THE EPOCH TIMES

SELF-REFLECTION

Tap Into the Power of Your Poly

Journaling can relieve trauma, strengthen the immune system, and improve self-confidence

AMY DENNEY

rauma survivors are learning that a simple pen and notebook can unlock healing, improve resiliency, and bring balance to a haywire nervous system.

The beauty of this remedy is that so little is required. You don't need a background in writing. You don't even need to love writing. You don't even need to go anywhere to receive help if you don't want to, thanks to online classes in the many different forms of writing. All you need is an open mind and a desire to improve your health.

Casandra Austin-McDonald began journaling in the hospital after a near-fatal suicide attempt.

"I realized I was there because I had not

healed my trauma," she said.

The beauty about journaling is that it's unlike an essay, which needs a beginning, middle, and end.

Diana Raab, author





Turmeric contains curcumin, a compound often studied for several therapeutic effects.

DETOX

PIXDELUXE/GETTYIMAGES

Turmeric, Horsetail, and Garlic: Can They Reverse Aluminum Toxicity?

SHERRA VORLEY

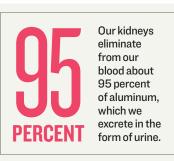
In a recent Epoch Health article, "Ask a Doctor: How Can I Detox From Aluminum Exposure?", we discussed aluminum exposure and its effects on the body. We noted that aluminum is the most widespread metal on earth. As it binds easily with many other substances, aluminum isn't naturally available as a pure element.

Once humans developed the capability to isolate elements into their pure forms with the advent of electricity, aluminum became invaluable to modern industries. It's now found throughout our daily lives and in soil, food, water, and air. The 13th element on the periodic table, while superabundant in nature, is now more able to enter our bodies through inhalation, ingestion, water, skin contact, vaccinations, dialysis, and infusions.

According to the Textbook of Clinical Neurology (Third Edition), aluminum levels in the blood, or serum aluminum levels, at normal are 10 micrograms per liter. Dialysis patients may have serum aluminum levels of 50 micrograms per liter. Above 60 micrograms per liter indicates increased absorption. At 100 micrograms per liter and above, the levels are potentially toxic, and levels above 200 micrograms per liter may result in clinical symptoms and signs of toxicity. Aluminum is noted to cause oxidative stress, inflammation, metabolic and digestive problems, neurological issues such as Alzheimer's disease, and dementia, as well as immune system changes and some cancers.

In the previous article, we discussed limiting exposure and detoxification best practices. Now, we discuss three powerful detoxing foods to include in your aluminum detox program: turmeric, garlic, and horsetail.

Continued on Page 2







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Turmeric, Horsetail, and Garlic:

Can They Reverse Aluminum Toxicity?

Continued from Page 1

Effects of Aluminum Exposure

Health issues that arise from aluminum exposure often face contradictory evidence. A study titled "Differential Neuroprotective Effect of Curcuminoid Formulations in Aluminum Chloride-Induced Alzheimer's Disease" was published by Environmental Science and Pollution Research in May with revealing findings.

In this animal study, the researchers induced Alzheimer's disease by administering high levels (300 milligrams per kilogram) of aluminum chloride to rats. The study intended to investigate herbal pharmacotherapies made of curcuminoid extracts to mitigate and prevent signs of Alzheimer's disease.

The study found that curcuminoid-rich extract and its protein complex "significantly improved the behavioral, biochemical parameters and acetylcholinesterase inhibitory

activity in treatment groups." This shows that the extract has the potential to treat neurological issues including Alzheimer's disease. It also shows evidence of the neuroprotective effects of curcuminoid compounds,

which are found in turmeric. Interdisciplinary Toxicology, a journal of the Institute of Experimental Pharmacology of Slovak Academy of Sciences, published an article, "Aluminium Toxicosis: A Review of Toxic Actions and Effects" in February 2020. In this extensive review of the relevant to cause oxidative scientific literature, researchers show aluminum's toxic actions and effects. These include oxidative stress, pro-inflammatory effect, enzymatic dysfunction, metabolic derangement, necrosis, icity. The authors further describe disease conditions associated with aluminum toxicosis including granulomas, fibrosis, toxic myocarditis, thrombosis, ischemic stroke, Crohn's disease, inflammatory bowel diseases, anemia, Alzheimer's disease, dementia, sclerosis, autism, osteomalacia, oligospermia and infertility, hepatorenal disease, breast cancer and cysts, pancreatitis, pancreatic necrosis, and diabetes mellitus, among others.

Causes of Aluminum Exposure

Aluminum (Al) is used extensively on its own and with other chemical compounds in our everyday lives. Compounds include Al chloride, Al hydroxide, Al nitrate, Al phosphate, Al sulfate, Al potassium, Al ammonium sulfate, and Al silicate.

From fireworks to pottery, cement to cooking utensils, the list of everyday items containing aluminum is widespread. It's challenging to limit our contact with aluminum. It's found in pharmaceuticals, food additives, detergents, vaccines, water treatment, waterproofing, and flame retardants.

Healthy humans normally have an approximate total body burden of 30 to 50 milligrams of aluminum per kilogram of body weight. Normal levels of aluminum in the blood are estimated at one to three micrograms per liter. In the human body, aluminum has been found in the skin, colon, lymph nodes, adrenals, parathy-

roid glands, and most soft tissue organs. Importantly, the 2020 study published in Interdisciplinary Toxicology shows that aluminum can rapidly enter the brain, extracellular fluid, and cerebrospinal fluid.

How to Reduce

Aluminum is so widely

used, we've become

Aluminum in Our Tissues

The human body is made to excrete toxins, and aluminum is no exception. Our kidneys eliminate from our blood about 95 percent of aluminum, which we excrete in the form of urine. Aluminum

> hair, nails, sebum, and bile. Its excretions are also present in milk and semen, a consideration for parents and future parents. Actions to

is also excreted in sweat, feces,

support our kidneys and other excretory systems can help reduce aluminum accumulation in the body. Animal experiments have

shown that deficiency in cal-

cium and magnesium may contribute to aluminum accumulation in the brain and bone. Also, having a high iron load resulted in less aluminum accumulation in tissues. Therefore, ensuring adequate intake of iron, calcium, and magnesium may protect tissues from aluminum accumulation. However, be aware that many people

Aluminum is noted stress, inflammation, metabolic and digestive problems, neurological issues such as Alzheimer's disease, and dementia, as well as immune system changes and some cancers.

can accumulate excess iron.

Reducing Aluminum Absorption What if there were ingredients that helped or hindered our body's ability to absorb aluminum, meaning that it passed through the body and was excreted without accumulating in our blood and tissues? As shown in the Interdisciplinary Toxicology study, certain compounds and minerals—citrate, fluoride, maltol, and lactate—enhance aluminum absorption in the gastrointestinal tract. Absorption is

and diets high in phosphate, silicon, polyphenols, and sialic acid. The researchers in that study concluded that aluminum-induced oxidative stress combined with the subsequent metabolic defects leads to aluminum toxicosis. Antioxidant agents, therefore, are the fundamental basis for therapeu-

reduced in the presence of iron overload

Sherra Vorley is a writer passionate about food sovereignty, self-reliance, and holistic health. Her wish is to help people by providing actionable tools for disease prevention and holistic healing.

HEALING HERBS ALUMINUM DETOX SHOTS

- 1/2 cup fresh or 1/4 cup dried horsetail
- · 1 fresh or frozen minced garlic clove • 1/2 teaspoon ground turmeric
- · 2 cups high-quality fresh water

- · Boil 2 cups of high-quality fresh water
- Steep turmeric and horsetail until cool · Add minced garlic and stir

tic interventions.

 Store liquid in the fridge or a cool dark place for up to three days

HOW TO USE

Take one shot of 1 to 2 ounces three to six times

Use liquid in other recipes such as salad dressings, soups, or pilafs.

Plant-Based Medicines to Treat Aluminum Exposure



Turmeric (Curcuma longa)

Turmeric is a root belonging to the same plant family as ginger. It has been used for centuries in cooking for its pleasant earthy, floral flavor and rich orange pigments. It's a primary ingredient in curry.

These roots look like small orange, roughskinned carrots. Greengrocers and health food stores often have fresh turmeric roots for sale. In the spice aisle, turmeric is available in its gorgeous golden powdered form. As a popular health supplement, turmeric and its primary compound, curcumin, can be found in capsules, extracts, and tinctures.

Turmeric is used in many traditional medical systems. Ayurveda, traditional Chinese medicine, and many other Indian and East Asian medical systems use turmeric to treat skin disorders, issues of the upper respiratory tract, joint problems, and digestive troubles.

Turmeric's Healing Activity

Curcumin is the major component of turmeric that provides vibrant golden pigments. It and its closely related substances make up the curcuminoid compounds.

Curcuminoids have a great variety of pharmacological activities. These include powerful anti-inflammatory and antioxidant effects. These compounds are also antibacterial, antiparasitic, nematocidal, and antiviral; specifically, anti-human immunodeficiency virus.

In strengthening and soothing the gastrointestinal system, along with the antiinflammatory effects, curcuminoids are antispasmodic with evidence of inhibiting carcinogens and cancer growth.

In the Environmental Science and Pollution Research study mentioned above, the neuroprotective effects of curcuminoids were well demonstrated. The study showed that in terms of aluminum chloride-induced Alzheimer's disease, the curcuminoid-rich extract improved the behavioral and biochemical parameters and inhibihistological analysis, the results indicated stabilization of neurodegenerative changes and neuronal loss.

A further study related to Alzheimer's disease published in Neural Regeneration Research showed curcumin to have protective and preventative effects on many chronic diseases including cerebrovascular disease, hypertension, and hyperlipidemia. Again, the study shows that this is due to the antioxidant, anti-inflammatory, and metalchelating properties of curcumin

How to Use Turmeric

Turmeric is available fresh, in dried powdered form in the spice aisle and in a wide range of dietary supplements. Including turmeric in the diet is one of the easiest ways to take advantage of the many antialuminum attributes turmeric has to offer. While the intense color of turmeric is hard to miss, the flavor is subtle and combines well with many foods.

Try to add curries or traditional Indian cuisine to your diet, as turmeric is a common ingredient. Boost your turmeric power by mixing it with black pepper. The combination is often found in many curry spice blends. Turmeric, as well as many Indian spice combinations, go wonderfully well with garlic and ginger, which also have a host of health benefits and antioxidant properties to help boost your aluminum detox.

If Indian cuisine isn't your thing, you can add turmeric to dressings, marinades, soups, and pilafs. Golden Milk, the traditional Ayurveda drink, gets its color and health attributes from ground turmeric roots. Turmeric tea with lemon and honey is equally soothing and delicious. Supplements, extracts, and tinctures are convenient and make adding turmeric to your day simple



the signature ingredient used to make golden milk. It can also be made into a tea with lemon and honey.

Turmeric is



Garlic (Allum sativum)

Garlic is a medicinal plant that has been in use since ancient times. This aromatic herbaceous plant is used as food throughout the world. As a traditional remedy, garlic possesses several biological properties.

Available as a food or in supplemental forms, garlic has great potential in aiding aluminum detoxification from the body.

With 11 different horticultural groups of garlic, it's classified into two types: softneck and hardneck. Most of us are familiar with the softneck varieties, which are usually found at the grocery store. They have soft stems that are pliable, making them perfect for the traditional braids of dried garlic. Hardneck varieties, which are sometimes favored by home gardeners and specialty growers, have stiff stems that send up flowering stalks, called scapes, which are also delicious. Hardneck garlic has fewer cloves, which are larger and easier to peel.

Garlic is documented as one of the earliest examples of plants being used to treat disease and maintain health. Medical texts from ancient Egypt, Greece, Rome, China, and India each show prescribed medical applications for garlic. Modern science continues to confirm that garlic has a host of benefits for disease prevention and treatment.

Garlic's Healing Activity

An important part of any detox centered around eliminating heavy metals, garlic helps eliminate heavy metals from the body while protecting organs from heavy metal toxicity. The main active constituents in garlic are sulfur-containing phytoconstituents including alliin, allicin, and flavonoids like quercetin.

Biological compounds isolated from garlic have been evaluated for their various biological activities. These include antioxidant, anti-inflammatory, and anticancer activities. The powerful phytochemical composition also includes antibacterial, antiviral, antifungal, and antiprotozoal constituents. The antioxidant capabilities and chelation potential, combined with other actions, provide help with aluminum detoxification.

How to Use Garlic

Garlic is treasured for its ability to enhance many styles of cooking. Countless recipes begin with garlic in the pan: minced, chopped, shaved, crushed, and what have you. It stores for long periods. For convenience, you can mince garlic in large batches and store it in the freezer. This makes it easy to add a spoonful here and there to almost any recipe for soups, stews, dressings, marinades, pilafs, and bread.

Not everyone is a fan of garlic's telltale odor. It's rarely recommended on date night. Fresh raw garlic is often recommended as the best way to obtain its benefits, but this can be difficult for some people to stomach. The strong flavor and odor of raw garlic are a consequence of its beneficial sulfur-containing phytoconstituents.

Pair garlic with high-chlorophyll foods such as fresh parsley, dill, basil, or mint to bind with the sulfur compounds and neutralize their smell. Similarly, taking garlic in the form of prepared supplements instead of raw may make it easier to get down.



Horsetail (Equisetum arvense)

The silica in plants such as horsetail can be very helpful in removing aluminum. Extracts of common horsetail have a long tradition in treating inflammatory conditions. In folk medicine, horsetail has been used for thousands of years.

Known as a living fossil, this interesting plant was one of the most dominant groups of plants 400 million years ago during the Paleozoic Era. A perennial plant that's native to North America, Europe, Asia, and the Middle East, horsetail has hollow, jointed, and ridged stems that easily pull apart. In late spring, the green photosynthetic stems branch out in whorls and take on the appearance of scouring brushes.

Wild foragers harvest horsetail from woods, meadows, fields, or moist areas alongside streams, swamps, rivers, and lakes. Dried horsetail is used to make tea or infusions. Many supplements are available to use as directed.

