by tossing a flat stone or other object in one square, skipping that square as you hop. Skip a different square each round. Or try hopping through all the squares with one leg only — or hop backward through your grid. Feel free to practice solo or play with friends.

TROUBLESHOOTING: If you struggle with balance, start small. “At its core, if you can walk, you can ‘scotch,’” says Schneider. “The hopping component can be introduced over time, but the essence of the game — movement along a path with rhythm and coordination — can be accomplished through simple stepping.”

Imagine a line on the ground. Begin with your feet straddling the line, then step forward with one foot landing on the line. Follow this by stepping into a straddle position again, then step forward with the other foot on the line. Repeat this pattern: Step, straddle, step, straddle. From there, you can try increasing the speed of your steps. As your speed progresses, the movement will naturally evolve into a light hop.



Learn more about the power of play at [ELmag.com/powerofplay](https://www.ELmag.com/powerofplay), and get ideas for making exercise more fun at [ELmag.com/funexercise](https://www.ELmag.com/funexercise).



Jumping Rope

“Jump rope offers a full-body workout that’s portable, low cost, and incredibly efficient. It improves cardiovascular health, balance, coordination, and endurance,” says jump-rope instructor Steve Harris, founder of JumpBeatFit. “Beyond the physical benefits, it’s a creative and joyful way to connect with others and rediscover a sense of play.”

For adults, the biggest challenges may include managing impact and coordinating jumps with the timing of the rope.

HOW TO DO IT:

- Start with the rope behind you and your hands at hip level, with your elbows slightly bent and close to your sides.
- Hold the handles lightly and use your wrists to turn the rope in a circular motion, swinging it overhead and in front of you.
- Keep your jumps small — just enough to clear the rope — and land softly on the balls of your feet with your knees slightly bent to absorb the impact.
- Breathe naturally and rhythmically: Aim for steady, even breaths that match your jumping tempo.
- Relax your shoulders and keep your core engaged to maintain good posture.

TROUBLE-SHOOTING:

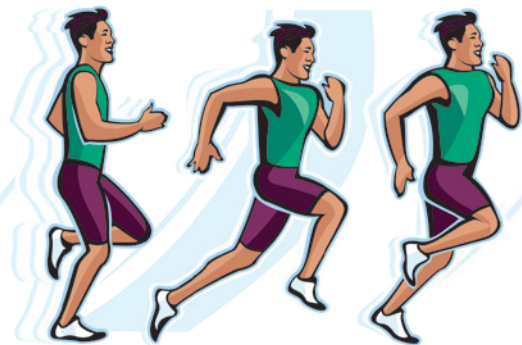
If you’re nervous about tripping, Harris suggests starting with the easiest jump-rope move: the toe catch. Begin by holding the rope handles in both hands and placing the rope behind you. Swing the rope forward and stop it with your toes as it lands in front of you. “This helps build timing, rhythm, and confidence without needing to jump. Once this feels natural, you can progress to small, controlled hops over the rope,” he says.

If you experience urinary leakage while jumping, try leaning slightly forward, aligning your nose over your toes, says Brianna Battles, MS, CSCS, a strength coach who works with pregnant and postpartum athletes.

Battles also suggests that you first practice jumping without a rope and try to exhale more frequently. Your breaths do not have to coincide with every jump, but the key is to keep breathing. This helps train your pelvic-floor muscles for impact.



Find guidance for building a strong, functional pelvic floor at [ELmag.com/pelvicfloorworkout](https://www.ELmag.com/pelvicfloorworkout) and [ELmag.com/pelvicfloormen](https://www.ELmag.com/pelvicfloormen).



Sprinting

As a kid, you didn’t have to learn to sprint — you just did it, whether chasing down a soccer ball or before sliding into second base. But no adult wants to pull a hammy trying to be a hero.

If you’re out of practice, go easy on yourself. Sprinting can be as low-key as playing Red Light, Green Light with your kids, says Kim Alexander, a strength coach and yoga instructor who specializes in natural/primal movement. Once you get more comfortable with picking up the pace, you can gradually challenge yourself with more speedwork.

HOW TO DO IT:

- Choose a forgiving surface, such as a grassy field, running track, or trail.
- Start with an easy jog and a dynamic warm-up, including movements like leg swings, high knees, butt kicks, bounding, carioca (a lateral cross-step motion), and skipping. “These are playful movements, but they are also great for building coordination,” says Alexander.
- As you run, visualize moving from your center of gravity as opposed to moving from your legs. This helps prevent overstriding.
- Pump your arms to help increase your speed. The faster you swing your arms, the faster your legs will move.

TROUBLESHOOTING:

While sprinting, some people hold their upper body too rigidly, which makes for an inefficient stride and can also lead to urinary leakage, says Battles. Let go of any tension at your belly and breathe, lean forward, and allow your torso to rotate naturally. These cues help your core and pelvic-floor muscles work most effectively.



Delve into the science of sprinting at [ELmag.com/sprintsience](https://www.ELmag.com/sprintsience), and try the sprint-interval workout at [ELmag.com/sprintworkout](https://www.ELmag.com/sprintworkout).



HANGING & CLIMBING

Bouldering

“The climbing gym is a chance to reconnect with that thing we used to do when we were kids, on the playground or on a tree or on the furniture,” says Dan Bartz, cofounder of First Ascent climbing gym. “We’re all climbers. It’s a human instinct to climb, and it’s something we kind of grow out of because we just stopped practicing.”

While rock climbing involves scaling higher routes with a harness to keep you safe, bouldering is a style of climbing that includes a thick mat below that protects you from a fall. “Bouldering is sort of the gateway to climbing because it’s the least equipment-intensive way to climb,” says Bartz.

HOW TO DO IT:

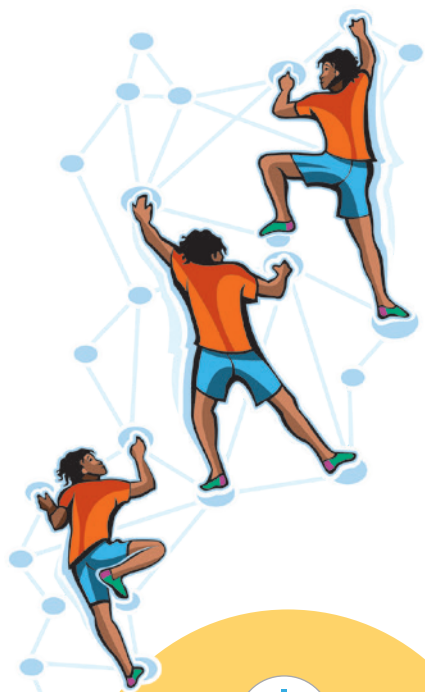
- In a bouldering gym, each climb is called a “problem.” Boulder problems are typically color-coded and ranked by difficulty level. Bartz recommends starting with a beginner-friendly route.
- To get into the starting position, place your hands, your feet, or both on the start hold or holds.
- Begin to climb, moving to the holds with matching colors and using your entire body to ascend the wall.
- To complete the problem, show control of your body either at the finish hold or the top of the wall.
- Climb back down using any combination of holds for support.

TROUBLESHOOTING:

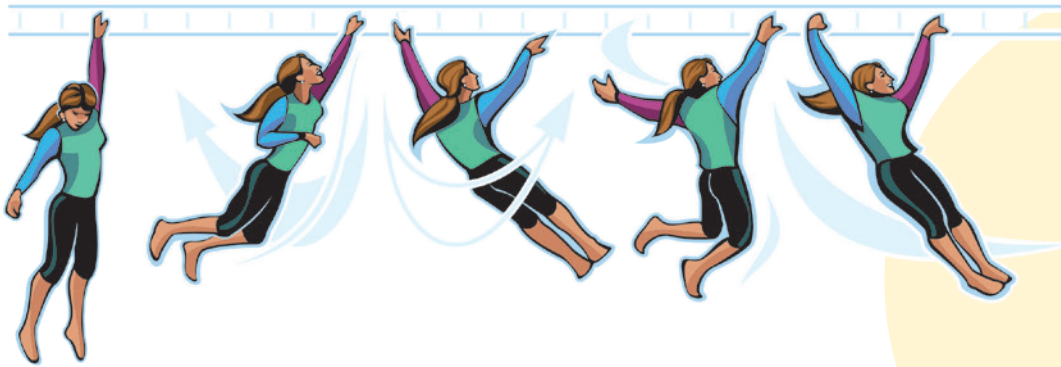
It’s important to practice falling. If you find yourself losing your grip, push yourself away from the wall and try to land on your feet with soft knees before rolling backward on the mat.

If you’re having trouble staying on the holds for a bouldering problem, you can always use holds of different colors to get more practice and get comfortable being on the wall.

Your forearms may initially feel like the weakest link. Be sure to stretch them between climbs and take breaks as necessary.



Learn all about bouldering at ELmag.com/bouldering, and find tips to improve your grip strength at ELmag.com/gripstrength.



Monkey Bars

For an adult, navigating the monkey bars can be challenging — not just because you're bigger than your kid self but also because you've likely accumulated some movement baggage over the years. "To start it as an adult typically takes more than just doing it, especially if years of shoulder, neck, and arm tension have created patterns of wear on your ligaments and left you with some major muscle atrophy," says Bowman.

