

THE EPOCH TIMES

MIND &

BODY

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NATURE AS MEDICINE

Nature

A Potent Treatment for Behavioral Issues

Time outdoors can foster creativity, longevity, and a better quality of life for children and adults

Nature gives children a sense of something profound and beautiful.

Drugged Kids

According to one study of Medicaid data in 13 states, 12.4 percent of children in foster care received antipsychotics, compared with 1.4 percent of children on Medicaid. The medications, used to make children less aggressive and more manageable, come with the high price of limiting motivation, play, and curiosity, according to Dr. Bessel van der Kolk in his book "The Body Keeps the Score."

AMY DENNEY

Alexx Seipp's two children exhibited constant boredom, fighting over toys and acting aggressively—until the family moved playtime outside.

Seipp has fostered 15 children in the past five years, so discovering a way to help her children was important. Seipp participated in the "1000 Hours Outside" challenge and extended outdoor play to three to four consecutive hours with her adopted children. She watched as it melted their incessant need for attention and inability to play independently, both effects of early trauma.

"When you're in nature, there are unlimited rocks and sticks. You don't need to fight over the materials," Seipp said. "At home, I had to work to keep them busy, entertained, and out of trouble. But outdoors, they would happily play for an hour or more with just a creek bed, some sticks, and some rocks.

"I felt like I also got a chance to breathe and would read a book. It became self-care that I could do with my kids since childcare was limited."

Experts say unstructured imaginative play, which organically happens outdoors, increases social, emotional, and cognitive development to help children to grow into mature, well-rounded members of society.

Tending to curiosity is a big deal for overall health—and not just for children. Older adults who remain curious live longer, happier lives.

Ginny Yurich, founder of the 1000 Hours Outside movement and author of the book by the same name, discovered 11 years ago that she needed nature as much as her kids did. A friend suggested that the frazzled mom take her three children, who were younger than 3, outdoors for several hours.

"I thought it was going to be a disaster, but it instead turned out to be one of the most significant days of my life. It was the first good day I had as a mom," she recalled.

"Mother Nature kept the interest of my children, and I had, for the first time, a legitimate break from the ever-pressing needs of our kids. It was as if, in that moment, Mother Nature mothered them, but she also mothered me."

Yurich started her blog two years later, inspired by the works of British educational reformer Charlotte Mason, who advocated for four to six hours outdoors daily. It's since become a worldwide movement of families from all backgrounds who are committed to being outside as much as possible.

Nature Versus Noise

Digital screens are pervasive in our daily life and have all but devoured the normal childhood experience.

Continued on Page 6

Cognitive Benefits of Magnesium L-Threonate

This lab-made magnesium salt is showing some remarkable effects on the brain

JOSEPH MERCOLA

Magnesium comes in a wide variety of naturally occurring forms, but magnesium L-threonate isn't one of them. This magnesium salt of L-threonic acid was made in a lab, although it's made of two natural parts.

Some people's brains shrink with age more than others. It's now believed that increasing synapses and their density may prevent cognitive decline, and magnesium L-threonate may help.

Described as a patented compound with the ability to enhance working memory,

MgT

Magnesium L-threonate (shortened to MgT and pronounced "mag T").

short- and long-term memory, and learning in animal studies, magnesium L-threonate (shortened to MgT and pronounced "mag T") was developed by scientists at the Massachusetts Institute of Technology in 2010.

The animal study that first introduced MgT, published in *Neuron* in 2010, noted its ability to rapidly absorb into the brain, which structurally reversed specific aspects of brain aging by increasing the number of "functional presynaptic release sites" while it reduced their release probability.

Continued on Page 4

Magnesium comes in many natural "salt" forms but magnesium L-threonate is lab-made.



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Which Blood Tests Does a Vegetarian Need?

If you eat few animal products, it's a good idea to monitor certain nutrient levels

To find the studies mentioned in this article, please see the article online at TheEpochTimes.com

JOEL FUHRMAN

When it comes to you managing your health, an early warning system is a distinct advantage. That's where blood tests come in: They're an important tool for assessing your overall health, and provide valuable insight into any potential issues that may be developing.

Your health care provider likely orders a standard screening panel at your annual physical. The problem is, these tests may not pick up on some important nutritional deficits that can impact your health.

In addition to the standard tests ordered by your physician, I recommend the following tests for those who follow a vegetarian (plant-based, nutrient-dense) diet. These tests will give you a clearer picture of your overall nutritional status—what I call “nutrient IQ.”

Why Do I Need Special Blood Tests?

When following a diet of high-nutrient plant foods, it's important to ensure that you're getting optimal amounts of some vitamins, minerals, and fatty acids that are more available in animal products.

Also, some people, especially those aged 70 and older, require extra protein to maintain adequate IGF-1 levels. Ensuring that risk factors for diabetes and heart disease are at favorable levels is also important.

How Often Do I Need These Tests?

The recommended schedule would be to have these tests every five years for adults younger than 65, and every three years for those aged 65 and older.

Vitamin B12 and Methylmalonic Acid

Vitamin B12 isn't naturally present in plant foods, and insufficiency is common, especially in those older than age 60, because B12 absorption becomes less efficient as we age.

Vitamin B12 is important for immune function, brain function, red blood cell production, and DNA synthesis.

In the mitochondria—the power plants that create cellular energy—vitamin B12 is required for the conversion of methylmalonyl-CoA to succinyl-CoA; when B12 levels are low, methylmalonyl-CoA begins to accumulate and enters the blood as methylmalonic acid (MMA). Elevated MMA in the blood indicates insufficient B12.

Having results for both B12 and MMA is helpful, as a high MMA might indicate a mild deficiency or a developing deficiency if B12 results are on the lower end of the normal range.

Favorable ranges

B12: 160–950 picograms/milliliter or 118–701 picomoles/liter
MMA: Normal ranges vary somewhat between different labs. The normal range is approximately less than 300 nanomoles/liter, or less than 0.3 micromoles/liter.

Vitamin D

The primary source of vitamin D is sunlight, and supplementation is appropriate to ensure year-round vitamin D adequacy and prevent skin damage from excessive sun exposure. Low vitamin D levels are associated with osteoporosis, depression, autoimmune disease, cancer, and diabetes. Excessively high vitamin D levels may also be harmful to health.

Favorable range:

30–45 nanograms/milliliter or 75–115 nanomoles/liter



Standard blood tests won't reveal all nutrient deficiencies but you can get a wider blood work-up to gain additional insights.

Homocysteine

Vitamin B12 acts as a coenzyme for methionine synthase, which produces methionine from homocysteine. Deficiency in B12 (or folate) results in the accumulation of homocysteine.

Elevated homocysteine is also a risk factor for cardiovascular disease. In excess, homocysteine promotes oxidative stress, endothelial dysfunction, and inflammation. Elevated homocysteine has also been linked to a greater risk of dementia.

Favorable range:

Less than 15 micromoles/liter

Hemoglobin A1C

Hemoglobin A1c (HbA1c) is an indicator of long-term (about three months) blood glucose levels. The test measures the percentage of hemoglobin in the blood that is glycosylated (attached to a sugar molecule). More glycosylated hemoglobin is formed at higher blood glucose concentrations, and it accumulates over the lifetime of the cell. A high HbA1c level indicates prediabetes or diabetes.

Favorable range:

Less than 5.7 percent

Oxidized LDL or Measured LDL Cholesterol

This test is for those with a history of LDL cholesterol higher than 110 milligrams/deciliter.

Elevated low-density lipoprotein (LDL) cholesterol is one of many risk factors for cardiovascular disease. However, oxidized LDL (oxLDL) is a more important marker of disease risk than total LDL, because oxidized LDL is more atherogenic (plaque formation-promoting) than native LDL.

Oxidized LDL also promotes endothelial dysfunction, progression of atherosclerotic plaque, and destabilization of atherosclerotic plaque.

Measured LDL, also called “direct LDL,” measures the concentration of LDL cholesterol in the blood rather than calculating it using measurements of other lipids. Usually, circulating LDL cholesterol is calculated from the measurements of total cholesterol, high-density lipoprotein (HDL) cholesterol, and triglycerides. The results of calculated LDL are less reliable when LDL is low or triglycerides are high.

Favorable ranges

oxLDL: less than 60 units/liter
Measured LDL: less than 100 milligrams/deciliter

Ferritin

Ferritin is a protein that stores iron. A low ferritin level in the blood indicates iron deficiency. The iron in plant foods is less absorbable than that from animal foods, and some people on a vegan or near-vegan diet, especially women who are pregnant or of childbearing age, may require iron supplementation. Having too much iron can also create health problems.

Favorable ranges

Men: 50–336 micrograms/liter
Women: 40–307 micrograms/liter
Note: Iron supplementation guidelines based on ferritin concentration are provided in the Personalized Vitamin Advisor and General Supplement Guidelines.

Insulin-Like Growth Factor 1

This test is for those 75 years old and older. Insulin-like growth factor 1 (IGF-1) is a growth-promoting hormone important during childhood and adolescence. IGF-1 levels peak during our teens and 20s and then decline as we age. In adults, circulating IGF-1 is primarily determined by protein intake; animal protein increases IGF-1 more than plant protein, and dairy protein is the strongest IGF-1 elevator. A high IGF-1 level is linked to accelerated aging and an increased risk of cancer and premature death.

However, it's possible for IGF-1 to be too low, especially in older adults. Adequate IGF-1 levels are required to maintain bone mass, muscle mass, and brain function.

Favorable range:

100–160 nanograms/milliliter

Omega-3 Index

The long-chain omega-3 fatty acids DHA and EPA are usually supplied by fatty fish. DHA and EPA are important structural and functional components of brain and retinal cell membranes, and have anti-inflammatory and cardiovascular benefits.

Studies have linked a low omega-3 index (below approximately 5 percent) with an increased risk of cognitive decline in older adults. Conversion of alpha-linolenic acid from plant foods to DHA and EPA is limited, and consuming preformed DHA and EPA (preferably from an algae-derived supplement) is the most reliable way to increase omega-3 levels in the blood. Adequate levels can be confirmed with an omega-3 index test. The omega-3 index is a measure of the percentage of fatty acids in red blood cell (erythrocyte) membranes that are made up of DHA and EPA.

Favorable range:

Less than 5 percent



Vegetarians can get most nutrients easily, but some vitamins are easier to get from animal foods.

FLOORTJE/GETTY IMAGES

Joel Fuhrman, M.D. is a board-certified family physician, seven-time New York Times best-selling author and internationally recognized expert on nutrition and natural healing. He specializes in preventing and reversing disease through nutritional methods.

Researcher Provides Diet Plan for a Safer Tan

How leaving behind toxic sunscreen chemicals can save our health—and help the planet

JANIS SIEGEL

Author, health coach, and health advocate Elizabeth Plourde has been on a one-woman crusade for more than a decade to see the use of all sunscreens banned worldwide.

Along with her editor-in-chief and publishing partner husband, Marcus, she's waging an education war against misinformation that leads consumers to believe that they're preventing skin cancer by using commercial sunscreens.

“We've been totally sold the propaganda, and it is rampant,” Plourde told The Epoch Times from her home in southern California. “The statistics don't support the claims. There are no sunscreen chemicals that are safe. The industry says, ‘Use it or you'll get cancer.’”

As a licensed clinical laboratory scientist, Plourde, who earned degrees in psychology and biological science, also practices as a North American Menopause Society-certified menopause practitioner.

The scientist and researcher-turned-health warrior once worked with state-of-the-art medical laboratories focusing on cancer and DNA research.

Today, she's relentlessly focused on ex-

posing the life-changing effects of the toxic chemicals in sunscreens.

The extensive research from Plourde's first book, “Sunscreens Biohazard: Treat as Hazardous Waste” (2012, New Voice Publications), paints a compelling picture of our relationship with the sun and sunscreen through more than 500 studies on cancer-causing chemicals, cancer, vitamin D3, other nutrients, and much more.

Her 2019 book, “Sunscreens—Biohazard 2: Proof of Toxicity Keeps Piling Up” (New Voice Publications) provides compelling research from more than 50 additional studies that continue to show the lack of evidence for sunscreens preventing skin cancers, specifically melanoma, the deadliest form, even as the media and sunscreen manufacturers continue to make the claim.

Instead, she has found that they contain cancer-causing, hormone-disrupting, and coral reef-killing chemicals that harm us and destroy our environment across the globe.

“It's a multimillion-dollar product, and they're making a lot of money,” Plourde said. “We need to stop using plastics and stop using sunscreens. My major goal is to educate the public.”

In a life-changing moment for her, Plourde came across a 1994 study published in the Journal of the National Cancer Institute that was so disturbing, it propelled her toward more research and toward writing her first book.

The study, conducted at the M.D. Anderson Cancer Center in Houston, applied sunscreen to mice and found that while it was protective against sunburn, it wasn't protective against melanoma.

Without conclusive data, researchers suggested that sunscreens may even be causative of skin cancers. They also noted that all skin cancers in the United States continued to rise steadily, by nearly 4 percent each year. However, they were unclear about how the sun's ultraviolet rays affected melanoma in humans, although other, less deadly types of cancer, such as squamous and basal cell, had been well established as related to sun exposure.

“But no such direct and incontrovertible relationship with cumulative sun exposure has been found for melanoma,” researchers told The New York Times in an article published at the time of the study.

“There is molecular evidence that sunlight causes basal cell and squamous cell carcinomas, but such evidence is lacking for melanomas.”

Researchers recommended sensible and limited sun exposure and the use of protective clothing.

In her 2019 research, 25 years later, Plourde said not much has changed.

“In 1994, the Journal of the National Cancer Institute study staggered me to keep working,” she said. “To do this to us and say that it stops melanoma, we've been brainwashed. Melanin is the very best

sunscreen protection.”

Rather than coating the skin with a concoction of the 16 sunscreen chemicals known to be toxic to adults and children, Plourde is imploring sunscreen users everywhere to use a natural approach to sunning and tanning.

Her recommendations focus on limited sun exposure while eating a burn-protective high antioxidant diet and letting the skin's own melanin provide natural sun protection. When the body's melanin is depleted, that's its built-in signal that it's time to get out of the sun as the skin begins to turn pink or red.