Horsetail's Healing Activity

In Mount Sinai's Herb Library, they note horsetail was used traditionally to stop bleeding, heal ulcers and wounds, and treat tuberculosis and kidney problems since the time of ancient Rome and Greece. The silica in horsetail helps to strengthen bones so is used as a treatment for osteoporosis.

Horsetail is also a diuretic, which increases urine output and helps relieve the body of excess fluid.

A study, "Antioxidative and Antiproliferative Activities of Different Horsetail (Equisetum Arvense L.) Extracts," looked at the antioxidative and antiproliferative activity of different extracts taken from horsetail. It showed that "n-butanol, methanol, ethyl acetate, and water extracts had significant peroxyl radical scavenging activity."

The study tested the extracts on human cancer cell lines and found that "extracts inhibited cell growth that was dependent on cell line, type of extract, and extract ited the most prominent antiproliferative effect, without inducing any cell growth stimulation on human tumor cell lines."

In conclusion, the study shares, "The results obtained suggest that the horsetail extracts could be used as an easily accessible source of natural antioxidants and as potential phytochemicals."

The natural antioxidants and diuretic action combined with high amounts of silica make horsetail supplementation and horsetail tea valuable, cost-effective ways to detox from aluminum toxicity.



You can forage horsetail along streams, swamps, lakes and rivers and dry it to make infusions.





Getting creative with your can be a great way to add nutrients to your diet and get a daily

Macular Degeneration Doesn't Have to Mean Eventual Blindness

This form of irreversible vision loss can be unsettling, but you can slow or stop its progression



SANDRA CESCA

"Am I going blind?" was the first question I asked my ophthalmologist when I recently went for my annual eye exam.

Because I'm older now, she checks me for typical eye conditions related to aging, such as glaucoma and cataracts. Imagine my surprise when she told me that I needed to get another exam, called optical coherence tomography, which maps the entire retina.

After returning with photographs of the inside of my eyes, she told me that I had the beginning of age-related macular degeneration (AMD). This condition is slow to develop and rarely leads to blindness but is

I have needed corrective lenses since age 12. Once past puberty, my vision seemed to stabilize. It got worse again as I went through menopause and then stabilized. Without any other vision problems, I was surprised to hear of this recent diagnosis. I needed to know more, so I dug into the latest literature.

What Is AMD?

Here's what I learned.

Our eyes age along with the rest of our bodies. As we age, our eyes become of increasing concern, especially if we wear corrective lenses. According to the National Eye Institute, AMD is a condition for which no current cure exists. Unlike detached retinas, which can

be helped by different surgical techniques, macular degeneration has no surgical options. However, several clinical trials are are also good sources of lutein and zeaxanunderway that may offer hope for those with this disorder.

AMD is a common age-related condition that leads to vision loss. As of 2019, it affects about 11 million people older than 50 in just the United States. This figure is

> tion continues to age. The macula is the light-sensitive part in the center of your retina, giving you clarity for daily visual tasks. Because AMD develops in that area, you may first notice difficulty in reading, driving, or doing close detailed work. AMD can develop in one or both eyes.

The cause of AMD isn't known, although scientists believe that it develops from a combination of genetic and environmental factors, aging, chronic inflammation, and of your risks can help prevent AMD from occurring.

If, like me, you're diagnosed with early AMD, your best approach is to take care If macular degeneration is caught early, it's of your eye health, which in-

cludes eating a proper diet high in antioxidants and managing your risk factors. You might also consider taking a daily eye supplement that contains antioxidants, minerals, and vitamins that are recommended explicitly for eye health.

Foods to Fend Off AMD

One of the best ways to find foods high in antioxidants to include in your anti-AMD diet is to look for color.

Orange and red vegetables and fruits such as carrots, acorn squash, yellow and red bell peppers, pumpkins, sweet potatoes, tomatoes, apricots, and berries contain the carotenoids beta carotene, lutein, and zeaxanthin, a class of antioxidant micro-

Lutein isn't only found in these colorful foods, it's also found in the macular part of your eyes. As an eye pigment, lutein protects the macula from high-energy light

> from the sun. "A large body of evidence shows that lutein has several beneficial effects, especially on eye health," a research review published in Nutrients in 2018 reads. "In particular, lutein is known to improve or even prevent age-related macular disease which is the leading cause of blindness and vision impairment."

Macular degeneration Zeaxanthin is also found in your eyes, where it neutralizes glaucoma, cataract, and even distorted, or dark sports unstable free radicals from oxidative stress.

> Green leafy vegetables such as kale, spinach, romaine lettuce, broccoli, and eggyolks thin, as are corn, kiwi fruit, and grapes.

can create blurry,

in our vision.

Ginkgo biloba and goji berry also protect against damaging free radicals from metabolic oxidation. They're available in tea, capsule, tablet, or tincture form.

Vitamin A is needed for the light-sensing function of the retina. Top sources of vitamin A include carrots, sweet potatoes, pumpkin, squash, and cantaloupe; salmon, mackerel, and trout; and fortified dairy products, eggs, and liver.

Coconut oil has been found to help protect the retina against damage from AMD. Rich sources of omega-3 fatty acids include oily fish such as salmon, herring, mackerel,



progress can be slowed or even halted.

and sardines; oysters and caviar; and seeds such as flax, chia, and hemp; and walnuts.

Glutathione is another powerful antioxidant that helps maintain the health of the retina. Sulfur is necessary for producing glu tathione, so consuming onions, garlic, leeks, and eggs is essential as they contain sulfur.

Risk Factors

There are several known risk factors for age-related macular degeneration (AMD)

Age: AMD is most prevalent in people older

revealed several genes related to developing AMD.

Family history and genetics: Research has

Ethnicity: AMD is more common in Caucasians, particularly women.

Smoking: Regular exposure to smoke significantly increases your risk of macular degeneration. Toxic chemicals in cigarette smoke increase the impact of sunlight up to 1000 times as it reaches the retina causing damage to the macula.

Obesity: Carrying excess weight can increase your risk of early or intermediate AMD progressing to a more severe form.

Cardiovascular disease: Atherosclerosis, vascular diseases, and hypertension may increase your risk of AMD.

Supplements

The 10-year Age-Related Eye Disease Studies (AREDS and AREDS2) conducted by the National Eye Institute (NEI) followed 4,000 participants and found that the antioxidants lutein and zeaxanthin effectively reduced the risk of AMD progression. The formula they used contained the following nutrients (which is similar to the one I'm taking):

Vitamin A (5000 IU) Vitamin C (500 mg) Vitamin E (400 IU) Lutein (10 mg) Zeaxanthin (2 mg) Zinc (80 mg)

Treatment Options

Copper (2 mg)

There are two types of AMD, "dry" and "wet." The dry type is more common and progresses slowly over many years. About 80 percent of those with AMD have this type. The wet type is more serious as it progresses quickly, sometimes developrom the dry type. The wet type is due to the leakage of blood vessels that grow under the retina. Because of this, wet AMD must be treated immediately to minimize severe damage to your eyesight. Because there are two major types of AMD, the treatment options are different.

One of the

best ways to

antioxidants

to include in

AMD diet is to

look for color.

Coconut oil may protect

the retina against

damage from AMD.

Ginkgo biloba can

protect against

damaging free radicals

Goii berries can ward off

metabolic oxidation.

your anti-

find foods

high in

This condition is ordinarily chronic and not as dangerous as the wet type. Consequently, attention to your daily diet and lifestyle and managing your risk factors are the best approaches to treat dry AMD. Medical intervention, such as eye injections or laser surgery, is usually necessary only if your AMD is advancing or your dry type suddenly becomes wet.

Wet AMD

Dry AMD

 $The \, leakage\, of\, blood\, vessels\, from\, behind\, the$ retina causes this more serious type of AMD. Research indicates that a protein called vascular endothelial growth factor (VEGF) is the main reason for this condition. The current approach to treatment requires monthly or bimonthly injections of anti-VEGF drugs directly into the eye. These may slow or stop the leakage, thus helping to prevent further vision loss.

Traditional Chinese Medicine

Acupuncture and formulas made from various herbal extracts have been used in treating AMD for thousands of years. Different treatments based on traditional Chinese medicine (TCM) have exhibited success without noticeable side effects, as reported by numerous clinicians. The popularity of these approaches is limited in the United States because of a lack of randomized controlled trials and systematic reviews. More research needs to be done in this area, given the long history of success of TCM.

For example, a 40-month clinical conducted in China beginning in 2012 studied a treatment for wet AMD using extracts from several TCM plants known to have antiinflammatory and antioxidant properties. These were made available to the 70 participants in tablet, capsule, oral liquid preparation, and injection. The results showed the participants had improved visual sharpness and the treatment had stopped the advancement of their macular degeneration.

Laser photocoagulation is a type of laser surgery used to treat the wet form of AMD. It doesn't restore vision but may slow the progression by burning the leaking blood vessels that cause wet AMD. However, scarring from this procedure may increase your vision loss rather than improve it.



There are a wide variety of herbal. pharmaceutical, dietary, and surgical treatments for age-related macular degeneration.

Implanting a telescopic lens in one of the eyes of selected patients with advanced dry macular degeneration in both eyes may improve both distance and close-up vision. However, it provides a narrow field of view and isn't recommended for most advanced AMD patients.

Stem Cell Research

The National Eye Institute is currently undergoing a study to test the safety of injecting autologous stem cells into the eyes of AMD patients as a possible future treatment for dry AMD. Autologous means the stem cells would be grown from each participant's own cells and then injected into their eyes. This trial began in September 2020 and ends in May 2029; applications are still being accepted.

Conclusion

AMD is difficult to treat, and the lack of research leaves this field open for more treatment discoveries. Considering the millions of people with AMD, newer, more successful options are sorely needed. Until then, your best approach to prevention and treatment is to focus on your eye health through a nutritious diet, restful sleep, daily exercise, and not smoking. Protect your eyes from UV and blue light from the sun and computer and cellphone screens, and visit your eye doctor as often as necessary.

Sandra Cesca is a freelance writer and photographer focusing on holistic health, wellness, organic foods, healthy lifestyle choices, and whole-person medical care. Her background includes allopathic medicine, naturopathy, homeopathy, organic and biodynamic farming, and yoga practices.

Watch for Symptoms

According to the Mayo Clinic, the following symptoms can indicate that you are developing AMD:

- Visual distortions, such as straight
- Reduced central vision in one or both
- · The need for brighter light when
- lines seeming bent
- reading or doing close-up work Increased difficulty adapting to low light levels, such as when entering a

dimly lit restaurant

- Increased blurriness of printed
- · Decreased intensity or brightness of
- Difficulty recognizing faces
- · A well-defined blurry or blind spot in your field of vision

Think Outside the Bread Box

Part 3: Healthy, simple, gluten-free alternatives to bread, buns, and wraps

MELISSA DIANE SMITH

This article is the third in a three-part series on gluten-related health conditions and the gluten-free diet. The first article in the series is "When Gluten-Free Eating is the Best *Medicine.*" The second article in the series is, "Why Have Wheat and Gluten Become So Problematic?"

If you eat a gluten-free diet or want to try one, it's natural to want to take the easy way out: Eat your standard American fare, such as sandwiches, and replace the wheat bread or tortillas you're accustomed to eating with gluten-free bread or tortillas.

Although doing so can prevent reactions to gluten, going gluten-free this way can lead to new, non-gluten-related ailments and diseases, such as weight gain, increased blood sugar levels, and insulinrelated health conditions. That's because gluten-free grain flours and starches (i.e., rice flour, corn meal, sorghum flour, millet flour, corn starch, tapioca starch, cassava starch, and potato starch) are high

in calories and carbohydrates and high glycemic, meaning that they can spike blood sugar levels.

An alternative to gluten-free bread is lower-carb, lower-glycemic, grain-free tortillas, which can work well on occasion. But the healthiest, most nutrient-rich alternatives to bread are easy-to-fix ones made from vegetables and fruits.

Why Not Go Gluten-Free the Standard Way?

Unwanted weight gain is a common result of eating processed gluten-free breads and other products. In one study published in The American Journal of Gastroenterology in 2006, 82 percent of people who went on a gluten-free diet gained weight in the first two years of eating that way, including 81 percent of the people in the study who were

A standard gluten-free diet is linked to an increased risk of metabolic syndrome in people who have celiac disease or nonceliac gluten sensitivity.

Metabolic syndrome, sometimes called insulin resistance syndrome, is a cluster of at least three of five risk factors, including large waist size, low HDL cholesterol, elevated blood pressure, blood sugar levels, and triglycerides, which often occur in concert and predispose people to Type 2 diabetes and cardiovascular disease.

A 2020 study found that there was an increase in weight gain and a 20 percent increase in the prevalence of metabolic syndrome in patients with celiac disease who followed the gluten-free diet for six months. In a study on patients with gluten sensitiv-

ity who at e gluten-free for six months, there was no significant weight gain, but there was a 15 percent increase in the prevalence of metabolic syndrome and a 20 percent increase in fatty liver disease, which is an excess of fat stored in the liver—another condition strongly associated with metabolic syndrome.

The Lowdown on Grain-Free Tortillas

Instead of eating gluten-free bread or tortillas, it's tempting to turn to grain-free tortillas. They're a better option than their gluten-free counterparts for many people because they're generally lower in carbo-

hydrates and lower glycemic. Beware, however: Grain-free tortillas often are made from cassava flour, a high-glycemic, low-nutrient starch, or from chickpea flour, almond flour, or coconut flour, ingredients that can be allergenic and problem-

atic for some people who are intolerant. A golden rule in nutrition is the simpler and cleaner the ingredients, the better it is for health. Keeping that in mind, almond flour tortillas made by Siete and coconut flour tortillas manufactured by a number of companies can be good grain-free tortilla options.

Melissa Diane Smith is a holistic nutrition counselor and journalist who has been writing about health topics for more than 25 years. She is the author of several nutrition books, including "Syndrome X," "Going Against the Grain," "Gluten-Free Throughout the Year," and "Going Against GMOs."

7 Fresh Produce-**Based Alternatives** to Bread

When it comes to gluten-free, the healthiest strategy begins when you let go of the belief that your sandwiches have to look like traditional sandwiches or that your wraps must be made with flour-based bread or tortillas.

