

MIND & BODY

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FOOD SECURITY

Countering the Threat of Global Food Homogenization

Industrialized agriculture and seed patents destroy crop diversity and could threaten the future of food—if we let them

4

Four corporations now control over 50 percent of the world's seeds.

15

CROP PLANTS

provide 90 percent of the world's calories.

75

PERCENT

of crop diversity was lost between 1900 and 2000.



POWERFUL GLOBAL MONOPOLIES

increasingly control food production, limiting farmers' control over their crops and endangering plant species.

Our food is produced under the tight control of a small number of large companies.

A LOST TRADITION

The devastation of our hard-won crop diversity



A great variety of cultivated food plants is the key to food security.

SUSAN C. OLMSTEAD

The push toward globalism isn't limited to political schemes; it also includes efforts to influence agriculture and homogenize food consumption around the world.

The origins and varieties of the food we eat have drastically changed in the past few decades thanks to changing farming practices, although this has likely escaped the notice of most everyday grocery shoppers.

In many nations, bountiful supermarket shelves provide the illusion of abundance, while powerful global monopolies increasingly control food production, limiting farmers' control over their crops and endangering plant species.

This directly affects the variety of food in our grocery stores—and its nutritional value.

Eating to Extinction

In the 2022 book "Eating to Extinction: The World's Rarest Foods and Why We Need to Save Them," author Dan Saladino examines why the scope of our diet has drastically narrowed even while food is abundantly available in rich nations such as the United States.

Decreasing biodiversity is leading to the extinction of some food plant species, according to Saladino, a longtime food journalist for the BBC.

"Over the past several decades, globalization has homogenized what we eat, and done so ruthlessly," he wrote. "Of the roughly six thousand different plants once consumed by human beings, only nine remain major staples today. Just three of these—rice, wheat, and corn—now provide fifty percent of all our calories."

According to the U.N. Food and Agricul-

ture Organization (FAO), the proportion is closer to 60 percent. The FAO estimates that 15 crop plants provide 90 percent of the world's food energy intake.

This dwindling diversity stems from the way our food is produced under the tight control of a small number of large companies, according to Saladino.

"The source of much of the world's food—seeds—is mostly in the control of just four corporations. Ninety-five percent of milk consumed in the United States comes from a single breed of cow [the Holstein]," he wrote.

"Half of all the world's cheese is made with bacteria or enzymes made by one company. And one in four beers drunk around the world is the product of one brewer."

Continued on Page 4

A Book That Has Inspired the World



“ I have indeed experienced all the miracles. No matter what your experience or what background you have or what country you are born in, you will benefit from Falun Dafa.

Martin Rubenis
OLYMPIC ATHLETE

“ Falun Gong has taught me how to be considerate of others and how to improve my relationships by handling conflicts constructively. [...] It has given me incredible relaxation, mental clarity, and freedom from stress.

Shiyu Zhou
PH.D., USA

Zhuan Falun is the main text of Falun Gong (also called Falun Dafa). The book expounds upon profound principles of Truthfulness, Compassion and Tolerance. It addresses the long-forgotten term “cultivation,” the origins of illnesses, karma, the role of moral character on a path to spiritual perfection, and more.

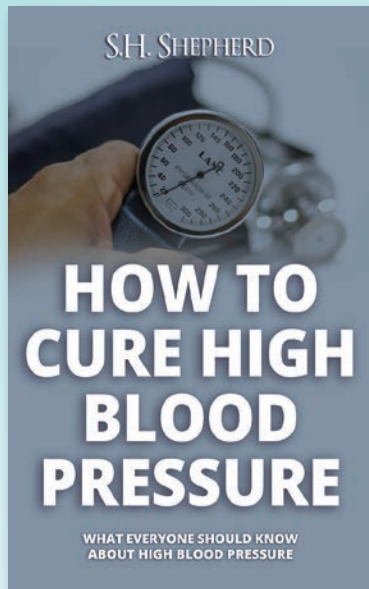
The book was a national bestseller in China in the 1990s, and has been translated into over 40 languages. Find out why it has captured the hearts and minds of tens of millions of people in over 100 countries worldwide!

Order Your Copy



FaYuanBooks.com

How to Cure High Blood Pressure



Mainstream medicine cannot cure high blood pressure because its focus is and has been on treating its symptoms, typically by prescription drugs. However, the cure for high blood pressure exists and is available to anyone by learning what causes a high blood pressure condition and then putting what is learned into practice.

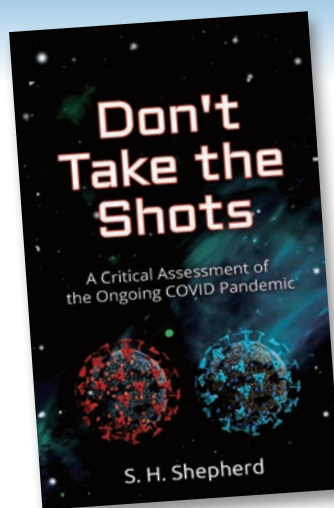
This book is all about high blood pressure, what causes it and how to cure it. It critically assesses the prescription drugs typically prescribed and describes their many risks and downsides. It explains how anyone can reduce their risk of getting other diseases, including cancer, kidney disease and brain disease, caused by high blood pressure.

You do not have to live with high blood pressure. Think of many things you could do each day that it limits or restricts. Then suppose things got

worse. Think about the many things you would then no longer be able to do if disabled by vascular or organ damage due to high blood pressure.



Don't Take the Shots

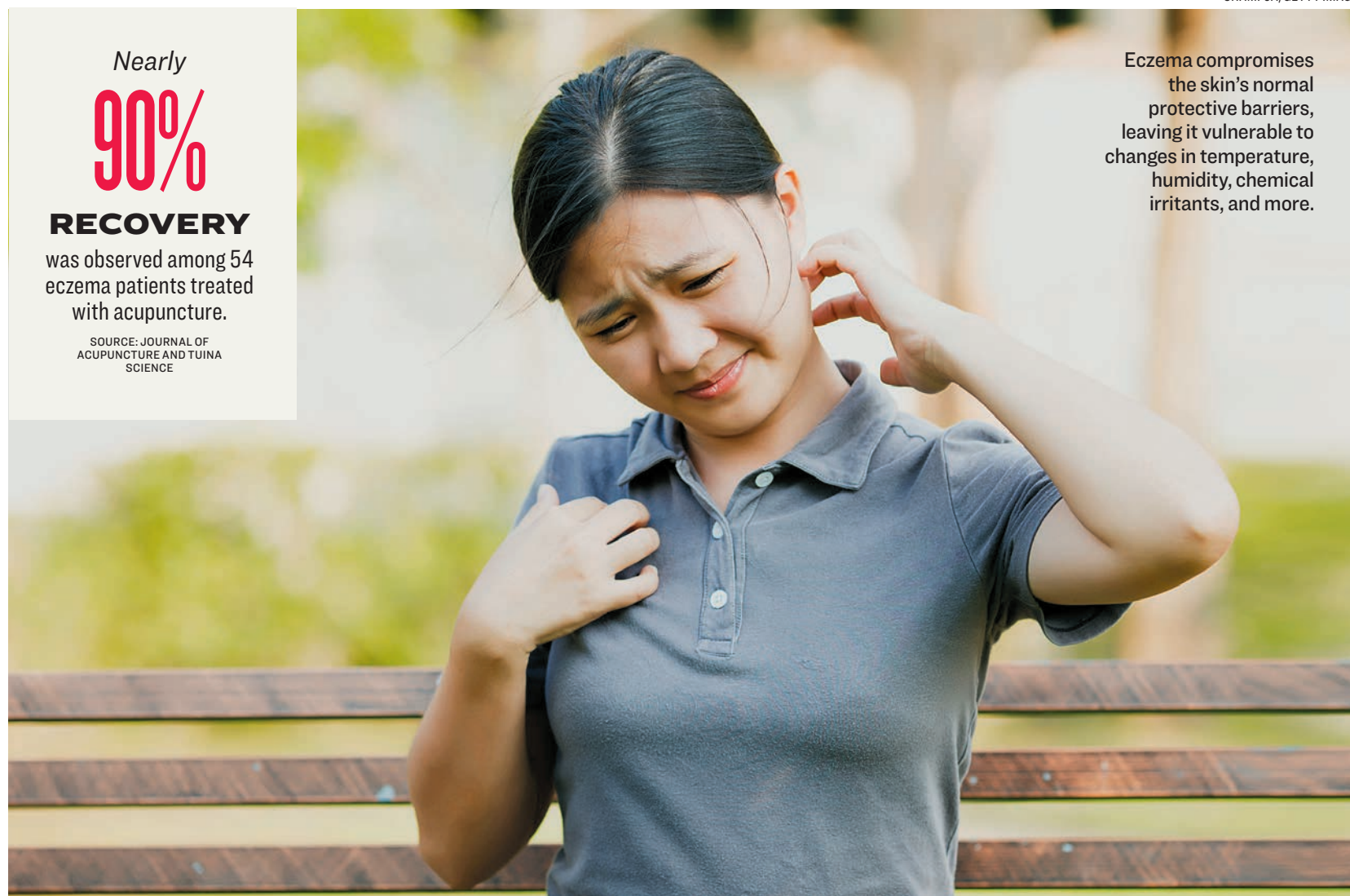


The book explains why no one should be vaccinated for the COVID-19 SARS-CoV-2 virus or its variants in the first place. But it also explains how those already vaccinated can best survive the pandemic. It presents facts, not media hype, about the pandemic. Many of the facts have been kept from the public from day one of the pandemic, and almost all of the medical advice offered by experienced and well-respected virologists and medical doctors has been ignored or kept from the public whose very lives are dependent on this information.

The book illumines the importance of staying disease free in a world of mandated vaccinations. Having a health issue like high blood pressure, cancer or any other disease puts one at risk of being infected by the SARS-CoV-2 virus and its variants.

It provides convincing evidence showing why it may not be in everyone's interest to take the shots against COVID-19. It provides the information needed to understand and effectively respond not only to the pandemic, but our infectious world in general, including ways in which anyone can defend themselves against viruses by strengthening their immune system.

If you have not been vaccinated for COVID-19, then don't take the shots, for taking them could mean never being free of the virus. But if you have been vaccinated, then what you learn in this book will help you in the days and years ahead.



Nearly
90%
RECOVERY
was observed among 54
eczema patients treated
with acupuncture.

SOURCE: JOURNAL OF
ACUPUNCTURE AND TUINA
SCIENCE

Eczema compromises
the skin's normal
protective barriers,
leaving it vulnerable to
changes in temperature,
humidity, chemical
irritants, and more.