“Melanin is protective against radiation,” Plourde said. “Gradually increase your tan in the spring. Sunbathe before 10 a.m. and after 2 p.m., and wear hats and long sleeve shirts.”

According to Plourde, the research also shows that the chemicals in sunscreens are hormonally active, meaning that they mimic the size and shape of human hormones.

“These faux hormones fool the body's hormone receptors and then trick the body into recognizing and accepting them, according to Plourde.

“Many endocrine disrupting chemicals, EDCs have the ability to disrupt normal hormone functioning because they are so similar in structure that they can take the place of the organism's own hormones which can prevent the body's natural hormones from carrying out its essential functions,” she wrote in Biohazard 2.

Chemicals in sunscreens, such as benzophenones, camphor, cinnamates, and PABA, have been shown in studies on rats to have estrogenic effects, according to

Plourde. The research shows that we need to avoid sunscreen chemicals because they're shown to promote endocrine activity.

Sunscreens also contain two androgenic or male hormone-blocking chemicals.

And lest you think that sunscreens that tout so-called natural ingredients are a way around all the toxic chemicals—think again.

Aisles of sunscreen products that tout “no phthalates” or “oxybenzone and octinoxate-free” or “hypoallergenic” also aren't safe. According to Plourde, don't be fooled by products that are labeled “natural.”

“The current sunscreen marketing strategy is to label them as ‘All Natural—No Chemicals,’ however, these products generally contain titanium dioxide and/or zinc oxide,” she wrote. “While the manufacturers and wholesalers are claiming these are natural and safe, they are not.”

So how can we enjoy the long, sun-filled days of summer and throughout the year and still be protected from too much sun?

In her newest book, Plourde gives read-

ers everything they need to prepare natural sun protection in their own kitchen. Her natural approach to tanning includes eating a high-antioxidant diet shown to be protective against ultraviolet, or UVA and UVB, rays.

“There's a massive amount of evidence that proves antioxidant foods and supplements prevent and even reverse oxidation damage solar radiation can create,” she wrote in her 2013 diet guide, “Sunscreens Biohazard: Diet and Guide to Safe Sunning.”

“This protection system consists of antioxidant substances which form protection chains. Carotenoids, enzymes, and vitamins A, C, E, and D are the most important substances forming the protective system in the human skin.”

Plourde said it takes about three weeks to build up sufficient antioxidant protection in your skin, and then you can safely tan—until your melanin runs out, that is.

In her diet guide, she gives sun worshippers a thorough list of foods in all food groups and provides their antioxidant content to help sunbathers make the best food choices.

“We've got to make our whole diet antioxidant and eat as many antioxidants as we can,” Plourde wrote. “Antioxidants rise up in your skin and the melanin builds up in your skin. We need an antioxidant diet.”

Janis Siegel is an award-winning news journalist and columnist that has covered international health research for SELF Magazine, The Times of Israel, the Fred Hutchinson Cancer Research Center, and others. Ms. Siegel launched a health column featuring cutting edge research from world-class academic institutions.

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Cognitive Benefits of Magnesium L-Threonate

Magnesium L-threonate showed beneficial effects on anxiety and cognitive function in adults.

300

crucial bodily functions rely on the body having adequate amounts of magnesium.



ALL PHOTOS BY SHUTTERSTOCK

placebo. ... Cognitive fluctuation was also reduced," the study reads.

"The study population had more severe executive function deficits than age-matched controls from normative data and MMFS-01 treatment nearly restored their impaired executive function, demonstrating that MMFS-01 may be clinically significant. ... The current study demonstrates the potential of MMFS-01 for treating cognitive impairment in older adults."

Scientists Double Down on Reversing Brain Aging

To come to that conclusion, the study conducted baseline cognitive testing, with the first follow-up testing six weeks later. Then, for 12 weeks, study subjects were randomly dosed daily with either placebos or 1,500 to 2,000 mg of MgT, depending on body weight, and cognitive tests were repeated at six-week and 12-week intervals in the areas of executive function, working memory, attention, and episodic memory (the ability to recall fleeting events).

Significantly, the most startling finding was that not only does MgT enhance performance on individual cognitive tests in older adults with cognitive impairment, but it also serves to reverse brain aging by more than nine years. The study's findings revealed four significant results from MgT use:

1. Improved body magnesium status—After 12 weeks, two things were noted in the treated group: They exhibited significantly increased red blood cell magnesium concentration, indicating high circulating levels of magnesium in the body, as well as significant urinary output of magnesium, showing that large amounts of magnesium were absorbed.
2. Improved cognitive abilities—Visual attention and task switching revealed (in some cases, as early as six weeks) increases in performance speed for executive function and cognitive processing. Notably, overall composite scores rose steeply compared with baseline scores and with placebo recipients at weeks six and 12.
3. Reduced fluctuation in cognitive abilities—Cognitive functions that are worse some days than others is one sign that mild cognitive impairment may be developing. Those on the placebo showed notable fluctuation in their cognitive scores, while the MgT group reflected mostly positive changes.
4. Reversed clinical measures of brain aging—Perhaps the most significant finding, it explains how MgT can "turn back time" in aging brains.

MgT and the Blood-Brain Barrier

MgT boosts the magnesium levels in your

brain when taken orally because of its ability to cross the blood-brain barrier. Once it's in your brain, it increases the density of synapses—the communication connections between brain cells. What's more, MgT increases this function in precisely the places needed.

The importance of getting it to your brain shows why it isn't as simple as adding magnesium to your diet, as MgT works differently from typical magnesium, which doesn't reach the brain to change the factors of brain aging.

Even raising blood magnesium levels by 300 percent (known as "induced hypermagnesemia") doesn't change cerebrospinal fluid levels by more than 19 percent. An all-encompassing study showing the complex regulatory functions of the blood-brain barrier notes:

"The environment exerts profound effects on the brain. A large body of evidence shows that brain plasticity is strongly affected by exposure to stimulating environments, with beneficial consequences throughout the entire life span."

One reason these discoveries were deemed critical is that there's a connection between a loss of synaptic density, brain shrinkage, and subsequent cognitive decline, the study authors said.

Understanding How MgT Rejuvenates Aging Brains

According to researchers, the brain doesn't age at the same rate as the rest of the body. For instance, a 60-year-old can have a brain that essentially functions like that of someone a decade older. How that varies is measurable via performance test scores as well as physiological parameters. It can also happen in cases of traumatic brain injury.

The MMFS-01 study shows an average chronological age of 57.8 years among participants. However, their cognitive function averaged 68.3 years of age—about a 10-year difference.

But supplementing with MgT made a dynamic difference: The subjects' collective brain age decreased from 69.6 at the start of the study to 60.6 in just six weeks' time—a nine-year brain age drop. The improvements continued through the 12 weeks, with the brain age at the end averaging 9.4 years younger, which closely matched their peers with healthy brains.

The takeaway is the remarkable difference that magnesium, and more specifically, MgT, makes in regard to turning back time in people whose brain age is greater than that of their chronological age.

Studies also show how increasing concentrations of magnesium in cultured brain cells from the hippocampus (where memories are stored and retrieved) boosts both synaptic density and brain plasticity. The reason this is important is twofold:

- Synaptic density is a measure of the structural integrity of brain synapses. Evidence suggests that greater synaptic density results in more efficient cognitive processing.
- Plasticity is a measure of the speed at which synaptic connections can change with new stimuli—it's essentially learning at the cellular level.

Sleep Factors, Anxiety Observed in Cognitive Decline

Researchers cited a number of earlier studies exploring factors contributing to cognitive decline, including sleep loss and anxiety disorders with perceived memory loss. Not surprisingly, people with this particular set of conditions are more likely to develop Alzheimer's, as the following studies can attest.

In a review published in 2013, researchers from several hospitals and research centers in St. Louis reported that symptoms of sleep disorders, anxiety, and disrupted circadian rhythms were common in patients with Alzheimer's disease. In their study objective, the authors wrote:

"Recent animal studies suggest a bidirectional relationship between sleep and amyloid-beta, ... a key molecule involved in AD [Alzheimer's disease] pathogenesis. This study tested whether [amyloid-beta] deposition in preclinical AD, prior to the appearance of cognitive impairment, is associated with changes in quality or quantity of sleep."

The upshot was that amyloid deposition was associated with an inferior quality of sleep, specifically worse sleep efficiency (the percentage of time in bed spent actually sleeping) in comparison with those without amyloid deposition, although sleep time was similar in both groups. Significantly, "frequent napping was associated with amyloid deposition," the study reads.

In 2007, scientists in Sweden followed 185 people for three years with no cognitive impairment, along with another 47 people with depressive symptoms related to mood, motivation, and anxiety. Interestingly, the scientists observed that "the predictive validity of mild cognitive impairment ... for identifying future Alzheimer disease ... cases is improved in the presence of anxiety symptoms."



Magnesium may boost synaptic density in the hippocampus.

Researchers are still studying the effects of magnesium L-threonate, but so far the results are promising.

Another 2013 study as a collaboration between researchers in California, associated aging with regional brain atrophy, reduced slow wave activity during non-REM sleep, and impaired long-term retention of episodic memories. The researchers found that age-related gray matter atrophy was linked to sleep disorders and impaired long-term memory.

What Does Calcium Have to Do With Magnesium?

There are a few little-known but important factors regarding magnesium. One is that, like other minerals, your body doesn't produce it, so it must be derived from an outside source. Second, magnesium works hand in hand with calcium, and the optimal ratio is 1-to-1.

However, doctors have mistakenly pushed women in particular to concentrate on their calcium intake to avoid problems with osteoporosis. With insufficient amounts of magnesium, your heart can't function properly. When the balance between the two favors calcium, especially with the 2-to-1 ratio promoted by doctors over the past 30 years, it can result in a heart attack.

In one study, high incidences of hip fractures in Norway were thought to be a result of an imbalance between the concentration of calcium and magnesium in municipal drinking water. In fact, 5,472 men and 13,604 women aged 50 to 85 suffered hip fractures. After an investigation, researchers concluded that increasing magnesium may help to protect against them.

In addition, keeping your vitamin K2 and vitamin D intake on par with magnesium and calcium is also important. The four work together. For instance, people whose magnesium intake was relatively high were shown in one study to be less likely to have a vitamin D deficiency, compared with people with an inadequate magnesium intake.

If you opt for a magnesium supplement, note that there are several different forms. Additionally, one way to get it is through taking regular Epsom salt baths or foot baths. This form of magnesium, magnesium sulfate, absorbs into your skin to raise your levels.

Essentially, since you get only one brain to last your entire lifetime, scientists believe that supplementing with MgT appears to be imperative for anyone wanting to preserve brain function or even to recover some function that's been lost.

To find the studies mentioned in this article, please see the article online at [TheEpochTimes.com](https://www.theepochtimes.com)

Dr. Joseph Mercola is the founder of [Mercola.com](https://www.mercola.com). An osteopathic physician, best-selling author, and recipient of multiple awards in the field of natural health, his primary vision is to change the modern health paradigm by providing people with a valuable resource to help them take control of their health.

Continued from Page 1

Magnesium is already recognized as a mineral required by the body for more than 300 crucial biological functions, such as contracting muscles, maintaining heartbeat, creating energy, and activating nerves to send and receive messages.

Despite its importance for normal bodily functions, a large percentage of the U.S. population is deficient in magnesium. About half don't get the recommended amounts: 310 to 320 milligrams (mg) for women and 400 to 420 mg for men. Presumed deficiencies vary depending on health status and age; for example, having heart disease and being elderly increase the risk for being deficient in magnesium, one analysis found.

But still, no matter the age, it's apparent that magnesium deficiency is a genuine health concern worldwide. In fact, in 2006, a French study of 2,373 subjects aged 4 to 82 concluded that 71.7 percent of men and 82.5 percent of women weren't getting adequate

amounts of magnesium.

People with low magnesium levels are at risk for a number of serious disorders, including cardiovascular disease, high blood pressure, high blood sugar, and other signs of metabolic syndrome, and osteoporosis.

A study published in the *Journal of Alzheimer's Disease* in 2016 notes MgT's benefits in the areas of anxiety, sleep disorders, and cognitive dysfunction in human adults. The randomized, double-blind, placebo-controlled, clinical trial took place at three separate institutions and involved participants between the ages of 50 and 70 with reported episodes of memory problems, sleep disorders, and anxiety.

In short, the study found that brain atrophy is a natural part of aging, but supplementation with magnesium L-threonate, also known as MMFS-01, for 12 weeks improved and even reversed symptoms in the study group.

"With MMFS-01 treatment, overall cognitive ability improved significantly relative to

Having heart disease and being elderly increases the risk for being deficient in magnesium.

50%

of all Americans don't get the recommended daily amount of magnesium.

Liver Disease: A New Risk From Hormone Disruptors

Endocrine-disrupting chemicals have far-reaching effects, including on our livers, researchers find

MARTHA ROSENBERG

In this series, we explore ways medical science, modern medicine, and lifestyles have taken us to an unhealthy extreme—and what alternatives and solutions may exist.

By now, most people are aware of endocrine-disrupting chemicals, or EDCs—and their dangers—but they may not be aware of their links to the most common liver disease of our time.

These chemicals mimic and disrupt hormone function and lurk in our food packaging, furniture, cleaning products, building materials, drinking water, gardens, cosmetics, and more. Many EDCs became popular as plastics replaced wood and other more expensive natural substances in manufacturing. EDCs that function as flame retardants became popular when much of the nation began smoking, more than 50 years ago, and deadly home fires began to occur more frequently.

Last summer, Emma Suttie, an acupuncture physician, told *Epoch Times* readers about the 12 worst EDCs, the harms they can cause, and how we can try to avoid them. Because EDCs are "ubiquitous and people are exposed to so many simultaneously, studying their health effects is complex, and the long-term health consequences remain unclear," she wrote.

Epoch Times readers also recently heard about the role EDCs can exert in obesi-

ty. Obesogens, a type of EDC, are found in personal care products such as makeup, shampoos, and soaps and are often overlooked as obesity factors when usually only the roles of diet and exercise are considered.