If it's been years since you've swung across a jungle gym, she adds, start with hanging progressions and gradually work toward monkey-bar mastery.

HOW TO DO IT:

- Start by gripping the first bar with your leading hand. Use momentum to begin swinging your body forward.
- As the opposite side of your body swings forward, reach that arm to the next bar.
- Gently swing your body backward, then use the momentum from your backswing to generate your next swing forward. Continue alternating arms.

TROUBLESHOOTING: Most people aren't going to be able to traverse the monkey bars without building up strength and endurance. Bowman recommends the following progressions.

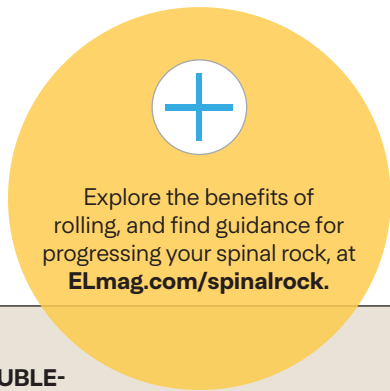
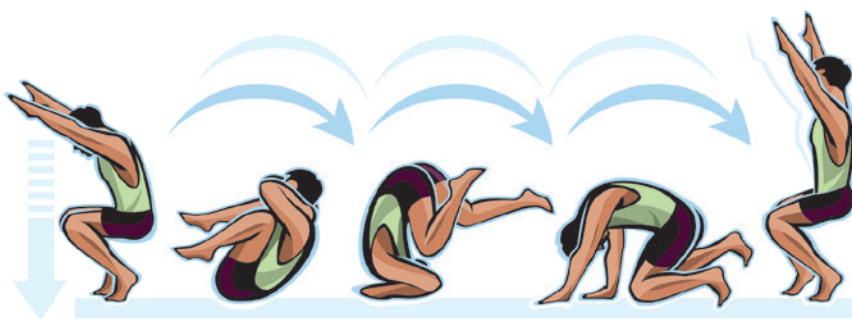
- Practice hanging from a bar with both feet on the ground, using your legs as much or as little as you need them. Try to hang without letting your shoulder blades pop up toward your ears.
- Once you can hang without support and with active shoulder blades, practice a two-handed swing, continuing to keep your shoulder blades down.
- Practice "shuffling" across a bar or the sides of the monkey bars, shifting your weight from one hand to the other as you move sideways.
- When you can hang from a single hand for a moment, try doing the monkey bars hand over hand, taking one rung at a time. Start by hanging with both hands. Then reach one hand to the next rung, and bring up the other one beside it. Take turns with your reaching arm.



Discover the benefits of hanging and how to build up your hanging strength at [ELmag.com/thehang](https://www.ELmag.com/thehang).



GYMNASTICS



Explore the benefits of rolling, and find guidance for progressing your spinal rock, at ELmag.com/spinalrock.

Backward Shoulder Roll

Whether you're doing spinal rocks, over-the-shoulder "ninja" rolls, or somersaults straight out of a gymnastics class, rolling backward and forward can strengthen your core and improve your spatial awareness. "One benefit is the incredible amount of proprioception you develop when upside down and rotating," Alexander says.

Yet rolling can feel intimidating if you haven't done it in a while. Alexander recommends starting with the backward shoulder roll.

HOW TO DO IT:

- Start in a crouched seated position on a slightly cushioned surface, such as a gymnastics mat.
- Engage your core by drawing your abdominal muscles toward your spine as you roll backward, bringing your legs back and over your left shoulder. Place your right hand on the ground next to your head to help support your roll.
- Touch your feet to the ground as you continue to roll over.

TROUBLE-SHOOTING:

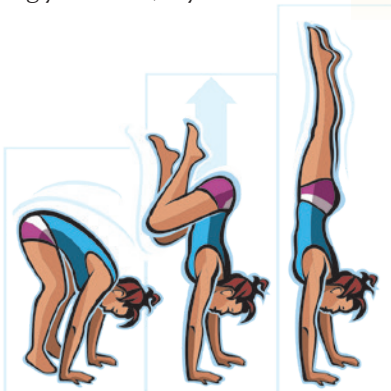
The most challenging aspect of rolling is keeping your body in a tucked position throughout the movement, says Alexander. To practice, start in a seated position, hold the front of your shins, round your back, and tuck your chin. Hold this position for up to 30 seconds while keeping your core engaged. Then try the same thing while lying on your back, holding the backs of your thighs and bringing your forehead to your knees. Once you can do this, practice bringing your legs over one shoulder and then lowering them back to the ground with control.



Cartwheel

Whereas your 6-year-old niece might make cartwheeling look easy, the act of holding your body up with your hands as you turn yourself upside down and return to your feet might be a trial. Not only do adults have more body to move, but they also tend to be less flexible.

Add to this the fear of getting hurt, and it's easy to give up on cartwheels altogether. But if you start with the most basic cartwheel progression and gradually build it up, you can improve strength and mobility while also overcoming your fears, says Hurst.



Handstand

Of all these gymnastics moves, the handstand is arguably the most advanced. Two things make handstands challenging for adults: the amount of strain they place on the wrists and the shoulder mobility necessary to achieve good alignment.

Hurst recommends warming up with shoulder- and wrist-mobility exercises, regardless of your fitness level. He also stresses the importance of learning to do a cartwheel first so you can comfortably bail if you find yourself falling out of the handstand.

HOW TO DO IT:

- Imagine a line that points in the direction you wish to cartwheel. Start by placing your front, or lead, foot on that line, pointing toward the other end of the line.
- Reach your lead hand up in the air, point your palm in the same direction as your lead foot, and reach your opposite hand out to your side.
- Reaching with your lead hand and hinging at your hips, place your lead hand on the line, followed by your opposite hand, as you kick your legs over one at a time. Try to keep your legs as straight as possible, and lock out your arms. Land with your feet on the other side of where you placed your hands, and return to a tall standing position.

TROUBLESHOOTING: If it's been years since you attempted a cartwheel, start by squatting low to the ground and placing your hands, one at a time, on the floor at one side of your body. Push into your arms and lock them out as you kick your feet over to the other side of your hands. Don't worry about keeping your legs straight or bringing them up too high.

Gradually practice bringing your butt higher off the ground and eventually straightening your legs. Side-bending stretches, wrist-conditioning exercises, and hip-mobility work can all improve your range of motion.



Learn more about strengthening your wrists at ELmag.com/wriststrength and mobilizing your hips at ELmag.com/hipmobility.

HOW TO DO IT:

- Place your hands on the ground shoulder width apart, actively pushing through your shoulders to lock out your arms.
- Shift your weight forward and engage your core as you kick up so that your hips line up with your shoulders and hands. Keep your gaze between your hands.
- Use your core to extend your legs overhead, forming a straight line with your body.
- Hold the position as long as you can maintain good form. Then lower your feet to the ground with control.

TROUBLESHOOTING: Kicking up to a full, unsupported handstand takes plenty of practice. One of Hurst's favorite handstand progressions is the elevated A-frame, which looks like a downward-facing dog pose with feet elevated on a bench, box, or sofa. Keep your arms straight and load through your shoulders as much as possible, rising onto your toes and pushing your butt up into the air.

Play with variations of the A-frame, such as lifting one leg at a time. Hurst also recommends practicing a split-leg kick-up to build spatial awareness and control. 🎯



Read about the benefits of getting upside down, and find progressions to help you nail your handstand, at ELmag.com/handstand.

A woman in a red swimsuit is floating on her back in the ocean. The water is a deep teal color, and the sun is setting on the right side, creating a warm, golden glow. The woman's eyes are closed, and she has a peaceful expression. The overall mood is serene and contemplative.

Trying Not

to Try

BY EDWARD SLINGERLAND, PhD

On the many benefits of spontaneity — and how to cultivate more of it.



THE RULES OF DANGER TENNIS

are simple: Hit the ball as hard as you can, and don't worry about whether it lands in or out. Just swing.

A friend of mine invented danger tennis after noticing during routine matches that our play often became hesitant, tight. We were trying to win points — or at least not lose them — and so our swings and shot placement had become overly cautious.

Switching to danger tennis made the tension magically dissolve. Shoulders relaxed and wrists loose, we could swing as hard as we wanted, and, amazingly, the ball never went out. Crushing forehands and elegant backhands simply flowed off our rackets. We decided we should just play danger tennis all the time.

If only. It turns out you can't just turn danger tennis on when you need it. Introduce points, spectators, or extraneous thoughts of any kind, and the tension and tics come flooding back.

Like the butterfly of happiness that alights in your hand only if you are not trying to catch it, danger tennis comes only to those who don't pursue it.

Dating is the same. During my early 20s, I would try hard to convey my own attractive coolness by lingering at coffeehouses with dense volumes of classical Chinese literature



casually left open on my table and my motorcycle helmet clearly visible on the seat beside me. *I read ancient Chinese. I ride a motorcycle. Stop and talk to me.*

Without exception, the women of San Francisco walked on. My desperate attempts to seem desirable kept me celibate until an intense shift at my restaurant job one evening left me so spent that I managed to stumble into a drought-ending date — one that happened only because I wasn't trying to make it happen.