CHAMPJA/GETTY IMAGES

TRADITIONAL CHINESE MEDICINE

Tips to Stop Itching and Scratching Your Eczema

Traditional Chinese medicine offers a different perspective and scientifically validated treatment methods

AMBER YANG & SUMMER LAWSON

While the skin might appear dry or flaking in the winter, it might react to the humidity in the summer, causing skin rashes and itching. The conditions may worsen during the change of seasons. Those are some common symptoms of eczema.

Eczema is a skin condition of small spongy blisters of inflammatory cells that gather in the epidermis and dermis. It can cause scratching due to itchy rashes and blisters.

Dr. David Kuo from Taiwan Fuyuan Traditional Chinese Medicine Clinic analyzed the causes of eczema from both traditional Chinese and Western medicine perspectives. He recommends acupuncture, massage and atopic ointments to ease the itching and scratching of eczema.

What's Eczema?

Eczema, or clinically, dermatitis, compromises the skin's normal barriers. Hence, it reacts to external factors quickly. These ex-

ternal factors can be a cold, dry winter; different chemicals; or a hot, humid summer. For instance, sweating can cause irritation and inflammation if not dried quickly.

On the other hand, dry, cold weather reduces the moisture content in human skin, which can also trigger inflammation. Some patients also notice eczema conditions worsen during the change of seasons.

When the itchy rashes and blisters of eczema cause one to scratch, the skin oozes tissue fluid, and dampness appears.

Eczema often appears around the elbows, neck, armpits, posterior knee joints, and groin; its pathogenesis characteristics are mostly symmetrical. Dr. Kuo said that the temperature is relatively high in those spots where the artery beats. Hence, they are prone to eczema.

What Causes Eczema?

Kuo pointed out four major factors that cause eczema:

1. Environment: drastic temperature change, seasonal change, extremely hot or dry environment, pet hair, dust mites, fluffy toys, beauty cleaners, chemicals,

- perfumes, skin care products, and nonabsorbent clothing with artificial fibers.
2. Emotion: High levels of stress.
3. Heredity: the most significant factor of eczema.
4. Food: fish and shellfish, spicy food, and beer.

5 Types of Eczema

Kuo pointed out that there are different types of eczema based on various manifestations and distributions. The five common types of eczema (dermatitis) are as follows:

5. Atopic eczema, the most common type of dermatitis, which can occur all over the body.
6. Contact eczema, which includes irritating contact dermatitis and allergic contact dermatitis. It can be, for example, a person's feet coming into contact with shoes made of unsuitable fabrics or materials.
7. Seborrheic eczema, which is caused by excessive sebum secretion and usually occurs on either side of the nose and between the eyebrows. It can appear red, inflamed, and scaly.
8. Asteatotic eczema, also known as xerosis, which usually occurs on the limbs and toes. It's similar to athlete's foot but not contagious. The conditions may appear after swimming, and there is no pus when scratched.
9. Neurodermatitis (lichen simplex chronicus), a condition caused by scratching the skin surface for an extended period, which thickens the epidermis and forms a psoriasis-like appearance.

According to traditional Chinese medicine (TCM), skin conditions are said to mirror what's happening inside of one's body and can indicate excess dampness, a concept within the Chinese medicine paradigm. Eczema reflects internal health issues and may be triggered by alcohol or eating only fruit and salads for a long time, which can accumulate dampness in the body.

Dampness usually leaves the body through sweat and urination. However, unhealthy habits such as lack of sleep or sitting too much, and

Eczema Relieving Acupoints



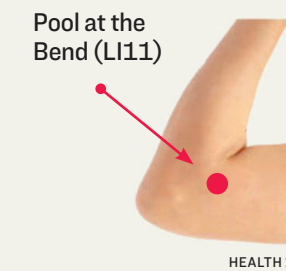
Sea of Blood (SP10)

Directions: SP10 is located just above the knee on the inner leg. To find the acupoint, grasp and hold the kneecap with your palm. The point is located where your thumb sits on the inner thigh.

Acupoint SP10 is an important point for nourishing blood and promoting blood circulation, and it's also often used to treat chronic eczema, chronic urticaria, and other diseases.

Qi Energy

The concept of qi can be understood as the sum total of energy or vitality that constitutes life in the body



Pool at the Bend (LI11)

Directions: To find the acupoint, bend your arm toward the chest. LI11 is located close to the edge of the bones, on the outer end of the elbow, where it dents. Acupoint LI11 connects acupoint "Enclosed Valley," where the meridian energy gathers. In TCM, too much heat can disrupt your qi energy. By pressing the acupoint LI11, it can help dissipate the excess heat in the body.

One Hundred Insect Nest (EX-LE3)

Directions: Acupoint EX-LE3 is just one inch above acupoint SP10. EX-LE3 is commonly used for treating eczema in TCM.

irregular bowel movements, can leave more dampness in the body.

How to Stop Eczema From Itching

TCM treatments often involve the meridian system in the human body. Meridians are responsible for transporting energy (qi) and blood (fluid) throughout the body.

Qi and blood are the most important fundamental substances necessary for life. The concept of qi can be understood as the sum total of energy or vitality that constitutes life in the body. It comes mainly from the food we eat and the air we breathe. Blood, in TCM, refers to the fluids that nourish the entire body. The two substances of qi and blood circulate to maintain balance and stability in various tissues and organs. Meridians are the channels that help these substances move throughout the body.

When the meridian system is blocked, it will affect the transport of substances, and abnormalities will appear.

Eczema is a skin condition of small spongy blisters of inflammatory cells that gather in the epidermis and dermis.

Acupoints, a unique term in Chinese culture and TCM, are places with many nerve endings and where blood vessels congregate.

TCM found that acupoints are located in the viscera and meridian circulation routes distributed on the surface of the human body. They are specific locations where qi and blood gather, transfer, and enter and exit, and are also regarded as energy-gathering points of the human body.

Stimulating acupoints by using acupuncture massage and moxibustions improves the circulation of the qi in the human meridian system and can treat illnesses correspondingly.

A joint study of German and Chinese scholars was published in the Journal of

Acupuncture and Tuina Science. Among 54 eczema patients, 47 participants recovered or improved symptoms by using acupuncture. The recovery efficacy reached almost 90 percent.

Several randomized controlled clinical experiments have also shown that acupuncture can improve eczema symptoms and reduce itching.

Many ointments are available to treat eczema, such as indigo ointment (qing dai ointment) and purple cloud balm (ziyun balm). A study published in Scientific Reports found indirubin, a potent anti-inflammatory phytochemical derived from indigo and the active ingredient in qing dai ointment, helps promote wound healing. Another study published in Molecular Immunology found it reduces skin inflammation. Shikonin, another plant compound and the active ingredient in ziyun balm, is antibacterial, anti-inflammatory, and stimulates wound healing, according to research published in Frontiers in Pharmacology.

How to Care for Eczema Daily

Patients with eczema should be cautious of the following in their daily life:

10. Don't wash the affected area with hot water or irritants such as soap.
11. Avoid scratching. Instead, gently pat or tap the affected area, and treat the area with a cold compress to reduce itching.
12. Have a healthy and regular diet. Avoid allergens.
13. Choose an appropriate skin moisturizer or emollient.
14. Avoid staying up late, and practice work-life balance.
15. Manage stress and anxiety, and practice mindfulness.
16. Avoid excessive sunbathing. Dry sweat immediately after a workout.
17. Choose sweat-friendly, breathable, and comfortable clothing.

To find the studies mentioned in this article, please see the article online at [TheEpochTimes.com](#)

Food Therapy for Eczema

Dr. David Kuo suggests two soup recipes to relieve eczema.

LOTUS AND MUNG BEAN SOUP

Purpose: Eliminate heat and remove dampness. The recipe is suitable for people who experience a sticky and unpleasant taste in the mouth, anxiety, and insomnia.

INGREDIENTS:

- 30 grams mung beans
- 30 grams lily bulbs
- 30 grams fresh Chinese yam
- 15 grams prickly water lily, and rock sugar to taste

DIRECTIONS:

- Fill a pot with water and bring it to a boil.
- Add all the ingredients to the boiled water.
- Boil until everything becomes thoroughly cooked and soft.

- Add rock sugar to your taste before serving.

Benefits: Mung beans clear heat and remove toxins in the body. Lily bulbs help calm one's mind and improve sleep quality. Chinese yam nourishes the stomach.

Some of these herbs may sound unfamiliar, but they can be found at shops we trust here:

T S Emporium: [Tsemposium.com/en_us](#)

Kamwo Herb & Tea LLC: [KamwoHerbs.com](#)



PHOTO: GETTY IMAGES

SI SHEN PORK RIBS SOUP

Purpose: Strengthen one's spleen and dispel internal dampness.

INGREDIENTS:

- 100 to 200 grams pork ribs
- 20 grams chia
- 20 grams lotus seeds
- 20 grams Chinese yam
- 20 grams fuling
- 20 grams coix seeds
- 2 liters water

DIRECTIONS:

- Blanch and drain pork ribs and put aside.
- Pour two liters of water into a pot. Bring it to a boil.
- Add all the ingredients.
- You can also add three slices of Don Quai, fresh ginger, and salt to taste.
- Cook until everything is soft.
- Serve hot.

Benefits: Si Shen soup is a good food therapy for eczema patients. It not only strengthens one's spleen but also improves the digestive system. The soup removes excessive water retention in the intestines. The doctor said that the herbs used in the soup contain rich carbohydrates and can replace rice.



PHOTO: GETTY IMAGES

FOOD AS MEDICINE

The Health-Boosting Powers of Coconut Water

This refreshing, subtly sweet beverage is mother nature's soft drink

Indian classics refer to the coconut palm as kalpavriksha, which means “the all-giving tree.” Coconut products, including the oil, milk, cream, and water, have been used for thousands of years for their nutritive and medicinal properties, which include anti-bacterial, anti-fungal, antiviral, antiparasitic, antioxidant, hepatoprotective, and immunostimulant properties.

Coconut water is the liquid found inside a green, or immature, coconut, not to be confused with coconut milk, which is made from the flesh of a mature coconut. The near-sterile fluid that makes up coconut water, sometimes referred to as liquid endosperm, is 94 percent water, making it valuable for hydration.

Coconut water has even been used intra-

venously as a rehydration fluid in emergency situations. If you're looking for a beverage that's both refreshing and nutritious, consider coconut water—a soft drink straight from Mother Nature.