We also recently reported that higher concentrations of a type of EDC known as mono-ethyl phthalate, or MEP, in pregnant women was correlated with obesity in their offspring, specifically, an increase in "BMI [body mass index], waist circumference, and percent body fat in children between 5 and 12 years of age," regardless of the child's gender or age at onset of puberty.

It's known that these widespread chemicals can cause cancerous tumors, birth defects, and changes in the brain and immune system, as well as obesity and early puberty in those exposed to them. Now, scientists are identifying a new disease linked to EDCs—nonalcoholic fatty liver disease, or NAFLD.

NAFLD—A Rising Disease

Nonalcoholic fatty liver disease is the most common liver disease in the world. Marked by excessive fat accumulation in the hepatocytes, major liver cells, it's mostly seen in people who are overweight or obese. NAFLD can have no symptoms at first, yet can lead to diabetes, high blood pressure, kidney disease, heart problems in those with diabetes, cirrhosis, and even liver cancer. No specific medicine treats NAFLD, but doctors may treat accompanying high blood pressure, high cholesterol, obesity,

and Type 2 diabetes.

As cases of NAFLD increase, scientists are eyeing the role of gut microbiota in its development.

"The gut microbiota is involved in gut permeability, low-grade inflammation and immune balance, it modulates dietary choline metabolism, regulates bile acid metabolism and produces endogenous ethanol," reads a 2013 study published in the *Journal of Clinical Microbiology and Infection*. "All of these factors are molecular mechanisms by which the microbiota can induce NAFLD."

Since EDCs affect so many bodily systems—hormone, endocrine, respiratory, nervous, and immune systems—it should come as no surprise that they also affect the gut microbiota.

"Exposure to EDCs induces a series of changes including microbial dysbiosis and the induction of xenobiotic pathways and associated genes, enzymes, and metabolites involved in EDC metabolism," write scientists in a 2020 article in the *Journal of Nutrients*. "The products and by-products released following the microbial metabolism of EDCs can be taken up by the host;

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Processed foods are a leading culprit in liver disease, which makes eating healthy, whole foods the best way to avoid it.

therefore, changes in the composition of the microbiota and in the production of microbial metabolites could have a major impact on host metabolism and the development of diseases."

Obesity and poor Western diets may be driving NAFLD, but EDCs are clearly adding insult to injury by wreaking further havoc on the gut microbiota.

NAFLD Can Be Caused by Epigenetic Changes

Research published in *Nature Reviews Endocrinology* in 2017 concurs that there's a "growing epidemic" of NAFLD in Westernized countries and that EDCs may be a factor. But while the researchers write that EDCs have the "potential to influence the initiation and progression of a cascade of pathological conditions associated with

fatty liver," they don't indict gut microbiota as NAFLD drivers but rather point to epigenetic changes—alterations in the script that shapes genome behavior and decides which genes get turned on and off.

The researchers surmise that the well-known ability of EDCs to alter the activity of estrogen, glucocorticoids, thyroid hormone T3, and other nuclear hormone receptors alters the epigenome itself—the gene script which can then be passed from cell to cell and to the next generation without actually altering the genome's DNA.

Such gene scripting, in which someone's behaviors and environment actually change the way their genes work, is the key element that drives epigenetics and shifts genetic expression over time. This process is thought to be behind some of today's most stubborn diseases. For ex-

ample, research published in the *Iranian Biomedical Journal* in 2016 suggests that an EDC epigenetic change in cells called DNA methylation is correlated with Alzheimer's and Parkinson's diseases, schizophrenia, autoimmune and neurological disorders, and cancers.

Researchers also suspect that early-life exposure to EDCs may play a role in NAFLD development as it does in other EDC effects. For example, research published in the *Journal of Endocrinology* in 2018 states that "increasing evidence supports a developmental origin of liver disease, and early-life exposure to EDCs could represent one risk factor for the development of NAFLD later in life."

The Allure of EDCs

EDCs have become intrinsic in the manu-

facturing, food packaging, and home furnishing industries because of their efficiency and low cost. They are incorporated into personal hygiene products and cosmetics because consumers like the colors and fragrances that EDCs can produce. However, as consumers educate themselves about the dangers of EDCs, not only can they protect themselves from some of the dangers, they also can reduce the demand for such harmful products and the manufacturing of them. For example, "phthalate-free" now appears on the label of some personal care products, which is a direct outgrowth of consumers' buying preferences.

Just as with leaded gasoline and asbestos, regulators have been slow to recognize the harms of EDCs. But awareness of their danger is growing, especially as new conditions such as NAFLD are linked to the chemicals.

How to Avoid EDCs and Their Many Harms

The linking of NAFLD to EDCs is another reason to urge our lawmakers and public agencies to better regulate and outright ban the worst of these substances. But as regulation continues to lag behind research raising concerns for human health and safety, incorporating these lifestyle measures can help protect you from exposure to these omnipresent and unwanted chemicals.

- 1 Buy organic produce and unprocessed foods (herbicides, additives, and packaging can have EDCs).
- 2 Avoid fragrances in personal care products—even in your laundry

and dish soaps.

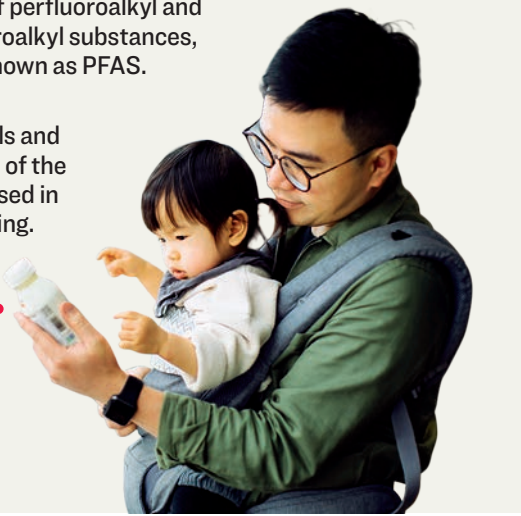
- 3 Avoid cooking with plastic and storing food inside it.
- 4 Wash your hands often; they may touch and transmit EDC chemicals.
- 5 Avoid harsh household cleaners.
- 6 Avoid canned goods—cans have often been lined with bisphenol A, commonly known as BPA.
- 7 Trade bottled water for a water filter attached to your sink or a water filter bottle.
- 8 Say no to thermal receipt paper, which is often coated with BPA.
- 9 Read labels on everything and maintain a high level of suspicion.
- 10 Vacuum with a HEPA filter and dust with a wet rag frequently to reduce EDC contamination in

- 11 your home. Furniture has often been manufactured with flame retardants, which are EDCs.
- 12 Reduce herbicide and pesticide use.
- 13 Make sure to eat enough iodine, which may protect from the EDC perchlorate.
- 14 Avoid nonstick pans.
- 15 Try to buy loose food that isn't packaged; wash produce thoroughly.
- 16 Avoid black plastic cooking utensils. Besides EDCs, they may also be made from recycled electronic waste plastic.
- 17 Avoid single-use plastic cups. Use reusable coffee cups instead.
- 18 Avoid paper containers with greaseproof linings. These packages often contain EDCs.

Don't buy stain-resistant carpets or rugs.

- 19 Avoid clothes that have treated to make them waterproof or stain resistant.
- 20 Don't eat microwave popcorn. The bags are a significant dietary source of perfluoroalkyl and polyfluoroalkyl substances, better known as PFAS.

Read labels and be mindful of the plastics used in packaging.



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NATURE AS MEDICINE

Nature

A Potent Treatment for Behavioral Issues

Our connection to the natural world is our connection to something infinite, beautiful, and uplifting.



Continued from Page 1

To free their children from the addictive grip of video games and social media, parents aim to nurture a love of something healthier in the real world. If that thing is the beautiful outdoors, it's a bonus for the brain.

Psychologist Nicholas Kardaras is a critic of Silicon Valley's playbook of techniques designed to keep kids engaged and hooked on apps and games. In his book "Glow Kids: How Screen Addiction is Hijacking Our Kids—and How to Break the Trance," he highlights studies showing that we're losing sensory awareness at a rate of 1 percent per year.

Yurich has witnessed that loss firsthand. "Beyond the effects of screen time on attention spans, there are also key developmental experiences that are missed when kids spend too much time in the two-dimensional world. Complex movements and sensory experiences that occur in nature help enhance the very way the brain functions," Yurich said.

Like many people, Jane Glover, a San Francisco-area mother of four said her fondest childhood memories revolve around catching tadpoles in a nearby

creek and sliding down hills on cardboard. She still enjoys nature and does her best to break the trance that media can cast on her and her children.

A photographer and writer, Glover has a blog about hikes in Marin County called Marinside Out, in which she offers resources on encouraging children to hike, what to put in your hiking bag, and links to recommended gear. Among her tips for getting kids to hit (and enjoy) the trails:

- Pack snacks.
- Take plenty of breaks.
- Pick a trail that caters to their skill level.
- Take time to examine small details along the way.
- Reward children afterward.
- Let them take photos or journal.
- Allow them to be the leader.
- Play games as you go.
- Pick trails with kid-friendly features such as waterfalls or rope swings.
- Let them bring a friend.

A Family Battles Screen Use

Glover has witnessed transformations in her children as the family stayed determined to take life outdoors.

Her 15-year-old daughter has taken her

Older adults who remain curious live longer, happier lives.



"Glow Kids: How Screen Addiction is Hijacking Our Kids—and How to Break the Trance" by Nicholas Kardaras, St. Martin's Press (2016).

phone along and complained about hiking, only to later express relief when the lack of a phone signal gave her a break from online drama. She's also completed several complicated hikes that have boosted her confidence and have become the subject of school reports while motivating her to keep hiking.

Glover's 13-year-old son used his own money to buy a gaming system that he later recognized he'd become addicted to. He came to his parents confessing he didn't like what the gaming was doing to him, then sold the system and bought a mountain bike.

"He now enjoys mountain biking instead of gaming, and he hasn't looked back," Glover said. "Since selling his Xbox, he's drawing again, being creative, and spending time outside mountain biking—things that make him feel good about himself that he can truly be proud of."

But the biggest transformation was with her 9-year-old son, who was lying about how long he was playing video games, ignoring time restrictions, arguing repeatedly about it, and throwing destructive tantrums.

"I was so worried that I even reached out to our pediatrician for advice on what

to do about his tantrums and mood dysregulation. I was convinced he needed psychiatric help or possibly medication," she said.

But once the video gaming systems were removed from the home, he began going outside more, visiting a local skate park and mastering tricks on his scooter, and stopped asking for video games after about a week.

"His tantrums have stopped, and he's a much happier boy," Glover said. "He's also much more focused at school. I truly believe removing the screens and spending time outdoors was the cure for him, and I feel very fortunate that he doesn't need medications to control his mood."

Mental Health Drugs Limit Curiosity

The Glovers are among a growing number of families that have or are considering medication for mental health struggles. In children where trauma is more likely, so is medication. But antipsychotics come with a troubling trade-off.

According to one study of Medicaid data in 13 states, 12.4 percent of children in foster care received antipsychotics, compared with 1.4 percent of children on Medicaid. The medications, used to

Netting More Time

We spend over 1,200 hours per year watching television, compulsively scrolling the internet, or playing video games. If we take a 10,000 foot view of our lives, we may find we actually do have enough time to get up and get outside.

A simple 30 minute walk a day outside in nature can do much to enrich our sense of wonder and curiosity about the world we live in.



make children less aggressive and more manageable, come with the high price of limiting motivation, play, and curiosity, according to Dr. Bessel van der Kolk in his book "The Body Keeps the Score."

Yurich, who is immersed in research for her own book due to come out later this year, said the addictive quality of technology undoubtedly strains family relationships, increases nagging, shortens attention spans, and fuels arguments.

"Kids have less capacity to deal with boredom and have increasingly more difficult times turning inward to deal with downtime as well as with stressful situations," she said. "We aren't an anti-screen movement, but we're attempting to restore balance to our lives that have increasingly swung in the direction of using technology for fulfillment, entertainment, and connection."

Two years after beginning to strategically implement long periods of nature into her family's weekly routine, Yurich added up how much time they were spending outside, which came to about 1,200 hours a year—matching the average amount of time American kids spend on screens. That eye-opening moment is what caused her to go public with their lifestyle.

She said that kids are motivated to keep playing when they're with friends, learning creativity, cooperation, and collaboration. Nature provides all the resources for this and ample opportunity to learn the art of getting along with others.

"There are studies upon studies that point to the emotional relieve that comes with stepping outside," Yurich said. "The sights, sounds, smells, and textures of nature all contribute to bringing our blood pressure down and helping us experience times of great peace and contentment."

Adults Need Nature, Too

For Glover, every moment outdoors is worthwhile, and her stress comes down as she steps away from the steady stream of emails and texts. Adults spend more than 10 hours a day behind a screen, according to 2016 Nielsen data.

"Answers just have a way of presenting themselves in a way that they can't when I'm distracted by all of the things that go with screens," she said. "I'm able to confront the challenges of the day with a clear mind just knowing that I have done something worthwhile with my day by being out in nature."

Eco-wellness and eco-therapy are trending subjects within mental health. Therapists are prescribing time outdoors as a solution for cognitive and emotional struggles. How much time is needed? A June 2019 study in Scientific Reports found that just two hours a week, either in small increments or one chunk, had substantial benefits on overall wellness.

You may not need the outdoors to foster

Beyond the effects of screen time on attention spans, there are also key developmental experiences that are missed when kids spend too much time in the two-dimensional world.

Ginny Yurich, founder, 1000 Hours Outside

Children spend on average

7 HOURS per day in front of a screen. This has become the norm in our modern society, but is it healthy?

curiosity as an adult, but the benefits of both nature and curiosity might be enough to motivate you to discover an outdoor hobby or experience.

In older adults, curiosity has been associated with longevity, according to a 1996 study published in Psychology and Aging. Even after taking into account age, smoking, cancer, and heart disease, those who rated themselves more curious at the beginning of the five-year study were more likely to be alive at the conclusion.