Instead, think outside the bread box and get creative using vegetables (and two fruit) as alternatives to buns and wraps. Try these seven produce-based ideas for bread substitutes.

COLLARD WRAPS:

Collard greens, either raw or lightly steamed, also make nice low-carb wrappers. Be sure to remove the prominent spine on each leaf using a paring knife. Start near the bottom, shave away only the thick part of it, and be careful not to cut through the leaves.

You can steam the collard greens for a few minutes until bright and tender, then arrange them on a plate and use a paper towel to pat dry before filling them. Try them with red pepper hummus and assorted vegetables with or without chicken strips.

and collard greens make great wrap replacements.

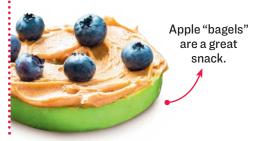
LETTUCE WRAPS:

Virtually nothing could be more convenient—and lower in carbs—than using large lettuce leaves, such as romaine or Bibb leaves, as tortilla or bread substitutes. Wrap burgers with them, or make BLT (bacon, lettuce, and tomato) "sandwiches," taco lettuce wraps, fajita wraps, tuna salad wraps, lettuce cups with Asian-based



APPLE SLICES:

For a lighter alternative to peanut butter or almond butter and jelly sandwiches, use apple slices as the bread substitute. Slice an apple crosswise, and cut a hole through the center of each slice to make bagel-like apple slices. Use 2 apple slices to make a small sandwich with nut or seed butter in between. Kids love these, and they're quick, handy sandwiches for adults, too!



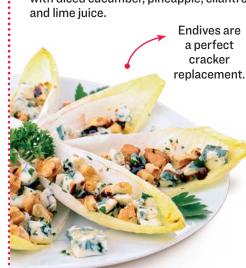
ENDIVE BOATS:

Healthy fats and

omega-3 fatty acids can

help slow or halt AMD.

Buy green or red endive bulbs, cut off the base, and use the leaves as super-low carb boats you can top with the filling of your choice. They can serve as appetizers or light meals. Try them with chicken or tuna salad, or chopped cooked shrimp with diced cucumber, pineapple, cilantro,



of people who went on a gluten-free diet gained weight in the first two years of eating that way, including

of the people in the study who were overweight.

THICK-CUT ROASTED **SWEET POTATO BUNS:**

To make these unusual, higher-carb, smallin-size, but big-on-flavor "buns," cut sweet potatoes into ½-inch slices and place them on a baking sheet.

preheated oven. Roast the sweet potato slices for 5 minutes, then flip them over and roast for another 5 minutes, then remove from the oven and set aside on a plate. Stack a small broiled turkey burger with sage or a small piece of cooked fish and

Drizzle with a few tablespoons of olive oil

or coconut oil, and place in a 400-degree,

a few spinach or lettuce leaves on top of each sweet potato slice, and place another roasted sweet potato slice on top. Use a toothpick or skewer to hold each minisandwich together.



CUCUMBER SUBS:

Believe it or not, this fruit (commonly mistaken for a vegetable) can serve as a refreshing alternative for a submarine bun when you're making a sandwich! Cut it in half lengthwise, scoop out the middle, and top it with anything for an easy-to-make, open-faced sandwich.

PORTOBELLO MUSHROOM CAPS: Large portobello mushrooms are the general size and shape of hamburger buns. Just remove the stem and cook them, and they make nice, filling, stand-ins for hamburger buns.

To cook them, drizzle or brush the portobello caps with extra-virgin olive oil. Place them on a small baking sheet gill side up and roast the caps for 12 minutes, or grill them for about 5 to 7 minutes on each side.

Season them with salt and pepper, and allow them to cool slightly, release their juices, and dry a bit before using them as buns to sandwich virtually any type of burger.



The healthiest, most nutrient-rich alternatives to bread are easy-to-fix ones made from vegetables and fruits.



Navy SEAL, Army Ranger veterans find mental health recovery from 1 or 2 psychedelic therapy sessions

ELAINE MARSHALL

avy SEAL veteran Chris Maddox was standing over the filled tub in his San Francisco hotel room, a knife in one hand and his phone set to dial 911 in the other, unable to decide on a course of acspecial operations veterans participating in tion. His group was headed to Mexico the the Stanford University study. They all shared next morning to participate in a study to re- a similar history of adversity and brothersearch the effects of psychedelic therapy on hood. The guys rallied him out of bed and post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI) in special opera-

But he didn't think he could go through with it. Not just the trip to Mexico, but any of ans, the rate of recovery from PTSD is less it anymore. After 12 years of multiple combat deployments, he had been medically retired with treatment-resistant PTSD and TBI, set adrift into the isolation of civilian life. Then, the study intake dredged up long-buried

memories and feelings from his time in the military, and he sunk into a place where he felt hollow and undeserving.

"I knew this study had the potential to help me, but I didn't feel like I deserved a chance at healing," Maddox said.

In the end, he put down the phone and the knife and instead returned to a reliable standby after almost a year of sobriety, getting drunk and hoping this would be the time he didn't wake up. The sound of people pounding on his door and windows later roused him.

"Chris!" male voices shouted, followed by more pounding. "Chris, open the door!" Maddox's traveling companions were also

through the trip.

Maddox emerged from his experience in Mexico with dramatic, life-changing results. He's one of the lucky ones. For most veterthan 30 percent. Veterans also have a 50 percent higher suicide rate than the general population. In fact, suicides among post-9/11 veterans are four times higher than combat deaths, with an estimated 114,000 veterans comes with concomitant disorders of depression,

PTSD

addiction, and anxiety that lock their victims into a neurological

Veterans have a

prison.

higher suicide rate than the general population.

"Anyone can journal. Journaling can be

a powerful tool for well-being and mental

health," said Diana Raab, who has written

It should feel like a burden is being lifted

when you write, Raab says. If it makes you feel

worse, sadder, or more anxious, she suggested

taking a break and trying again later. For the

most part, there are no harmful side effects

several books on using writing for healing.

having died by suicide since 2001.

"I had tried every Western-medicine-based approach, was on 12 different psychiatric drugs simultaneously, have been in rehab multiple times, and have been to multiple psychiatrists," Maddox said. "I have done cognitive processing therapy, cognitive behavioral therapy, equine therapy, canine therapy ... you name it, I've done it. The ibogaine therapy in Mexico completely revolutionized my mental health within four days.

"I was able to get off all of my medications, I'm in a steady job, and things are great with my family. I feel like I'm me again.'

Post-Military Service Difficulties

Multiple factors have been cited for the suicide epidemic among veterans. PTSD comes with concomitant disorders of depression, addiction, and anxiety that lock their victims into a neurological prison. The hypervigilance, distrust, and fear that keep a soldier alive during deployment turn into a spiral of self-destruction at home.

Many also lose their sense of identity and team camaraderie when they return to civilian life. For special operations veterans who were elite warriors in deadly, high-pressure environments, the tedium of civilian life can feel like decay.

Therapeutic Psychedelics

THE EPOCH TIMES Week 47, 2022

These are the psychedelics commonly used for therapeutic purposes:

Psilocybin: The active ingredient in "magic mushrooms," it has been explored to treat depression, anxiety, addiction, anorexia, PTSD, OCD, and anxiety about lifethreatening illness.

MDMA: Also known as ecstasy, in therapeutic settings, it has shown a 76 percent success rate in treating PTSD.

Ketamine: a dissociative approved for treatment-resistant depression.

Ayahuasca: a plant hallucinogen that's been used in religious ceremonies in parts of South America for centuries. It's been explored to treat depression, PTSD, and addiction

Ibogaine: a plant hallucinogen from West Africa being studied to treat addiction, PTSD, and brain injury.

LSD: studied to treat major depressive disorder, alcoholism, PTSD, addiction, and anxiety about a life-threatening illness.



"Being a special ops vet is like having a Ferrarithatyou're only allowed to drive at 15 miles per hour," said Jeff Smith (not his real name), an Army Ranger veteran who has used psychedelics in his own healing journey from PTSD.

Smith became a firefighter in a large metropolitan area, in part to quench his own ongoing need for high-octane service. "It helps to have a sense of purpose or a calling to dedicate yourself to when you get out of the military," he said.

With 24 veterans dying by suicide each day and conventional treatments hitting dead ends in an overwhelmed Department of Veterans Affairs (VA) system, it's no surprise the psychedelic renaissance found its way into the veteran community. Because psychedelics are classified as Schedule 1 drugs outside the United States. until the FDA approves them for treatment, it isn't possible to track how many veterans are employing psychedelic therapy, although advocates estimate it's in the thousands.

An Unexpected Therapy

Currently, veterans seek treatment in one of two ways: Through word-of-mouth connections to underground communities, or through travel to countries where psychedelic therapy is legal.

"It's an absolute embarrassment that on a large scale, veterans are going to Central

Psychedelic therapy is not an easy fix or magic bullet. For many vets, the experienc is difficult but profoundly helpful

and South America for lifesaving treatment because there is no access here," said Army Ranger veteran Jesse Gould, who founded Heroic Hearts Project after his own PTSD recovery through psychedelic therapy. Gould is an outspoken and driven advocate and predicts that a paradigm shift is imminent.

"Veterans by the thousands are actively pursuing psychedelics right now," he said. "Psychedelic therapy is coming, whether people like it or not. They're passing FDA trials and they're in the public zeitgeist. The problem now is we're letting our stigmas and fears get in the way of what the science is telling us."

The acceptance of psychedelic therapy is seeping into mainstream consciousness drop by drop. With the explosion of research in the past decade, an increasing number of states and municipalities are approving psychedelic research, treatment, or decriminalization. In July, the VA launched five clinical trials to study MDMA (the drug known as ecstasy) and psilocybin, or "magic mushrooms," for the mental health disorders common among veterans; other privately funded veteran studies are also underway.

Texas lawmakers surprised the rest of the country when they voted almost unanimously to require the state to study the risks and benefits of psilocybin, MDMA, and ketamine for veterans, and to conduct a clinical trial using psilocybin to treat veterans with PTSD. This made Texas the first U.S. state to approve state funding for psychedelic research since the War on Drugs ended research that began in

"I see Texas as an example that a lot of others are wanting to follow," said Brad Burge, founder of Integration Communications and the director of communications and public relations for Veterans Exploring Treatment Solutions (VETS).

VETS is another organization that supports veterans with PTSD, TBI, and other mental health challenges who are seeking psychedelic therapy, by providing coaching

Research With Veterans

Navy SEAL veteran Marcus Capone and his wife, Amber, founded VETS after psychedelic therapy helped Capone recover from PTSD

ing psychedelic research for veterans," Burge said. "When lawmakers heard personal testimonies from special ops vets like Marcus, it flew through legislative sessions. The bill had nothing to do with decriminalization or legalization, just research. It gave conservative

"VETS was instrumental in Texas legislat-

policymakers the political leeway to support our troops by getting in front of psychedelic legislation for the very first time. In fact, it was VETS that, after a tip from a

mutual friend, reached out to Maddox and enrolled him in the Stanford study.

"I wasn't exploring psychedelics at the time, it never crossed my radar," Maddox said. "When Marcus reached out to me, I thought he was crazy. 'You want me to go to Mexico and sit with a shaman?' But then I thought, you know what? I'll do anything to get better, Legal Implications what do you want me to do?"

For the study, Maddox underwent a session with ibogaine, a psychoactive substance from a plant native to Africa that's showing tremendous promise for not only substance abuse disorder and PTSD, but also brain injury. An ibogaine journey lasts longer than other psychedelics, about 20 hours.

The journey is often described as grueling and unforgiving, yet revelatory. Subjects recount being taken through an audit of the good, the bad, and the ugly about themselves, typically with ample time spent on "the ugly." Yet they also talk about connecting with God, or a universal oneness, and seeing their life from a "zoomed out" and loving perspective. Researchers have been gathering clues to explain why just one or two sessions can lift a subject out of PTSD, depression, anxiety, and addiction. Maddox completely lost interest in alcohol and his self-sabotaging thoughts just four days after his experience.

A Challenging Treatment

Psychedelic therapy, whether it's through psilocybin, ibogaine, ketamine, MDMA, or ayahuasca, is believed to work by overwriting self-destructive neural pathways.

People suffering from mental health disorders often describe feeling stuck. This is, neurologically speaking, accurate. They are trapped in neural "ruts" so hardwired into the brain that they begin to change its shape. Imagine walking the same dirt path so frequently that it carves a trench so deep in the ground that you can no longer see over the op or climb your way out.

That's what being trapped in these mental

health disorders feels like neurologically. Psychedelic therapy is believed to wipe the neurological slate clean so the individual can start laying more positive networks instead. Think of a ski run that is groomed at the end of the day, ready for fresh tracks. Researchers describe this as a "mystical experience," in which the individual is liberated from their neurological prison into personal agency.

Smith said some veterans and first responders are reluctant to seek treatment, lest they

go "soft" and lose their edge. But in his job as a firefighter, dealing with traumatic events while on the job, he hasn't found that to be

"We spend so much time building our armor to survive combat or as a first responder," Smith said. "Being tough allows you to perform in high-risk situations. Getting sucked into your feelings could get you killed, there's no time for that. But I have found working with psychedelics doesn't cause me to lose the edge to perform well on the job. I can turn it on at work and turn it off when I come home to my family."

The truth is, psychedelic therapy is rarely "soft," much less an easy fix or a magic bullet. All the veterans I talked to said the same thing—the psychedelic experience was one of the hardest things they've ever done.

"My ibogaine journey was the scariest experience of my life," said Maddox, who continues to work with psychedelics to learn more about himself and to train as a guide for other veterans. "I'm not going to lie, psychedelics still terrify me. It's very powerful medicine. I still work with a coach for one month prior and one month after each session. I have to get my head in the right mindset to do it."

Although psychedelic research is showing dramatic results, stigmatization from the '60s and '70s persists. In 2020, Oregon voters passed a measure to allow psilocybin therapy in approved centers with trained facilitators. Yet 75 percent of Oregon counties had measures on the Nov. 8 ballot to either opt out or to ban psilocybin outright. Opponents cite the potential ruin of rural character, safety concerns, and insufficient training requirements for facilitators.