Impressive Nutritional Makeup

Coconut water contains inorganic ions, which are necessary for cellular function along with enzyme activation, bone formation, gene expression, and metabolism of amino acids, lipids, and carbohydrates. The ion composition in coconut water is effective for replenishing electrolytes such as sodium, potassium, magnesium, and calcium, which are lost from your body when you sweat.

Due to its rich electrolyte content, “ingest-

tion of fresh young coconut water, a natural refreshing beverage, could be used for whole body rehydration after exercise,” researchers wrote in the Journal of Physiological Anthropology and Applied Human Science. Coconut water is also an excellent source of B vitamins, including B1, B2, B3, B5, B6, B7, and B9, or folate, which your body needs to complete enzymatic reactions for cellular function.

Vitamin C, a powerful antioxidant, is also found in coconut water, helping to mitigate oxidative stress. In a study on rats, consuming coconut water helped to prevent and reverse high blood pressure, likely by inhibiting the peroxidation of lipids, improving insulin sensitivity, and boosting antioxidant status in the animals.

Coconut Water Protects Your Heart

The rich content of mineral ions in coconut water, such as potassium, offers cardioprotective benefits. In an animal study, coconut water protected rats against damage from heart attacks, likely due to its content of potassium, calcium, magnesium, and L-arginine.

L-arginine is an amino acid that your body converts into nitric oxide (NO). NO improves blood flow by dilating blood vessels, which can have beneficial effects on blood pressure. A study of 28 adults with high blood

pressure found 71 percent of those who consumed coconut water had a significant decrease in mean systolic blood pressure and 29 percent had a significant decrease in mean diastolic pressure.

The abundance of L-arginine in coconut water may also be responsible for its anti-diabetic and anti-thrombotic, or blood-clot reducing, benefits. Coconut water has been found to significantly reduce hyperglycemia and oxidative stress in rats with diabetes.

Further, due to its ability to decrease oxidative stress in the eyes, coconut water may also protect the eye's lens from cataracts related to diabetes. Coconut water even has beneficial effects on lipid levels, lowering lipids as well as the drug lovastatin in rats.

Good for Your Kidneys, Liver, and Brain

If you suffer from kidney stones, coconut water should be on your radar, as research suggests it increases urinary output of citrate, potassium, and chloride, which suggests it could play a role in preventing kidney stones from forming.

When it comes to liver

health, coconut water has been suggested as a potential hepatoprotective agent. In a study using mice, coconut water vinegar was found to reduce liver damage caused by acetaminophen by restoring antioxidant activity and suppressing inflammation.

Writing in the Asian Pacific Journal of Tropical Medicine, researchers further highlighted coconut water's “antidiabetic effect,” noting its ability to eliminate poisons and ameliorate drug-induced overdose toxicity. One of the most important classes of phytochemicals in coconut water, however, are cytokinins, plant hormones that have anti-aging, anti-cancer, and anti-thrombotic effects.

One cytokinin, trans-zeatin, shows promise for supporting brain health, including reducing Alzheimer's disease. The compound prevents the formation of amyloid-beta protein, which may play a role in the development of Alzheimer's disease. Coconut water is also protective against the pathological changes of Alzheimer's disease in animal studies.

A Naturally Restorative Beverage

When you're looking for a tasty and healthy alter-



Coconut water is one of nature's most restorative beverages, with a host of therapeutic effects for mind and body.

AFRICA STUDIO/SHUTTERSTOCK

native to water, only a handful of options can be described as truly natural and good for you—coconut water among them. Offering exceptional hydration and refreshment, with a hint of subtle sweetness and a host of unique nutritional properties, coconut water is a beverage you can feel good about drinking.

For more coconut water health benefits, be sure to check out our GreenMedInfo.com coconut water database. It contains dozens of study abstracts indicating that coconut water may be valuable for addressing dehydration, inflammation, DNA damage, and more.

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FOOD SECURITY

Countering the Threat of Global Food Homogenization

Continued from Page 1

Saladino told The Epoch Times that crop diversity is worth preserving because it's "the legacy of thousands of years of farming and food production."

"We all need to appreciate the importance of [food] diversity—for our future food security, for resilience, for health, and because it's part of what makes us human," he said.

Monopolies Dominate the Global Food Market

As a result of laws passed in the 1990s to protect bioengineered crops, four corporations now control more than half of the world's seeds, according to the 2021 Deutsche Welle article "Who Controls the World's Food Supply?"

The four multinational corporations are Bayer (Monsanto), Corteva, ChemChina, and Limagrain, according to author Charli Shield. Calling them "staggering monopolies [that] dominate the global food supply," Shield wrote that the practical result is that "more and more of the world's food relies on less and less genetic diversity."

The organization Civil Eats in 2018 described the monopoly a bit differently, citing research on seed industry consolidation by Philip Howard of Michigan State University. According to Howard, a sociologist, the "Big 4" seed companies including Bayer, Corteva (a firm created as a result of the merger of Dow and DuPont), ChemChina, and BASF (a German chemical company) control more than 60 percent of proprietary seed sales globally.

The FAO has expressed concern about this trend, asking, "What is happening to biodiversity?" and answering, "The extension of industrial patenting and other intellectual property systems to living organisms has led to the widespread cultivation and rearing of fewer varieties and breeds. This results in a more uniform, less diverse, but more competitive global market."

The FAO estimated in 2010 that 75 percent of crop diversity was lost between 1900 and 2000 and warned that if it continued, it would threaten global food security.

"Biodiversity makes production systems and livelihoods more resilient to shocks and stresses, including to the effects of climate change," reported the FAO in its 2019 assessment. The State of the World's Biodiversity for Food and Agriculture.

Seed Patents

The 2022 report No Patents on Seeds, produced by an international coalition of the

same name, states that "patents ... granted on usages of naturally occurring genes, on seeds, on plants and [on] their harvest, represent one of the biggest threats to global food security and regional food sovereignty."

The group stated that although the European Patent Office ceased granting patents on conventionally bred plants and animals in 2017, corporations now use loopholes to patent randomly generated (rather than genetically engineered) plant mutations.

"These patents on genes and genetic variations 'block access to biological diversity for plant breeding,'" according to the report.

Patents create monopolies on plants and animals.

"If patents are granted on conventionally bred plants and animals within its geographic scope, the patent holder can exclude other breeders from using them to bring new varieties to the market," the report reads.

In some cases, according to the short film series "Rich Appetites," seed laws can make it illegal for small farmers to exchange seeds—or even to simply save them for replanting.

"Corporate control of seed violates farmers' rights under international conventions and endangers people's livelihoods, increasing hunger and eroding cultural traditions," claims the second short film in the series, "Seeds."

"Rich Appetites," which was produced by the groups AGRA Watch and Alliance for Food Sovereignty in Africa (AFSA), also examines the ways that powerful groups control food production around the world under the guise of charity.

"Billionaire philanthropists [such as the Bill and Melinda Gates Foundation and the Rockefeller Foundation] are pushing U.S.-style industrial agriculture around the globe—including in Africa," the film states.

Industrial agriculture "is the single largest cause of biodiversity loss worldwide, fails to solve hunger, and hurts small-scale farmers and the planet," according to the films.

Although Western-led charitable organizations may mean well, their insistence on imposing this approach to farming has done more harm than good, AGRA Watch and AFSA say.

The Bill and Melinda Gates Foundation claims that industrialization benefits farmers and the poor. The foundation's support of African farming groups, for example, comes from its commitment to "transforming smallholder agriculture into a sustainable, inclusive foundation of economic opportunity," according to its website discussing its



PAOLO PARADISO/SHUTTERSTOCK

▲ To create a sustainable food system, we need to buy locally and eat in season, experts say.



PHOTO: LINDA WARE/REXUS.COM

A wealth of plant varieties created by generations of farmers is being lost as large corporations patent life forms.

agricultural development initiatives.

An effort to feed the world's hungry more efficiently was what first drove the effort to modify foods for productivity and uniformity, wrote Saladino, who has traced this back to the decades following World War II. Agriculture scientists of the time found ways to produce rice and wheat "on a phenomenal scale," he wrote.

Although this was a noble attempt "to save millions from starvation," it was a trade-off resulting in a loss of food diversity.

In an email to The Epoch Times, Saladino wrote: "We can't have a one-size-fits-all approach to feeding the world based around a reductionist vision of producing more and more calories. Science is only beginning to reveal to us the complexity and sophistication of many traditional food and farming systems."

"This research deserves investment alongside new technologies. We have already lost too many genetic resources, knowledge, and skills that could help feed the world in the future."

Solutions: Davids Face Goliath

A return to biodiversity-preserving farming practices seems impossible as long as industrial agriculture giants monopolize food production from seed to shelf.

An important advocate for seed and food sovereignty for small farmers is Vandana Shiva, founder of the India-based Navdanya movement and Italy's Navdanya International.

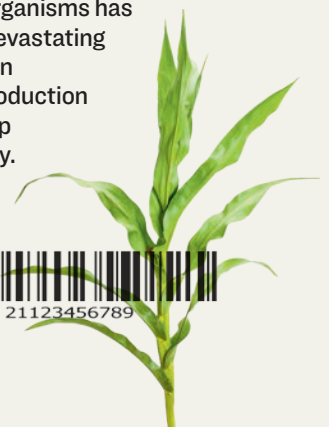
"The shift from globalization driven by multinational corporations to a progressive localization of our economies has become an ecological and social imperative, essential for food sovereignty," she recently wrote.

Navdanya International is opposed to what it calls "biopiracy"—the patenting of agricultural knowledge and techniques—and encourages and conducts research, advocacy, and partnerships to help small farmers maintain control over what they produce and how they produce it.

Two other groups working to change agricultural practices—the German nonprofit Foundation on Future Farming

Patenting Life

The ability to patent living organisms has had a devastating effect on food production and crop diversity.



and the Swiss nonprofit Biovision—recently published the optimistic Transformation of Our Food Systems: The Making of a Paradigm Shift.

In it, the authors describe growing global efforts to shift farming and food production practices out of a homogenized industrial system and into what has come to be called an "agroecological model."

Following this model will enable farmers to nourish a world population of 10 billion people by the mid-21st century while maintaining crop biodiversity and reducing dependence on harmful industrial practices, they claim.

Saladino offered practical advice to grocery shoppers hoping to join this pushback against global food homogenization.

"Technology has been one of the drivers of globalization and the homogenization of food, but technology can also provide us with a means to help preserve [food] diversity," he said.

In his book, Saladino described meeting a farmer in southwestern China who's saving endangered varieties of rice by selling directly to people in Chengdu and Beijing via WeChat.