Curiosity also has a role in disease progression. Alongside hope, curiosity was studied over two years in more than 1,000 patients. Those who had higher levels of curiosity and hope had a decreased likelihood of developing hypertension, diabetes, and respiratory infections. The results were published in a 2005 issue of the journal Health Psychology.

What About Outdoor Sports?

It might be natural to wonder if organized sports outdoors is a good alternative, as it gets children, coaches, and parent spectators out of the house. The answer, according to Yurich, is sort of. The major difference is the opportunity for curiosity.

"I think any time spent outdoors is beneficial. It's important to know, however, that the unstructured and semi-structured experiences allow for unique growth opportunities for children that can't be found in the environments where adults lead," she said.

"Organized youth sports alone will provide some benefits, but they don't provide all of the benefits that open-ended play in nature gives to children."

Seipp, who really began her outdoor journey after reading the book "There's No Such Thing as Bad Weather" by Linda Akeson McGurk, continues to schedule outdoor play with her kids and has seen it ease poor behavior.

"When we were having difficult behavior at home and I was stressed out, we would go outside and the stress would just melt away," Seipp said.

"I could feel my body relax as they climbed logs and rocks and trees. Nature is big enough to absorb their hyperactivity and noise and energy."

Amy Denney is an award-winning journalist, certified Holy Yoga instructor and light therapy specialist. She works with clients looking for natural, side-effect free solutions to pain and stress.

Nature can inspire new creative pursuits that can help children (and adults) find deeper joy beyond the confines of screens.



The sights and memories we make outdoors give us something worth remembering and sharing.



This world offers endless experiences to enliven the senses and invigorate the spirit.

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MINDSET MATTERS

3 Tips to Move Past a Difficult Diagnosis

Debilitating health and devastating diagnoses need not rob you of a life filled with purpose.

AMY DENNEY

There's a large swath of healing that exists somewhere between complete denial of tragedy and allowing trauma to swallow your identity completely.

Jennifer Guttman, a clinical psychologist who specializes in giving people a sense of personal control, calls this space "assimilating into the narrative of your life." The work, often involving cognitive behavioral tools, is something she frequently undergoes with clients who are dealing with difficult diseases such as cancer, Type 1 diabetes, and rheumatoid arthritis.

"First thing, it's important to face it head on, because most people tend to avoid it," she said of people newly diagnosed or facing new challenges. "Passivity leads

to a lack of empowerment."

It's common for people to get stuck in the denial phase of grief when dealing with unexpected health issues, but there are techniques to help you move through even the worst situations. The benefits of doing so reach beyond a better emotional outlook and include a higher likelihood of getting the nutritional and medical care you need for your diagnosis, Guttman said.

Those who integrate their diagnosis into the story of their lives, in part by finding their purpose within it, tend to be those who take charge of their illness, she said. They ask more questions, take notes at appointments, use a support system, and find ways to get help at every phase.

Not everyone who gets a devastating or unexpected health diagnosis will suffer from emotional trauma. One 2020 study in the journal Annals of Burns and Fire Disasters found that while more than 90 percent of patients with burn injuries experienced stress symptoms, about one-third developed post-traumatic stress disorder (PTSD).

Trauma experts aren't exactly sure why

only some people in identical scenarios develop PTSD, but it can often lead to shame, despite evidence showing that actual changes occur in the brain of traumatized people, according to "The Body Keeps the Score," a book on healing

Illness can amplify itself in our minds. It's critical to look beyond the diagnosis to what life still offers.



KATERYNA ONYSHCHUK/SHUTTERSTOCK

trauma by Dr. Bessel van der Kolk.

Stress symptoms are varied but can include headaches, rapid heartbeat, acid reflux, constipation or other gastrointestinal distresses, trouble sleeping, muscle contractions such as jaw clenching, and neck and back pain.

PTSD symptoms fall under the categories of reliving the event, avoiding feelings or thoughts about the event, having more negative thoughts than before the event, and feeling hyperaroused (on edge or keyed up).

It's important for patients to be honest with themselves and allow themselves to feel emotions such as grief, sadness, and anger. But then they need to keep moving through the feeling and integrate the experience into their identity, being able to talk about it more factually without the crippling emotions.

"The more you talk about it openly, the more it's going to become part of the story of your life," Guttman said. "You don't want it to be a scarlet letter or define you but just another part of your identity."

This will help you be as in charge of an out-of-control situation as you can be. It's a good idea, she said, to have a strong support system that includes a spouse, parents or children, clergy, a support group, and a mental health professional.

A healthy support system will come in handy when you implement these techniques to face your emotions.

Learn to Live in the Present

Perhaps the most courageous act of integrating a disease into your story is to learn how to live mindfully in the present.

"You think you're escaping having to deal with the pain of it all. Your body knows it's still happening," Guttman said. "Part of denial is detachment from feelings. It's extra painful to sit with what's happening after the denial phase. People don't like to sit with uncomfortable feelings."

Mindfulness is important because it cues your body that the illness isn't in control, she said. You can only control the present, and part of that is to avoid negative forecasting and making dark predictions about the future, which is a temptation with a lot of illnesses.

Center your future plans on your relationships, goals, and your purpose, Guttman said.

Embrace Gratitude

It's easy when you're sick to dismiss positive things and experiences due to what Guttman calls "foreboding joy," a sense that everything is going to fall apart again or eventually.

Watch out for minimization, she said, by embracing experiences and people for all

they're worth.

"Rejoice in as much memory making as possible," Guttman said. "Continuing to live life and not giving up on life is super, super critical."

The findings in a study published in The Journal of Positive Psychology in January 2020 show that gratitude is a simple but effective intervention that improves health behaviors and leads to better outcomes for patients with cardiovascular disease.

Center your future plans on your relationships, your goals, and your purpose.

Journal Your Way Out of Negative Thoughts

Logic is a powerful tool for any negative emotion, and one of the best ways to use logic is to visualize it.

"Journaling is a really good thing for people to get out of their heads," Guttman said. "When you write something down, it's easier to see errors in your thinking."

The negative thought spiral begins to unwind faster on paper. According to a 2015

study published in the Journal of Contemporary Psychotherapy, narrative journaling is an effective and useful tool for PTSD patients, especially those who are struggling to discuss events.

Cling to Your Purpose

Assimilating your narrative into your life makes the experiences with your health part of your overall story and purpose. This contributes to your agency, a term used in psychology to refer to people who are able to remain in control of their own lives.

Gilda Radner is a great example of someone who created purpose within her diagnosis to empower herself. The iconic comedian died in 1989 after a battle with ovarian cancer, but she wrote and spoke about her illness often.

"She was able to stay in charge of her life and not let the cancer be in charge of her," Guttman said. "Purpose is extra important when you're ill."

Continue to make goals, even if they can't be as grandiose as previously, she said. Micro goals, such as getting out to have coffee with a friend or walking to the end of the block, help to propel you toward hope.

She added that it's important for those who form support systems to also nourish themselves in similar ways.

Guttman noted that since the pandemic,

more people are feeling stuck than ever. Some of them are being dealing with long-COVID, but many others are set back due to the psychological impact of the past few years.

"I do know there's definitely more people who are depressed and anxious than ever," she said. "Anxiety and depression cause brain fog in themselves."

The good news is that not only are her long-COVID patients improving, but she's been inspired by patients with grim diagnoses who continue to keep optimistic control over their lives in all manner of circumstances. She's also seen plenty of patients who lived with agency and purpose until they passed away.

"There are people who have super-positive outlooks and are amazing and super inspiring," Guttman said.

Those who still struggle should begin building a support system right away. And if you have feelings of hopelessness or suicidal thoughts, you should contact a mental health professional or the suicide hotline—988—right away.

Amy Denney is an award-winning journalist, certified Holy Yoga instructor and light therapy specialist. She works with clients looking for natural, side-effect free solutions to pain and stress.



1 in 8
PEOPLE
lived with a mental health condition in 2019.

1 in 3
OF
people suffering from depression and anxiety have trouble finding a therapy that works for them.

Mental Health in Your Cup of Tea

There's much you can do to ease any mental health burdens and live happier

LISA ROTH COLLINS

In honor of World Mental Health Day (which is Oct. 10), we want to lift a cup of tea to all those who strive to navigate their lives while living with mental health issues, such as depression, schizophrenia, anxiety, mood swings, and other challenges. We also salute all the mental health professionals who work hard to help those who seek assistance.

Most of all, we want to emphasize the importance of good mental health and discuss several tools that everyone can use to support it.

Mental Health Today

The theme for World Mental Health Day is "Make mental health and well-being for all a global priority." This focus, which was set by the World Federation for Mental Health, is especially poignant and critical now, given the stress and anxiety surrounding the recent global health crisis.

According to the World Health Organization, individuals with severe mental health conditions die as much as 20 years early because of preventable physical conditions. In 2019, approximately 970 million people (one in eight) worldwide lived with depression and anxiety disorders or other mental health conditions, such as bipolar disorder, post-traumatic stress disorder, eating disorders, autism, and schizophrenia. Most of these individuals don't have access to effective care.

There are several things you can do that can go a long way toward supporting your mental well-being and managing mental health challenges. The Mental Health Association's guidebook, "Our Best Mental Health Tips Backed by Research," offers research-backed practices that can help. These include spending more time in nature, talking with someone you trust for support, doing volunteer work and other acts of kindness, being aware of any use of drugs or alcohol, planning things to look forward to, and adopting a healthy diet.

If you are looking for better focus and attention, then the EGCG (epigallocatechin gallate) found in green tea may help.

Cup of Tea, Anyone?

Sometimes, the little things in life can mean a great deal. Take a cup of tea, for example. For many years, scientists have been evaluating the effects of tea on our health, including mental health, and the findings have been enlightening.

"Tea is calming, but alerting at the same time," according to psychopharmacologist Andrew Scholey at Swinburne University of Technology in Melbourne, Australia.

This paradoxical effect means that individuals may derive two seemingly opposite benefits from tea.

That isn't to say that tea is a magic potion. Neuropsychiatrist Stefan Borgwardt of the University of Basel in Switzerland noted that "it's important not to overestimate the effects." However, since about one-third of people with depression and anxiety never find a therapy that works for them, adding a natural remedy that may offer some relief is welcome.

Mental Health Benefits of Tea

Scientists have seen some positive results among individuals who consume tea versus those who don't. In a study of nearly 9,700 adults, the authors found that those who drank at least three cups of green tea per week had a 21 percent lower prevalence of depression than their peers who didn't drink the tea.

L-theanine is an amino acid found in high amounts in green tea (especially matcha) and in lesser amounts in black, white, and oolong. A 2016 study found that participants who consumed 200 milligrams of L-theanine daily (that's the amount found in eight cups of tea) showed lower levels of the stress hormone cortisol and were more relaxed after participating in stressful tasks than those who consumed a placebo.

Proof of the relaxing effects was seen in magnetoencephalography, which shows brain activity. The benefits of L-theanine may be associated with its ability to pass through the blood-brain barrier and directly impact the brain. It also has an effect on the body's stress response system by reducing cortisol

and perhaps enhancing gamma-aminobutyric acid levels, which lowers anxiety.

If you're looking for better focus and attention, then the EGCG (epigallocatechin gallate) found in green tea may help. Research shows that consuming EGCG can result in a relaxed yet attentive state of mind. Like L-theanine, it can pass through the blood-brain barrier and enhance cognitive function.

Several herbal teas have also been shown to affect mood and help with relaxation and focus. Consider adding one or more of these teas to your daily routine.

Ashwagandha: This tea may reduce symptoms of depression and anxiety. This ancient herbal tea may also lower stress hormone (cortisol) levels. In a clinical trial, experts found that individuals who took ashwagandha had stress-relieving effects and lower cortisol levels than participants who didn't take ashwagandha.

Chamomile: This tea may help with anxiety. In a 2016 study, people with a generalized anxiety disorder who consumed chamomile tea showed a reduction in their moderate to severe symptoms.

Lemon balm: This tea is for depression and anxiety. This member of the mint family has a calming effect. A 2014 study shows that individuals who consumed lemon balm tea or yogurt containing lemon balm showed improved mood and anxiety.

Bottom Line

Attaining and maintaining optimal mental health continues to be a challenge worldwide, and experts are always striving to find effective preventive and therapeutic remedies. Including teas in your daily routine may play a helpful role in this quest.

Lisa Roth Collins is a registered holistic nutritionist and also the marketing manager at NaturallySavvy.com, which first published this article.

Drinking tea is an integral practice in many cultures—and it comes with mental health benefits.