Effortless tennis and romantic appeal are not the only goals in life that elude direct, effortful pursuit. Creative insight, humor, trust — even something as basic as sleep — are all things that cannot be forced. The only way to get them is to not chase them directly. You have to try not to try.

Easier said than done. But possible.

WHAT IS WU-WEI?

The paradox involved in trying not to try obsessed the early Chinese thinkers I spent the first years of my career studying. Daoist or Confucian, they all shared the spiritual ideal of wu-wei, or “effortless action.”

Wu-wei is a state of mind where you lose the sense of yourself as an agent and are completely absorbed in what you are doing. You are spontaneous, unselfconscious, and relaxed. As a result, you move through the world with perfect ease, which often amounts to greater success in everything you do.

It thus resembles the idea of flow — a state attained when you stop feeling the effort of a task or activity and lose track of the passage of time. Yet wu-wei is a broader and, in my view, more helpful concept.

Flow, as defined and popularized by psychologist Mihaly Csikszentmihalyi, PhD, demands experiences in which the difficulty and complexity are constantly ramped up. As your skill improves, you require more challenging situations to experience flow so you don't become bored. Yet, if an activity is *too* hard, you'll become frustrated.

Csikszentmihalyi was emphatic about distinguishing true flow from fake versions. Vegging out in front of the TV or getting lost in social media can provide some of flow's hallmarks, such as loss of self and not noticing the passage of time. Still, these experiences tend to leave us enervated and depressed, not satisfied and relaxed. Doomscrolling is absorbing, but it isn't flow.

At the same time, there's a problem with defining true flow in terms of complexity and challenge. While this description fits certain activities, like rock climbing or competitive tennis, it fails to capture the true flow experiences of most people.

We experience wu-wei when we are in contact with things that matter to us.



This is where wu-wei comes into play. For the early Chinese, the defining feature of wu-wei was that it involved a person living in harmony with the metaphysical order of the universe, which they called “the Way” or “the Dao.”

The equivalent, for modern Westerners who might not believe in a supernatural Way, would be the experience of becoming absorbed in something that is both bigger than you and valuable in your eyes.

That second part is key.

We get into wu-wei when playing with our toddlers because we love them and value spending time with them, not because sitting cross-legged on the floor attending a tea party of stuffed animals is inherently challenging or complex.

We emerge from weeding the garden feeling satisfied and fulfilled



We emerge from weeding the garden feeling satisfied and fulfilled because we feel that contact with nature — with growing, living things — is meaningful, and because we take pleasure in our healthy flowers and vegetables getting to spread their roots and breathe freely.



because we feel that contact with nature — with growing, living things — is meaningful, and because we take pleasure in our healthy flowers and vegetables getting to spread their roots and breathe freely.

We experience wu-wei when we are in contact with things that matter to us.

ON NOT TRYING

Great. So, find something that you value. Become absorbed in it. Success and pleasure will follow.

The problem with this advice is that our conscious minds have a habit of getting in the way of spontaneity. The trick of wu-wei is that you can obtain it only if you are not actively trying to do so.

An early Daoist text, the *Zhuangzi*, has a passage highlighting this tension: “If you’re betting for pottery tiles in an archery contest, you are per-

fectly skillful. Raise the stakes to belt buckles and you begin to worry about your aim. Start betting for gold and you’re a complete wreck — you can no longer shoot straight. Your skill is the same in all three cases, but your greed causes you to focus on the external prize. As a general rule, those who value what is on the outside become clumsy on the inside.”

The only way to win the gold is to not *want* to win the gold. You need to relax into your body and be absorbed completely into the flow of the sport itself, giving your skill space to do its thing. You need to let this activity, one you value for its own sake, take control.

But it’s hard not to think about the gold!

The reason that the fluid, powerful backhands of danger tennis turn into tense, clumsy volleys when playing a regular match is that one is valuing

what is on the outside and thereby failing to enter wu-wei.

This is true of both physical and social skills. For the early Chinese, the most important feature of wu-wei was not that it allowed them to shoot well in archery but that it allowed them to win the hearts and minds of other people and move through the social world with effortless ease. People in wu-wei were thought to acquire a charismatic power to attract and influence others.

In contemporary terms, this charisma is what successful politicians possess in abundance and what people trying too hard to find a date — like I did in my early 20s — decidedly lack. You can’t acquire charisma through effort or force of will.

Someone who is trying too hard to be charming is not charming; rather, they seem inauthentic. The only way

to avoid this is to engage with the social situation, genuinely listen to the people around you, speak when you have something to say, and remain silent when you don't. Smile when something is funny, and don't force it.

The description of the "True Person" in the *Zhuangzi* portrays this ideal perfectly: "The True Person of ancient times was proper without being partisan and could ask for help without being obsequious. They were humble without making a display of their humility. Relaxed and at ease, they appeared happy; when they acted, they simply did whatever the situation demanded. Their accumulated attractiveness drew people's eyes to them; they abided with no ulterior motive, but no one doubted their virtue."

EFFORTLESS ACTION

So, what do you do if you are not yet a True Person but want to be one? How do you simply "abide," like The Dude in *The Big Lebowski*, when in fact you are wracked by social anxiety and desperately want to be liked?

There is no definitive answer, because the problem of trying not to try is a genuine cognitive paradox grounded in the basic structure of the human brain. When you consciously try to relax, you activate the very part of the brain that you want to shut down.

It is like the famous white bear paradox studied by the psychologist Daniel Wegner: If you're told not to think of a white bear, you will, because the concept has just been activated in your mind. The brain is structured in such a way as to make it impossible to consciously try not to try.

Early Chinese philosophical responses to this paradox varied. Some thinkers proposed practices that might eventually trick you into wu-wei, like counting sheep so you'll stop worrying about falling asleep.



The incredible amount of information at our fingertips extinguishes the opportunity for spontaneous wandering and chance discoveries.

Others focused more on lulling the mind through the body, advocating breathing exercises or sitting in a particular way.

Their crucial shared insight was that spontaneity can only be pursued indirectly. You can create a space for it to come, but you can't directly pursue it or try to grab it.

More generally, these philosophers recognized that we cannot be fully happy or accomplished human beings unless we embrace this conundrum. We need to learn how to stop pushing when effort is counterproductive.

This ancient paradox provides an urgent insight for us today. Our modern world is built on striving and micromanagement. Over the last decade or so, smartphones and social media have made things immeasurably worse for our peace of mind.

We used to get a little mental downtime as we walked from place to place or stood waiting for a bus. Now even that small island of wu-wei has been squeezed out by a firehose of



We have a choice about whether to continue laboring on the treadmill of fruitless effort. We can also choose to step off that treadmill and into the unknown.

incessant videos and posts and likes and alerts.

The incredible amount of information at our fingertips extinguishes the opportunity for spontaneous wandering and chance discoveries. Rather than exploring a new place on foot, we read endless reviews of hotels and restaurants and try to maximize every experience.

We are all too often like tennis players anxiously trying to place their shots, overthinking things, cautious and ineffective — and not having much fun.

ROOM FOR WU-WEI

To my thinking, we could all use a bit more danger tennis in our lives. Of course, if we try too hard, spontaneity will elude us, but this doesn't leave us helpless. There are ways to make space for spontaneity — or at least to avoid scaring it off.

Recently my partner and I were in Texas, dealing with a challenging family health crisis. We needed a break from sitting in the hospital room and decided

to go out for a drink before dinner. My partner got on Yelp to look at reviews of nearby bars but then stopped herself. "Danger tennis!" she said, and I knew immediately what she meant.

We headed to a sketchy but intriguing bar that we'd spotted during the drive to the hospital. It had a faux stone facade, like a castle, and was wedged between a Dunkin' and a couple of vacant storefronts in a strip mall.

The interior was dark, with a faintly unpleasant odor. We proceeded to get two perfectly acceptable drinks for 10 bucks, win the round of the trivia contest that was in full swing when we arrived, and chat enjoyably with some colorful locals. It was a wonderful time. Yelp would have led us to the bar at the local franchise of a chain Italian restaurant.

Chalk up a win for danger tennis.

This is how cultivating wu-wei looks in daily life: Take a random walk in the woods. Step away from banging your head against writer's block and have

a beer, or play some foosball, or weed the garden or neglected window box.

Send your kids out on their bikes to figure out what to do between now and dinner. Turn and chat with a stranger on the bus instead of staring at your phone. They may be startled and call the police, but then again they may not. Either way, you'll have done your part to support a comeback for spontaneous conversations.

Another early Daoist text, the *Laozi*, advises, "Be wu-wei (literally 'do nothing'), and nothing will be left undone."

In many areas of life, this turns out to be pretty good advice. We have a choice about whether to continue laboring on the treadmill of fruitless effort. We can also choose to step off that treadmill and into the unknown. 🌱

EDWARD SLINGERLAND, PhD, is a Distinguished University Scholar and professor of philosophy at the University of British Columbia. He is the author of *Trying Not to Try: Ancient China, Modern Science, and the Power of Spontaneity*.



Melatonin's Many Wonders

Far more than just a sleep hormone, this molecule regulates a host of bodily functions.