"Through an app on our phones, it's possible for more of us to have a direct relationship with farmers and food producers," he told The Epoch Times.

Some of these apps include Locavore, Simply Local, Farm Fresh 24/7, and Farmish.

Buying locally leads to cooking with foods that are in season.

"If all of us just cooked more seasonally, that would make a big difference to global food diversity," Saladino said.

He also recommended joining local or regional networks dedicated to food sovereignty and biodiversity, such as the Slow Food Foundation for Biodiversity and the Ark of Taste.

"We can't replicate the relationship hunter-gatherers have with nature and biodiversity, but we can increase our awareness of the food that exists around us, the farmers and food producers in our part of the world, and the crops, fruits and other foods adapted to the places we live. One simple way of doing that is to live and eat in tune with the seasons," he said.

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 Fat-Soluble Activators

Certain vitamins found mainly in meat have several important roles in the body

SALLY FALLON MORELL

Historically, the diets of healthy nonindustrialized peoples throughout the world varied according to climate and terrain—but all of them can be described as nutrient-dense and rich in vitamins and minerals.

Weston A. Price, an influential researcher from Cleveland (1870–1948), analyzed some of these foods and found that the diets of "primitive peoples" contained four times more minerals than today's average American diet. Of note were the high levels of naturally occurring, fat-soluble vitamins found in the food—vitamins A, D, and K2—which Price referred to as "activators."

Without them, he noted, proper absorption of minerals such as iron, calcium, and iodine can't occur.

These vitamins play myriad other roles and are essential to life and good health.

However, misinformation on fat-soluble activators abounds. The U.S. Department of Agriculture (USDA) dietary guidelines largely exclude sources such as butter, cream, full-fat cheese, lard, poultry fats, and organ meats such as liver that best provide these critical nutrients.

Vitamin A

When it comes to critical fat-soluble vitamins, we need to consider what I call the "vitamin A switcheroo." Because the dietary guidelines suggest so little vitamin A, the USDA and the Food and Drug Administration (FDA) allow the food industry to label carotenes as vitamin A. Nutrition labels on packaged carrots or tomatoes state that they contain vitamin A—but your body actually converts vitamin A from beta-carotene, a precursor to vitamin A.

Animals and humans can convert carotenes into vitamin A via an enzyme-intensive process in the gut.

In the natural world, ruminant animals spend most of their time transforming the carotenes in green grass into vitamin A, which they store in their organs, fat, and butterfat. In nature, carnivorous animals go straight for the true vitamin A-rich parts of their prey—the liver and other organs.

Some humans are able to convert carotenes fairly efficiently. However, a study in the U.K. found that nearly 50 percent of European women lacked the enzyme for this conversion. In fact, human beings vary greatly in their ability to convert beta-carotene to true vitamin A, with women being less able to make this conversion than men.

Beta-carotene has a dark side. In a study published in the Journal of Biological Chemistry in 2012, researchers from Ohio State University found that molecules derived from beta-carotene can block certain actions of true vitamin A. This discovery could explain why a previous clinical trial found that people who were heavily supplemented with beta-carotene had a higher incidence of lung cancer than participants who took no beta-carotene.

Diabetics convert carotenes with great difficulty—as do babies and children who need true vitamin A from egg yolks and liver as their first foods, not sweet potatoes and carrots. Intestinal absorption problems, poor thyroid function, poor liver function, consumption of food additives, heavy exercise, and exposure to pesticides and chemicals can all inhibit the conversion of carotenes to vitamin A.

It's difficult for many people to depend on plant sources of carotenes for vitamin A, especially as this vitamin plays so many roles in the body.

Not only do we need vitamin A for mineral assimilation, especially calcium (which is why milk contains vitamin A-rich butterfat) but also for protein assimilation, an animal study suggests.

Vitamin A is essential for reproduction, proper growth, and the prevention of birth defects. Most hormones require vitamin A for their formation—including sex hormones, stress hormones, and thyroid hormones. We need vitamin A for our eyes, healthy skin and bones, and good hearing. Vitamin A supports energy production in the mitochondria, so it plays a role in combatting fatigue.

One of the most fascinating roles for vitamin A is support for feel-good chemicals and the ability to plan and complete tasks, suggests a review study published in Molecular Nutrition and Food Research in 2010 that looks at multiple previous studies to understand the effects of the vitamin in songbirds and rats.

The study found that vitamin A deficiency had major implications for learning, maturation, and neurological development.

"Together these results yield significant insights into the role of vitamin A in maintaining neuronal plasticity and cognitive function in adulthood," the researchers wrote.

Vitamin D

The second fat-soluble activator—vitamin D—also carries a cargo of misinformation.

Many sources on vitamin D insist that it's difficult to get the sunshine vitamin from food—maybe a little from eggs, oily fish, vitamin D-fortified milk, or mushrooms, a source of D2, not the active animal form D3, but not enough to meet our needs.

The only options these sources present are sunbathing or taking vitamin D supplements.

Actually, many foods provide vitamin D: butter, whole milk, and cheese (especially if these come from pastured animals); shellfish such as shrimp; poultry liver; and poultry fat. Lard and bacon are excellent sources and eggs from chickens raised in the sunlight are vitamin D powerhouses. Then, there's cod liver oil, which provides both A and D—and which most American children received right up to World War II.

Like vitamin A, we require vitamin D for so, so many things: healthy bones, of course, but also proper growth, mineral assimilation, muscle tone, reproduction and virility, healthy skin, insulin production, the nervous system, basic cell function, immune function, and the production of feel-good chemicals.

Vitamin K2

The third fat-soluble vitamin has an interesting history. Price wasn't sure what it was—he called it the x factor—but he knew that traditional peoples got it in their diet from foods such as butter from grass-fed animals, animal fats, and liver. It acted as a co-factor to vitamins A and D—without the x factor, the other two activators were less effective. He believed

that the x factor was largely responsible for the wide faces and freedom from dental decay that he observed among nonindustrialized peoples.

We now know that the x factor is vitamin K2, the form of vitamin K that animals make out of vitamin K1 in green-growing grass, and that sea animals make from plankton. A key role of vitamin K2 is making sure that calcium and phosphorus go to the right place—the bones and teeth—and don't get lodged in the wrong places, such as the joints and arteries.

These three vitamins work together—vitamins A and D are hormone-like, providing signals to the cells to make certain proteins, while vitamin K2 activates the proteins after signaling from vitamins A and D.

The best way to obtain these three critical nutrients is the fun way: by eating.

That's why we shouldn't take isolated supplements of vitamins A, D, and K2. If we take vitamin D on its own—a very popular practice these days—we're likely to develop deficiencies in vitamins A and K2, which could manifest as kidney stones, immune problems, or even depression.

The combination of K2 with vitamin D—very popular these days—is bound to lead to rapid vitamin A depletion. And the form of K2 in the supplements isn't the x factor, not the animal form discovered by Price, but a form made by fermentation.

The best way to obtain these three critical nutrients is the fun way: by eating. Taking cod liver oil isn't that fun, but there are ways to do it painlessly. And there are delicious foods in the Western diet that will provide these nutrients in the approximate right proportions, especially if these foods come from pastured animals: cheese omelets, caviar and sour cream, butter sauces, pate, grass-fed bacon cheeseburgers, crispy chicken skin, potatoes cooked in duck fat, custards, creamed soups, and natural charcuterie.

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.

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



Some vitamins are best obtained from certain sources, and with fat soluble vitamins, that typically means animal foods.



Most people know vitamin D is available from sunshine and supplements, but fewer people know it is also found in animal foods.



Supplements offer one way to get your fat soluble vitamins, but it isn't a very pleasant way, and it may not be as effective.



Vegetarians will need to get vitamin K2 from supplements and fermented foods.

ALL PHOTOS BY SHUTTERSTOCK

Monopoly of the Food Supply

A return to biodiversity-preserving farming practices seems impossible as long as industrial agriculture giants monopolize food production from seed to shelf.



While the exact causes are not entirely clear, the link between sinus congestion and depression has been extensively documented and theories abound.

Could Your Sinus Problems Be Making You Depressed?

Research has uncovered several strong links between sinus congestion, depression, and suicidal thoughts



Between
1 and 5
PERCENT
of the American population suffers from chronic rhinosinusitis.

SELLWELL/GETTY IMAGES

MARTHA ROSENBERG

Between 1 and 5 percent of the American population suffers from “chronic rhinosinusitis” (CRS), a condition in which the nose and sinuses are inflamed for at least 12 consecutive weeks. It can result in a plugged nose, facial pain, loss of smell, or nasal mucus—or all of the above. As much as 11.6 percent of U.S. adults have sinusitis—inflamed sinuses—and 8 percent of U.S. adults and 7 percent of U.S. children have seasonal allergic rhinitis, or hay fever, which can also be characterized by sinus inflammation.

Now researchers believe that the conditions can be linked to depression, anxiety, and even suicide, although it isn't clear whether the mental health issues precede or follow the sinus issues.

A study published in the American Journal of Rhinology & Allergy found that almost a third of patients with CRS also had depression that occurred “independent of other chronic illnesses associated with CRS.” A study published in 2019 in the Journal of the American Medical Association (JAMA) Otolaryngology—Head & Neck Surgery, looked at 16,224 South Korean patients who had CRS and 32,448 who didn't. It found that patients with CRS were more than 50 percent more likely to have developed depression or anxiety after an 11-year follow-up.

And a study published in the International Forum of Allergy & Rhinology found that the severity of patients' CRS—called their “Rhinosinusitis Disability Index”—was correlated with their anxiety and depression score and that the more depressed the patients were, the worse they said their CRS was.

Lifestyle, Medication Considerations
Chronic rhinosinusitis can affect the whole body and cause such comorbid conditions as cognitive dysfunction, diabetes, and sleep disorders caused by nasal obstruction and drainage, researchers wrote in the American Journal of Rhinology & Allergy. Facial and sinus pain and “impaired olfactory function could impact pleasurable social activities,” the authors wrote, noting that work productivity can also suffer.

Depression is also linked to comorbid conditions such as rheumatoid arthritis, cancer,

GROUND PICTURE/SHUTTERSTOCK



Chronic rhinosinusitis can affect the whole body and cause such comorbid conditions as cognitive dysfunction, diabetes, and sleep disorders

Chronic nasal blockages can lead to disordered sleep and a host of subsequent conditions may follow.

coronary heart disease, stroke, and diabetes.

“Patients with depression may have physiologic effects due to their mental illness or maladaptive behaviors, which increase their risk for developing some conditions, such as Type 2 diabetes,” American Journal of Rhinology & Allergy researchers wrote.