Opponents also confuse the psilocybin measure with Oregon's recent decriminalization of small amounts of drugs. Smith, the Army Ranger vet who's a firefighter, understands the ire. He's seen a dramatic uptick in overdoses and drug-related calls since the decriminalization measure passed.

But it irritates him that people confuse that with psilocybin therapy. He has personally never been on an emergency call involving a psychedelic in his years on the job, but he responds to opiate- and amphetamine-related calls daily.

"People always say 'Thank you for your service,' but I'm tired of my friends and former teammates suffering and dying," Smith said. "If you want to thank us, give us access to a therapy that is actually saving lives."

Elaine Marshall is a functional medicine writer and author of "Veterans and Psychedelic Therapy: A New Paradigm," releasing in 2023. Veterans4psychedelictherapy.com

Support Organizations

Here are a few groups in the United States that help connect veterans

with psychedelic therapy:

· Heroic Hearts Project VETS

Mission Within

SELF-REFLECTION

Tap Into the Power of Your Pen

Continued from Page 1

A childhood trauma survivor who started her career in the criminal justice system, Austin-McDonald hasn't stopped writing since that turning point, modifying her journal entries into a published book, "Unclothed: Memoir of a Naked Soul." She's now a professional speaker and life coach who guides women into self-actualized transformation.

"So much poured out of me when I actually started writing because there was so much I needed to process," she said. "I get fueled by my own writing. I literally will pull the car over sometimes to write something down."

While some trauma sufferers might have a writer's intuition, experts say anyone can utilize the power of the written word to bring balance back to their health. Just as our physical body grows stronger by exercising, our emotional health gains resilience by regularly reflecting on and expressing thoughts and feelings. And the benefits spill over into physical health, too.

Just as our physical body grows stronger by exercising, our emotional health gains resilience by regularly reflecting on and expressing thoughts and feelings.



Journaling for Trauma

to journaling.

If you've never journaled, try experimenting with different styles to manage your stress or simply to track your healing progress and growth, Raab advises. Whatever your reason, have it front of mind when you begin, so you can determine if it's effective. For instance, you might set a goal to work with your inner critic to stop a cycle of shame.

Raab suggested exploring these common

• Reflective journaling: Write about your experiences and describe your feelings about

• Gratitude journaling: Write about what you're grateful for. This could be a list, or you could elaborate at a deeper level. It tends to be effective first thing in the morning or right before bed.

• Travel journaling: Take a special ournal with you while traveling as a way to document your trip.

• Visual journaling: Combine words with art or drawings. You might draw

an illustration on the left side of the page and write something on the right side.

• Food journaling: This is for those tracking food intake, to monitor weight loss or gain. You might also use it to document any food allergy reactions or emotions connected to eating habits or allergic reactions.

"The key to successful journaling is in the regularity," Raab said. "It should be a habit that you incorporate into your daily routine." There's just one rule for wellness writing:

the three-day rule. According to John F. Evans, creator of Duke Integrative Medicine's online course, Transform Your Health: Write to Heal: "If you find yourself covering the same ground over and over with the same emotion for three days straight, it may be time to move on. Either write about the topic in an entirely different

way or leave the topic alone for a while." He added that therapeutic value is also found in writing drama, poetry, fiction, essays, unsent letters, lists, and memoirs.

Trauma Memoirs: To Publish or Not

Now its own category of books, trauma memoirs can be beneficial but writing coaches are quick to advise that you aren't writing just for yourself. Sharing your narrative is an artistic endeavor intended to move your audience, not a compilation of your most traumatic events for your own sake.

Also, if you are journaling with the thought of others later reading your words, it may make it difficult to be fully honest with yourself and benefit from the pure self-reflection that jour-

Besides journaling, prose and poetry are also powerful tools often suggested for soldiers with post-traumatic stress disorder, according to Steve Donahue, an author and book coach.

"Telling a beautiful story about a terrible

thing is transformational. Even if this was not

the primary reason for writing your book, it's

one of the potential benefits of doing it well," he wrote in a 2021 blog post. Austin-McDonald's therapist encouraged her to keep journaling her own life story. Ultimately, she felt compelled to edit out a lot of the "emotional vomiting" and share her story

they aren't alone. "It was really God-led," she said. "I get these nudges from God, and I listen and I follow it, and it turns into something."

to let other victims of childhood trauma know

Set Yourself Up for Success

Unless you're writing for an audience, and perhaps even if you are, you don't need to be concerned about proper punctuation and spelling. What's most important is establishing habits that will facilitate healing and joy. Here are some tips from Raab and Evans:

• Use a journal and a pen you love. They should inspire you to pick them up and use them on a regular basis.

 Write whenever you want and especially when you notice strong emotions to express something that happened or something someone said or did.

• Carve out a time of day and establish a consistent place where you will write uninter-

rupted for at least 20 minutes. Always date the top of your page.

• Ground yourself in the moment by either **Try Using Prompts** a short meditation or taking a few deep breaths in and out.

• Spend a few minutes thinking about your trauma and where you feel it in your body. Consider how it affected you and your loved ones.

• If you get stuck, write about yourself using third person to see if it changes perspective. Begin by writing, "Right now, I feel ..." And

details as possible. "The beauty about journaling is that it's unlike an essay, which needs a beginning, middle, and end," Raab said. "It can be stream-of-

consciousness or automatic writing where

you allow your thoughts to take you where

see where it goes. Try to provide as many

they want. It's okay if you begin writing about ANASTASIA OMELYANENKO/SHUTTERSTOCI



Journaling is therapeutic and can leave you feeling like a burden has been lifted.

one thing and you're brought down memory lane to something else. The important thing is that you're writing."

listing prompts.

For those who are new to journaling or to get out of writer's block, prompts can be useful. Raab's latest book, "Writing for Bliss: A Seven-Step Plan for Telling Your Story and Transforming Your Life," has prompts throughout,

Some of the ones she offers on her web-

in addition to a section at the end of the book

Write about a vivid childhood experience,

either joyful or painful (or both). Write a poem beginning with "I do not

know ...' • Finish: "My intention for today is ..." • Write a heartfelt love letter to a special per-

son in your life, here or departed.

• Write about a colorful family member.

Expect Positive Outcomes

Studies have been accumulating since the early 1980s about the physical effects writing has, including lowering the heart rate, strengthening the body's ability to fight off infections, improving self-esteem, and helping people overcome obstacles, according

One study of college students in 1986 who wrote for 15 minutes on four consecutive days about the most traumatic or upsetting experiences of their lives, while the control group *to pain and stress*.

wrote about superficial topics, resulted in a decrease in health problems. The group that wrote their deepest feelings had fewer visits to the health center and fewer days of illness.

Similar results have been shown in many studies since with outcomes such as:

 Reduced blood pressure Improved liver function

aminations Reduced absenteeism from work

• Reduced depressive symptoms before ex-

Quicker re-employment after job loss

 Improved working memory • Fewer days in the hospital

Improved sporting performance

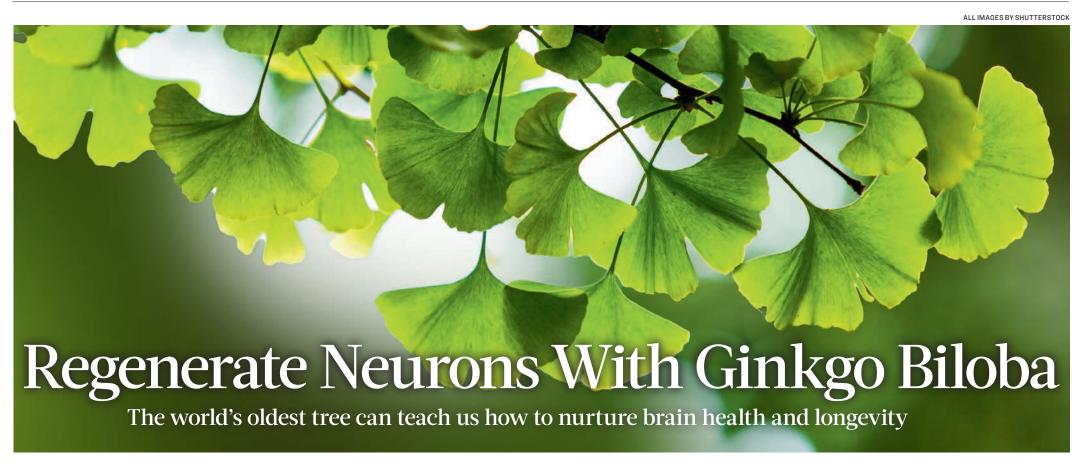
 Higher grade point average Altered social and linguistic behavior

Austin-McDonald noted that she has worked with clients whose moms read their childhood journals, and they were triggered by journaling or couldn't fully express their deepest thoughts. In that case, writing may not be best. But there are other avenues such as music, tapping, yoga, and drama that can help pro-

"Writing literally saved my life," she said. "You have to find a way to speak what your soul wants to say."

cess feelings.

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



SAYER JI

Considering the fact that ginkgo biloba is the oldest known tree in existence (deemed for this reason a "living fossil"), isn't it poetic how this plant has also been used to promote long life as both a food and medicine in traditional cultures as well?

Clearly, this plant has figured out a way to optimize longevity in face of many of the same adversities humans face, e.g. predators, infections, fluctuations in nutrient availability and climate, etc.

And so, by consuming that plant, could it not lend some of its power and (phytochemical) wisdom to those imbibing it, as was once commonly believed by "pre-scientific" cultures throughout the world who considered plants their allies?

In ancient times, if something worked in practice it was considered validated by that fact. This was no academic affair, as even a slight advantage or disadvantage in immunity or metabolism could translate into life or death consequences.

Of course, they didn't have the luxury or means to employ randomized, doubleblind, placebo controlled trials before trying out a medical intervention.

And yet, today we have the lens of science to plumb the depths of traditional approaches to healing, in order to ascertain the many ways a natural substance may protect against disease as well as the plausible mechanisms with which they do so.

And this enterprise has gifted us with a massive database of information that can help us to attain even greater appreciation for the power of traditional medicine to not only heal, but do so in a way that is often superior to drugs within the conventional pharmacopeia.

Ginkgo biloba, I believe, is an ideal example of this.

The Power of Ginkgo Biloba Revealed through Science

The first time I really started to grasp ginkgo biloba's power to heal the brain occurred when I stumbled upon a 2006 paper published in the European Journal of Neurology that described a 24-week randomized, placebo-controlled, double-blind study showing that an extract of this plant was as clinically effective as the blockbuster donepezil for mild-to-moderate Alzheimer's disease:

"Our study suggests that there is no evidence of relevant differences in the efficacy of EGb 761 [ginkgo biloba] and donepezil in the treatment of mild to moderate Alzheimer's This plant
has figured
out a way
to optimize
longevity in
face of many
of the same
adversities
humans face.



Coffee is more than a wakeup. It increases brain-derived neurotrophic factor.



Green tea can also increase brain-derived neurotrophic factor.



Exercise can also increase brain-derived neurotrophic factor.

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dementia, so the use of both substances can be justified. In addition, this study contributes to establish the efficacy and tolerability of the Ginkgo biloba special extract E.S. in the dementia of the Alzheimer type with special respect to moderately severe stages."

Amazingly, this was not the first study to ascertain significant medicinal properties in ginkgo biloba. In fact, if you peruse our database on GreenMedInfo.com on ginkgo, you will find it has been studied to have value in more than 100 different diseases and has been identified to have at least 50 distinct beneficial physiological actions. Isn't this amazing? Consider that the average FDA-approved drug has 75 known adverse health effects for every purported health benefit.

Clearly, a plant with this much power to heal—including the ability to compete with a multibillion-dollar drug in ameliorating what is considered an "incurable" neurodegenerative disease, Alzheimer's disease—is worth exploring in greater depth.

As for its brain regenerative properties, it has already been known that ginkgo can stimulate brain-derived neurotrophic factor (BDNF), a protein found in the brain and in the peripheral nervous system that is essential in the regulation, growth, and survival of brain cells and that is especially important for long-term memory. The ability to increase BDNF, therefore, implies it will improve brain and cognitive function. But this, alone, does not reveal the whole story on why ginkgo is so special, as a wide range of substances are capable of increasing BDNF, including coffee, grape seed extract, green tea, and even aerobic exercise.

Only recently, a new mechanism behind ginkgo biloba's brain and neurological tissue healing properties was revealed in the publication of an article in Cell and Molecular Neurobiology titled "Ginkgo Biloba Extract Enhances Differentiation and Performance of Neural Stem Cells in Mouse Cochlea."

In the new study, researchers tested the premise that ginkgo biloba's wide range of benefits in the treatment of neural damage and disorders is due, in part, to its ability to positively modulate neural stem cells (NSC), a subpopulation of cells within the brain that, as multipotent cells, are capable of generating the many different types (phenotypes) of cells that make up the brain. Their results, using mouse cochlea-derived neural stem cells, showed a number of ways that ginkgo biloba exact (GBE) resulted in a beneficial effect:

addition, GBE treatment also increases NSC differentiation to neurons and enhances the performance of mature neural networks evident by the increased frequency of calcium oscillation. Moreover, neurite outgrowth is also dramatically increased upon GBE treatment. Overall, our study demonstrates the positive regulatory role of GBE in NSC proliferation and differentiation into functional neurons in vitro, supporting the potential therapeutic use of GBE in hearing loss recovery."

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In ancient

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that fact.

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practice

it was

When one figures in the broad range of ways in which ginkgo can promote brain health, including increasing circulation to the brain, reducing brain inflammation and oxidative stress, increasing in BDNF, and now stimulating brain stem cell-mediated neuronal regeneration and improved function, it may begin to provide practitioners with an ideal drug alternative in age-related neurological and cognitive problems.

It should be noted that neural stem cell stimulation and subsequent brain repair has also been observed in preclinical research with a little-known component of turmeric known as ar-turmerone, which is found in whole turmeric but not in the increasingly popular 95 percent standardized curcumin extracts of turmeric. It is likely that many of the compounds we consume daily also have brain regenerative properties. Indeed, we wrote about some of these "nerve regenerating" natural substances in our article, "6 Bodily Tissues That Can Be Regenerated Through Nutrition," if you would like to learn more.