BY MO PERRY





THE MOLECULE of darkness. The hormone of rest and rejuvenation. The ultimate multitasker. These are just some of the ways nutrition scientist Deanna Minich, PhD, CNS, IFMCP, describes melatonin.

“When most people think of melatonin, they think of sleep,” says Minich. “They are unaware of its many other functions.”

Melatonin is a crucial part of the sleep cycle, but its role does not end there, she notes. “It’s a potent antioxidant, it regulates the mitochondria, it can stimulate the immune system, and it’s a circadian signal.”

And there’s more. Melatonin helps control temperature, blood pressure, and the gut microbiome. It also supports neurogenesis and protects nerve cells, which help repair and detoxify the brain.

“Melatonin is called nature’s most versatile biological signal,” Minich says.

Melatonin is a hormone found throughout nature, made by plants, animals, fungi, and even bacteria. In humans, most circulating melatonin is produced in the pineal gland from the amino acid tryptophan. The pineal gland responds to evening darkness by releasing melatonin into the bloodstream, telling the body it’s time for sleep.

On average, the pineal gland generates between 0.1 and 0.9

milligrams of melatonin per day. The gut mucosa contains about 400 times more, but most of it stays within the gastrointestinal tract. There it helps protect the gut lining, reduce inflammation, and regulate gut motility and the microbiome.

Melatonin is also synthesized in the eyes, skin, and various other glands and organs. At these sites, it helps modulate the immune system, repair tissue, and prevent oxidative stress and inflammation.

Our bodies start producing melatonin when we’re about 3 months old, with levels ramping up from infancy to adolescence and peaking before puberty. Production then declines and can drop significantly by the time we reach our 50s.

“This is when we find ourselves in ‘melatoninpause’ — a term I love because it syncs up with the decline of so many other hormones,” Minich says.

In addition to aging, melatonin production is influenced by illness, diet, and environmental factors such as exposure to artificial blue light at night. Some medications and a lack of exposure to sunlight can also impact levels.

There’s a lot to know about this crucial molecule and the many ways it supports our health. Let’s explore some of melatonin’s more unexpected roles.



Free-Radical Fighter

Free radicals are highly reactive molecules.

They're a natural byproduct of metabolism, but the body also produces them in response to nutritional deficiencies as well as exposure to ultraviolet radiation, pollution, certain medications, and toxins. There are always free radicals circulating in our bodies, but an excess of them can lead to cellular damage, chronic diseases, and accelerated aging.

Antioxidants neutralize harmful free radicals. Some, such as vitamins C and E, come exclusively from dietary sources. Others, such as glutathione, are mostly produced in the body.

Melatonin is an antioxidant that's both produced in the body *and* derived from dietary sources —



though we make more than we can get from food.

"Melatonin is a direct scavenger. It gobbles up free radicals like Pac-Man," says Russel Reiter, PhD, one of the world's leading melatonin experts. "Vitamin E and vitamin C are go-to antioxidants, but they don't compare to melatonin."

Several factors make melatonin a potent antioxidant. First, unlike vitamins C and E, it's both water- and

fat-soluble, so it can move freely through all types of cells and tissues, offering protection throughout the body.

Second, because melatonin is produced within our cellular mitochondria, where free radicals are created, it can quickly neutralize troublemakers before they have a chance to do damage.

Finally, melatonin and its metabolites can scavenge up to 10 free radicals, while most antioxidants can vanquish only one.

Minich compares melatonin to a set of Russian nesting dolls. "When melatonin gets one free radical, it changes into the next doll down, which gets another free radical, et cetera. All of a sudden, 10 dolls later, it's cleaned up quite a number of bad things in the body."



Body-Clock Fixer

Many of us mistake melatonin for a sedative, but it doesn't induce sleep directly. Instead, it more broadly supports sleep by helping regulate our body's internal clocks — the circadian rhythms.

In addition to the sleep-wake cycle, these rhythms govern hormone production, metabolism, immune function, and body temperature.

"Melatonin helps open the 'sleep gate' by lowering our core body temperature and preparing the brain for synchronizing with the peripheral clocks

throughout the body," Minich explains. "As it becomes dimmer and darker at night, our melatonin goes up, our core body temperature comes down, and we get this signal to head for bed."

While melatonin supplements won't knock you out on their own, they can assist if you struggle to fall asleep, especially if your internal clocks are dysregulated by shift work or travel. A Cochrane review published in 2002 concluded that 0.5 to 5 mg of melatonin is "remarkably effective in preventing or reducing jet lag," particularly for those traveling east.

Timing matters. If melatonin is taken early in the day, the review authors note, it can cause sleepiness too early and further confuse the body's internal clock.

Some studies suggest that supplementing with 3 mg of melatonin can help menopausal women who struggle with nighttime hot flashes regulate their body temperature.



Inflammation Soother

During the COVID-19 pandemic, melatonin received heightened attention for its capacity to both help fight infections and reduce inflammation. A paper published in *Clinical Nutrition ESPEN* in 2021 listed it among the key preventive and therapeutic nutraceuticals for COVID, along with zinc, selenium, and vitamins C and D.

Melatonin can stimulate cytokine production to help the body fight off invading viruses, bacteria, or other pathogens, notes John Lieurance, ND, DC, in his book *Melatonin: Miracle Molecule*. It can also help slow down cytokine production when the body needs to reverse or prevent potential inflammatory damage.

“It is this dual action of melatonin on the immune system that has been of particularly great interest to scientists,” Lieurance writes. It makes melatonin especially valuable in treating conditions like COVID, where the potential overreaction of the immune system — known as a cytokine storm — can be as damaging as the infection itself.

Because inflammation is managed in part by optimal sleep, melatonin’s role in promoting sleep is key, says Samantha McKinney, RD, who helps lead nutrition education at Life Time. “Being chronically underslept will increase the likelihood of illness and chronic inflammation.”

Emerging research suggests that symptoms associated with inflammatory autoimmune conditions, such as multiple sclerosis, may be eased with melatonin supplementation. This is most likely due to the hormone’s anti-inflammatory properties and its ability to reduce oxidative stress and regulate the gut microbiome.

Mitochondria Supporter

The pineal gland produces most of the melatonin that circulates through the body and regulates circadian rhythms. Another type of melatonin is produced inside our cells, by mitochondria. “Melatonin and mitochondria go together,” says Minich.

Known as the powerhouses of our cells, mitochondria produce energy in the form of adenosine triphosphate, which fuels virtually everything our cells do.

Because of their role in energy production and cellular health, mitochondria also influence how we age. Dysfunctional mitochondria can contribute to cellular senescence — the loss of a cell’s ability to divide and function properly. Senescent

cells release inflammatory signals, driving much of the chronic inflammation and tissue damage associated with age-related decline.

Mitochondrial dysfunction has been linked to neurodegenerative diseases like dementia, Alzheimer’s, Parkinson’s, and multiple sclerosis. Poor mitochondrial health can also contribute to type 2 diabetes, cardiovascular disease, and psychiatric disorders.

The presence of melatonin and other antioxidants in mitochondria is key to preventing such dysfunction and damage. “Now we know that melatonin is synthesized in the mitochondria, and it seems to be very efficient at protecting mitochondria from damage,” Reiter says.





Immune-System Booster

The body's immune system protects us from harmful viruses and bacteria. It also identifies and destroys mutated human cells that can develop into cancer. Melatonin increases the level of circulating natural killer cells, which bolsters the immune system's ability to ward off diseases including colds and cancer.

As of 2024, more than a hundred studies on *PubMed* pointed to the potential of melatonin in supporting treatment for a range of cancers, including breast, prostate, and bladder. Melatonin supplementation, which has been used for decades in patients undergoing chemotherapy, "seemed to sensitize the cancer cells to the treatment," Minich says.



Brain Protector

Thanks in part to its sleep-supportive properties, melatonin plays a critical role in brain health.

"One of the main ways sleep protects the brain is by supporting the glymphatic system, which helps detoxify the brain nightly," McKinney explains. As we sleep, this system flushes out metabolic waste products that contribute to neurodegenerative diseases such as Alzheimer's.

Melatonin is an important molecule in this "brainwashing" process, as Reiter calls it. As a sleep-regulating hormone, it enhances deep, restorative sleep — when the glymphatic system is most active.

Melatonin's antioxidant powers protect brain cells from oxidative stress and inflammation, both of which accelerate cognitive decline. Because it's both water- and fat-soluble, it can cross the blood-brain barrier and directly neutralize harmful free radicals in the brain.

Melatonin's presence in the brain can lead to cognitive benefits, especially for people with neurodegenerative conditions like Parkinson's. It may even help with neuropathic pain and depression risk, Minich says.

She sometimes calls melatonin the "molecule of consciousness" because it can enhance the vividness of dreams, and she notes that long-term meditators have been found to have higher levels of melatonin compared with nonmeditators.



GIVEN MELATONIN'S many positive roles, it's only natural to wonder about your own levels. Melatonin can be measured in the blood, saliva, and urine, but Reiter says these metrics are of limited utility.

"It's very difficult to find your own melatonin levels, because you have to get the nighttime values," he explains. "If you go to your physician and ask to be tested, we'll all have low melatonin because daytime levels are always low."

Our levels can also vary day to day, month to month, and season to season.

"It's better to look

at symptoms," Minich says.