“Comorbid depression has also been shown to impact treatment outcomes in other diseases. Patients with depression have increased death and rehospitalization rates after coronary artery bypass grafting. Within this context, it is not surprising that CRS would be associated with a higher prevalence of depression compared with a group of individuals without CRS.”

There are also similarities in the medications that people with depression or sinus problems may be taking—as well as special risks when psychiatric patients are treated, researchers noted in the journal Allergic Rhinitis.

“Psychotropic medications may affect diagnosis of allergies [and] medications used to treat allergies impact mood and behavior,” they wrote.

What are some of the risks? “Systemic corticosteroids are associated with depression, mania, and psychosis,” and “antihistamines may act additively or synergistically with certain psychotropic medications in beneficial (treatment of insomnia, potentiation of anxiolytic effects) or detrimental (worsening of sedation-elevating risk of accidents) [ways].”

Insomnia, seen in both diseases, exacerbates depression, and “systemic decongestants with alpha-Adrenergic agonist mechanism of action can precipitate hypomania or mania, and exacerbate insomnia and anxiety in vulnerable individuals,” the researchers wrote. Antidepressants and ADD medications can also have additive effects when sinus medications are used, according to the researcher.

Researchers writing in the BMJ echoed the concerns.

“The side effect of some antiallergic medications (systemic decongestants, antihistamines, leukotriene inhibitors and corticosteroids) may worsen prosuicidal factors such as night-insomnia, day-somnolence, agitation, anxiety, depression and cognitive disturbance,” they said.

Pollen, Ragweed May Be Dangerous for Some

Several scientific papers have noted an increase in suicides when pollen and ragweed counts rise.

“Based on the influence of cytokines [substances secreted by immune cells] on mood, cognition, and behavior in healthy individuals and patients with medical and psychiatric conditions, the reciprocal immune-brain interactions, and the cytokine expression during allergic reactions, we hypothesized that tree pollen (which peaks in spring) and ragweed pollen (which peaks in late summer/early fall) may act as envi-

ronmental triggers for suicide in vulnerable individuals,” researchers wrote in the journal Molecular Psychiatry as early as 2005.

Their hypothesis is strengthened at the end of their paper.

According to research published in the BMJ, those with a history of mood disorders were more at risk of suicide when pollen rises, but even those without such a history were seen to be at risk. Pollen-linked suicides affected men more than women, according to the research published in BMJ, but a study in Japan published in the journal Environmental Research found the opposite to be true.

“Our results indicate that pollen is associated with female suicide mortality in Tokyo,” the researchers wrote.

What mechanisms could explain such a morbid consequence from ubiquitous substances that most believe to be an annoyance but not a danger?

“There are several possible mechanisms underlying the link between pollen and suicide,” BMJ researchers wrote. “One possibility is that air pollen triggers episodes of seasonal allergic rhinitis, a relatively common condition affecting more than 20 percent of adults with deterioration in their quality of life. In seasonal allergic rhinitis, pollen induces allergy-related cytokine (i.e., Th2 cytokine) production in the nose of individuals who are sensitive to tree pollen.”

The cytokines in the nasal cavity can find their way to the brain, “where they may induce an amplified production of Th2 cytokine that can result in the impairment or inhibition of the limbic structures involved in impulsivity, aggression, anxiety, and especially depression. A recent study of suicide victims found an increased expression of Th2 cytokines in a region of the prefrontal cortex previously implicated in suicide,” according to the researchers.

Depression in Those With Sinus Problems

It's likely that similar mechanisms are at play in those with non-hay fever sinus conditions.

“A systemic inflammatory hypothesis has been proposed, which links inflammatory cytokine levels to depression severity,” researchers wrote in the American Journal of Rhinology & Allergy.

“The proinflammatory cytokines interleukin-1beta, interleukin-6 and the neutrophil-chemoattractant interleukin-8 may play a major role in acute sinusitis, as shown in viral and allergic rhinitis,” researchers wrote in the Journal of Korean Medical Science. “In chronic sinusitis interleukin-3 dominates the cytokine profiles, giving support to a variety of inflammatory cells.”

Similarly, inflammatory cytokines are often behind the development of depression (a cause that was obscured by the now-discredited “chemical imbalance” theory of depression). Even food allergies can lead to depression-related inflammation.

Still, there's a ray of hope for those with sinus issues who are also experiencing depression.

“CRS treatment does seem to improve depression,” researchers wrote in the journal Current Opinion in Otolaryngology & Head and Neck Surgery while noting that “depressed patients have a significantly larger economic burden because of their

Getting treatment for a mood disorder might help alleviate allergy symptoms.

MAMA LITA/SHUTTERSTOCK



Natural Treatments for Sinus Problems

According to the Mayo Clinic, there are several at-home and natural treatments you can try to relieve sinus conditions and hopefully any depression you might have with them.

The Mayo suggestions include: rinsing your nasal passages including nasal lavage; breathing in vapor from a bowl of hot water; a hot shower; the steam of which can help; applying a warm compress to your nose and forehead to reduce sinus pressure; drinking plenty of fluids; and rest, which speeds recovery from infections.

As much as

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of U.S. adults have sinusitis—inflamed sinuses—and

8% of U.S. adults and

7% of U.S. children

have seasonal allergic rhinitis, or hay fever, which can also be characterized by sinus inflammation.



SUPERCELLS/SHUTTERSTOCK



Several studies have linked higher pollen counts to a rise in suicides.

Breathing in steam vapors can help clear blocked nasal passages.

increased healthcare utilization and productivity losses.”

Getting treatment for a mood disorder might help alleviate allergy symptoms since the two conditions have related biological actions according to some researchers.

And it's also important to remember that depression can be a natural and expected reaction to many environmental and social conditions that exist today. Despite drug ads that imply the normal human emotional state should be gleeful and ecstatic, there are valid reasons for sad and depressed moods, from job and economic stresses to family problems to the diminished human dignity occurring in many political, social, and medical spheres today.

Probiotics

Sinus conditions may also benefit from the symbiotic bacteria found in probiotics. These bacteria play an important role in digestion, immune function, and more. We pick these helpful bacteria from our environment and food. Some research suggests that sterile environments that are too “clean” cause our immune systems to overreact to substances, including weeds and trees that we encounter less frequently. Researchers believe that the “good” bacteria found in probiotics offer an effective treatment option for many such conditions.

Research published in 2021 in the journal Healthcare states that “probiotics may induce the inhibition of adhesion of pathogens to the mucous membranes, the stabilization of tight junctions in the epithelial layer with a reduction in the permeability of the mucosa, the competitive inhibition of pathogens, modulation of the immune system, and the production of various substances toxic to pathogenic microorganisms.”

Probiotic treatment for sinus conditions is especially promising, according to the researchers, because the nasal microbiome or microbiota has its own unique characteristics different from other parts of the body.

The researchers note that animal studies have shown the ability of probiotics to “reduce the inflammatory phenomena of CRS on the mucosa” and say that studies of the nasal microbiota should continue. Many sufferers would welcome further research.

INTENTIONAL LIVING

Why You Don't Take Action (and What to Do About It)

How I've made progress in taking action by systematically removing every reason I have not to

MIKE DONGHIA

My relationship with taking action has changed in the past two years.

About two years ago, my wife and I decided to start a blog to document all that we were learning and experimenting with in our lives. Since that decision, made on a long car ride together, we've published more than 100 blog posts and written more than 100,000 words—enough to fill nearly two books.

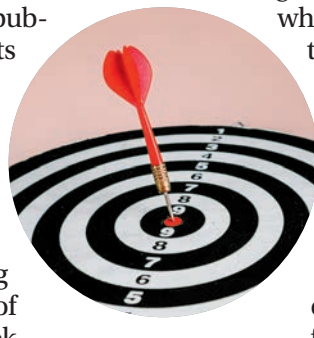
It's been very rewarding, but it's also been a lot of work. Taking action and sustaining that action over the long haul hasn't always been one of my strengths, and so when I look back through the archives of our blog, I really do feel proud of what we've accomplished.

The commitment to writing weekly and the accountability of doing it with my wife have helped me to grow in ways I didn't expect. This new practice has

also given me the chance to identify and work through roadblocks that occasionally keep me from taking action and making progress in meaningful areas.

I still haven't arrived, of course. Consistent action is still a daily challenge.

But I've grown a lot this past year, and though I'd take the opportunity to share what I've learned about the art of taking action. Here are six factors that I've found can keep me from taking action—and what to do about them.



You don't have to hit the bullseye, you just need to throw the dart.

Perfectionist Tendencies

The root of perfectionism is in the false security and sense of control you get from your perfect plans about the future.

These plans give you comfort like a pacifier does for a baby. But they leave you afraid to take action, because every step into the messy real world is a threat to your perfect—but fragile—plan.

It gets worse. A meta-analysis in the Jour-

Perfectionism is a common risk factor in a host of psychological pathologies including depression, anxiety disorders, and obsessive-compulsive disorder.

nal of Clinical Psychology found perfectionism to be a common risk factor in a host of psychological pathologies including depression, anxiety disorders, and obsessive-compulsive disorder.

When I get stuck in a perfectionist mindset, my favorite trick is to take action immediately without any concern for quality. I aim to work as fast as possible without overthinking in order to break through the seal of inaction.

It's wiser to adjust and refine your plan while you're moving than to try to construct a masterpiece in your mind without the feedback of reality.

Dreading the Task

Every person has tasks they'd rather not do. Whether you find the job boring, tedious, exhausting, or frustrating, it's tempting to procrastinate in these scenarios rather than face them head on.

But this posture of running away from action changes your psychology toward life itself.

If it's really something you have to do, no

amount of avoidance is going to make it go away. And avoiding it means it will be in the back of your mind all day and possibly multiply into more problems.

Instead of turning away, what if you ran full speed at these tasks and knocked them out? Don't think twice about it, just do it reflexively. Taking action in this way puts you back in the driver seat as an active participant in your own life and it feels great.