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 Systome Biomed, vice chairman of the board of the National Health Federation,

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that ginkgo biloba exact (GBE) resulted in a beneficial effect:

"Our data showed that GBE treatment promotes cell survival and NSC proliferation. In

Dr. Weston Price

around the world

with healthy teeth

and obvious physical

health. His goal was

the role of diet on

THE EPOCH

disease.

to better understand

studied people

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Who Was Dr. Weston Price and Why Did He Matter? This world explorer of diet and health found remarkable similarities between so-called primitive people

Are you confused about w

Are you confused about what constitutes a healthy diet? Bewildered by all the claims out there about how we should eat? Concerned that your children aren't getting the nourishment they need?

Indeed, most people are confused, and no wonder, given the many conflicting assertions about the kind of diet that will confer good health. Shall we embrace skinless chicken breasts and skim milk? Make smoothies with protein powders and raw kale? Can we thrive on "fortified" break-

Should we go gluten- and casein-free?
One influential researcher found an insightful way to understand what diets support vibrant health—by studying people who enjoyed vibrant health. He was a Cleveland dentist named Weston A. Price. He was a man who asked probing questions, and the main question he kept asking himself was

fast cereals and peanut butter sandwiches?

man who asked probing questions, and the main question he kept asking himself was "Why are my patients so sick?" Almost every new patient he examined had teeth riddled with infection and decay; many had "dental deformities," the phrase Price used to describe crowded and crooked teeth.

Price observed a correlation between dental health and overall health. The rare patient with excellent dental health—wide dental palate, straight even teeth, and freedom from decay—was blessed with good overall health, while those with cavities and crooked teeth suffered from a range of modern diseases, including growth problems, fatigue, infertility, and one or more of the many chronic diseases that were common in Price's day, from tuberculosis to kidney problems to cancer.

Continued on Page 10



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Today, more than

American children

suffer from some kind of disability,

while allergies,

asthma, digestiv

disorders, and

17 percent of

norm for human beings.

birth through old age.

A Variety of Healthy Diets

Price demonstrated the role of nutri-

tion in supporting optimal health from

Because Price studied healthy popula-

tions throughout the world—from the

Arctic to the tropics—he naturally en-

countered great variety in traditional

diets. The natives of Alaska and north-

western Canada lived mostly on animal

products—game and fish—while vams,

seafood, and pork nourished the South

Sea islanders. The Australian Aborigines

consumed every type of food imagin-

able: kangaroo, birds, insects, grains, le-

gumes and a vast selection of nuts, fruits,

and vegetables. Isolated Swiss villagers

derived a large portion of their calories

from dairy foods: milk, cream, butter,

and cheese, along with rye bread and

meat; Gallic inhabitants in the Outer

Hebrides were equally healthy on a

limited diet of seafood and oats. Many

African diets contained milk from cattle

and goats, plus meat, fish, grains, in-

sects, and a variety of plant foods. South

American diets were equally varied—

from Guinea pig, grains, and dried fish

eggs in the high Andes, to fish, small

animals, and tropical fruit in the Ama-

zon basin.

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THE EPOCH TIMES

Who Was Dr. Weston Price and Why Did He Matter?

Continued from Page 9

Indeed, Price shared the view of many of his contemporaries that the health of the mouth mirrors the overall health of

Price practiced dentistry between 1920 and the early 1940s, during a time when the world was opening up. Modern transportation methods and a new invention called the camera allowed explorers and anthropologists to document the lives of isolated, socalled primitive peoples. Indeed, one of Price's nephews worked for the National Geographic Magazine, so dinner table conversation in the Price household often included firsthand reports of native peoples from remote regions—from the Alaskan hinterlands to the Amazonian jungles.

The most common and striking observation Price's nephew Price saw had on encountering an that populations isolated tribe: What beauwith healthy teeth tiful teeth they had! Fifty developed cavities years earlier, the painter after they began George Catilin described eating processed Native American teeth "as regular as the keys of a piano; and without decay or aches, [which] preserve their soundness and enamel, and powers of mastication." Explorers also noted the stunning physiques, calm demeanor, and overall good health of native peoples and the ease of

childbirth among the women. On hearing these reports, Price couldn't rest in Cleveland; he had to find out for himself. Was it true? Was it true that people isolated from the West enjoyed perfect dental health and, by inference, perfect overall health? And if it were true, what were these people eating?

So, beginning in 1931, he embarked on a series of investigations that took him to many remote parts of the globe. The descriptions of his findings, including details about native diets along with his revealing photographs, first appeared because he demin peer-reviewed dental journals and then were published collectively in his book "Nutrition and Physical Degeneration," which has enjoyed a lasting influence since its appearance in 1939 right up to the present day.

In a sense, Price was a predecessor to the blue zone researchers of more recent

didn't look at longevity, a factor that wasn't easily evaluated at that time in research. He looked at apparent health and vitality, and one of the most obvious ways to do this was to look at people's teeth.

Price gathered his observations from remote villages in the Swiss Alps; windswept islands in the Outer Hebrides; the Alaskan wilderness; Native American communities in Northwest Canada and Florida; South American villages in the Andes and the Amazon; the South Seas, including New Zealand and Australia; and the interior of Africa.

In all, he found 14 groups that enjoved excellent dental health-naturally straight teeth and freedom from cavities—and excellent overall health freedom from disease along with ease of reproduction and childbirth. These communities had many elders, living long and productive lives, and

death of children was rare. Today, more than 17 percent of American children suffer from some kind of disability while allergies, asthma, digestive disorders, and other ailments make life miserable for many more. Writing in the journal Bioscience, researchers point out

what they call an "epidemic of narrow jaws" requiring expensive orthodontics to achieve the attractive appearance that young people naturally desire. Chronic disease in adults, disease linked to factors such as diet and lifestyle, has recently led to a decline in lifespan.

Why does Price's research matter? First and foremost good health, energy, and attractive

appearance is

None of these diets contained any processed or devitalized food, what Price called 'the displacing foods of

modern

commerce.

In all, he found

GROUPS that enjoyed excellent

dental health—naturally straight teeth and freedom from cavitiesand excellent overall health—freedom from disease along with ease of reproduction and childbirth.

decay appeared, causing great suffering, as there were no dentists to treat the pain of decay. The happy, optimistic Alaskan peoples, for example, became prone to suicide, and many claimed this desperate act was to escape the pain of tooth decay. The next generation on processed food had more narrow facs, with crowded

Noting the variety in traditional di-

ets described in Price's book "Nutrition

and Physical Degeneration," many com-

and exclaim, "There's no such thing as

a healthy diet!" That's the wrong conclu-

this: There are many varieties of healthy

diets. All of these diets supported su-

perb health, including freedom from

tooth decay, excellent facial structure and physical form, absence of disease,

and ease of reproduction and childbirth.

The fact is that while all these diets dif-

fered in their particulars, they shared

several commonalities. The first is that

none of these diets contained any pro-

cessed or devitalized food, what Price

called "the displacing foods of modern

commerce." These "displacing foods"

contained "none of the body-building

factors," as Price put it, and worse,

pushed out the native foods that had

nourished people for generations.

Calories from sugar and white flour

replaced those from animal foods and

whole grains; canned condensed milk

replaced raw whole milk from pastured

animals; vegetable oils replaced animal

fats; refined salt replaced mineral-rich

native salt; and devitalized canned foods

As soon as processed foods entered the

food supply of a tribe or village, tooth

replaced fresh vegetables and fruit.

prone to diseases like tuberculosis and cancer, while childbirth became painful and lifethreatening. Overall, the second generation on

and crooked

processed food was less robust, had compromised eyesight and hearing, and reduced fertility. The second major characteristic of healthy traditional diets was the inclusion of animal foods; Price didn't find any traditional peoples following a vegan or vegetarian diet. Some have called

this "Price's greatest disappointment." He hoped to demonstrate good health from a diet with few or no animal foods, but had to admit that all healthy populations consumed animal foods—often obtained at great risk. All the "sacred" foods—foods considered important for having healthy children—were animal foods. Even populations that had herds to supply milk still included meat in their diets. Meat and organ meats, fish,

shellfish and fish eggs, birds of every

sort and their eggs, even reptiles and



Dr. Price noticed a pattern of eating too many refined grains among those populations with poorer



While whole grains eaten in proper proportion may not be an issue, Dr. Price believed they are overeaten by most people in the

insects—all served as nourishment for healthy traditional peoples.

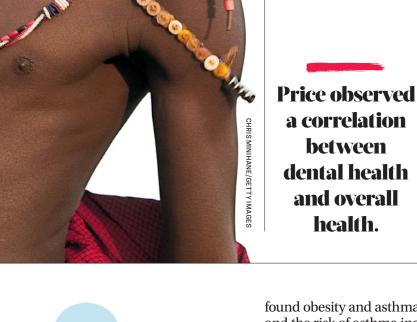
Some commentators have interpreted Price's findings as follows: avoid sugar and white flour, and include animal foods in the diet—that's all you need to know about a healthy diet.

That's taking a simplistic view and ignoring the all-important principle of nutrient density. Price sent many samples of native foods back to his laboratory in Cleveland for analysis. He discovered that traditional diets—diets supporting superbly healthy people—contained at least four times more minerals than the typical American diet of his day. Levels of calcium, iron, phosphorus, calcium, magnesium, iodine, and boron tended to be much higher in native diets. Moreover, these diets contained at least 10 times more of the fat-soluble vitamins compared to the American diet of his day—vitamins A, D, and K2—found exclusively in animal foods and fats, such as butter, pork fat, poultry fat, egg yolks, organ meats, shellfish and fish eggs. Many Americans believe that the road to good health involves avoiding rich and satisfying foods like these; in fact, to achieve good health we should include these types of foods in our diet as often as possible.

A healthy diet isn't so much a diet that avoids this or that traditional food, or that involves arbitrary rules like food combining, but one that includes nutrient-dense foods grown and prepared to ensure maximum assimilation. The good news is that when we eat a rich and satisfying diet that supplies the body with all the nutrients it requires, cravings for devitalized processed food gradually disappear.

We'll talk more about how to achieve a nutrient-dense diet in upcoming columns.

Sally Fallon Morell is the founding president of the Weston A. Price Foundation and founder of A Campaign for Real Milk. She is the author of the bestselling cookbook "Nourishing Traditions" (with Mary G. Enig, Ph.D.) and of many other books on diet and health.



firmed this pattern, showing that a propensity for obesity predicted a tendency

Obesity can impair breathing in two ways. One is that excess fat, particularly in the chest and abdomen, weighs heavily on the lungs as well as the muscle that drives the bellows of your breath: the diaphragm.

Found just below your lungs, your diaphragm is like a flexible dome that pushes up against the bottom of your lungs. When your diaphragm contracts, your

But a diaphragm in an obese body has a larger load to carry. It has to expend more energy because it must work against the burden of excess fat. This burden can reduce lung volume as well, which means you get less out of each breath you take.

The other drawback to excess abdominal fat is that it tends to be highly inflammatory, increasing the cytokines and immune cells known to drive all forms of chronic disease.

This inflammatory factor raises the risk of lung problems such as asthma

Exercise drives your lungs to work harder, strengthening their capacity even as it helps you shed the

extra weight that

contributes to

and chronic obstructive pulmonary disease (COPD), and can even shorten your life. Data from a 2012 study in the American Journal of Clinical Nutrition suggest that excessive abdominal fat contributes to the increase of an inflammatory marker known as plasma IL-6. This marker was shown to be "strongly associated with all-cause and causespecific mortality in older persons with obstructive lung disease."

It's a vicious cycle, because breathing problems can also drive obesity. If you already struggle to breathe, you may be less likely to engage in strenuous physical activities that make you huff and puff. A British study found that almost 80 percent of teenagers report that the worst thing about asthma was not being able to participate in sports due to compromised breathing.

Of course, not moving enough is not the only cause for breathing problems. And not everyone with asthma is obese. However, the relationship these two diseases share is nevertheless remarkable. A metaanalysis examining over 300,000 adults found obesity and asthma were related, and the risk of asthma increased with a greater body mass index (BMI). According to some estimates, about 250,000 new cases of asthma per year in the United

States are related to obesity. If excess fat impairs breathing, losing fat improves it, regardless of the fat reduction method. One review of studies examining weight loss and asthma found that all research observed an improvement in breathing outcome when subjects slimmed down, whether the fat was removed surgically or through good old fashioned diet and exercise.

Moving for Breath

In addition to shedding the pounds that may compress your lungs and diaphragm, exercise also contributes other breathing benefits.

When you physically exert yourself, your muscles demand more oxygen, and release more carbon dioxide in the process. This means your lungs have to work harder to keep up. This improves your oxygen intake, and makes your lungs progressively stronger.

According to fitness expert Gerry Bernstone, stronger muscles make breathing easier.

"Exercise has also been shown to help to increase the size of the airways, making it easier for air to move in and out. Additionally, exercise can help to improve the elasticity of the lungs, making them more efficient at exchanging oxygen and carbon dioxide," Bernstone said.

So how should you move if you hope to breathe better? Aerobic exercise is the

form best known for its improvements to lung function, because it challenges our breathing by its very nature. With consistent aerobic practice of walking, jogging, or bicycling, improvements are easy to see. A pace and distance that would have winded you weeks or months before may become a piece of cake, forcing you to pick up the pace to make further progress.

Exercise can help to improve the elasticity of the lungs, making them more efficient at exchanging oxygen and carbon dioxide.

Gerry Bernstone, fitness expert

Aerobic exercise is certainly important for improving lung health. However, other forms of exercise can play a role.

For people who suffer from asthma, COPD, cystic fibrosis, or lung cancer, the American Lung Association recommends a program called pulmonary rehabilitation. The program includes a combination of aerobics, stretching, and resistance training as part of its instruction. Stretching provides relaxation, and a chance to focus on your breath. Resistance exercises (like weight lifting) can make your muscles stronger, including

the ones that work your lungs.