Some indicators of insufficient melatonin include abnormal fatigue, inflammatory conditions, chronic stress, gut dysbiosis, frequent colds or infections, and disrupted sleep patterns.

You can also review your current circumstances. Stress, inconsistent sleep patterns, and nighttime light exposure can all suppress melatonin production.

And age matters: Around 40, natural production of the hormone begins to decline more steeply.

Paying attention to your symptoms and circumstances — and supporting melatonin production by maintaining a consistent sleep schedule, limiting blue-light exposure at night, and spending time in natural daylight — can help you reap melatonin's many benefits. 🌙

MO PERRY is an *Experience Life* contributing editor.



SUPPLEMENTATION STRATEGIES

Melatonin is widely available as a supplement, with doses usually far exceeding what our bodies make naturally — even when production is at its peak. Circumstances such as cancer treatment warrant taking high doses under a physician's care, but for most of us, less is more, says Deanna Minich, PhD, CNS, IFMCP.

"We produce less melatonin as we get older, so I think a physiological dose of 0.3 to 1 milligram is reasonable to 'patch the gap,'" she says.

Research supports her suggestion. An older MIT study determined that 0.3 mg of melatonin was more effective at treating insomnia than the typical drugstore dose of 3 mg. It also found that the higher dose elevated circulating melatonin levels during the day, causing a hangover effect.

For jet lag, however, the reverse is true. Studies suggest that a dose of 5 mg helps people fall asleep faster and sleep better than 0.5 mg but that more than 5 mg had no additional benefit.

For daily use, Minich recommends starting with 0.3 mg, taken about 30 to 60 minutes before bedtime. If you feel groggy in the morning, you may need to take it earlier, about two to three hours before bed.

She also recommends opting for plant melatonin over synthetic versions. A study published in *Molecules* in 2021 found the plant-derived molecule in the brand Herbatonin to be more anti-inflammatory and better at free-radical scavenging. (Minich is the chief science officer for Symphony Natural Health, which produces Herbatonin and whose cofounder helped author the study.)

Melatonin supplements aren't for everyone. They can interact with medications, including blood thinners, blood-pressure drugs, and immunosuppressants. And anyone who is pregnant, breastfeeding, or managing a hormone-related or autoimmune disorder should speak with their healthcare provider before use.

Healthy Living, Financial Stability



SBLI[®]
LIFE INSURANCE



Life Time[®] members get an exclusive discount on **SBLI term life insurance**—fast, easy, and personalized coverage.

Discover your savings by calling **833-YES-SBLI**.



REAL LIFE

CORAL REEFS are a vital indicator of overall ocean health, and they're threatened by the climate crisis. On page 80, one of our editors shares her tour of the Great Barrier Reef of Australia and what she learned about efforts to rehabilitate this critical marine habitat.



In Search of Glimmers

How seeking out the good moments can help you feel happier, calmer, and more connected to those around you.

BY JESSIE SHOLL

YOU'VE LIKELY HEARD of triggers — words, events, or experiences that spark fear or anxiety — but have you heard of their opposite? “Glimmers” are micromoments of joy that make you feel safe and connected to your body and the world around you.

The concept was introduced by social worker Deb Dana, LCSW, in her 2018 book *The Polyvagal Theory in Therapy*. “Glimmers,” she writes, “can help calm a nervous system in survival mode and bring a return of autonomic regulation.”

In other words, they can move you out of a stressed, triggered state and into a calmer one.

You might experience a glimmer when you hear a song you love. Or while you're out exploring nature. Perhaps it's seeing your dog wagging his tail when you come home, receiving a long hug from a loved one, or even eating a perfect piece of sushi. Anything that gives you a cozy, peaceful feeling can be a glimmer.

Liz Brinkman, RDN, a certified intuitive-eating counselor in Phoenix,

teaches the concept of glimmers to her patients who have developed patterns of disordered eating. She finds glimmers useful in her own life as well and describes the feeling they elicit as a calming warmth in her heart area. “My whole system feels a sense of ease,” she says.

Though glimmers are abundant, they're more evasive than triggers.

That's because our brains are wired to continuously scan our surroundings for threats. “It's a survival mechanism that's built into our brains — the negativity bias,” explains Justine Grosso, PsyD, a holistic psychologist in Durham, N.C.

Sensing danger can be dangerous in its own way: When you feel threatened, your body releases adrenaline into the bloodstream, increasing your blood pressure. If the sense of threat lingers, cortisol levels rise to keep the body on high alert. Over time, these effects can contribute to other health complications, including gastrointestinal issues and sleep problems.

“And if you've experienced trauma,” Grosso adds, “you may have developed a hypervigilance to threat

and may even perceive a threat when there isn't one. That's really stressful on bodies.”

But glimmers can counteract that stress response — and the more glimmers we experience, the easier it is for us to downshift when we're triggered. That's due to something called “the window of tolerance,” Grosso says.

The window of tolerance is the space in which we're able to successfully regulate our emotions. People with a history of trauma tend to have a narrow window of tolerance and may live in the state of hyperarousal that Grosso describes.

Actively seeking glimmers widens the window of tolerance, training our brains to keep an eye out for joy instead of (or in addition to) danger. This helps us build a more resilient nervous system, so we feel triggered for a shorter amount of time and the experience becomes less intense.

Those resilience-building effects last. “We're banking positive emotional experiences and pleasant sensations that represent safety instead of threat,” Grosso explains.

These are some of the easiest ways to seek and spot glimmers so you can take in their calming effects.

Anything that gives you a cozy, peaceful feeling can be a glimmer.



Get Support

When you first begin seeking glimmers, it can be helpful to have a glimmer-focused talk with a like-minded friend or family member. In some cases, working with a therapist could be the most effective approach.

A therapist can be especially helpful for people with a history of trauma or PTSD, Brinkman notes. When she worked at a Veterans Affairs hospital, one of the therapists there would ask people to imagine holding a pet. A feeling of calm would come over them as they visualized petting the animal and feeling its purring or rhythmic breathing.

"She invited them into an experience they already had," Brinkman says, "to see if they could access that same sense of calm inside themselves again."



Create a Ritual

Each evening, Brinkman and her family discuss the glimmers they experienced that day. "I was talking to one of my sons the other night," she recalls, "and I asked him what the best part of his day was. He said, 'I got this really cool drink of water, and I could feel it go all the way down my throat, into my stomach, and it felt so good.' That's a glimmer."

You can also attach glimmer-seeking to an activity you're already doing. Try looking around your kitchen while your coffee brews in the morning: Is there art on the wall that delights you? Maybe you notice the sunshine streaming through the window, or an eye-catching array of green plants.

Or at the end of the day, while you're brushing your teeth, review the day's events and linger over any glimmers you may have encountered.

Reflecting on glimmers can impart the same feelings of well-being as experiencing them in the moment. This is especially true when you're able to recall the physical and sensory details. Give yourself the time and space to move beyond the visual or aural memory and try to actually feel it in your body. "It's the opposite of dissociating," Brinkman explains. "Instead, I'm staying in relationship with my body — feeling present and connected in the moment."

Write Them Down

The Book of Delights, a series of short essays by award-winning poet Ross Gay, is an exercise in glimmer-seeking. Gay finds joy in little things — pecans, an infinity scarf, poetry readings — and allows the reader to relish them as well.

Gay's collection also functions as a guidebook: Writing in a journal is a useful way to sort out your thoughts, helping you winnow them down to the heart of any matter. On lucky days, this could result in a glimmer. Keep a list of the moments that make you feel calm and joyful, using as much detail as possible when describing them so you can easily access the feeling later.

You might also try keeping a sensory notebook. The key here is to incorporate as many of your senses as possible. What was the most glimmery thing you saw, touched, tasted, smelled, or heard that day? Linger in the memory to be sure you're embodying the feeling as you recall it. (Get more tips for sharpening your senses at ELmag.com/sensoryretreats.)



Take an Awe Walk

A study published in the journal *Emotion* in 2022 investigated the emotional benefits of an "awe walk" on healthy older adults. Sixty participants took weekly 15-minute outdoor walks for eight weeks. An experimental group was directed to notice and experience moments of awe (which are also glimmers) during their walks; a control group was not.

Those who took awe walks reported feeling greater joy and other positive emotions during their strolls. They also reported more daily positive emotions and less daily distress afterward. (Discover more ways to experience awe at ELmag.com/awestruck.)

You might take an awe walk while forest bathing — a Japanese practice that involves fully immersing your senses in a quiet outdoor setting — for an extra dose of mood support. (Learn how reconnecting with nature can offer a range of health benefits at ELmag.com/forestbathing.)



Keep It Real

Nothing is perfect, and pretending an experience is perfect defeats the purpose of glimmer-seeking. Finding moments of joy doesn't mean bypassing reality. Instead, Grosso says, "it's about becoming present to the full spectrum of what's happening in the present moment."

Glimmers can be paradoxical, in that they sometimes come with a side of grief. "Because glimmers send the message to our brain that we're safe now, we might grieve a time when we weren't," she explains. It can be painful to recognize that past trauma, but it can also be healing to acknowledge it from a place of calm and safety. 🌱



INTRODUCING A WHOLE NEW LOOK

©2024 LIFE TIME, INC. All rights reserved. nrmg2483700

OMEGA-3 FISH OIL
Essential fatty acids to help
support skin, cardiovascular
function, and cognition.*

GLOW™

DIETARY SUPPLEMENT
30-day supply • 120 softgels



Pure. Potent. Personalized.