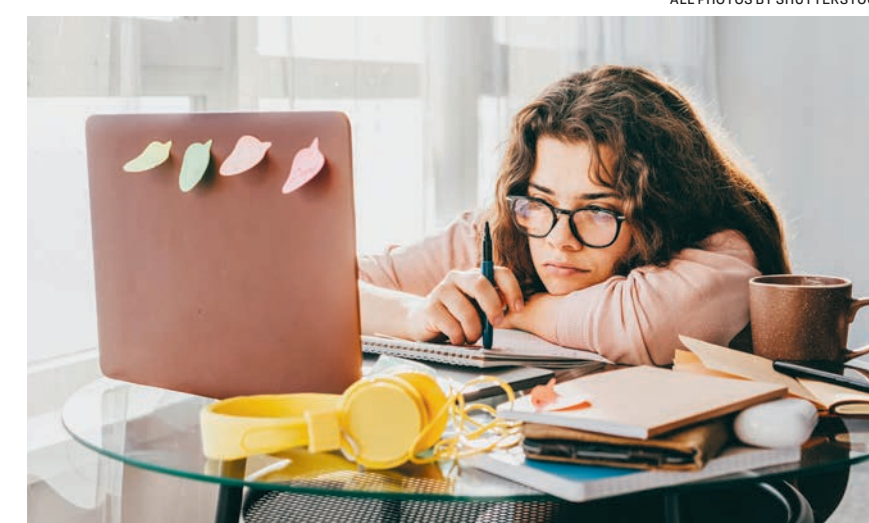
Feeling Sorry for Yourself
Self-pity is a waste of time.

It doesn't solve your problems. It makes you an unattractive person. It pushes your responsibilities onto others. And to top it off, it isn't even fun. If you're going to take up a vice, there are certainly far more fun ones to choose from.

But when you're feeling sorry for yourself, it's nearly impossible to see all of this.

You're too preoccupied with your own thoughts and feelings to realize that you're making an irrational choice.

Fortunately, I find that even in my gloom, I'm able to ask myself a probing question: Is this worth it? And the beauty of a question is that it pulls you out of a reflexive state (self-pity) into a reflective one. While habits powerfully shape our lives in the collective, it's actually pretty easy to break free from the orbit of a single instance with a simple act of intention.



ALL PHOTOS BY SHUTTERSTOCK

There are workarounds to help you get past internal and external blocks to taking meaningful steps to improve your life.

Distracting Thoughts

Sometimes you want to take action, but your mind feels full or busy. You're preoccupied with problems in other areas of your life or distracted by open loops that you haven't closed.

I used to think the solution was to write these thoughts down or even try to tackle them quickly so I could get to work.

That never works. Inevitably, the problem in my mind is more absorbing than the task at hand, and I never got back to what I originally wanted to be working on. I end up working on the urgent instead of the important.

The path of action involves training

your brain to turn away from those other thoughts and to distract yourself with work instead. The quicker you can get yourself into the swing of action, the more likely this is to work. And the more often you do it, the more it becomes a habit and the default way you handle these situations.

Distracted by Easy Pleasures

Meaningful action almost always requires hard work. And let's be honest, at any given moment there is a whole menu of easy pleasures that seem more appealing than digging into that hard work.

I've tried every trick in the book, but the only thing that works for me is the “two-

minute rule.” While you're still in the haze of temptation, commit to taking action for just two minutes, giving yourself permission to stop after that.

But once you start working for a few minutes, you'll almost certainly keep going. The hardest part is starting, but once you get going, the momentum is working in your favor.

The ‘Why Bother?’ Mentality

Have you ever failed so often in an area that you begin to have a “why bother” attitude about taking action? Why bother giving up your bad habit today when you know you'll just pick it up again next week? It feels like the work you put in this week will just go to waste, and so you wonder if it's even worth the effort.

The problem is that you've broken so many small promises to yourself, that you no longer trust yourself to follow through.

You need to rebuild that trust. The way to do that is with small actions over many days. Choose an action so small that you can't possibly not do it, and then stick with it for 30 days in a row. In one month, you'll have a new relationship with yourself.

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.



Researchers have linked a decline in religious attendance to a rise in deaths of despair like suicide and overdose.

Does Religion Prevent Despair?

A trio of economists has tied the rise in 'deaths of despair' to the decline in religious practice in America

ZRINKA PETERS

The recent dramatic increase in "deaths of despair" (suicides, fatal drug overdoses, and deaths due to alcoholism) is directly connected to the decline in organized religion in the United States—and to the repeal of "blue laws" that once prohibited some commerce on Sundays in observance of the Christian Sabbath.

This is according to a 2022 study by economists Tyler Giles, Daniel Hungerman, and Tamar Oostrom called "Opiates of the Masses: Deaths of Despair and the Decline of American Religion."

Over the past two decades, note the researchers—who are from Wellesley College, the University of Notre Dame, and Ohio State University—the death rate from drug poisonings in the United States has tripled. At the same time, the suicide rate and the rate of alcoholic liver disease have increased by 30 percent.

Middle-aged white Americans have been hit especially hard, according to a study in the Proceedings of the National Academy of Sciences cited by the authors. Among this group, increases in deaths from these causes have been so dramatic that at the turn of the century, all-cause U.S. mortality rates began to rise, reversing decades of decline.

The Repeal of 'Blue Laws'
The "Opiates of the Masses" authors attribute this in part to the repeal of so-called blue laws, an act they call a "policy-based shock to religiosity." When centuries-old

blue laws—enacted initially to preserve the Christian Sabbath as a day of rest—were repealed, businesses were permitted to remain open on Sundays. As a result, participation in religious services fell.

Using graphical analysis and difference-in-differences methods, the economists were able to map a direct connection between the repeal of these laws and the increase in deaths of despair.

Attending a religious service at least once a week is associated with greater life satisfaction, more frequent volunteering, a higher sense of mission, and more.

Among middle-aged Americans, they found, the repeal of blue laws had a 5 percentage-point to a 10 percentage-point effect on weekly attendance at religious services and increased the rate of deaths of despair by two deaths per 100,000 people.

Blue laws are still on the books in only 28 states, and most of them prohibit only alcohol sales during limited hours. A very small number of counties also prohibit car sales and hunting on Sundays, but for most of the United States, Sunday blue laws are a thing of the past, and the concept of strictly observing a day of rest for religious reasons is now foreign to most Americans.

Although 77 percent of churchgoing Protestant Christians say they observe Sunday as a day of rest, only a small number of them refrain from shopping or attending entertainment events, according to a survey by Lifeway Research. One-third report

avoiding paid work.

"Americans are a privileged society [in which] people often enjoy two days off a week. For many, this may make observing a Sabbath day something many churchgoers don't give much thought to," Scott McConnell, executive director of Lifeway Research, said in a statement.

"Today, however, we see blue laws being repealed and most businesses open seven days a week. U.S. Postal Service trucks are now out delivering packages on Sunday. "Taking a Sabbath may be something people have to become even more intentional about."

Religion Provides Structure, Comfort
In an extensive 2009 review of the body of literature published on religion and mental health featured in The Canadian Journal of Psychiatry, Dr. Harold G. Koenig argues that religion provides both comfort and structure to people's lives.

He calls religion "a powerful coping behaviour that enables people to make sense



Along with providing social support, hope, purpose, and values, religion helps adherents develop self-discipline and self-regulation.

of suffering, provides control over the overwhelming forces of nature (both internal and external), and promotes social rules that facilitate communal living, cooperation, and mutual support."

Religious beliefs and practices provide "guidelines for human behaviour that reduce self-destructive tendencies and pathological forms of coping," he claims, leading to fewer deaths of despair among the religious.

Attending a religious service at least once a week is associated with greater life satisfaction, more frequent volunteering, a higher sense of mission, a greater tendency to forgive others, and lower probabilities of drug use and early sexual activity, according to a study including about 6,000 young adults.

In this study, conducted by researchers at the Harvard T.H. Chan School of Public Health and published in 2018 in the American Journal of Epidemiology, young adults who had had a religious upbringing including attending religious services also reported better mental health than those who hadn't.

The researchers also asked how often the subjects prayed or meditated, senior author Tyler VanderWeele told The Epoch Times. Frequency of prayer and meditation, along with more frequent religious attendance, had a protective effect against the "three dangers of adolescence:" depression, substance abuse, and risky sexual behaviors, he said.

Religion is "certainly not the only important protective factor," but an "important health and well-being resource and one that to my mind is being neglected, especially in adolescents and young adults," VanderWeele said.

"I do think some of the decline we're seeing in young people's mental health and well-being is [caused by] declining rates of religious participation."

The Harvard study authors didn't recommend becoming religious solely to reap health benefits, but wrote, "Encouraging service attendance and private practices in adolescents who already hold religious beliefs may be meaningful avenues of development and support, possibly leading to better health and well-being."

Along with providing social support, hope, purpose, and values, religion helps adherents develop self-discipline and self-regulation as they seek to follow their faith's guidance and systems, VanderWeele said.

Zrinka Peters has been writing professionally for over a decade. She has a BA in English Literature from Simon Fraser University in Canada and has been published in a wide variety of print and online publications including Health Digest, Parent.com, Today's Catholic Teacher, and Education.com



Electrolyte Deficiencies Provide Warning Signs for Severe COVID

Tending to these essential minerals can improve cell signaling, may be key to avoiding severe COVID-19 infections

CHRISTY PRAIS

The association between illness and electrolyte imbalances isn't a new concept, but it's come back into the spotlight more recently, with recent studies examining electrolyte imbalances and COVID-19.

The results are quite interesting, as they reveal possible diagnostic opportunities and therapeutic interventions to help reduce the severity of COVID-19. Also, a correlation has been found between low electrolyte levels in the year before someone contracted the virus and higher mortality.

The relationship between the severity of COVID-19 outcomes and low levels of specific electrolytes suggests that they could be an easy predictor for those who may develop severe disease. Also, early prediction of critical cases through testing for specific electrolyte imbalances may help identify patients who will likely benefit from early therapeutic and preventive measures that could reduce mortality.

What this means is that those with COVID-19 need to have their fluid and electrolyte levels closely monitored, as imbalances can reflect disease status and progression.

Possible causes of electrolyte imbalance in COVID-19 patients include fever, sweating, vomiting, diarrhea, dietary changes, drug-related side effects, hyperventilation, the direct effect of the virus on infected host cells, and the malfunction of organs during the disease.

A balance of different electrolytes is crucial as many automatic processes in our body rely on them. When electrolytes get depleted, our cell signaling and communication functions weaken, further compromising our body at a time when it needs to be stronger and more resilient.



Continued on Page 10



Many herbal teas are more than a pleasant beverage, they offer documented therapeutic benefits.

HEALING HERBS

Herbs to Improve Memory and Cognitive Function

Rosemary, peppermint, and sage have demonstrated brain-boosting effects in scientific studies

SHERRA VORLEY

Our human brains are amazing. This complex organ is our command center. The function of our cognitive, sensory, social, emotional, behavioral, and learned skills relies on our brain health.