3 Drinking 3 cups of tea a week is associated with a 21 percent lower prevalence of depression.



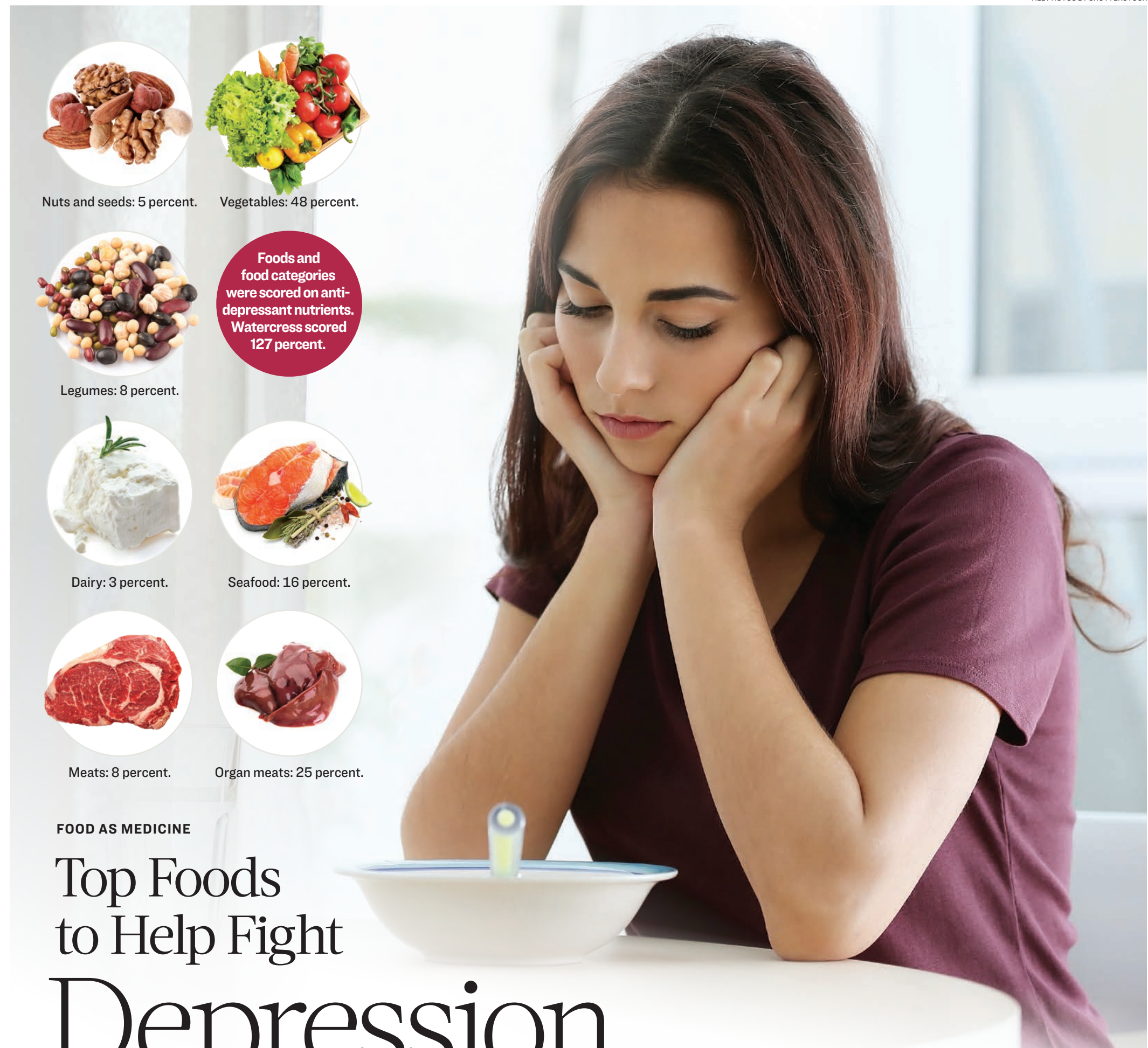
Ashwagandha.



Chamomile.



Lemon balm.



Nuts and seeds: 5 percent. Vegetables: 48 percent.

Legumes: 8 percent. **Foods and food categories were scored on anti-depressant nutrients. Watercress scored 127 percent.**

Dairy: 3 percent. Seafood: 16 percent.

Meats: 8 percent. Organ meats: 25 percent.

FOOD AS MEDICINE

Top Foods to Help Fight Depression

Researchers have ranked which nutrient-dense foods best help alleviate depressive symptoms

JOSEPH MERCOLA

While there are hundreds of articles, dietary strategies, government agencies, and nonprofits meant to offer information on how to fight disease and optimize your health, you would be hard-pressed to find any that concentrated on diet and brain health or mental disorders before 2007.

Given how much we've learned about the impact of diet on mental health, that lack of insight is surprising.

In September 2018, researchers conducted a systematic review to look at the available research on nutrient-dense foods to find the best foods to eat to help fight depression.

Dr. Laura R. LaChance and a team from the University of Toronto and Drew Ramsey from the department of psychiatry at Columbia University's College of Physicians and Surgeons tackled the initiative.

Continued on Page 14

Smaller fish, such as sardines, anchovies, and herring, generally have fewer contaminants and are high in omega-3 fats.

Trouble Swallowing? It May Be Eosinophilic Esophagitis

The esophagus condition is triggered by reactions to food and often can be resolved or dramatically improved by a food elimination diet

MELISSA DIANE SMITH

A few years ago, a client wrote to tell me that her teenage son had just been diagnosed with eosinophilic esophagitis and was wondering if there were any



DIMABERLIN/SHUTTERSTOCK

nutritional treatments for it.

Last autumn, a childhood friend emailed me telling me he had been diagnosed with the same condition.

And then a few weeks ago, I learned that an out-of-town male relative had also been diagnosed with it.

What is eosinophilic esophagitis? Is it just a coincidence that three people in my sphere have been diagnosed with it in just a few years, or is its prevalence increasing?

What Is Eosinophilic Esophagitis?

In the early 1990s, doctors began describing a new

1 in 2,000 adults in the United States are estimated to be affected by eosinophilic esophagitis.

condition called eosinophilic esophagitis (known as EoE) affecting the esophagus, the muscular tube that leads from the mouth to the stomach that is often called "the food pipe." EoE is a chronic immune system disease in which eosinophils, a type of white blood cell, build up in the esophagus, causing inflammation and injury to the esophagus as a reaction primarily to foods but sometimes to airborne allergens or acid reflux.

EoE is now considered a major cause of digestive illness.

Researchers once thought EoE was a part, or type, of gastroesophageal reflux disease (GERD), but they eventually determined that EoE and GERD are separate conditions.

Continued on Page 10

Eosinophilic esophagitis symptoms occur during or immediately after swallowing while eating a meal.

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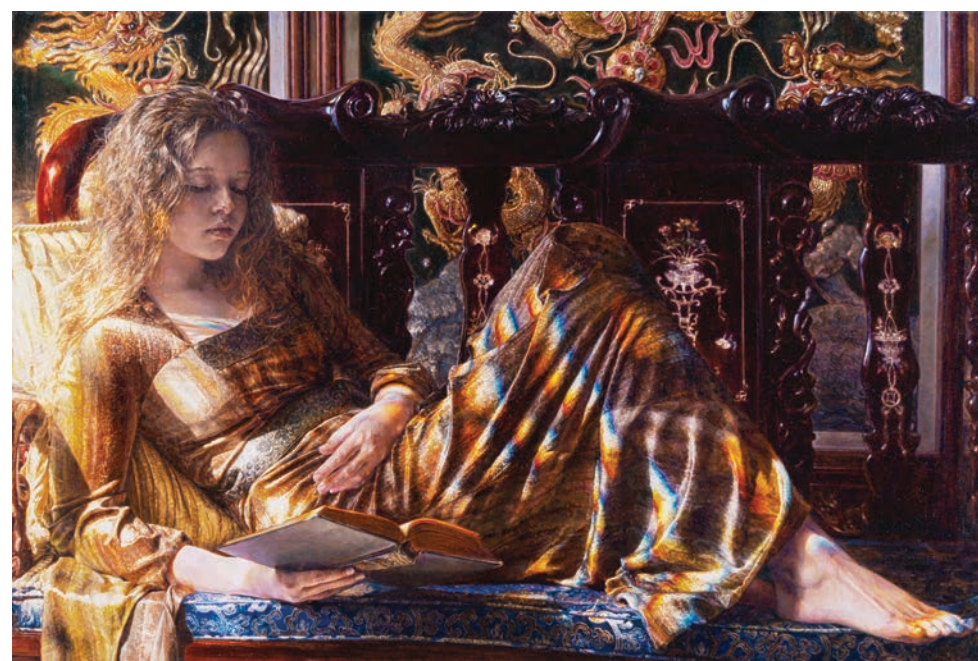
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THE EPOCH TIMES



Eosinophilic esophagitis can occur at any age, but it is three times more common in men, especially white men in their 20s to 40s.

Trouble Swallowing? It May Be Eosinophilic Esophagitis

Continued from Page 9

In a 2020 review article on EoE, United Kingdom researchers explained that people who have EoE may use the terms “indigestion” or “heartburn” but not realize their symptoms differ in nature from discomfort felt by people with acid reflux. The symptoms in EoE occur during or immediately after swallowing while eating a meal, while the symptoms of GERD occur 30 minutes to two hours after eating a meal.

Difficulty swallowing is the most com-

mon symptom, and EoE sufferers try to adapt to it. They often are the last to finish a meal, use large amounts of liquid to wash food down, and sometimes suffer through episodes of food obstruction and regurgitating swallowed saliva, fluids, or solids until the food has shifted and passed.

Food obstruction is the most frequent emergency presentation of EoE, occurring in 20 percent of sufferers. EoE is identified in up to 50 percent of food obstruction cases and is the most common cause of food obstruction seen in emergency departments.

How Common Is EoE, and Why Is It Increasing?

EoE is estimated to affect 1 in 2,000 adults in the United States, according to a 2013 analysis. However, the authors wrote that this number may underestimate the true prevalence of the condition, because both the knowledge of the new hospitalization diagnosis code and the recognition of EoE are still increasing.

EoE can occur at any age, but it is three times more common in males, especially in white males in their 20s to 40s. This health problem also afflicts people who are predisposed to immune reactions, including food allergy, asthma, and eczema, and there's an association with autoimmune diseases, including celiac disease, Crohn's disease, ulcerative colitis, and rheumatoid arthritis. Research has demonstrated seasonal variation in EoE diagnosis, with an

Signs and Symptoms

According to the Mayo Clinic, there are multiple symptoms of eosinophilic esophagitis.

Adult Symptoms:

- Food impaction (when food gets stuck in the esophagus after swallowing)
- Dysphagia (difficulty swallowing)

- Pain in the center of the chest that doesn't respond to antacids
- Regurgitation (when undigested food comes back up)

- Vomiting
- Poor growth, weight loss, and malnutrition

Child Symptoms:

- Pain in the abdomen
- Food impaction (when food gets stuck in the esophagus after swallowing)
- Feeding difficulty in infants
- Eating difficulty in children

Infants can also have EoE.



The Step-Up 2-4-6 Elimination Diet

Another elimination diet variation, the step-up 2-4-6, is growing in popularity.



It starts with a 2-food group elimination diet, which eliminates all milk products and all gluten grains (not only wheat, but also rye, barley, oats, triticale, farro,

einkorn, spelt, and kamut).

If patients don't achieve symptom improvement on the 2-food group elimination diet, they can “step up” to a 4-food group elimination diet, eliminating milk and gluten grains, plus egg and soy/legumes.

If that doesn't resolve their symptoms, they can “step up” again to a 6-food-group elimination diet, which includes eliminating

milk, gluten grains, egg, and soy/legumes, plus nuts and fish/seafood.

A clinical trial published in The Journal of Allergy and Clinical Immunology in 2018 found that the step-up 2-4-6 elimination diet achieved EoE remission in 43 percent of children and adults. “A step-up approach results in early identification of a majority of responders to an empiric diet with few food triggers, avoiding unnecessary dietary restrictions, saving endoscopies, and shortening the diagnostic process,” the researchers concluded.

increase in EoE cases in the spring and summer months, suggesting that exposure to seasonal airborne allergens or foods more available during those seasons may play a role in its development.

Evidence also suggests that the numbers of new EoE cases have been rising. A review published in 2019 of nearly 30 studies in Europe and North America found that there has been a progressive increase in the number of new EoE cases, especially since the early 2000s.

Greater awareness of the disease and more widespread use of endoscopy—a flexible tube with a light and camera attached to it, typically used to help diagnose EoE—may play a role in the rise in cases. But research points to a true increase in the incidence of the disease.

The exact reasons for the rise in cases are unknown. Possible explanations about

why EoE is increasing include changes to food production, such as genetic modification of crops, pesticide use, and antibiotic or hormone use in livestock, as well as the increased use of acid-suppressing medications, which might change microbes in the esophagus to later increase the risk of food reactions and inflammation.

Nutritional Treatment for the Condition

It's important to diagnose and treat esophagitis. If it isn't properly diagnosed and treated, EoE may lead to the narrowing of the esophagus over time, and people who have EoE have an increased risk of multiple autoimmune diseases. Treatment options for the condition include swallowed steroids, proton pump inhibitors, periodic esophageal dilations, and food elimination diets.

The most natural and definitive therapy for EoE, which avoids virtually lifelong drug treatments and associated risks and adverse events from drugs and dilations, is for patients to identify their individual food triggers and eliminate them from the diet. Reactions to foods are well-known to trigger EoE but not through the release of immunoglobulin E (IgE) antibodies involved in true food allergy, but through some other undetermined immune mechanism, possibly through the release of IgG4 antibodies, according to a 2014 randomized, double-blind, placebo-controlled study. As of right now, there's no accurate test to identify food triggers connected with EoE.

Therefore, medical experts recommend an elimination diet to help identify food triggers, improve the condition, and directly address the underlying allergic mechanism that's leading to esophageal inflammation and damage. Practitioners

typically choose one of two types of elimination diets to recommend: the step-down 6-food elimination diet or the step-up 2-4-6 elimination diet.

How to Try an Elimination Diet for EoE. Successfully following an elimination diet involves a few important steps and adapting the diet in practical terms to your lifestyle. Also, keep in mind that foods that trigger EoE are highly individual. For those reasons, it's important to work with a nutritionist or practitioner who specializes in elimination diets for EoE so he or she can help tailor the most appropriate food elimination diet for you and guide you through the process.

When done successfully, completing a trial period of an elimination diet and then challenging yourself with each of the common EoE-triggering foods should not only resolve or alleviate discomfort in your esophagus, but also help you learn which foods are triggering the immune reaction and inflammation in your esophagus, so you can develop your own personalized therapeutic diet to prevent EoE and promote long-term esophageal health.