LTH.Shop

Adaptogens for Resilience

Three herbs that support mental well-being.

BY HENRY EMMONS, MD

STRESS IS INEVITABLE, and we are built to adapt and grow from it — so long as it isn't too intense or persistent. Still, nearly all of us will experience stress that's overwhelming enough to tank our normal resilience at some point. This is when anxiety, depression, and fatigue are likely to take hold and we need some extra help.

Several herbs known as adaptogens can provide gentle, safe support during periods of chronic stress. They bolster hormonal balance, immune function, and nervous-system regulation. When I want to help a chronically stressed patient find traction, I rely on these three herbs.



RHODIOLA: THE ENERGIZER

Rhodiola supports the nervous system. Not only does it help downregulate stress hormones, but it also gives

a modest energy boost without too much stimulation.

Traditionally, rhodiola has been used to improve energy and focus. Recent studies have shown that it may contribute to the following effects:

- Reduced generalized anxiety
- Improved serotonin and dopamine levels

- Better-regulated cortisol levels

I often recommend rhodiola during the winter months to patients with a tendency toward seasonal depression.

How to use:

A typical dose ranges from 200 to 250 milligrams twice daily. Look for a standardized extract containing at least 3 percent rosavin. It may be taken with meals, ideally with breakfast and lunch. Avoid bedtime usage because of the adaptogen's mild stimulating effects.

Potential downsides:

Rhodiola is energizing. If you notice anxiety or sleeplessness, consider a smaller dose and take it early in the day. Rhodiola is considered safe for long-term use and has no known interactions with other medications.



ASHWAGANDHA: THE SOOTHER

Ashwagandha ranks as one of the most valued remedies in Ayurvedic medicine. It's one of my

favorite herbs and among the few that I use in my daily regimen. Here's what it does:

- Supports the body under stress
- Reduces anxiety
- Helps with sleep

It also appears to improve focus and alertness while simultaneously calming anxiety.

How to use:

The usual dosage is 250 mg twice daily (standardized to 1.5 percent withanolide — a naturally occurring chemical compound). If it makes you sleepy, or you're using it primarily to support sleep, take the full 500 mg in the evening.

Potential downsides:

Ashwagandha, also known as winter cherry, is part of the nightshade family. Anyone sensitive to nightshades (tomatoes, peppers, potatoes, eggplant) could potentially react to this herb as well.

Beyond that, it is well tolerated. Watch for signs of fatigue if you're taking prescription sedatives.

It's wise to avoid ashwagandha if you take immunosuppressant drugs, because it may enhance the immune-system response.



HOLY BASIL: THE UPLIFTER

Sometimes called tulsi, holy basil is a prized tonic for multiple health concerns,

including eczema, bronchitis, and gut issues. Ayurvedic practitioners sometimes call it "liquid yoga." This adaptogen can be an excellent antidote for a down mood. It works in these ways:

- Reduces inflammation and strengthens the immune system
- Improves lipid metabolism, stabilizes blood sugar, and reduces insulin resistance

- Boosts mental health by easing anxiety, improving stress tolerance, and enhancing mood

Holy basil can help manage stress by slowing the release of cortisol and blocking its receptors. This helps limit the potential damage from excess cortisol.

How to use:

The typical dose is about 300 mg taken two or three times daily. Look for a standardized freeze-dried or liquid extract, or enjoy it as a tea.

Potential downsides:

Holy basil is considered safe, even for long-term use. It's not known to interact with other medications.

HENRY EMMONS, MD, is an integrative psychiatrist and cofounder of Natural Mental Health. He is the author of *The Chemistry of Joy*, *The Chemistry of Calm*, and *Staying Sharp*.



Let's Take a Trip!

Spending vacation time with friends or family might be less than relaxing. Follow these expert tips for making the most of your time together.

BY JON SPAYDE

VACATION! We all appreciate a restful break from the stresses and routines of everyday life. And because vacation time is hard to come by, we naturally want our time off to count: We want to return feeling relaxed, restored, and fortified with fond new memories.

One way we might try to maximize our time off is by taking a trip with friends or family. Yet vacationing with others — even our favorite people — is rife with opportunities for conflict. A dream vacation can quickly sour if the group lacks consensus on priorities and budgets, personalities clash, or individual needs remain uncommunicated.

Fortunately, a little planning can go a long way. Clinical psychologist Charlotte Russell, PhD, founder of *The Travel Psychologist* blog, offers some eminently practical suggestions for dealing with opposing needs during a group vacation — so everyone can get the renewal they're seeking.



STRESS SOURCES

The group's expectations do not align. There's a wide spectrum of vacation styles, and we might be surprised by the likes and dislikes of our friends and family. "It's easy to assume that people we know have the same preferences we do, but that can be far from the truth," Russell says.

Perhaps one member of your group wants to sample every local adventure, while another prefers to spend all their time reading a book by the pool.

Members of the group have different assumptions about what traveling together means. Russell has observed that there's a common expectation among travelers that "if you're vacationing together, you'll be spending all your time together, doing everything together. Yet many people will find that overwhelming."

There is a generation gap. Younger and older vacationers likely differ in their interests, energy levels, physical abilities, and goals for their vacation. It can be tricky to find common ground between a 5-year-old and an 85-year-old.

The budget is a touchy subject. "This is a common source of tension," Russell says. Travel budgets reflect not only various levels of financial freedom but also contrasting attitudes about spending.

Generational differences can impact attitudes about spending, she

adds. Some grandparents may have more frugal habits than their kids and grandkids, for example. On the other hand, many younger people have less disposable income than their elders.

Personality differences become more pronounced. Vacationing with family or friends can be "a little more intense than seeing them in day-to-day life," Russell notes.

Travel and lodging challenges — such as delayed flights, reservation errors, and unexpected weather conditions — can highlight the different ways people operate under stress and potentially strain the group dynamic. You're also spending a lot more uninterrupted time together than usual, and overexposure can lead to friction.

People's needs and desires may change midvacation. Maybe the quiet time an introvert initially enjoyed creates some loneliness halfway through the stay, and he'd like to socialize more. Or maybe the enthusiastic history-and-culture buff realizes that she'd like to spend more time on the water.

Conflict may come as a surprise. Some families or friend groups likely haven't faced the kinds of conflicts that occur on vacation, and they're completely unprepared for the problems that arise in a new context.



SUCCESS STRATEGIES

Establish your priorities. Before planning a vacation with others, spend time establishing what is most important to you, Russell advises. “This allows us to be clear on what we are willing to compromise on and what we aren’t.”

Be discerning about who you invite. For Russell, a good vacation with others begins with the guest list. “When considering whether to vacation with particular friends, think about times in the friendship when you’ve needed to ask for something or assert your needs,” she says. “Has the friend listened and been understanding and supportive — or not?”

Traveling with others is a good way to build and maintain relationships, she points out. But the foundation of the relationship is key. The greatest benefits stem from spending time with people we trust who are supportive and understanding.

Discuss expectations in advance. “For family travel, in particular, unspoken expectations and norms can play a role in conflict, or in people feeling unable to assert their needs,” Russell says. Intentionally communicating expectations and priorities ahead of time can prevent unanticipated conflict from arising throughout the trip.

“Sometimes, in the planning stage of a vacation, conversations about expectations will come up naturally, but sometimes they don’t,” she notes.

She recommends talking through activities, amenities, various expenses, and individual needs.

Be willing to compromise. “Compromise can work well when all parties are willing to work together,” Russell says. “Approach your planning in a spirit of sitting side by side with the issue in front of you — cost, activity level, whatever — and working together to address it.”

Consider appointing a coordinator or point person. It can be helpful to ask one person to handle questions and concerns, says Russell. This person can streamline group communication as well as the decision-making process.

It may seem logical to choose a natural leader among your group, but that person may not want the added pressure during their time off. Ask your group if anyone is willing to take this role, and emphasize that the goal is to simplify the planning process.

Be OK with splitting up — even if the plan was to stick together. “It’s important for everyone to try not to take it personally if a member of the group says they want some time alone,” Russell notes. “We all have different appetites for time together.”

One compromise she suggests is to rendezvous for dinner after spending some time apart during the day. “That’s an example of a

nice balance between separateness and togetherness.”

Check in. Some in a group can be expected to speak up if they want something different, but those who aren’t comfortable doing that may benefit from loosely scheduled group check-ins to make sure needs are being met. This could be as simple as taking a moment over breakfast or dinner to ask how everybody is feeling and whether the current plans still feel right.

Taking care of the essentials helps you show up as your best self on vacation — and feel the most restored and fulfilled when you return home.

Take care of yourself. Self-care is critical while negotiating the interpersonal challenges of a group vacation. “If we look after ourselves well, we are less likely to feel irritable or impatient with others,” Russell notes.

Make sure you meet your basic needs by getting enough sleep, eating regular meals and snacks (because we can all get hangry), and staying hydrated. And don’t be afraid to claim some alone time, or time with just your immediate family, when you need it.