White matter, grey matter, blood vessels, and nerves—the human brain is about 60 percent fat. The remaining 40 percent is a combination of water, protein, carbohydrates, and salts. Our brain weighs in at about 3 pounds, with an incredible 86 billion neurons. Our neurons, or nerve cells, communicate constantly with each other by releasing chemical messengers called neurotransmitters.

And, through a process known as neurogenesis, our incredibly adaptive brains can grow new brain cells. Our ability to change our minds extends well past midlife. We can learn new things, acquire new skills, and recover from brain injury throughout our lives.

The concept of neuroplasticity describes the brain's capacity to rebuild and remodel itself. Through new experiences, new information, or even injury, our brains can regenerate and strengthen neuronal connections.

Sage tea has a long-standing traditional use as a brain-enhancing tonic.

Happy Healthy Hippocampus

The part of the human brain responsible for our ability to learn and remember is called the hippocampus. On each side, deep in the center of our brain, are two thumb-sized, seahorse-shaped structures, known as the hippocampi. New studies show that this area of the brain has the unique capacity to generate new neurons. Incredibly, there are 700 new brain cells in the hippocampus every day!

New neurons need a great deal of support to survive, grow, and be active. Fortunately, there are a few ways to help them grow taller, larger, and stronger to become mature.

Continued on Page 14

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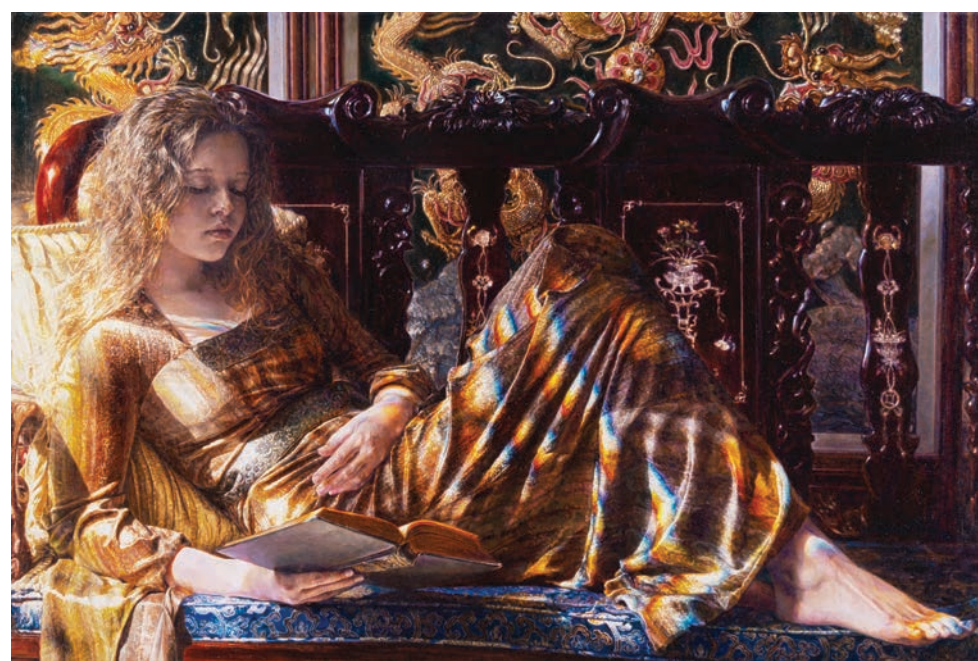
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THE EPOCH TIMES

Electrolyte Deficiencies Provide Warning Signs for Severe COVID

Continued from Page 9

The Science Behind It

Multiple studies point to the importance of four electrolytes that are essential in the fight against COVID-19: sodium, magnesium, calcium, and potassium. A review of these studies, published in *Annals of Clinical Biochemistry* in 2020, suggests that low electrolyte levels are directly linked to disease severity and weakened recovery.

Clinical data from 12 studies show that 59 percent of people with COVID-19 have low levels of calcium (hypocalcemia), according to a review published in *Immunity, Inflammation and Disease* in 2021. The results show hypocalcemia is significantly associated with the severity of disease, mortality, the number of hospitalization days, and admission to the intensive care unit (ICU). Calcium is involved in the regulation of the inflammatory response, metabolic and signaling, and plays an important role in the survival and virulence of viruses.

Magnesium plays a role in immune response, reduces inflammation, is a muscle relaxant, is a vasodilator (widens blood vessels), has antioxidant effects, and protects the nervous

system. As a result, magnesium levels affect the health of the cardiovascular, nervous, respiratory, and digestive systems. Low levels of magnesium (hypomagnesemia) in COVID-19 patients who were admitted to the ICU have been shown to be one of the signs of disease severity, according to a study from Iran. The study recommends that magnesium should be added to the panel of tests in routine COVID-19 testing.

Those with COVID-19 need to have their fluid and electrolyte levels closely monitored.

In a study from China published in *JAMA Network Open*, a journal of the American Medical Association, 93 percent of severe and critically ill patients had below-normal levels of potassium (hypokalemia). The study found a direct relationship between the degree of hypokalemia and the severity of COVID-19.

Another smaller study published in the *Canadian Journal of Kidney Health and Disease* evaluated the prevalence of low levels of sodium (hyponatremia) in COVID-19 patients and the correlation between hyponatremia and the severity and outcome of COVID-19. It found that hyponatremia patients required significantly higher rates of ICU admissions and oxygen support.

Finally, an extensive study (published in *Nature* in 2021) was done in the United States that looked at the entire medical history of more than 100,000 COVID-19 patients to understand key markers associating mortality and health states that are more likely to lead to ICU admission and mortality. It concluded that those who experienced imbalances in their electrolyte or fluid levels in the year before they contracted the virus were more likely to die than those who didn't.



Extensive research, including a large U.S. study, has linked low levels of electrolytes such as potassium, sodium, magnesium, and calcium to severe COVID-19.

Christy A. Prats received her business degree from Florida International University. She is the founder and host of *Discovering True Health*, a YouTube Channel and podcast dedicated to health and wellness, and contributing journalist for *The Epoch Times*.

How to Ensure Our Optimal Electrolyte Levels

Everyone's body is different, and electrolyte levels are affected by many factors. Getting a serum electrolyte test done would be a great first step to see where you're at and if you need therapeutic intervention.

Gatorade or most store-bought electrolyte-boosting sports drinks are definitely not the answer. Many contain toxic dyes and are packed with excessive sugar, making them more sugar-heavy than electrolyte heavy, which is detrimental to your health.

Having a well-balanced diet is crucial for maintaining optimal electrolyte balance. There are excellent food sources for you to maintain electrolytes.

Good Sources of Potassium

- Beans: white beans
- Green leafy vegetables: spinach, chard, and kale
- Potatoes
- Bananas
- Dried apricots
- Squash and zucchini
- Avocados
- Red, yellow and orange fruits and vegetables

Good Sources of Natural Sodium

- Celery
- Beets
- Bok choy
- Bell peppers (red, yellow, and orange)
- Salt
- Lemon juice
- Coconut water

Good Sources of Magnesium/Calcium

- Beans
- Nuts and seeds (magnesium mainly)
- Almond and cashew nuts (highest)
- Sunflower and sesame seeds (highest)
- Green leafy vegetables (calcium)
- Wheat-based grains (magnesium)
- Coconut water
- Lemon juice
- Lime juice
- Orange juice

Optimal electrolyte levels are crucial for COVID-19 recovery and mortality and can be part of the puzzle in mitigating severity. The good news is that we can help our bodies have a better chance of fighting off the virus and improve our general health with a good understanding of the importance of electrolytes and keeping them at optimal levels.



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Those Side Effects on TV Drug Ads May Lure Customers

The mind-numbing list of side effects may actually help sell drugs, research suggests

MARTHA ROSENBERG

"One of the most perplexing aspects of the ubiquitous direct-to-consumer (DTC) prescription drug advertisements is the seemingly endless recitation of side effects in drug ads," cardiology expert Larry Husten stated in an opinion piece on *MedPage Today*.

"The list is, alternatively, horrifying, boring, concerning, and silly. It is reasonable to wonder how these ads, with their interminable lists of side effects, lead to greater sales of the drugs they promote."

Some clues might be found in research published in the journal *Nature Human Behavior* in 2017. The study, "The unintended consequences of argument dilution in direct-to-consumer drug advertisements," was conducted by Niro Sivanathan and Hemant Kakkars of the London Business School.

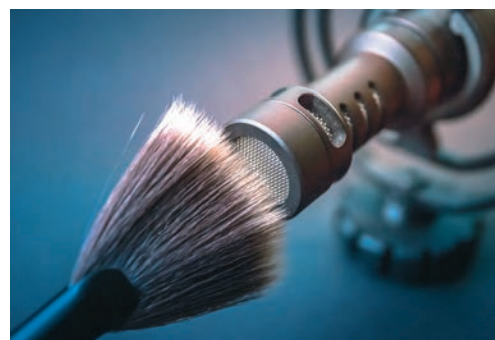
After six experiments embracing 3,059 U.S. participants, the authors concluded that "when commercials list severe side effects along with those that are most frequent (which include both serious and minor side effects), as required by the Food and Drug Administration, it dilutes consumers' judgments of the overall severity of the side effects, compared with when only the serious side effects are listed."

The presence of "minor side effects significantly diluted participants' severity judgments," about more serious side effects and helped sell the drug, the researchers wrote.

Specifically, subjects who listened to or read versions of drug ads in which information about minor side effects was mixed in with information about more serious ones exhibited "greater attraction" to those drugs, according to the researchers. The minor side effects somehow take the sting out of the more severe risks and, perversely, boost the drug, they hypothesize.

Husten suggested that the side effect list has the effect of "hypnotizing" viewers in a process sometimes called autonomous sensory meridian response (ASMR)—an experience, often found on the internet, that people seek out and enjoy.

ASMR has been defined as a pleasurable feeling that originates in a person's head and spreads to their spine and sometimes their limbs, according to Husten. An ASMR can "lull or practically hypnotize viewers into a state of benign, uncritical acceptance."



Drug ads can mimic the autonomous sensory meridian response (ASMR)—an experience, often found on the internet, that people seek out and enjoy.

'Ask-Your-Doctor' Drug Ads Are 2nd Largest US Ad Revenue Source

However it is that the ads work (something that maybe only the marketing psychologists working for those companies really understand), the one thing we know for sure is that they're effective.

Since "Ask-Your-Doctor" DTC drug ads began in 1997, when they were authorized by the U.S. Food and Drug Administration (FDA), they've become the second largest U.S. ad revenue source, after life and entertainment ads, according to Statista. And they "move product."