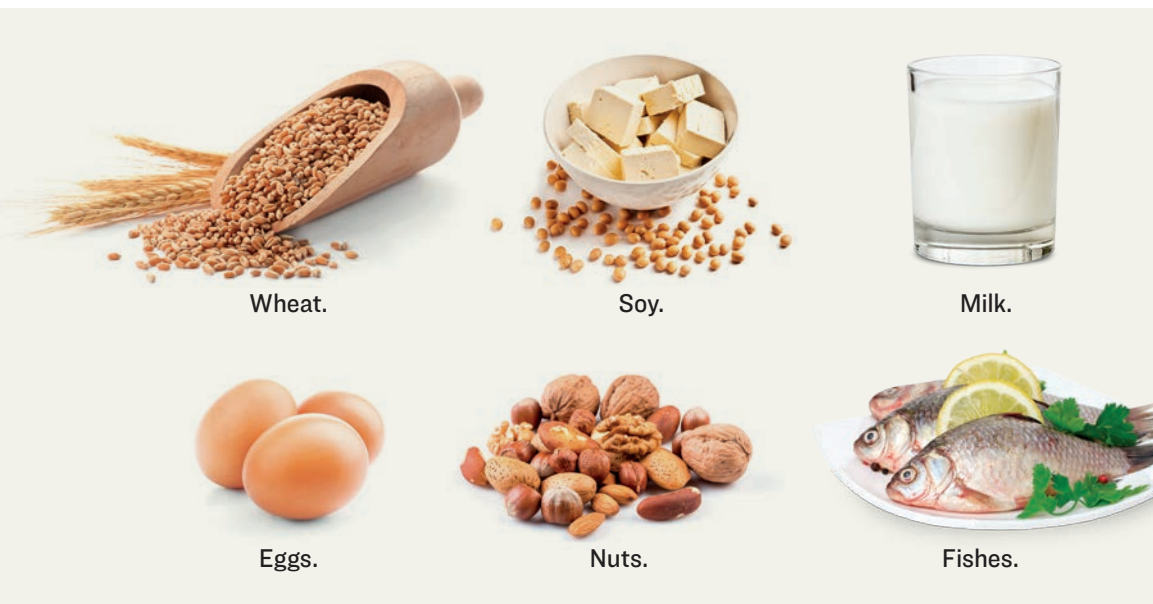
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The Step-Down 6-Food Elimination Diet

The step-down 6-food elimination diet eliminates the six foods most commonly associated with the immune reaction that leads to EoE. The six foods are wheat, milk, soy, eggs, nuts, and seafood/shellfish. EoE symptoms are checked along with biopsy (removing samples of tissue during endoscopy) after six weeks, then each food is slowly reintroduced every two weeks while symptoms are monitored

and recorded.

This elimination diet is quite restrictive but typically more effective. In a clinical trial conducted in 2012, 78 percent of patients had a greater than 50 percent reduction in their peak eosinophil density tests, and symptom scores of difficulty swallowing decreased in 94 percent of patients on this diet.



FOOD AS MEDICINE

Open Sesame! 10 Amazing Health Benefits of This Super Seed

This ancient medicinal food has been used for centuries, and researchers are discovering why

SAYER JI

Given the growing body of scientific support on its health benefits, sesame would be as much at home inside a medicine cabinet as inside a kitchen cupboard.

Sesame (*Sesamum indicum*) is one of the oldest cultivated plants in the world, prized as an oilseed for at least 5,000 years. While it's beginning to regain favor because of its exceptionally high calcium and magnesium content, few realize that it's also one of the most potent medicinal foods still commonly consumed today.

In fact, its history as a medicine goes back 3,600 years to Egyptian times, when it was listed in the scrolls of the Ebers as a favored medicine. Also, it's

believed that women in ancient Babylon used a mixture of honey and sesame seeds (halva) to prolong youth and beauty, and Roman soldiers ate the mixture for strength and energy.

In the past 20 years, a glut of scientific information has poured in demonstrating that sesame seed, and its components, have more than 100 potential therapeutic applications, which you can view on the GreenMedInfo sesame research page.

Here are just 10 evidence-based medicinal properties of this food medicine:

Diabetes: A study published in 2011 in the Clinical Journal of Nutrition showed that sesame oil improved the effectiveness of the oral antidiabetic

drug glibenclamide in Type 2 diabetic patients. Another study published in 2006 in the Journal of Medicinal Foods showed that the substitution of sesame seed oil as the sole edible oil lowers blood pressure and glucose in hypertensive diabetics.

High Blood Pressure: A study published in 2006 in the Yale Journal of Biology and Medicine showed that sesame seed oil had a beneficial effect in hypertensive patients on either diuretics or beta-blockers. Substitution of all dietary oils with sesame oil brought down systolic and diastolic blood pressure to normal, in addition to decreasing lipid peroxidation (bodily rancidity) and antioxidant status. One of the compounds identified behind sesame seed's antihypertensive effects are peptides that act as angiotensin I-converting enzyme inhibitors.

Gingivitis/Dental Plaque: Sesame seed oil has been used for oral health for thousands of years in the traditional Indian medical tradition known as Ayurveda in a process known as “oil pulling.” It involves swishing sesame seed oil in the mouth for prolonged durations and has been said to prevent teeth decay, halitosis, bleeding gums, and dry throat, and for strengthening the teeth, gums, and jaw. Clinical research now confirms that it compares favorably to chemical mouthwash (chlorhexidine) in improving plaque-induced gingivitis, and that it's capable of reducing *Streptococcus mutans* growth associated with oral plaque formation.

Infant Health/Massage Oil: A study published in the Indian Journal of Medical Research in 2000 showed that massaging infants with sesame oil improved both their growth and post-massage sleep, in comparison to control oils such as mineral oil.

Multiple Sclerosis (MS): In the animal model of MS, also known as experimental autoimmune encephalomyelitis, sesame seed oil protected mice from developing the disease by reducing IFN-gamma secretion, a key factor in initiating autoimmune inflammation and injury in the nervous system. It has also been researched for its potential beneficial role in another neurodegenerative condition, Huntington's disease.

Antibiotic-Induced Kidney Damage: Sesame seed oil protected against gentamicin-induced kidney damage in rats by reducing oxidative damage caused by the antibiotic.

Atherosclerosis: Sesame seed oil prevented the formation of atherosclerotic lesions in



It's believed that women in ancient Babylon ate halva to prolong youth and beauty. Roman soldiers ate it for strength and energy.

mice that were fed an atherogenic diet. The antioxidant and anti-inflammatory lignan found within sesame seeds, known as sesamol, has been identified to be partially responsible for its anti-atherogenic properties. In fact, sesamol has been shown to possess more than two dozen beneficial pharmacologically active properties, many of which may contribute to improving cardiovascular health.

Depression: The sesame lignin sesamol was shown to exert an antidepressant-like effect in behavioral despair in chronically stressed mice, specifically by modulating oxidative-nitrosative stress and inflammation.

Radiation-Induced DNA Damage: Sesame has been shown to protect against gamma radiation-induced DNA damage, likely through its antioxidant properties. It was capable of reducing mortality in radiation-treated mice, in part, by preventing intestinal and spleen damage. When compared to another powerful antioxidant, melatonin, it was found to be 20 times more effective as a free-radical scavenger.

Sesame seed may have over 100 therapeutic health benefits, including cancer-fighting properties.

Cancer: Sesame contains fat-soluble lignin with phytoestrogenic properties known as sesamin, which has been studied for inhibiting the proliferation of a wide range of cancer cells, including:

- Leukemia
- Multiple myeloma
- Colon cancer
- Prostate cancer
- Breast cancer
- Lung cancer
- Pancreatic cancer
- Lung cancer

Sesamin's anticancer effects have been linked to NF-kappaB signaling. Sesame's lignan content may actually be superior to flaxseed.

Sesame deserves to be recognized, along with garlic, honey, turmeric, and a select few other substances, as an easily accessible and affordable food-medicine that, if consumed regularly, could quite possibly save lives.

Sayer Ji is the founder of GreenMedInfo.com, a reviewer at the International Journal of Human Nutrition and Functional Medicine, co-founder and CEO of SysteMo Biomed, vice chairman of the board of the National Health Federation, and steering committee member of the Global Non-GMO Foundation. This work is reproduced and distributed with the permission of GreenMedInfo LLC. Sign up for their newsletter at www.GreenMedInfo.health

A ‘Super Antioxidant’ From Algae for Sunscreen?

Astaxanthin produced by marine algae may offer the solution we need for nontoxic sunscreen



JENNIFER MARGULIS

Even though they live by photosynthesis, algae can get too much sun, just as humans can. When faced with difficult conditions, including excessive sun, algae protect themselves by making a compound called astaxanthin.

“Astaxanthin is a ketocarotenoid, super antioxidant molecule,” wrote researchers in a 2022 review published in the *Journal of Basic Microbiology*.

“It has higher antioxidant activity than a range of carotenoids, [and] thus has applications in cosmetics, aquaculture, nutraceuticals, therapeutics, and pharmaceuticals,” they wrote, adding that it was “one of the high-valued microalgae products of the future.”

Astaxanthin is in the same biochemical class as beta carotene, found in carrots and other orange foods. But astaxanthin, first identified in lobsters, comes from the marine biosystem.

Lobsters don’t actually produce the pigment. They get it from consuming a species of algae called *Haematococcus pluvialis*, which then gives the crustaceans their red hue. In fact, this distinctive color produced from consuming the algae is also found in salmon, flamingoes, shrimp, and many other red-colored aquatic life.

H. pluvialis is a form of microalgae, made up of tiny individual units that live free-floating as plankton in the water—as opposed to macroalgae such as seaweed.

These algae live by photosynthesis and are normally green, thriving on sunlight. But excessive light can be harmful to them. The astaxanthin they produce protects them while still allowing the light they need through.

Astaxanthin Protects Algae DNA From Damage

Astaxanthin is actually a defense mechanism of the algae. *H. pluvialis* produces the pigment when it’s under environmental stress.

This stress can come from excessive light, heat, salt, or radiation, or from dehydration or a lack of nutrients. When stressed, the algae pauses its growth and goes into a dormant, protective form. It then produces astaxanthin to protect itself from harmful ultraviolet (UV) light. So, the pigment actually protects the alga’s DNA from damage.

We know that it’s beneficial to get sunlight on our skin and eyes every day. But we also know that too much sun exposure can burn the skin and has been linked to skin cancers. My husband’s grandfather and father both had many carcinomas removed. My husband believes if they had protected themselves better from the sun, they wouldn’t have had so many skin cancers.

At the same time, it has become increasingly clear that conventional sunscreens aren’t the answer.

America’s Sunscreen Problem

For one, conventional sunscreens are made of chemicals known to be toxic. The skin is the body’s largest organ. Smearing your skin—or your child’s skin—with products containing harmful chemicals is never a good idea.

For another, conventional sunscreens are often contaminated with known human carcinogens such as benzene.

Last year, Coppertone products were found to contain unacceptably high levels of ben-

zene, as reported by *The Epoch Times*. This July, the FDA announced a large recall of Banana Boat Hair & Scalp sunscreen sprays due to the presence of benzene in the “propellant that sprays the product out of the can.”

Ironically, in using sunscreen to protect ourselves from skin cancer, we may be exposing ourselves to cancer-causing chemicals.

Sunscreens block UV radiation in two ways: mineral and chemical. Many sunscreens have both mineral and chemical components. The once-popular surfers’ zinc oxide (remember when everyone at the beach had a white nose?) was a mineral sunscreen. Many sunscreens today still contain zinc oxide or titanium dioxide as a mineral block. They are simply white, reflecting both UV and visible light.

But, since nobody wants their face to look snow-white and shiny, sunscreen manufacturers have been making the particles in their products finer and finer. These nanoparticles are thought to confer benefits, including making medications more effective, because they are taken up by cells so effectively.

But nanotechnology is also highly problematic, as nanoparticles have been increasingly found to be harmful for human respiratory and cardiac health, according to a comprehensive scientific review published last year in *Frontiers in Sustainable Cities*. What’s more, though they’re found in a wide variety of sunscreens, cosmetics, and even foods, nanoparticles aren’t regulated.

Chemical sunscreen agents commonly include oxybenzone, octisalate, para-aminobenzoic acid (commonly known as PABA), and other related chemical compounds. These reflect UV light that causes DNA damage and skin cancer without turning the skin white. But many of these chemically active organic compounds have also been shown to have harmful effects on humans.

Lotion in the Ocean

Sunscreens are also harmful to the environment. Several common ingredients, including oxybenzone and octinoxate, wash off in the sea and freshwater bodies when we swim, and they get into the water treatment system when we shower.

These ingredients are highly poisonous to coral reefs, a foundation of the marine ecosystem. Without coral, the small fish that live on them die off, and larger sea creatures that feed on the small fish then starve. Between 6,000 and 14,000 tons of sunscreen go into coral reefs each year, Craig Downs, a leading researcher and head of the nonprofit Haereticus Environmental Laboratory, told *The Guardian*.

In a 2009 study conducted by the University of Toledo, scientists found that nanoparticles of zinc oxide and titanium dioxide can harm all living cells, from human to microbial, including bacteria beneficial to the soil and waterways, *Scientific American* reported.

But with advertising and public health campaigns trying to convince us that sunlight is harmful and sunscreen is necessary, what’s a responsible consumer to do?

Not Just for Algae

Enter astaxanthin. Though the Food and Drug Administration (FDA) prohibits companies that use astaxanthin in their beauty products from referring to it as a “sunscreen” or even as a sun protectant, astaxanthin appears to help humans as much as it helps algae.

Some cutting-edge small companies have started making skin serums contain-

Astaxanthin is in the same biochemical class as beta carotene, found in carrots and other orange foods.



Eating seafood containing astaxanthin, like wild-caught shrimp or salmon, is a natural way to protect the skin from sun damage.

ing astaxanthin. I first learned about it from Jane May Graves, the founder of Luxe Beauty, whom I met this summer while presenting at a health conference in Roswell, Georgia.

Graves told me that after her mom was diagnosed with stage 4, supposedly “incurable,” cancer, her family started taking inventory of the ingredients in every product they used. Graves became “obsessed with finding natural ways to heal [her mother’s] cancer,” she said in a 2021 interview. Part of her journey was eliminating all known and suspected carcinogens from their lives.

It was then that Graves found out about the harms of conventional sunscreens and other beauty products. And, despite the doctors believing her mom had only a few months more to live, her mom made a full recovery.

It was Graves who explained to me that astaxanthin can be applied externally or taken internally. Because it’s opaque to UV light, astaxanthin is effective in protecting animals, algae, and ocean coral from sun damage. When some friends invited us out on their boat, I slathered myself in Graves’s astaxanthin skin serum. Despite six hours in the hot sun, my skin didn’t burn.