Taking care of the essentials helps you show up as your best self on vacation — and feel the most restored and fulfilled when you return home. 🌍

JON SPAYDE is an *Experience Life* contributing editor.

HOPE

on the Great Barrier Reef

A tour of Australia's famous coral reefs reveals inspiring efforts to rejuvenate this critical marine habitat.

BY KAELYN RILEY

"WOW, check out this little guy!"

I'm sitting on the stern of a solar-powered catamaran near Opal Reef, about 30 miles off the coast of Far North Queensland, preparing to jump into the Coral Sea. My husband and I are nearing the end of a three-week adventure through Australia, a trip that has included so many magical moments that it's felt, at times, like fiction: throwing back fresh oysters with old friends in Melbourne, taking in a show at the Sydney Opera House, hiking through paperbark forests in Kakadu National Park.

And, incredibly, it's not over yet. We're here on our last day down under to snorkel on the Great Barrier Reef.

In the water next to me is marine biologist Kate Slaughter, one of the guides on our tour with Wavelength Reef Cruises. She's holding a hand toward me as I struggle to squish my feet into my rubber fins. On the tip of her gloved finger is the teeniest crab I've ever seen, its little greenish shell about the size

of a fruit fly. Behind her goggles, Slaughter's eyes are lit up in wonder. I watch as she turns her hand over and over, marveling at her new friend scuttling around on her palm. *Oh, I realize. She's just as excited as I am.*

My hair isn't even wet yet. Soon, I'll witness the whole world churning beneath us, the anemone and cuttlefish and, yes, the reef sharks, and dozens of other weird and wild creatures, arguably far more interesting than this practically microscopic crustacean.

Still, weeks later, this will be one of my most vivid memories of the day: this young scientist holding her hand out to me, utterly dazzled by the little life she's stumbled upon.

THE HEART OF THE OCEAN

That exchange between science and tourism is part of what makes Wavelength special. It's the only reef tour company in Queensland that's owned and operated by local marine biologists — which means that when they're

not showing people like me around the outer Great Barrier Reef (GBR), they're taking an active role in conservation and reef restoration.

"We do a lot of research on the boat," Slaughter tells me. "We have weekly surveys to keep an eye on how things are changing in the short term, and more in-depth quarterly surveys."

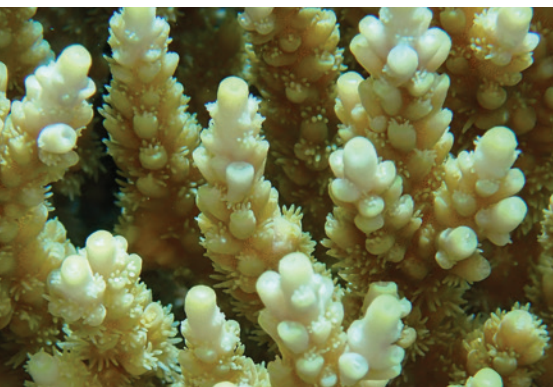
That work is aimed at improving coral health, which has been suffering for decades due to warming ocean temperatures and acidification. The Global Coral Reef Monitoring Network reports that between 2009 and 2018

between their jaws, the gobies sifting through the sand for critters to eat, the striped wrasses plucking parasites from the backs of sleepy-looking groupers. The sound is unbelievable — like a whole city bustling along its morning commute.

I swim through a school of blue damselfish; they sparkle around me like jewels. I spend several minutes floating above a giant clam the size of my office desk back home, watching the pulse of its body as it breathes in and out, like a heartbeat at the bottom of the sea.

most widespread global bleaching event on record. It's the fourth of its kind since 1998.

Slaughter first visited the GBR in the winter of 2016, following a particularly severe bleaching event throughout the northern section. "More than 80 percent of the reef experienced some degree of bleaching that summer, and I was swimming in the aftermath," she says. "I was so excited to see the reef for the first time, and it was beautiful, but it was quite shocking to see it in that state."



Coral reefs are a vital indicator of overall ocean health — and the backbone of one of the most biodiverse ecosystems on Earth.



we lost approximately 14 percent of the world's coral — an amount greater than all the living coral in Australia's reefs. In 2017, the United Nations estimated that 70 percent of reefs around the world were under threat.

These numbers represent much more than the loss of a beautiful tourist destination. Coral reefs are a vital indicator of overall ocean health — and the backbone of one of the most biodiverse ecosystems on Earth.

The GBR is the world's largest living structure and the only organism that's visible from space. Though coral reefs cover less than 1 percent of the sea floor, they're home to nearly a quarter of all marine life, providing food, shelter, and breeding grounds for more than a million ocean species.

When I finally press my face underwater, it's as though I can see them all at once: the parrotfish crunching coral

A GROWING THREAT

What we think of as coral is actually limestone, a protective exoskeleton built by the tiny invertebrates that live inside. These coral polyps contain millions of photosynthetic algal cells that use light to provide the coral with oxygen and nutrients. The algae also produce the coral's beautiful pigments, which vary depending on the spectrum and intensity of its light exposure.

When coral is stressed — by rising water temperatures, too much sunlight, or other changes in the ocean environment — it ejects its algal cells, losing both its color and its primary food source. Large-scale "bleaching" was once relatively rare, but the U.S. National Oceanic and Atmospheric Association reported in May 2025 that nearly 84 percent of the world's reefs had experienced heat stress since early 2023, accounting for the

Corals have shown an incredible ability to repopulate and rebuild, she tells me, but they're in a vulnerable position. As ocean temperatures continue to rise, the reef has less time to recover between bleaching events, putting the health of the entire ecosystem at risk.

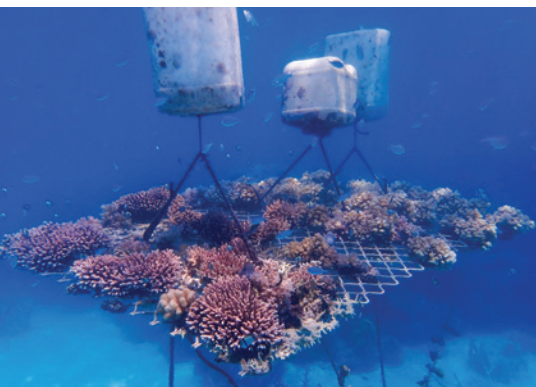
PLANTING HOPE

Despite these grave statistics, Slaughter says, there's a lot of optimism in daily life on the GBR, where she and her colleagues are taking a hands-on approach to reef restoration, which they refer to as "assisted recovery."

Our second stop of the day includes the nurseries on Opal Reef, which Wavelength grows in partnership with the University of Technology Sydney. This partnership is part of the Coral Nurture Program cofounded by Wavelength in 2018.

When corals break off from the reef due to storm or wave damage, they typically die in the sand. When they don't, Slaughter and her colleagues try to capture and rehabilitate them at these nursery sites, which are open structures with lots of water flow to maximize coral growth.

"It's just a middle ground for the corals to stay," she explains. "And like a plant nursery, you can take cuttings from them." They take these cuttings to bare spots on the reef and effectively replant them, using stainless-steel clips that Wavelength designed.



coral cover and biodiversity a site has, the more resilient it will be to threats like rising ocean temperatures. It also means those corals can reproduce along with the rest of the reef.

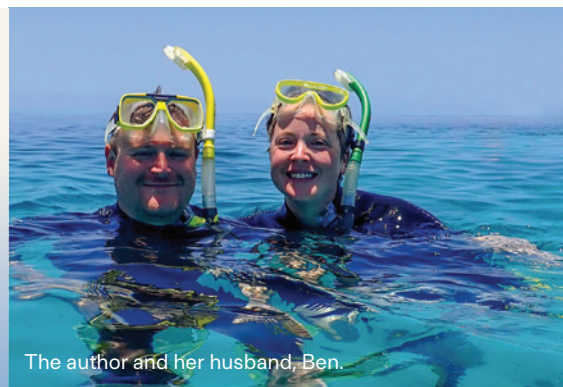
Coral colonies typically spawn only once a year as the full moon rises, a nighttime phenomenon that Slaughter describes as something "like an upside-down snowstorm." She and her colleagues have watched the corals that they personally planted onto the reef release all their reproductive cells into the water to be fertilized, eventually landing back on the reef to form new coral colonies.

one hand above his head like a dorsal fin. I've never seen him seem so much like the boy he once was, with a library full of books about the ocean and an encyclopedic knowledge of saltwater fish.

My vision blurs; I've been crying into my snorkel mask. I can't believe how much life is teeming around us, how vibrant and real it all is. And how vulnerable.

Before we say goodbye, Slaughter tells me that she's returned to those sites on the GBR that she first saw in 2016 — the bleached corals that inspired her career in marine biology —

I can't believe how much life is teeming around us, how vibrant and real it all is. **And how vulnerable.**



The author and her husband, Ben.

Over lunch on the boat, Slaughter holds up a coral clip for our group to see. It's a simple tool, like a nail with a spring-loaded clamp on one side. But in its simplicity lies its brilliance: The clips require few additional tools and little training to use, and they represent a minimally invasive planting method that supports the reef's natural ability to heal itself.

Over the last few years, the Coral Nurture Program has planted more than 100,000 coral fragments back onto the reef.