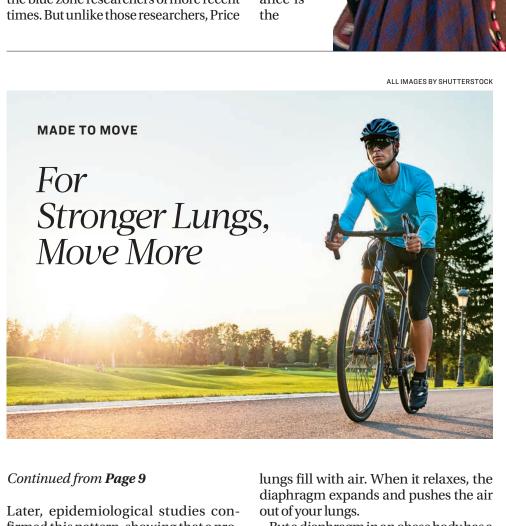
This predominantly exercise-focused lung improvement program may also include nutritional and psychological counseling. Doctors prescribe the program, which can be tailored for each individual. An evaluation includes a stress test to measure things like blood pressure, heart rate, and oxygen level, as well as a test to see how far you can walk in six minutes. Patients are retested months later to monitor progress.

The program also teaches the mechanics of breathing so patients have a better understanding of their condition and how to manage it. The goal is to learn how to become more active with less shortness of breath.

But you need not be diagnosed with a breathing problem to find an excuse to improve your lungs. Cross country and swim coach turned personal trainer Bonnie Frankel (78) also recommends a combination of aerobics, resistance training, and stretching, as well deep breathing exercises to further enhance your lung capacity.

Frankel says to start gradually if you're new to exercise, but be sure to find moves that you enjoy performing, because you're more likely to be consistent if you're having fun. Regularity is key, but you also don't want to overwhelm yourself or cause an injury. To avoid becoming too easy or routine, try to mix it up.

"Your exercise program should vary in your workouts. This includes time, pace, place, mediums, and rest day or days," Frankel said. The more you move, the quality of your life will improve."



Week 47, 2022 THE EPOCH TIMES

There are many options for treating dry eyes depending on what works best for you

JACQUELYN WATERS

This article is part two of a two-part series. Part one ran last week and described the symptoms, causes, and biology of this

ou've likely experienced the incredible discomfort of having something in your eye. Whether an eyelash or piece of sand or dirt, you doubtless stopped what you were doing and attempted to get it out. Imagine this feeling being present for hours, or worse, for days on end.

This feeling is an ongoing reality for people who suffer from dry eye disease (DED). Symptoms of DED range from mild irritation to severe pain. You may experience burning, excessive tearing, sensitivity to sunlight, eye redness, and eye fatigue. DED is a complex disorder with multiple factors that contribute to and intensify the disease.

Dry Eye Is Complex

DED is often entwined with meibomian gland dysfunction in a vicious cycle in which the conditions exacerbate one another. Meibomian glands are oil glands along your eyelid margin that secrete the oily layer of your tear film. This oily layer normally prevents your eye's tear film from evaporating too quickly. When the meibomian glands don't function properly, they don't secrete enough of a film to keep the watery portion of your tear film from evaporating. This leads to increased evaporation of the tear film, which causes the eyes to become dry and irritated. The dryness makes your eyes susceptible to pathogens, such as bacteria and viruses, and Adjusting Lifestyle and Diet triggers the immune system to spur a cascade of inflammation, which further exacerbates meibomian gland dysfunction.

If you have symptoms of DED, the first step is to see an ophthalmologist who's able to begin teasing apart the factors causing and perpetuating your dry eye symptoms.

Each case of DED is unique. Determining the driving factors contributing to and aggravating the condition is vital for proper management of the disease. There isn't a one-size-fits-all approach. A good ophthalmologist will take the time to figure out which factors are contributing most significantly and address those factors specifically in order to break the cycle. If your ophthalmologist suggests treatments that you're uncomfortable with and doesn't seem

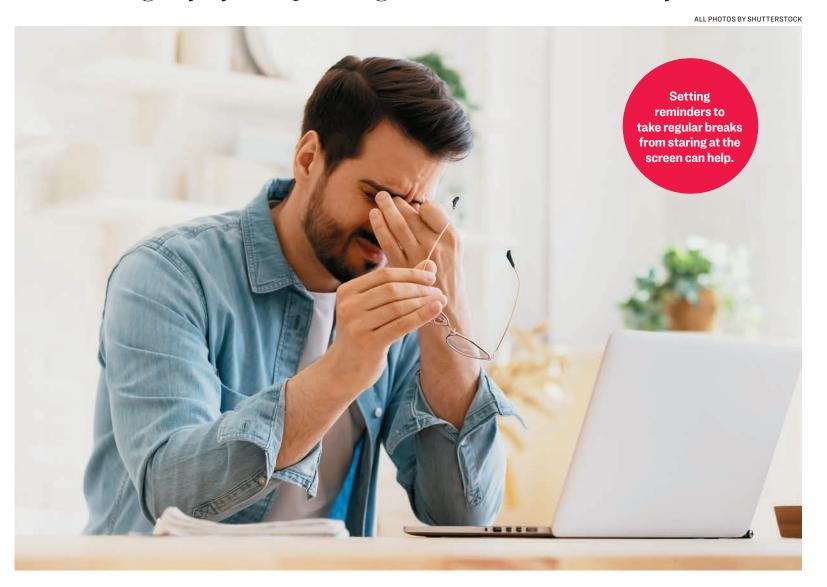
Treating Dry Eye Disease Outside of the Clinic

The main goal of DED treatment is to restore the eye surface to a place of homeostasis where inflammation is under control and the factors necessary for a healthy tear film are re-established.

Addressing Environmental Factors

Environmental factors such as smoke and windy or dry climates can cause dry eye symptoms. Use of a humidifier, as well as avoiding sitting in the direct path of airflow from an air conditioner or fan are smart strategies for protecting your eyes. In addition, moisture chamber glasses can be very effective in these environments to protect the eves from losing substantial tear film due to rapid evaporation.

Staring at a computer or smartphone screen for hours each day can contribute to dry eye symptoms due to infrequent blinking and



eye strain. It may seem like a small thing, but setting reminders to take a rest from staring at the screen can be very beneficial.

One of the simplest and most profound changes you can make for your dry eyes is to drink more water. Set timers to remind yourself to drink water to make sure you're adequately hydrated throughout the day.

Smoking and drinking excessive alcohol can cause dry eye symptoms; quitting smoking and keeping alcohol use in moderation are two powerful ways to decrease dry eye symptoms.

In some cases, an underlying autoimmune disorder may be the cause of DED. For instance, autoimmune thyroid disorders, Sjogren's syndrome, rheumatoid arthritis, and lupus can all cause decreased tear production.

Determining what exacerbates symptoms of your autoimmune disorder can be key to to have given you a thorough exam, it may helping your dry eye symptoms. For instance, elderberry can increase the production of inflammatory cytokines such as IL-1 beta, TNF-alpha, IL-6, and IL-8. Elderberry is contraindicated for those with autoimmune disorders. Echinacea can worsen autoimmune symptoms and therefore may aggravate dry eve symptoms in individuals with autoimmune disorders associated with decreased tear production.

Controlling inflammation in the body is important for decreasing autoimmune symptomology. A diet rich in anti-inflammatory foods, such as omega-3 fatty acids, is helpful for lowering inflammation in the body and at the surface of the eye.

Research on the role of omega-3 fatty acid supplementation on dry eye symptoms has been highly variable, but a recent systematic review and meta-analysis demonstrated improved subjective symptoms in patients with DED who supplemented with omega-3 fatty acids.

A meta-analysis of clinical trials reveals evidence that omega-3 fatty acid supple-

entwined with meibomian gland dysfunction

in a vicious cycle in which the conditions exacerbate one

another.



For some people, eye drops may be enough to treat dry eyes-but eye-drops that have preservatives should be avoided.

mentation "significantly improves dry eye symptoms and signs in patients with dry **DED** is often

A diet high in processed foods, unhealthy fats, and sugar contributes to inflammation in the body and may be linked to your dry eye symptoms. A cross-sectional survey of 103 subjects suggests that "lower inflammatory diets such as the Mediterranean diet may have a protective effect against dry eye."

Sometimes a vitamin deficiency is the

Vitamin D deficiency causes symptoms associated with dry eyes. In one study, researchers found vitamin D supplementation to be effective in treating patients who were deficient in vitamin D and not responding to conventional DED treatments. Another study revealed vitamin D supplementation improved dry eye symptoms, ocular surface conditions, and tear quality in older individuals who had dry eye symptoms.

DED can also result from vitamin A deficiency. In a small study of 30 males with dry eye, vitamin A supplementation improved the patients' quality of tears.

Some medications, such as some antidepressants, antihistamines, hormone replacement therapy, and blood pressure medicines, may cause dry eye symptoms. Decreasing the dose or finding an alternative may bring relief from dry eye symptoms.

Lubricating Drops

For some DED patients, symptoms are mild enough that lubricating drops are enough to maintain comfort throughout the day.

There are two categories of lubricating drops: evedrops with preservatives and preservative-free evedrops. It is very important to use preservative-free eyedrops. In vitro and in vivo studies reveal preservative-free evedrops result in the least amount of ocular surface disruption both clinically and on a cellular level. In particular, eyedrops with the preservative benzalkonium chloride (BAK) should never be used when a patient has DED. Some over-the-counter lubricating drops come in the form of a gel, which can temporarily blur vision, but may give longerlasting relief. Overnight ointments are another option to keep the eyes hydrated while you sleep.

When meibomian gland dysfunction is present with DED, as it often is, lipid-containing lubricants may provide better relief than lubricants without lipids.

It's best to avoid drops that reduce redness through vasoconstriction as they can have a negative effect, called rebound hyperemia, in which your eyes become even more red and irritated.

Compresses and Lid Hygiene

For those with blocked meibomian glands, doing warm compresses daily is recommended to soften the meibum—the oily fluid that becomes part of the tear film and allow it to flow out of the glands. A washcloth with warm water (around 113 degrees F) can be placed over the eyes for 10 minutes. There are also many different heating masks available on the market.

It's also important to keep the eyelids clean. There are numerous types of eyelid wipes and cleansers available. You want to stay as natural as possible to avoid harsh chemicals on your eyes.

Clinical and Pharmaceutical Treatments

If the above modifications (environmental, lifestyle alterations, dietary habits, supplementation, and decreasing dosage of offending medicines) and basic treatments (lubricating drops, compresses, and lid washing) don't successfully ameliorate dry eye symptoms, clinical and pharmaceutical treatments may be required. There are numerous options, but it's important that your ophthalmologist tailor the treatment regimen for your specific case of DED.

If blepharitis—inflammation of the eyelids—is a compounding factor in your DED, your ophthalmologist may determine that a topical antibiotic is warranted. If there is an infestation of Demodex mites, they may treat your eyelids with tea tree oil or topical ivermectin.

Punctal plugs are little devices that are inserted in the eye's puncta, tiny ducts that drain tears from the eye into the nasal cavity. Blocking these puncta allows tears to remain in the eyes longer. Temporary punctal plugs last for a few days to several months. They are often made of a material that breaks down over time, such as collagen. Semi-permanent plugs are designed to last for years. They are often made of material that is non-degradable, such as silicone.

There are also several treatment devices **Surgical Treatments** for removing blockages and expressing the meibomian glands.

Devices

LipiFlow Thermal Pulsation System is an increasingly popular treatment designed to remove meibomian gland blockages. The device uses a sterile activator to send heat pulses to meibomian glands while gently massaging the eyelids, unblocking the glands so the oil can flow freely.

ILux is similar to LipiFlow. It is a handheld device that warms and applies gentle pressure on your evelids to unblock the meibomian glands.

In a clinical trial comparing iLux and Lipi-Flow for meibomian gland dysfunction treatment, both devices significantly improved meibomian gland function and symptoms, with no statistically significant differences in outcomes between devices.

Intense pulsed light (IPL) therapy is another therapy for those with meibomian gland dysfunction. With this therapy, gentle pulses of light are sent to the skin next to the eyes to decrease inflammation. These pulses warm

hardened meibum blocking meibomian glands. In a three-year retrospective study, improvement in dry eye tear breakup time was found in 87 percent of patients after a series of IPL therapy sessions.

In addition to these therapies for unblocking meibomian glands, there are many types of prescription eye drops.

If your ophthalmologist thinks you have a bacterial infection contributing to your DED, he or she may prescribe antibiotic eve drops. Topical secretagogues—substances that

promote secretion—can be aqueous or mucin-based and may be utilized by your ophthalmologist to increase production of the aqueous or mucous layers of the tear film. There are also anti-inflammatory drops

that can be prescribed. If symptoms of inflammation and poten-

tial or actual ocular damage reach a certain threshold, your ophthalmologist may prescribe a corticosteroid eye drop or gel drop, such as Lotemax to calm the inflammation and allow the eyes to heal.

Non-glucocorticoid immunomodulator evedrops, such as those containing cyclosporin A, such as Restasis and Cequa, may be used. It's important to note these eyedrops may take 3 to 6 months of use before a change is noticeable.

Other Treatments

If the above treatments don't bring relief, your ophthalmologist or an endocrinologist may prescribe an oral secretagogue, called a cholinergic, such as pilocarpine and cevimeline. These drugs stimulate the lacrimal gland to release more lacrimal fluid into the eyes.

Autologous blood serum eye drops are eye drops made from your own blood. To make these drops, a sample of your blood is processed to remove certain components, such as red blood cells. The blood serum is combined with a salt solution and placed into sterile eye dropper bottles.

The British Journal of Ophthalmology states, "While pharmaceutical lubricants offer little to no nutrition, eye drops made from autologous serum have a tear-like biochemical character and supply nutritional components." This journal further notes that In vitro studies demonstrate autologous serum drops aid in the survival, proliferation, and migration of epithelial cells at the ocular surface.

Varenicline solution (Tyrvaya), is a nasal spray that helps treat dry eyes. Twice-daily administration of varenicline solution nasal spray was found to result in statistically significant improvements in DED symptoms over a four-week period in two studies.