My husband and I have also started consciously eating more foods high in astaxanthin, including wild-caught salmon and shrimp, and we recently started taking 12 milligrams of organic astaxanthin as a supplement.

A study published in *Marine Drugs* this year is among the few that have looked into the protection offered by astaxanthin. Researchers gave guinea pigs astaxanthin with a high Z-isomer content and exposed them to UV radiation. They found it protected the rodents.

“This study indicates that dietary astaxanthin accumulates in the skin and appears to prevent UV light-induced skin damage,” they concluded.

Astaxanthin’s potent antioxidant effect may help explain why it works so well.

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Most sunscreens have cancer-causing chemicals like benzene.

Are Barefoot Shoes Good for Walkers and Runners?

The minimalist revolution has reached our footwear with a new style of shoe

JEFF GARDNER

If you have been in a sporting goods store lately, you might have noticed that an ultralight, minimalist revolution of thinner and lighter clothing and gear is underway. Companies have been using new technology and high-priced materials to produce lighter and lighter products.

The revolution worked its way from jackets to tops to shorts all the way down to our shoes.

Minimalist footwear began to appear in the running world during the mid-1990s. Although humans have been trekking and running with little or no footwear for centuries, “Barefoot” Ken Bob Saxton is credited with bringing the idea of hitting the ground running in your bare feet to the American masses. In 1997, Bob set up BarefootRunning.com to encourage others to follow in his footsteps.

Companies such as Nike and Vibram (which introduced its Five Finger Shoes in 2006) picked up on the trend and began manufacturing minimalist running shoes in the early 2000s.

A minimalist shoe is, by definition, one that has little padding and a zero drop heel, meaning there’s little to no difference between the thickness of the sole at the front and back of the shoe. Additionally, minimalist shoes tend to have a wider toe box than other shoes, allowing the toes to spread out and gain a fuller, flatter “feel” of the ground’s surface.

The proposed benefit of zero-drop, minimalist walking or running shoes is that they encourage a front-of-the-foot strike while moving, as opposed to striking the heel first as one tends to do while running in a traditional, padded running shoe. The proponents of the front-foot-first strike walking and running style maintain that it mitigates the shock sent up the leg and into the knees and hips during a workout, thus reducing injury and overall wear and tear on the body.

But is this true? A 2016 study by the Luxembourg Institute of Health showed no difference in injury rates among runners who didn’t use zero-drop running shoes compared to those who did. So, if minimalist shoes don’t reduce injuries for runners and walkers, is there any benefit to wearing them?

Proponents of minimalist shoes say “yes,” declaring that walking or running in minimalist footwear builds stronger feet and better balance, thus reducing common injuries such as sprained ankles and twisted knees.

The argument goes something like this: Walking exclusively in cushioned shoes and boots, those with a high heel drop and built-in supportive arches, discourages the use of a full range of foot and ankle muscles, thus causing a weakening of the muscles, ligaments, and tendons in the foot and lower leg. Weak leg muscles and ligaments per-

form poorer during exercise, and are more susceptible to injury when you slip, trip, or step on an uneven surface.

But are these claims supported by the data? Maybe. In a 2019 study published in *Medicine and Science in Sports and Exercise*, a small sample of 57 walkers was divided into three groups: one that walked in minimalist footwear; a second that did a series of foot-strengthening exercises but walked in traditional, padded walking shoes; and a third that wore traditional walking shoes but didn’t perform any special exercises.

The results showed that the group that wore the minimalist shoes and the group that performed the foot-strengthening exercise had roughly the same gains in foot strength and balance. In contrast, the control group, the one who wore traditional walking shoes and did no exercise, did not.

To put this research into perspective, the findings suggest that anyone could see the same benefits of wearing a minimalist shoe by doing foot-strengthening exercises which, unlike minimalist shoes, are free and don’t require you to change out your footwear.

Pros and Cons

While exercising in minimalist footwear can help strengthen feet and legs, going minimal does have its drawbacks.

First and foremost is the transition from traditional shoes to something with almost no padding in the sole and none of the usual stiff ankle support of a traditional shoe. Those who switch to minimalist footwear for exercise often report a painful transition period in which the less-used muscles of the feet and legs are activated. These people start to rethink what they will and won’t step on (think sharp rocks) while wearing a thin, flexible sole.

Many people changing from traditional running shoes to minimalist footwear report a transition time of approximately two weeks to more than a month of continuous wear before taking the shoes out for strenuous, long exercise.

Adjustment period aside, those who walk or run in minimalist footwear insist that the feeling of the ground through their shoes brings a greater connection to the earth beneath them, transforming an exercise in foot strengthening into a full-body experience.

So, are minimalist shoes right for you? That depends, and before you spend lots on new footwear, you should also consider the possibility that some of the factors driving this revolution aren’t all tied to the “less is better” approach to exercise.

Be aware, for example, that companies often push new (and we hope, improved) products to grow revenues and expand their customer base. Like the never-ending updates to our smart devices and computers, new isn’t always better; it’s just different and more expensive.



Walking or running in minimalist footwear builds stronger feet and better balance.

Minimalist footwear began to appear in the running world during the mid-1990s.



Taking your time to transition to wearing new shoes is very important, especially when it comes to minimalist footwear.

The second and perhaps most important factor driving a change in the exercise industry is the changing nature of the average American. We are, as a nation, getting older and heavier. As such, there are several benefits to lightening the load during exercise, a process in which we should focus more on our bodies than on our gear.

For example, it’s estimated that for every 1 pound of weight we lose, we reduce the force on our knees by 3 pounds of pressure for every step taken. So dropping just 10 pounds (which can easily be done in a month or two) reduces the impact on our knees by 30 pounds of pressure per step. Add that up over a day, say with 5,000 steps, and that’s a reduction of 150,000 pounds of pressure on the knees daily. That’s a lot.

Bearing all of this in mind, the benefits of reducing equipment weight while exercising and the need to strengthen our feet and legs, the best option to reduce fatigue and injury while out walking or running has less to do with our equipment than it does with ourselves.

Can minimalist shoes improve the exercise experience? Possibly. But, the greater benefit to ourselves and our experience is losing weight and getting into better shape. Nothing we can carry or wear will help us more than what we can do to help ourselves.

Dr. Jeff Gardner, Ph.D., has a background in biology and teaches and researches at Regent University. His interests include the relationship between media use and our physical and spiritual well-being. An avid backpacker, when not writing, lecturing or traveling, he can be found somewhere on trail. You can reach him at jeffgar@mail.regent.edu

What Are the Correct Positions for Sleeping?

Research tells us about the most popular sleep positions and their effects

SARAH COWNLEY

No matter who you are, where you sleep, or how often you move around at night, there’s a right way and a wrong way to sleep.

The National Sleep Foundation has outlined the best sleeping positions for various types of people to get the most beneficial sleep possible. Whether you’re trying to prevent back pain or lessen the chances of snoring, these tips can help.

Most people sleep on their side, which is actually a good thing. Those who sleep on their back are more likely to get poorer sleep or have breathing difficulties. When you sleep on your back, your head is more likely to fall forward, and your airway can be obstructed. This can lead to snoring or sleep apnea.

Sleeping on your side helps to keep your airway clear and prevents you from snoring. It also helps to reduce acid reflux. If you’re pregnant, sleeping on your left side is the best position to sleep because it improves circulation and decreases the risk of stillbirth.

Sleeping on your stomach is actually the worst position for sleep because it can cause neck and back pain, and it’s difficult to breathe in this position. If you’re having trouble sleeping, try changing positions and see if that helps. You may find that you

sleep better in certain positions than others.

One recent study found that most people tend to move around a lot during the night. When analyzing 664 participants, researchers found that people spent about 54 percent of their time in bed sleeping on their side, about 37 percent on their back, and about 7 percent on their front.

Males younger than age 35 tended to be the most restless and had more position shifts during the night. But researchers say this isn’t a bad thing. Allowing the body to move during the night is a good idea. During sleep, the body will account for any pain or discomfort and adjust its position accordingly. That’s how the body generally avoids developing bedsores in everyday life.

So, if your sheets are too tightly tucked in, or if your partner or dog is taking up too much of the bed, making it difficult to move during the night, it may affect your sleep.

No real evidence has been shown to have found the ideal sleep position, but we know that comfort is the key to getting a good night’s sleep. This includes using the right pillow to help support the neck and spine properly. Lack of support for the head and neck during the night has been found to severely affect spine alignment, leading to problems such as muscle stiffness and shoulder pain.

Specialty pillows such as U-shaped or rolled pillows may offer a longer night’s sleep and can help to reduce morning and bedtime pain for those suffering from chronic pain.

Comfort is key for achieving good sleep. Experimenting with different sleeping positions may help you find one that works best for you.

During sleep, the body will account for any pain or discomfort and adjust its position accordingly.



Sarah Cownley has a diploma in nutritional therapy from Health Sciences Academy in London. She enjoys helping others by teaching healthy lifestyle changes through her personal consultations and her regular contributions to the Doctors Health Press. This article was originally published on Bel Marra Health.

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FOOD AS MEDICINE

Top Foods to Help Fight Depression

Most adults in the United States don't eat the recommended minimum amount of vegetables.

MINDFUL MEALS

Choosing healthy, wholesome foods can help lift the mood and nourish the body.

Continued from Page 9

Specifically, the study sought to derive a list of antidepressant nutrients.

"Nutritional data was extracted for a subset of foods with a high content of at least 1 antidepressant nutrient using a USDA [U.S. Department of Agriculture] database. These foods were analyzed for antidepressant nutrient density resulting in an antidepressant food score (AFS)," they wrote.



Bivalves, seafood, and organ meats were the highest-scoring animal-based foods to treat depression.

The list of antidepressant foods based on the AFS is headed by watercress, the plant food with the highest score at 127 percent. The highest animal-based food is oysters, with a score of 56 percent. The researchers also averaged the scores for categories of food to create a statistical mean for each food type.

Food Categories and Mean Antidepressant Food Source

Food Category	Mean Antidepressant Food Score (AFS)
Vegetables	48 percent
Organ meats	25 percent
Fruits	20 percent
Seafood	16 percent
Legumes	8 percent
Meats	8 percent
Grains	5 percent
Nuts and seeds	5 percent
Dairy	3 percent

The researchers were motivated by the prevalence of depressive disorders, as well as the expense and often inadequate management of such conditions. Their study stressed that each of the top foods can be integrated into any type of eating plan.

Not all of the foods in the study are necessar-

Given how much we've learned about the impact of diet on mental health, that lack of insight is surprising.

ily familiar to everyone throughout the world. People in the United States, for example, don't often eat bivalve foods (foods from sea creatures such as clams that have dividing shells).

Even when such foods are readily available, however, some people rarely eat them—even if they know they should. In fact, most of the adult population in the United States fails to meet the daily recommendations for vegetable intake. The Healthy People 2010 initiative, designed to increase vegetable consumption and other healthy habits, revealed that only 27.2 percent of Americans ate three or more servings of vegetables per day.

What Nutrients Fight Depression Best?

The scientists concluded that future researchers should look at the top antidepressant nutrients when they design intervention studies. Clinicians should also develop diets to help prevent depression. The researchers listed 12 antidepressant nutrients that they

deemed best for depressive disorders:

Folate
Iron
Long-chain omega-3 fatty acids (EPA and DHA)
Magnesium
Potassium
Selenium
Thiamine
Vitamin A
Vitamin B6
Vitamin B12
Vitamin C
Zinc

The Prevalence of Mental Illnesses and a 'Recipe' for Hope

LaChance and Ramsey's study noted that among people aged 15 years through 44 years, mental conditions, including depression, are the leading cause of disability worldwide. Creating new treatment options, including antidepressant foods, should be imperative for dealing with the growing number of people struggling with such issues, they said.

They recommended avoiding processed foods, such as those high in sugar and refined carbohydrates, and following a traditional diet, such as the Mediterranean diet.

"Furthermore, an international consortium of mental health and nutrition researchers recently recommended 'nutritional psychiatry' become a routine part of mental health clinical practice," the researchers noted.

The basis for their research was centered, in part, around a meta-analysis involving scientists from Australia, Spain, Finland, the UK, and France. Its aim was to address such disorders through dietary recommendations. That was also the aim of a randomized controlled trial from 2017, dubbed "SMILES" (Supporting the Modification of Lifestyle in Lowered Emotional States).

SMILES involved the collaborative efforts of multiple experts from centers based in neuroscience, psychiatry, dietary, medical, and other research centers throughout Australia. It concluded with the premise that "dietary improvement may provide an efficacious and accessible treatment strategy for the management of this highly prevalent mental disorder."

It also noted that addressing the association between what a person eats and what they don't would very likely impact the number of related deaths.

LaChance and Ramsey support the idea that nutritional psychiatry should be a routine part of clinical treatment for mental health clinical practice, a conclusion advocated in an earlier review published in *Lancet Psychiatry* in 2015.

"Evidence for nutrition as a crucial factor in the high prevalence and incidence of mental disorders suggests that diet is as important to psychiatry as it is to cardiology, endocrinology, and gastroenterology," researchers reported in the study "Nutritional medicine as mainstream in psychiatry."

"Evidence is steadily growing for the relation between dietary quality (and potential nutritional deficiencies) and mental health, and for the select use of nutrient-based supplements to address deficiencies, or as monotherapies or augmentation therapies."

The Highest-Scoring Plant Foods for Mental Health

One important observation LaChance and Ramsey made in the course of their study was that deficiencies in long-chained omega-3 fatty acids, B vitamins, zinc, magnesium, and

vitamin D are unquestionably implicated in the "pathophysiology" of depression.

More specifically, the impact foods have on inflammation and the influence of dietary fiber on your gut flora are two important factors when looking at the best foods to eat for mental health.

The highest-scoring plant-based foods for depression are:

Leafy greens—Watercress, spinach, mustard, turnip, chicory and beet greens, Swiss chard, dandelion, collard greens, and the herbs cilantro, basil, parsley, and kale.
Lettuces—Red, green, and romaine lettuce.
Peppers—Bell, Serrano, and jalapeno.
Cruciferous vegetables—Cauliflower, kohlrabi, red cabbage, broccoli, and Brussels sprouts.