"We work alongside researchers at the University of Technology Sydney to ensure that we are using the most-effective methods possible," Slaughter explains. "They've found that we have an 80 to 85 percent success rate, which is very strong. We would have been happy with 10."

This is not simply about beautification, she tells me. The more

"It's the most profoundly moving experience I've ever had," she says. "It means so much to know that we are assisting Mother Nature to maximize her perfect processes in the simplest way possible."

A YARD WORTH TENDING

I took a double dose of nausea medication before we left the marina, certain I'd be seasick on the water, but I didn't need it. We're here on what the crew calls a "diamond day," a synchrony of conditions that make for ideal snorkeling: low winds, minimal swell, plenty of sunshine for high visibility. My husband, who researched the weather and tidal patterns for weeks before selecting this day for our reef tour, is beside himself with glee.

"Did you see that blacktip?" he shouts to me on our final stop, a note of incredulity in his voice. He makes the sign the crew taught us for *shark*,

and some of them have bounced back. It's not linear, she emphasizes, and much of the reef continues to struggle.

"Still," she says, "I like to think the work we're doing in our own backyard is helping on a small scale."

The only way to save the reef is by reducing our reliance on fossil fuels and lowering our carbon emissions. Until then, ecologically sustainable tourism organizations like Wavelength can work to maintain these sites so they're worth visiting — which funds more research and conservation efforts.

"That collaboration between science and tourism is really important," Slaughter says. "It makes sense to work together because we have the same goal. We all want to see the reef flourish." 🌊

KAELYN RILEY is *Experience Life's* editorial director of food and nutrition.

JOOLA



WWW.JOOLA.COM



ME-TIME WE-TIME & EVERYTHING IN BETWEEN

We have something for every age and every stage of growth. From classes to lessons, camps, clinics and more — fun is easy to find at Life Time.

Join the fun at
lifetime.life/kids-family-fun.

**LIFE TIME
KIDS**





BETTER THAN GOOD

Tired of the same old almond milk? Taste these alternatives.



1.

POUR IT ON

Malk makes its organic oat milk with just three ingredients: gluten-free oats, Himalayan pink salt, and water. Enjoy freely. About \$7. www.malkorganics.com



2.

HAVE SOME PIE

Naturally sweet and sumptuous, pecans taste like dessert in any form, and the super-creamy pecan milk from PKN is no different. \$36 for a six-pack. www.pknpecanmilk.com



3.

KEEP IT SIMPLE

Most nondairy milks don't taste like the nut they're made from, but Three Trees pistachio milk is a celebration of pistachio flavor. (Excellent in matcha.) About \$7. www.threetrees.com



4.

BOOST THE BRAIN

Raw walnuts are a great source of omega-3 fatty acids, and Elmhurst's delicious maple-walnut milk brings them right to your morning coffee. \$15 for a two-pack. www.elmhurst1925.com



5.

GO BANANAS

Mooala's tasty blend of bananas, sunflower seeds, and cinnamon is a serious crowd-pleaser — a smoothie without the blender. \$28 for a six-pack. www.mooala.com

thrivent.com
GENEROSITY * ADVICE * INVESTMENTS
BANKING * INSURANCE



Helping you build financial strength.❤️

Like physical fitness, keeping your finances in shape takes work, but you don't have to do it alone. Thrivent offers holistic financial services to help you support the people, causes and community you love.

thrivent[®] Where Money Means More™



Thrivent provides advice and guidance through its Financial Planning Framework that generally includes a review and analysis of a client's financial situation. A client may choose to further their planning engagement with Thrivent through its Dedicated Planning Services (an investment advisory service) that results in written recommendations for a fee. Securities and investment advisory services offered through Thrivent Investment Management Inc., a registered investment adviser, member FINRA and SIPC, and a subsidiary of Thrivent, the marketing name for Thrivent Financial for Lutherans. Thrivent.com/disclosures. 31555D N4-25

ASK L.A.I.C

BY **BAHRAM AKRADI**

WE'RE IN A NEW ERA — one in which artificial intelligence has become commonplace in our lives. Whether that makes you excited or hesitant, the reality is that AI is here to stay. In fact, there's likely a day not far from now when we won't be able to imagine life without it.

If you read my previous column (available at ELmag.com/winwin), you might recall that I view AI as a tool for collective advancement and good; I believe that if we use it wisely, it can move us all forward.

With that in mind, I want to share a bit about L.A.I.C, one of the most exciting and promising AI initiatives at Life Time.

L.A.I.C (pronounced Lay-see) aims to be your trusted gateway to all things healthy living. Available in the complimentary Life Time app, it represents a significant step forward on our mission of helping people everywhere live healthier, happier lives.

Its foundation is a blend of human and artificial intelligence. It's a tool that is learning from and expanding on Life Time's nearly 35 years of expertise, experience, and thought leadership in the health and wellness space.

The human element is important here, and we can't overlook or forget the role our brains and their extraordinary intelligence plays. The brain contains tens of billions of neurons, each with thousands of pathways linking them to other neurons. These synapses facilitate the transfer of information and provide the foundation for learning and memory.

These ever-expanding neural pathways allow us to connect seemingly unrelated dots — to take facts, data, and experiences and synthesize them into new insights and epiphanies.

That brain power allows us to draw meaning from chaos and create insights where none existed before.

It's intuition. It's curiosity. It's our brain sparking in the middle of a conversation or having that *aha* moment when we're on a walk.

L.A.I.C isn't intended to replace this incredible human capacity — it's designed to complement it. By handling routine inquiries and, soon, making personalized health and fitness recommendations, L.A.I.C frees your mind to focus on what it does best: creatively solving problems, making decisions, and forming meaningful connections with others.

What makes L.A.I.C so cool is its ability to learn and adapt as you use it. The more you engage, the more personalized and valuable it becomes.

Each interaction helps the AI better understand your preferences, goals, and habits, allowing it to provide increasingly relevant recommendations and support. This creates a continuous relationship that becomes more intuitive, informative, and insightful over time.

Today, L.A.I.C can give you quick answers about our athletic country clubs and their locations, hours, and offerings. It can help you navigate our programs and services, find your favorite classes, and provide answers to many health and wellness questions, all based on Life Time's philosophy and thought leadership.

Like a toddler, it's growing quickly. You'll soon see its abilities expand to include more customized class and program suggestions based on your current fitness level and your previous actions and preferences. It will create individualized workout plans, and it



will offer personalized nutrition and LTH supplementation guidance, as well as other proactive suggestions to keep you on track with your goals.

This early version of L.A.I.C is the first step toward something that will rapidly advance, and we believe it has immeasurable long-term potential. Importantly, part of its successful evolution relies on you, our members.

We need your help to make L.A.I.C the best companion it can be. How? By using it regularly. See how it can help guide your day. Ask it questions. Explore its vast wealth of knowledge: It's informed by nearly 25 years of educational content from the pages of *Experience Life*, as well as by our incredible in-house experts. Inquire about your membership, or just ask it for advice.

And give us feedback. Your input helps refine and improve its responses. There's a learning curve, so we appreciate your patience as it continues to know and grow.

L.A.I.C represents our commitment to making a healthy way of life accessible everywhere, not just within the walls of our clubs. And I'm incredibly excited about its potential.

More so, I can't wait for you to start connecting with it. L.A.I.C is ready to meet you wherever you are and to learn from and grow with you. The relationship you build with it today will shape the personalized support you receive tomorrow and beyond.



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



“Exploration is really the
essence of the human spirit.”

— FRANK BORMAN

FORTIFIED WITH VITAMINS & NUTRIENTS FOR YOUR BRAIN HEALTH!

BRAINJUICE®



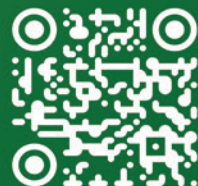
CLEAN INGREDIENTS. CLEAN BRAIN ENERGY.



NOW AVAILABLE AT

LIFETIME LIFE CAFE

BRAINJUICE.ME



stelo by Dexcom

Harness the power of your glucose data

The secret to better energy, endurance, and recovery? Understanding your metabolism. This summer, let the Stelo Glucose Biosensor give you the data to fuel better, push harder, and get the most out of every workout.

Discover Stelo at stelo.com/LifeTime



The official glucose biosensor of Life Time®

STELO SAFETY INFORMATION: For full information on risks and benefits, visit stelo.com.

INDICATIONS FOR USE: The Stelo Glucose Biosensor System is an over-the-counter (OTC) integrated Continuous Glucose Monitor (iCGM) intended to continuously measure, record, analyze, and display glucose values in people 18 years and older not on insulin. The Stelo Glucose Biosensor System helps to detect normal (euglycemic) and low or high (dysglycemic) glucose levels. The Stelo Glucose Biosensor System may also help the user better understand how lifestyle and behavior modification, including diet and exercise, impact glucose excursion. The user is not intended to take medical action based on the device output without consultation with a qualified healthcare professional.

Dexcom, Dexcom Clarity, Dexcom Follow, Dexcom One, Dexcom Share, Stelo, and any related logos and design marks are either registered trademarks or trademarks of Dexcom, Inc. in the United States and/or other countries. ©2025 Dexcom, Inc. All rights reserved. MAT-8378