Sometimes a surgical approach is necessary to bring relief and prevent further

Amniotic membrane grafts, such as Prokera, can provide significant healing to corneal tissue that has been damaged. Amniotic membranes are part of the placenta and are donated by consenting mothers after cesarean section. These tissues are rich in stem cells and have natural anti-inflammatory and anti-scarring properties.

Surgeries that might be necessary to protect eyes at risk of severe damage from lack of moisture include salivary gland transplantation and parotid duct transposition.

Surgical punctal occlusion is a permanent way to block the tear ducts. With this surgery, heat or laser will scar the puncta so that tears can't drain through the puncta, keeping tears in the eyes longer.

Finally, in severe cases, tarsorrhaphy may be needed to prevent the patient from going blind. This is a surgical procedure in which the eyelids are partially sewn together to protect the cornea from permanent damage due to dryness. This procedure is used as a last-

Environmental factors such as smoke and windy or dry climates can cause dry eye symptoms.

ditch effort in patients who can't adequately close their eyes or have a condition in which the cornea is exposed in a prolonged manner. Such instances may possibly occur with Bell's Palsy, myasthenia gravis, traumatic brain injuries, Grave's disease, tumors behind the eye, and Sjogren's syndrome.

Conclusion

While researchers continue to work to find treatment options for patients with DED, it's important to remember how our environment, lifestyle, and diet can influence the health of our eyes. Being purposeful about staying hydrated, stepping away from screens periodically, and eating natural foods with healthy fats and vitamins, can make a difference in not only our ocular health, but in the health of our whole body.

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

Jacquelyn Waters writes about health, science, and medicine. She has particular interest in all things neuroscience—from molecular neuroscience to psychology. She has 8 years of experience teaching college biology and received her Master's degree in biomedical sciences with a specialization in neuroscience from Vanderbilt University.

A comprehensive eye exam that looks at the full history of your general and eye reveal the root of dry



Methods for Determining the Cause of Your Dry Eyes

A comprehensive eye exam with a full history of your general and eye health is foundational.

your ophthalmologist may perform a

a calibrated strip of filter paper is placed within each lower eyelid. You will keep your eyes closed for five minutes. After the five minutes, the paper is removed and the degree of wetting is measured. The phenol red thread test causes less

irritation than the Schirmer's test. It utilizes a thin cotton thread that has been saturated with phenol red, a pH indicator. One end of each thread hooks over the lower eyelid of each eye. The patient maintains their gaze with normal indicate how dry the eyes are.

In addition to measuring tear production,

characteristic crystalline pattern called a "tear fern" that can be used to determine

To measure your tear production, Schirmer's test or phenol red thread test.

For the Schirmer's test, one free end of

blinking for 15 seconds, then the thread is removed. The wet part of the thread where tear fluid soaked is red and is measured to

your ophthalmologist may test tear quality. The tear ferning test is an effective method to assess tear quality and help diagnose dryness. The ophthalmologist takes a small sample of tear fluid and places it onto a sterile glass microscope slide. When it dries, it produces a

the quality of the tear fluid.

Your ophthalmologist may also perform a tear break-up time (TBUT) test. With this test, fluorescein eye drops are inserted into the eye. The patient is instructed not to blink while the tear film is observed by the ophthalmologist. The amount of time from the last blink to the appearance of a dry spot in the tear film is the TBUT value.

There are other eve drops with special dyes that can be used to view the surface of your eye. They're used to look for staining patterns that reveal dryness, decreased tear film, and damage to the cornea.

The concentration of solute particles in the tear fluid can also be measured. This is called a tear osmolarity test. When the concentration of solute particles is above a certain osmolarity, it's evidence there isn't enough fluid in the tears being produced.

Your ophthalmologist can also take a sample of your tears and send the sample to a lab. The lab can test for markers of DED and inflammation, such as decreased lactoferrin and elevated matrix metalloproteinase-9.

A Fall Mushroom Feast With Nutritional Punch



Mushrooms are nutritional powerhouses and a great source of B vitamins (B2, B3, folate, and B5), phosphorus, vitamin D, selenium, copper, and potassium

Mushroom-and-squash bruschetta accompanies beefand-mushroom meatballs for a cozy, healthy meal

SUSAN C. OLMSTEAD

People have been eating mushrooms for millennia—mainly for their earthy, meaty taste and their easy availability (although the grocery store, rather than the forest floor, is the easiest and safest place to forage mushrooms today). Even better, research continues to reveal that the health benefits of mushrooms may be far beyond what

even nutritionists have long suspected. An antioxidant food, mushrooms help to protect the body from damage-causing free radicals. The antioxidant properties of mushrooms have been successfully applied to treating cardiovascular disease, neurodegenerative diseases, diabetes, and cancer, according to researchers in the journal Frontiers in Pharmacology.

They also are a source of B vitamins (B2, B3, folate, and B5), phosphorus, vitamin D, selenium, copper, and potassium, according to Harvard University's T.H. Chan School of Public Health.

These recipes call for white mushrooms, the type of mushroom most commonly available in U.S. grocery stores. Other varieties such as shiitake and portobello, which are more flavorful and also easy to find for sale in most areas, can be used in their place.

For an Italian mushroom-themed feast, serve the bruschetta as an appetizer and the meatballs with pasta and a marinara or white sauce as a main course.

Susan C. Olmstead writes about health and medicine, food, social issues, culture, and children's literature. Her work has appeared in The Epoch Times, The Defender, Salvo Magazine, and many other publications. She lives in northern Ohio on the shore of Lake Erie.



The antioxidant properties of mushrooms have been used to treat cardiovascular disease, neurodegenerative diseases, diabetes, and cancer.



INGREDIENTS:

1 cup white mushrooms, chopped

2 cups butternut squash, finely chopped

2 cloves garlic, chopped 1/2 teaspoon salt

1/2 teaspoon sage

1/2 teaspoon pepper 4 tablespoons olive oil, divided

1/2 cup dried cranberries

1/2 a French baguette, cut into 12 slices and toasted 8 ounces goat cheese, softened

Preheat oven to 350 degrees F. Combine the squash, mushrooms, garlic, cranberries, salt, sage, and pepper with 1 tablespoon olive oil in a large bowl. Place this squash mixture into a baking pan lined with parchment paper and roast in the oven for 20 to 25

Brush the baguette slices with the remaining 3 tablespoons of olive oil, then spread the goat cheese on each slice. Top each slice with about 2 tablespoons of the squash mixture. Makes 6 servings of 2 slices each.



BEEF AND MUSHROOM MEATBALLS

1 pound grass-fed ground beef

1/2 cup to 11/2 cups breadcrumbs or 4 slices toasted

whole-grain bread, diced 1/4 cup milk or organic beef broth

1/2 teaspoon salt

1 diced garlic clove

1 tablespoon oregano 1/2 teaspoon pepper

1 tablespoon Worchester sauce

1 small onion, chopped

1 cup finely chopped mushrooms

Preheat oven to 400 degrees F. Mix all ingredients in a large bowl. Add breadcrumbs as needed if the mixture is too moist. Shape into about two dozen meatballs. Bake uncovered for 20 to 25 minutes.

Makes 6 servings of 4 meatballs each.

Is the 'Organic' Produce You're Buying Really Organic?

Proliferation of hydroponic foods has triggered controversy over what 'organic' really means

MELISSA DIANE SMITH

nbeknownst to most of us, more grown in industrial settings, with nutrients primarily coming from a liquid fertilizer solution instead of rich, fertile soil.

Does that sound like organically grown produce to you? Or do you picture berry or tomato plants grown in healthy fertile soil as the earthy heart of organic farming?

Would it surprise you to learn that many berries, tomatoes, and some vegetables, such as peppers and cucumbers, that are now labeled organic in the United States are grown

hydroponically, without any soil at all?

It's a situation that's unique to organic food sold in the United States and an especially odd development given the founding principles of the organic food movement and the stated views of the U.S. Department of Agriculture (USDA) on organic practices.

Organic Farming in the United States

The Organic Foods Production Act of 1990 made it clear that replenishing and maintaining soil fertility is foundational to organic farming. In 1995, the National Organic Standard Board (NOSB), the USDA's expert advisory panel, defined organic agriculture as "an ecological production management system that promotes and enhances biodiversity, biological cycles, and soil biological activity."

The USDA's organic regulations describe organic agriculture as a set of practices that "support the cycling of on-farm resources, promote ecological balance, and conserve biodiversity."

"These include maintaining or enhancing soil and water quality; conserving wetlands, woodlands, and wildlife; and avoiding use of synthetic fertilizers, sewage sludge, irradiation, and genetic engineering," a USDA introduction to organic practices

That "enhancing soil" part is key in the minds of many organic advocates. To that end, in 2010, the NOSB recommended prohibiting crop production systems that eliminate soil, such as hydroponics, from obtaining or-

ganic certification. However, the National Organic Program, part of the USDA's Agricultural Marketing Service for the USDA organic standards and the accreditation of organic certifying agents, never adopted this recommendation.

In the autumn of 2017, after a massive lobbying effort on the part of industrial agribusiness, the NOSB voted 8-7 against a recommendation to prohibit hydroponic crops from being labeled organic.

Some called the vote a watershed moment for the organic program in the United States. The hydroponic issue, along with the development of "organic" confined animal feeding operations and imports of corn and soybeans that were found to not be organic, are key areas of what many now consider organic fraud or watering down of organic standards to benefit big business.

Week 47, 2022 THE EPOCH TIMES

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What Is Hydroponics?

Organic experts

say hydroponics is

one of a few primary

reats to the integrit

of the organic

Hydroponic systems grow plants in water, essentially, often with an inert medium, such as coconut husk, to give the roots stability. The plants are fed nutrients through the water and no soil is involved in the process.

Because hydroponics eliminates soil, it removes the entire process of nurturing healthy soil capable of sustaining a rich microbial life and a variety of healthy plants. Hydroponics supporters say the

method can conserve water and grow plants quickly.

Not everyone who supports hydroponics agrees with NOSB's 2017 vote.

Dan Lubkeman, an avid proponent of hydroponics, was disappointed that the USDA granted organic status to hydroponics. He's president of the Hydroponic Society of America (HSA), a 46-year-old nonprofit organization that pro-

"The word 'organic' was very specifically created for soil-grown plants, and hydroponics was very specifically created for soil-less growing," he said in an email.

"Consumers want to know their food is safe. As you know, the word organic gives consumers that warm fuzzy perception of healthy, pesticide-free food."

Lubkeman said consumers are willing to pay a premium for organic foods and the clean ideals the organic label represents.

not merely optimized for greater comfort,

security, or engaging online experiences.

The point I'm trying to make is a nuanced

I think it's amazing that so many of us now

live in a world of food abundance. In the past

one, but I think I have a helpful analogy.

The Case Against Algorithms



Conventional agriculture uses herbicides such as glyphosate to kill off other vegetation and then feeds the plants through chemical fertilizers.

"The hydroponic industry wants to cash in on that consumer perception of safety without putting in the years of developing their own version of the word 'organic.' It's easier for them to charge more, faster, by piggybacking off the soil farmers. I think the hydroponic industry has no rights to the word organic, I think it's lazy marketing and misleading to the consumer. Hydro-organic is an oxymoron in my book," he said.

While the "organic" label may not be perfect, and there are issues with organic fraud, it is meaningful to consumers and organic foods are generally superior to conventional food. But organic is not hydroponic, in Lubkeman's view, and it doesn't need to be. Hydroponics has its own merits and should stand on them, he suggested.

"In a well-run hydroponic growing operation there's never pesticides, no animal feces or blood/bone meals, nothing composted, and less risk of pathogens and disease. My definition of hydroponic food is 'more food, in less space, with less water and in less time.' Hydroponics has many advantages and is the future of farming," he said.

Lubkeman and the HSA aren't the only ones taking issue with hydroponics' organic status, although most of the groups that oppose it do so because they see unique benefits from soil that are not replicated in hydroponics.

In a 2018 report, "Troubling Waters: How Hydroponic Agribusiness and the USDA Diluted Organics by Sanctioning Soil-less Growing," the Cornucopia Institute, a prominent organic industry watchdog, reported that hydroponic growing media like coconut husks don't provide the multiple other benefits real soil does.

"Labels on these 'organic' products do not differentiate hydroponic crops from soilgrown crops, despite the fact that nutrientdense food grown in soil is in high demand by informed consumers," the report reads.

It's All About Soil

Putting aside the food merits of hydroponics vs soil-grown foods, there is an essential benefit to organics. Organic farming has always been based on "feed the soil, not the plant." Real organic farming relies on the microbial activity of the soil to slowly release nutrients to the plant.

turing food for future generations without the more complex technology of hydroponic operations. It also means that the soil is returned to a natural state of rich microbial activity and ecological diversity.

When it comes to organic versus conventional agriculture, this difference is distinct. Conventional agriculture uses herbicides such as glyphosate to kill off other vegetation and then feeds the plants through chemical

Organic farmers have long known that healthy soil creates nutritious food, healthy people, and a healthy environment. Research bears this out. A 2014 review article in the British Journal of Nutrition examining 343 peer-reviewed publications found that organic foods have higher concentrations of health-protective antioxidants—along with lower levels of toxic heavy metals and pesticides—than nonorganic foods do.

A study reported in October 2018 in JAMA Internal Medicine found that eating organic foods can reduce the risk of developing cancer. The study followed close to 70,000 adults for five

years, most of them women. By prohibiting the use of synthetic chemical pesticides, including the problematic herbicide glyphosate, certified organic farming also benefits the environment and wildlife in

The Struggle to Keep the Soil in Organic

While "organic" hydroponic operations don't use chemical pesticides and herbicides, they also don't contribute to the ecological health of the larger planetary ecosystem. This distinction seems more clear to organic regulators in different

Labeling hydroponic produce as "organic" is basically only occurring in the United States. Hydroponic produce is explicitly prohibited from being labeled as organic in Canada, Mexico, and most True organic farming other developed countries. relies on the microbial

The preponderance of "organic" hydroponic production comes from corporate-owned, industrial-scale facilities in the

desert Southwest and Mexico (where it's exported to the U.S.) or is imported from countries such as Holland where it is also illegal to market soil-less production as organic, according to the 2018 report.

activity of the soil to

Organic experts say hydroponics is one of a few primary threats to the integrity of the organic program. One expert leading the charge for organic foods to keep to the standards it was founded on of being grown in healthy soil is Dave Chapman, an organic tomato grower at Long Wind Farm

Between 2011 and 2013, Chapman start-

ed to notice something different about the organic tomatoes at all the grocery stores

"The truth is at this time the vast majority of fresh 'certified organic' tomatoes in the stores are hydroponic, and more of some other vegetables will become hydroponic. Organic will mean hydro-grown stuff from massive greenhouse complexes," he said.

think it is. It's not what it means to me, and I've barely met anybody in the organic community who says, 'Yes, that's what organic means.' Nobody believes those places should be organic except the people that run them."