Antidepressant Plant Foods

Antidepressant Food Score (AFS range)

Watercress	127 percent
Spinach	97 percent
Mustard, turnip, or beet greens	76 percent - 93 percent
Lettuces (red, green, romaine)	74 percent - 99 percent
Swiss chard	90 percent
Fresh herbs (cilantro, basil, or parsley)	73 percent - 75 percent
Chicory greens	74 percent
Pummelo	69 percent
Peppers (bell, serrano, or jalapeno)	39 percent - 56 percent
Kale or collards	48 percent - 62 percent
Pumpkin	46 percent
Dandelion greens	43 percent
Cauliflower	41 percent - 42 percent
Kohlrabi	41 percent
Red cabbage	41 percent
Broccoli	41 percent
Brussels sprouts	35 percent
Acerola	34 percent
Butternut squash	34 percent
Papaya	31 percent
Lemon	31 percent
Strawberry	31 percent

Vegetables are highly nutritious, often with an amazing array of phytonutrients that can't be obtained from anything else, but there are downsides created by modern food production.

Case in point: Although it's been labeled a probable carcinogen, glyphosate, one of the most common and problematic herbicides, continues to be used on crops, poisoning many of your foods. Birth defects, infertility, neurological disorders, endocrine disruption, and cancer are all listed as potential risks of exposure, according to multiple studies.

Many crops are even genetically engineered so that they can withstand more glyphosate. These "RoundUp Ready" varieties have become popular because an estimated 60 million acres of farmland are now overrun with glyphosate-resistant superweeds, according to the Union of Concerned Scientists.

The Highest-Scoring Animal-Based Foods for Mental Health

In regard to eating foods to offset depression, the focus has shifted from studying individual nutrients to evaluating overall dietary patterns. Traditional and whole foods can definitively be linked to a reduction in symptoms.

One study notes that people eating the common Western diet, which is rife with unhealthy fats and sugars, may have a higher

One study notes that people eating the common Western diet, which is rife with unhealthy fats and sugars, may have a higher risk of depression, attention-deficit disorder, and other problems.



Beans are a rich plant protein and high in B-vitamins, iron, folate, calcium, potassium, phosphorus, zinc, and fiber but usually low in fat.

Among people aged **15-44**, mental conditions, including depression, are the leading cause of disability worldwide.



Leafy greens, lettuces, peppers and cruciferous vegetables are the highest-scoring plant-based foods for depression.

risk of depression, attention-deficit disorder, and other problems.

An analysis known as the SUN cohort study (Seguimiento University of Navarra) followed more than 10,000 university students over a four-year period and found that those who stuck closest to the Mediterranean diet had a more than 30 percent lower risk of developing depression in contrast to those with the lowest adherence to the Mediterranean diet.

The 2018 study by LaChance and Ramsey found several foods linked to lowering depression. The highest-scoring animal-based foods were:

Bivalves (soft-bodied invertebrates in a two-part hinged shell)—Oysters, clams, and mussels.
Various seafood—octopus, crab, tuna, smelt, fish roe (fish eggs), bluefish, wolffish, pollock, lobster, rainbow trout, snail, spot fish, salmon, herring, and snapper.

Antidepressant Animal Foods

Antidepressant Food Score (AFS range)	Percentage
Oyster	56 percent
Liver and organ meat (spleen, kidneys, or heart)	18 percent - 38 percent
Poultry giblets	31 percent
Clam	30 percent
Mussels	28 percent
Octopus	27 percent
Crab	24 percent
Goat	23 percent
Tuna	15 percent - 21 percent
Smelt	20 percent
Fish roe	19 percent
Bluefish	19 percent
Wolffish	19 percent
Pollock	18 percent
Lobster	17 percent
Rainbow trout	16 percent - 17 percent
Snail or whelk	16 percent
Spot fish	16 percent
Salmon	10 percent - 16 percent
Herring	16 percent
Emu	16 percent
Snapper	16 percent

As with modern fruit and vegetable production, there are also problems associated with modern animal food production.

Fish is sometimes considered to be the ultimate superfood, but be careful when purchasing it to make sure it's not on the list of fish that are most likely to be tainted with heavy metals such as lead, mercury, arsenic, cadmium, PCBs (polychlorinated biphenyl), or radioactive poisons.

Tuna, with a score of 15 to 21 percent on the AFS, is one of the most-consumed seafood, but it can be at risk of mercury toxicity. Wild-caught Alaskan salmon is one of the best foods you can eat, but be sure when purchasing it that it's not farmed fish, as it has likely been fed a diet of genetically engineered soy and corn.

There are also issues with concentrated animal feeding operations (CAFOs), which increase the risk of animal disease and contaminants from drugs and animal byproducts.

Herring is one of the top five healthiest fish and a local, sustainable food source. Smaller fish, such as sardines, anchovies, and herring, generally have fewer contaminants and are high in omega-3 fats.

Dr. Joseph Mercola is the founder of Mercola.com. An osteopathic physician, best-selling author, and recipient of multiple awards in the field of natural health, his primary vision is to change the modern health paradigm by providing people with a valuable resource to help them take control of their health.

13 Tips for Better Conversations

Connect with people and enliven your social life with better conversation skills

MIKE DONGHIA

I consider good conversation to be a real contender for life's greatest pleasure. Unfortunately, the art of carrying on a great conversation isn't something that comes naturally to many of us.

Despite this, I've been fortunate to enjoy some great conversation partners over the past decade. This is mostly because I'm drawn to good conversationalists and try to squeeze myself into their worlds. And over time, I've grown a lot by trying to emulate and learn from their ways—and figure out what works for me personally.

In some social situations, I still occasionally feel like a fish out of water. I find it hard, for example, when I'm the outsider among a more established group of friends. But in most small group settings, I consider myself an above-average conversationalist, or at the very least, someone who cares about the craft a little more than others.

Are you interested in improving the quality of conversations in your life? You should be. Great conversation is a pleasure for all parties. The act of elevating your own conversational skills is one very concrete way of loving those around you. According to a research article published in the *Journal of Health and Social Behavior* in 2011, people are happier and healthier when they connect socially, and a little bit of effort goes a long way in making those bonds deeper.

Here are my tips for having better conversations. I hope, at the very least, that they inspire you to take more seriously the life-enriching pursuit of connecting more deeply with the people in your life.

Be curious. The best conversationalists I've seen have an intense drive to understand their people and ideas. To them, each person is a portal into a different world and a unique set of experiences. Best of all, curiosity is likely to be contagious, according to a recent study published in *Cognitive Science*—meaning your own curiosity encourages others to join the fun.

Bevulnerable. Author Justin Cronin says that

to know and be known is the final desire, the very heart of love. One of the quickest ways to pierce through shallow conversation is to reveal a vulnerable aspect of your own life and to follow with a question that invites the other person into that tender space.

People are happier and healthier when they connect socially.

Signal willingness. For a conversation to take off, both sides must sense a willingness by the other party to commit and be present. Signal that you're willing to talk through your body language, your eye contact, and your choice of words—what you're trying to convey is that you are curious and not in a rush.

Share stories. Most people underestimate the power of simple, everyday stories and lean too hard on the "you're not going to believe this" type of story. In an interview in 2018, Uri Hasson, a professor of psychology and neuroscience at Princeton, shared his

conviction that stories are one of the most effective forms of communication. He mentioned a 2010 study of brain scans that demonstrated a strong neural alignment between the storyteller's brain and the listener's brain—suggesting a shared emotional experience was taking place.

Fill the silences. Pauses in the conversation that are too long can be awkward, even among close friends. Not everyone will agree with this, but except in settings where you are doing some activity together besides talking, I think it's good to keep the conversation from sputtering out. There is no one tip for getting better at this, but it is something anyone can improve with intentional effort.

Read the room. Good conversationalists don't force conversation on others. At the start of a conversation, when I'm feeling out the type of encounter the other person is open to having, I try to introduce topics so that there's both an easy on-ramp for going deeper, and an easy off-ramp if the other person isn't interested.

Put out something to eat and drink. Awkward silences aren't always the result of boredom, sometimes neither side has a knack for transitioning to a new topic before the old one has died out. There is a wonderful solution

for this problem: put out food and drinks. This allows pauses to feel more natural and for light-hearted small talk about the food/drink selection to gently fill in the gaps.

Learn how to interrupt with grace. It's common advice to never interrupt a person who is talking. Maybe that advice is helpful in a few settings, but I find that it doesn't lend itself to very lively or fun discussions. A good conversation is dynamic with lively exchanges rather than two people exchanging monologues with each other. The best

interruptions don't steal the show, but rather egg the speaker on by showing that you are excited and tracking closely. Among the closest of friends, you might even take the floor to make a side point, only to turn the floor right back over.

Demonstrate credibility that you are listening. I feel like one of my gifts is being able to get people to talk. It's not rocket science or a psychological trick that I employ, but simply the fact that I listen intently, without judgment. A study in 2014, published in

A good conversation helps us build a deeper connection to someone and provides a meaningful form of entertainment.



OLENA YAKOBCHUK/SHUTTERSTOCK

the *International Journal of Listening*, reported that participants who had received active listening felt both more understood and more satisfied with their conversation. When people sense that you are genuinely interested in them, the floodgates of conversation come open.

Embrace rabbit trails. Too many conversations, in my opinion, struggle along or putter out because new, exciting tangents are not pursued aggressively enough. Obviously, if the energy is still high around a certain topic, keep going with it. But when things slow down, or an intriguing digression comes to mind—don't be afraid to explore it. At the very least, frame the thought as a quick aside, and see how your conversation partner responds. Great conversations take you places you never expected—but you have to let them run.

Be unpredictable. It goes without saying that a good conversation isn't boring. But what makes something boring? Too much predictability. The best conversationalists say things you don't expect them to say and have ideas you don't expect them to have. Part of this is simply being an interesting human being, which is not something you can fake. But the other part is about delivery. Don't just state an opinion—make a bold claim and see

if you can back it up. Don't just ask a question—probe your subject like a detective, and try to get to the very heart of the matter.

Find what you have in common, and build from there. If it's not clear by now, good conversation is an art, not a science. There are few hard and fast rules. But generally speaking, the most mutually satisfying conversations are built on a foundation of common interests and experiences. When I know I'll be spending significant time with someone, I will often review these commonalities in my mind to prime the conversational flow.

Don't be afraid to mix moods. Some conversations are going to be serious, right from the start. And others will be mostly light-hearted. But here's an interesting pattern I've observed: the deepest laughter and the most serious talks are often mixed together. There is something about genuine human connection that frees us to express the fullest range of our emotions. I believe this is good for the soul and should be encouraged.

Mike (and his wife, Mollie) blog at This Evergreen Home where they share their experience with living simply, intentionally, and relationally in this modern world. You can follow along by subscribing to their twice-weekly newsletter.

WISE HABITS

The Counterintuitive Way to Create Change in Your Life

Accept and love that part of you that you want to change

LEO BABAUTA

A lot of us want to make changes in our lives—whether it’s changing a bad habit such as smoking or overeating, creating a new habit such as meditation, or simply being less distracted or reactive during the day.

Whatever the change, you’re likely to face internal resistance. There is a part of you that doesn’t want to change.

If you want to change your eating habits, there’s a part of you who just wants to eat the donuts. If you want to exercise more, there’s a part of you that just wants to be lazy and relax. If you want to have less drama in your life, there’s a part of you that gets off on the drama. If you want to write a book and change people’s lives, there’s a part of you that wants to stay in the safety of anonymity or the life you already know.

This part of you will fight against the part of you that wants to create the change.

Here’s the counterintuitive advice: Own that part of you that doesn’t want to change.

Until you own this part of you, you’re constantly trying to ignore it, repress it, squash it. Committing violence against a part of you doesn’t make it go away—in fact, it will strengthen it. Trying to ignore it means it will keep mysteriously controlling you.

So how do you own it? First, acknowledge that there’s a part of you that’s creating the resistance. You’re not a victim of your circumstances, you’re a creator of your life. Notice when this part shows up—if you

Anyone who has ever achieved anything great has had to overcome resistance to arrive where they want to be.

Whatever the change, you’re likely to face internal resistance.

Sometimes you will give in but that doesn’t mean you can’t keep working at your goals tomorrow.

Each time you overcome a temptation, it makes you stronger for next time.



ALL PHOTOS BY SHUTTERSTOCK

committed to a whole-foods diet, notice the part that wants to eat the potato chips.

When this part shows up, honor it. What does it feel like to be distracted or reactive? What does it feel like to feel helpless or frustrated? What does it feel like to be fearful and avoidant? Can you notice the feelings in your body? Can you give it attention and presence?

Could you even love this part of you? Could you forgive and be kind to the part of you that enjoys the distraction and helplessness and

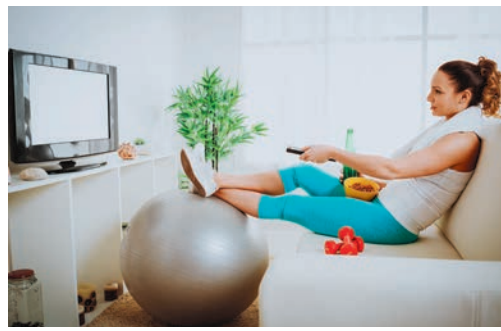
laziness and indulgence and drama?

Once you start to love this part of you, it no longer needs to be in control. Though it will still be there, when it does show up, you no longer have to fight it.

Counterintuitively, this relaxes everything. Resisting this part of you is simply energizing it from the negative position. Accepting it lets you see it more clearly and prevents it from operating in the shadows, driving your action—or inaction—without your consent.

If you can love this part of yourself instead of simply feeling badly about it, ignoring it, or running from it, you will have more of yourself under conscious influence and more of your own love, which is essential when it comes to changing in a direction of your own choosing.

Leo Babauta is the author of six books and the writer of Zen Habits, a blog with over 2 million subscribers. Visit ZenHabits.net



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