"Is that what organic means to us? I don't

One of those people is Jim Kras, CEO of Edible Garden. Edible Garden says it produces "sustainable, local produce, grown in Zero-Waste Inspired greenhouses."

The company works with local greenhouses to get produce it says consumers can trust.

"Edible Garden welcomes the ability to have the same opportunities to grow certified organic crops hydroponically and in CEA [controlled environment agriculture facilities as traditional field growers. This sign of support from USDA will allow consumers to ultimately benefit from a wider selection of organic produce at their local grocery stores," Kras said in an email interview.

Companies such as Edible Garden produce foods free of chemical pesticides and herbicides, but critics such as Chapman say that isn't

> Chapman believes it's impossible for hydroponic growers to recreate soil conditions.

"The nutrition in hydroponics is not coming from the complex dance of minerals and microbes that terrestrial plants have relied on in the soil for the last 500 million years. That is a long time. Something got figured out with all that co-evolution," he said. "It's a very sophisticated eco-system that is created in which the plants feed the microbes in the soil, and the microbes feed the plants."

Sorting Through the Confusion

Hydroponic is a radical departure from the way that a plant gets its nutrition in nature, though hydroponic supporters such as Lubkeman say hydroponics just makes it easier

Ways to Select Soil-Grown Organic Produce

Find soil-grown organic produce and products by looking for two relatively new add-on labels to USDA Organic. Farmers and advocates of strong organic practices haven't abandoned the USDA organic program but have taken action to build on it to maintain the integrity of real organic farming.

for a plant to absorb inorganic, processed elements derived from organic elements such as nitrogen, phosphorous, and potassium. But for those who want to do more than avoid toxic inputs into agriculture and want to support a food production system that nurtures the essential health of the soil, hydroponics doesn't quite cut it.

One way to avoid buying hydroponically grown produce labeled "organic" is to consult the Guide to Avoid Soilless Organic Produce that the Cornucopia Institute created for shoppers. It lists brands of produce that grow their produce hydroponically or without native soil.

Real Organic Project

After unsuccessful efforts to get hydroponics out of produce with the USDA Organic label, Chapman co-founded the Real Organic Project—a farmer-led movement that was created to distinguish soil-grown produce and pasture-raised products under USDA

Real Organic Project operates as an addon label to certified organic, meaning it only certifies farms that are already USDA Organic. It doesn't cost any money for a farm to become Real Organic Project certified because the certification program is funded by eaters, farmers, and private foundations that want to differentiate farms that are growing their animals and their crops to the letter—and spirit—of the certified organic standards.

Real Organic Project (ROP) certified 60 farms in its first year, 2018; 1,100 farms will be ROP certified by the end of 2022. You can also look for products with the ROP logo on food products made from these farms. Learn more at RealOrganicProject.org.

Regenerative Organic Certified

Regenerative Organic Certified (ROC) is another new certification for food, fiber, and personal care ingredients. Established in 2017 by a group of farmers, business leaders, and experts called the Regenerative Organic Alliance, ROC encompasses organic farming, then raises the bar, prioriizing improving soil health and building soil carbon, pasture-based animal welfare, and social fairness for farmworkers. Learn more at Regenorganic.org.

Melissa Diane Smith is a holistic nutrition counselor and journalist who has been writing about health topics for more than 25 years. She is the author of several nutrition books, including "Syndrome X," "Going Against the Grain," "Gluten Free Throughout the Year," and "Going Against GMOs."

INTENTIONAL LIVING

It's Time to Resist the Algorithms

We can make the good life possible by pushing back against the spirit of our age

MIKE DONGHIA

Let's face it: Algorithms are good and getting even better.

Everything from what you see on your Instagram feed, the product recommendations you get on Amazon, the videos you're shown on YouTube, and the specific directions given to you by Google Maps are shaped by powerful algorithms that process large amounts of data to give you an experience that's uniquely tailored to your preferences.

A world without algorithms would mean less of many good things we've come to enjoy and would be an immediate step backward in terms of convenience and person-

Despite these measurable consumer benefits, there are harder to quantify the costs of living in a world ruled by algorithms. I believe there's a strong case for pushing back against this force and preserving a space for older ideas to flourish.

Efficiency Versus the Good Life

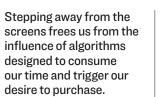
Like many aspects of modern living, algorithms have made our life easier and more predictable. They're amazingly efficient at what they do. But I worry that we're reinforcing a cul-

comfort, novelty, and convenience at the expense of other traits linked to a healthy, dynamic society—like risk-taking, adventure, and an independent spirit. Instead of nurturing the next generation of ambitious go-getters and entrepreneurs, we're growing more and more

ture that puts far too much importance on

At the margin, I think we need more people strategically and creatively resisting the algorithmic way of life, even while acknowledging the important role that algorithms will play

in our future. These acts of resistance may not look efficient in the short term (why not outsource more and more of our decisions to these powerful algorithms?), but I think we need to preserve something crucial in the human spirit: a set of values that makes the good life possible,





100 years, food has gotten cheaper, tastier, and more convenient than ever before in history. I celebrate this accomplishment and hope for the trend to continue. However, it's not hard to find problems

caused by this development. A report published in 2020 by the National Center for Health Statistics reported that a staggering 76 percent of American adults are overweight, with 43 percent meeting the criteria for obesity. At one level, that's because food producers have their own algorithm of sorts—a combination of price, convenience, and heavily refined grains, sugars, and seed oils. This food is tasty, addictive, and a major contributor to disease.

Living in a world of food abundance is both a blessing and a curse. As a

whole, our society is perhaps the best-fed but least dynamic to live on earth. And in a number of ways, we are already paying the price.

The solution is not to go back to a world before all these advances were made, but rather to cultivate a collective set of values that pushes back against the dangers of processed food abundance, while leaving ample space to enjoy the blessings of natural foods. Practices like exercise, fasting, growing our own food, and eating a balanced diet would seem to

The case against algorithms follows a similar vein. In order to benefit from and thrive in a world of automation, convenience, and yes, algorithms, we need to push back against the complacency they

There are three ways in particular that algorithms shape us that are cause for

Algorithms Shape Our Worldview

Most algorithms operate like a black box. We don't have much control over what we see or when we see it. In recent years, that's raised concern over the rapid spread of misinformation and the presence of filter bubbles— in which people are primarily shown content that reinforces their views.

Algorithms

Reinforce Passive Consumption A curious feature of algorithms is their tendency to break down content into smaller bite-sized pieces and feed them back to us in a steady stream of dopamine hits.

 Instead of albums, we stream personalized music stations.

• Instead of books, we flip through Tweets and images • Instead of movies, we watch 30-second

video clips and short episodes.

Algorithms surface the best of the best and deliver it in a convenient, infinite scroll experience that encourages overconsumption. They increase relevance and convenience at the expense of serendipity, leading us to miss new experiences, opinions, and interactions that might have challenged us or shaped our worldview in unexpected ways.

Algorithms surface the best of the best and deliver it in a convenient, infinite scroll experience that encourages overconsumption.

Depending on Algorithms Erodes Other Skills

In the short run, algorithms are often better decision-makers than humans. But what if this comes at the long-run costs of eroding skills that are necessary for humans to flourish and grow? In a perhaps innocent example, we can see how the use of GPS has eroded our ability to use a paper map or travel without technological assistance. Are there more important skills that we're

losing and don't know?

Because hydroponics eliminates soil, it removes the entire process of nurturing healthy soil

capable of sustaining a rich microbial life and a variety of healthy plants.

Beyond all of these is the simple question of what intent drives the design of the algorithm? In far too many cases, these artificial intelligence-driven algorithms are designed to consume our attention and separate us from our money.

Small Ways to Resist the Algorithm A surprising side effect of resisting the algorithms is that you begin to live a far more interesting life. You aren't the technophobe who hates progress or the technophile who gets giddy over every new development,

you're a contrarian, paving a new path for

the future and trying to hold onto the best of

both worlds. Are you ready to harness your inner contrarian spirit? Here are some small ways

Look outside algorithms to learn new things.

aren't like you

that you can get started today:

- · Read entire books and long-form magazine articles
- Resist the urge to Google everything • Explore a bookstore or library for inspiration • Have conversations with people who
- Try learning a new skill without reading about it

Look outside algorithms for your entertainment.

• Attend live events (concerts, sporting events, festivals, theater)

• Go to a movie theater without looking in advance to see what's playing

• Listen to a full album of music in one sitting • Subscribe directly to your favorite content producers

• Watch more full-length movies and fewer social media video clips

Look outside algorithms for relationships and adventure.

 Host dinner parties (be social without social media) • Get off your computer and into the

physical world • Find restaurants by exploring instead of reading reviews

• Drive without a GPS unless you absolutely need it

Travel somewhere you've never been

• Bonus points for traveling without an itinerary

Resisting the algorithm can be a fun and interesting way to live your life. It can also lead to new and exciting experiences that you wouldn't have otherwise

had. So go out there and start exploring

the world in your own unique way!

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.

MIND & BODY Week 47, 2022 THE EPOCH TIMES

3 Ways to Become More Resilient to Failure

Failure is inevitable, but getting really good at bouncing back may require practicing these habits

LOWRI DOWTHWAITE-WALSH

Failure may be an inevitable part of life, but that doesn't make it any less painful when it does happen. It can be particularly hard facing setbacks in your 20s and 30s, since this is the first time many people experience major "failures"—from not doing well in college or missing out on a desired job.

Feeling like a failure can have a major impact on mental health, with research actually linking this feeling to a greater risk of depression. This may, in turn, lead to a negative feedback loop, with people who are depressed more likely to ruminate on their failures and see themselves as failures.

But it's impossible to live life without ever failing, which is why resilience is key. Not only will this help you learn to cope and accept these feelings, but it may also help you better get past setbacks in the future.

Resilience is the ability to maintain or regain mental well-being when facing adversity. Our ability to be resilient stems from three key traits: self-esteem (how we value or perceive ourselves), psychological flexibility (being able to switch our focus from painful feelings to purposeful goals), and emotional regulation (our ability to tolerate and manage upsetting feelings).

While resilience may come more naturally to some than others, that doesn't mean that it can't still be learned. Here are three things you can do to build your resilience.

1. Get Moving

Oddly enough, physical exercise can actually be really important in helping us build mental resilience.

Research has found that both aerobic and resistance exercise can lead to more positive self-esteem and body image. This is true, regardless of your fitness level.

Other studies have also shown that walking, running, and cycling outdoors can significantly improve psychological well-being and self-esteem. Daily moderate or vigorous exercise seems to have the greatest positive impact on self-esteem.

Better self-esteem is important, as it's one of the building blocks of resilience. It's also been shown to have a significant effect on our ability to manage adversity and has even been directly linked to life satisfaction.

Even if you don't like exercising or feel like you don't have time, something as simple as a brisk walk for a few minutes outside every day may be enough to improve your self-esteem and your resilience.

2. Write It Down

Another thing you can try doing is keeping a journal. Research shows that journaling can reduce the impact of stressful life events, as it helps us process painful emotions such as disappointment, anger, sadness, and feelings of failure. It can also help us reframe these thoughts and feelings.

If you're not sure where to start or what to write, try gratitude journaling. This involves writing down the things in your life that bring you joy and happiness. Research shows this technique can improve well-being, as expressing gratitude is linked to better mental health, alongside greater optimism, hope, and stronger relationships—all of which are linked to resilience.

Studies have also found that simply writing down three things you're grateful for every day can have a long-lasting effect on your well-being and buffer against stress when you make it a daily habit. In the face of failure, this habit may help you get over difficult feelings and move forward.

3. Get Support From Friends and Family

Not only are close relationships important for your well-being, but social connections are also important for emotional regulation, which is another one of the building blocks of resilience.

Being able to express emotions openly to a close friend or loved one allows for the repair of emotional wounds, such as disappointment, rejection, and embarrassment one might experience through failure. Not only that, but speaking with friends and



Feeling like a failure can have a major impact on mental health.

Journaling has been shown to help reduce the negative impact of stressful life events.

family may also help you get practical advice or guidance with the feelings you have, alongside emotional support with what you're going through. Being able to express and process emotions have also been linked to better well-being and greater resilience.

There are plenty of ways to discuss how you feel with friends and family. If you aren't comfortable doing it face-toface, you can always try sending a text. But it's important to get your feelings out rather than keeping them in. Talking through what happened, making sense of it through a friend's or family member's interpretation, and finding some meaning in your failure can be particularly helpful in building resilience and moving forward.

While it's probably impossible to avoid failure altogether, building mental resilience may help you overcome it more easily the next time you feel like you've failed at something. Even trying just one of the techniques here may have a big impact on how you cope the next time you experience failure.

Lowri Dowthwaite-Walsh is a senior lecturer in psychological interventions at the University of Central Lancashire in the UK. This article was originally published by The Conversation.

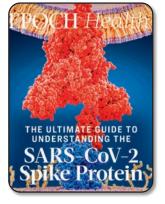
Support from friends and loved ones can help us to regulate our emotions when we're struggling

with failure.

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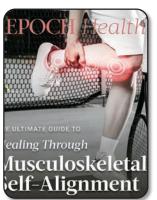
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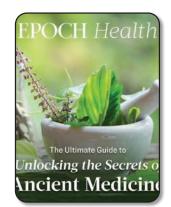


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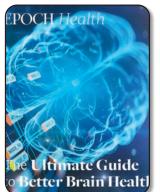
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