In 1992, five years before DTC ads began in America, took an average of seven prescription drugs per year—by 2007 that number had leaped to 12 per year and is likely much higher now. DTC drug advertising is only legal in the United States and New Zealand, and drug makers are some of the top national television advertisers, according to Media Radar.

The COVID-19 pandemic didn't seem to dampen drug makers' zeal. While most advertisers cut their spending during the pandemic, drug makers didn't, according to the pharmaceutical industry website FiercePharma—they spent \$5 billion on advertising in 2021 alone. Nor did drug makers "go digital" with online ads like so many advertisers have but, rather, stayed TV centered possibly because of their older demographic—almost half of drug ad spending was for arthritis, diabetes, and depression drugs, according to the U.S. Government Accountability Office, and Medicare beneficiaries spent more than \$280 billion on advertised drugs between 2016 and 2018.

A Short DTC Drug Advertising History Before 1997, drug maker marketing tended to be image building and institutional, such as "Pfizer's Partners in Healthcare," rather than promoting one drug," Frank J. Ascione, a doctor of pharmacy, wrote in a chapter in "O'Donnell's Drug Injury," an informational guidebook for health care practitioners or attorneys.

And prior to 1962 and the 1961 Thalidomide tragedy, drug marketing wasn't even overseen by the FDA (which has regulatory origins dating back to the 1906 Pure Food and Drug Act) but by the Federal Trade Commission (FTC). However, it soon became apparent that the FTC lacked both the scientific expertise with which to regulate drugs and the power to hold manufacturers responsible, according to Ascione.

Passage of the 1962 Kefauver-Harris Amendment, which required drug makers to prove their products were safe and effective, "enhanced the FDA's role in ensuring accurate information about drug products," he wrote. At the same time, consumer groups began demanding more information about prescription drugs.

Congress responded to public pressure by proposing a system in which all prescription drugs came with FDA-approved information, an effort which "became known as the Patient Package Insert (PPI) Initiative."

"The main regulatory objective was to ensure that individual patients compre-

hended their illnesses and treatment regimens—especially an understanding of the proper and safe use of medications they used," Ascione wrote.

Objections to Direct Drug Ads

Opposition from health care professionals and drug makers surfaced over the proposal to provide information directly to patients, according to Ascione. Would the information really increase drug safety, they asked. Would health professionals face increased liability over the new regulations? Would doctors resent consumer communication that bypassed them? And what about the cost of creating and printing the patient package inserts?

The prospect of DTC drug advertising brought up other concerns. Would such advertising "generate unneeded visits and inappropriate requests for medications ... [and] encourage drug products over healthier (and safer) lifestyle choices?" he wrote. Would it medicalize "nonmedical conditions, placing drug makers' needs over the public's health? Such concerns continue today.

"Every time you turn on your television [or] open up a magazine ... there they are: glossy advertisements for countless prescription drugs that promise the possibility of relief from whatever ails you," reads an editorial in the *American Medical Association's Journal of Ethics* a few years ago. "These informational vehicles drive home a single, uniform message: 'If you suffer from [insert any condition], talk to your doctor about whether [insert any drug name] is right for you.'"

DTC drug ads can "spur people to ask for medications they don't need" and "create conflicts between patients asking for a drug and doctors who don't recommend it," Dr. Robert H. Shmerling wrote in a 2022 article in *Harvard Health Publishing*. "How direct-to-consumer ads hook us," Shmerling is senior faculty editor at *Harvard Health Publishing*.

Do DTC Drug Ads 'Sell' Diseases?

An area of DTC drug advertising that especially generates controversy is what the ad industry calls "unbranded ads"—ads that raise awareness about a disease or condition without naming the actual drug that's being sold or even appearing to sell a drug. Instead, the ads are designed to create "awareness" and "demand."

Disease awareness campaigns often establish a condition or disorder as a looming public health problem and can be made to sound like public service announcements that serve the general good, such as "smoke detectors save lives." A hallmark of such unbranded advertising claiming that a disease is more widespread and serious than people think and that sufferers could have a condition and not know it.

The disease being given more awareness is often called "underdiagnosed," "misdiagnosed," and "underreported," and TV viewers are told that "stigmas" and "barriers" prevent patients from getting the treatment they need. Examples of diseases and conditions boosted by unbranded ads include exocrine pancreatic insufficiency, shift work sleep disorder, and non-24-hour, sleep-wake disorder. Few had heard of such conditions until drug maker advertising highlighted them.

Unbranded ads are often linked to online "symptom checkers" and "quizzes" to further self-diagnosis so that patients "ask their doctor" for a particular drug.

Health Professionals Weigh In

James O'Donnell, an associate professor of pharmacology at Rush Medical College in Chicago, told *The Epoch Times* that DTC drug ads "are not in fair balance" and have definitely not improved health care and patient education. In fact, the ads have reduced doctors to gatekeepers and order-takers while raising drug prices, he said.

Dr. Harry Haroutunian, the author of "Not As Prescribed: Recognizing and Facing Alcohol and Drug Misuse in Older Adults," laments how drug-taking has become normalized. Salon asked him in an interview about his opinion of DTC drug advertising.

"It is horrible," he responded. "It gives people magical thinking and the idea that any problem can be fixed with a drug and there are no consequences regardless of the list of dangerous side effects. The ads allow the patient to feel 'smart' by telling the doctor what he heard on TV, and then the doctor has to be smarter in what he chooses to prescribe."

Writing in *MedPage Today*, Husten was even more blunt.

"My own view is that drug ads are themselves like drugs," he wrote.

And the long list of side effects that research suggests helps sell a drug?

"It would not surprise me at all to learn that the advertising agencies that produce the drug ads are consciously using ASMR videos as a model," Husten said.

Drug ads sound like parodies of themselves as they list a dizzying list of side effects, but that dizzying effect might be what makes the ads work.

Prior to 1962 and the 1961 Thalidomide tragedy, drug marketing wasn't even overseen by the FDA.

\$5 BILLION
Drug makers spent \$5 billion advertising in 2021.

SOURCE: FIERCEPHARMA



Six experiments involving 3,059 U.S. participants revealed that the way commercials list severe side effects alongside common and minor side effects diluted consumers' judgments of the overall severity of the side effects.

Unbranded ads are often linked to online 'symptom checkers' and 'quizzes' to further self diagnosis.

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Study Links Popular Food Additive to Colon Cancer

Titanium dioxide is a popular way to whiten food and cosmetics but new research adds to previous concerns

JENNIFER MARGULIS

A new peer-reviewed article by a team of 15 scientists based in Mexico sheds light on the toxicity of a popular food additive often used as a whitening pigment.

The article, published in the journal *Toxicology* in August 2022, "Food Grade Titanium Dioxide Accumulation Leads to Cellular Alterations in Colon Cells After Removal of a 24-Hour Exposure," examines the effects of titanium dioxide on cells.

The Mexican researchers found that so-called food-grade titanium dioxide, which is used as an additive in everything from candy to sunscreen, accumulated in colon cells, causing what may be permanent damage.

Using electron microscopy, the researchers identified the presence of food-grade titanium dioxide (TiO₂) in a human colon cancer cell line that they maintained in a cell culture medium.

When they exposed human cells to titanium dioxide, they did so at small, variable concentrations. Other cells with no exposure to titanium dioxide served as the control group.

After 48 hours of exposure, the culture medium was replaced with an unexposed cell culture medium. Forty-eight hours later, the cells were analyzed. Titanium dioxide—at all concentrations—persisted in the colon cells even 48 hours after exposure.

The exposure caused damage to the cells and DNA alteration, researchers found.

EU Declares Titanium Dioxide Unsafe

This food additive has been controversial since 2021, when the French Agency for Food, Environmental, and Occupational Health & Safety concluded that it could no longer be considered safe, the scientists explained in their discussion.

The European Union banned its use at the beginning of 2022. At that time, manufacturers were given six months to remove titanium dioxide from food products sold to European consumers.

But other countries' regulatory agencies, including the Government of Canada and the U.S. Food and Drug Administration, continue to insist that TiO₂ isn't harmful to human health.

However, as the Mexican scientists pointed out in their study, TiO₂ has been shown to accumulate in human organs: It has been detected in the spleen and liver, found in the feces of newborn babies, and discovered in the mother's placenta.

Indeed, other research, including a 2021 article published by French scientists in the peer-reviewed journal *Particle and Fibre Toxicology*, has uncovered similar problems with titanium dioxide. This French review article examines evidence that implicates titanium dioxide in inflammatory bowel diseases and colorectal cancers.

Colon Cancer Rising

My friend Debbie's husband, Sean, thought he was exhausted and having abdominal pain because he and Debbie were expecting a baby, with both working full-time and caring for their three other children.

The exposure caused damage to the cells and DNA alteration, researchers found.

Sean didn't find out until after their baby was born that the pain he was experiencing was from cancerous tumors in his colon. He was diagnosed with stage 4 colon cancer. By the time the doctors figured this out, the cancer in his colon had already metastasized to his liver and beyond—so widespread they couldn't operate. After two heartbreaking and difficult years of grueling chemotherapy treatments, Sean died. He was only 38.

Sean's case isn't a one-off. There has been a disturbing rise in colon cancer among adults younger than 50 in the United States and nearly every other country in the industrialized world.

In fact, a recent global study, published in the journal *Gut*, found that nearly 2 million new cases of colorectal cancer were estimated in 2020, as well as approximately 930,000 deaths.

Worldwide colorectal cancer is the third most common type of cancer. Incidents are highest in Australia, New Zealand, and other European countries but lowest in Africa and Southern Asia, according to the study.

Yet another study, from scientists at Harvard's Brigham and Women's Hospital, found that incidents of early-onset cancer, including colon, liver, and pancreatic, have increased dramatically.

This research, published in *Nature Reviews*

views *Clinical Oncology*, demonstrated that the cancer risk is increasing with each generation, according to one of the physician-scientists, Dr. Shuji Ogino, who was an author of the study, as quoted in the *Harvard Gazette*.

Stop Colon Cancer Before It Starts

The new research from Mexico shows that the presence of titanium dioxide disrupts human cells' DNA. Cancer begins when human cells are harmed by cytotoxic substances, and cancerous cells proliferate when their growth is unchecked by the human immune system.

Experts such as Chris Wark, who was diagnosed with stage 3 colon cancer when he was only 26 years old—but, nearly two decades later, is cancer-free—say that the best way to prevent colon cancer is to avoid toxic exposures and, at the same time, support the immune system so that the body can clear cancer cells early and keep them from growing uncontrollably.

Here are some tips:

Eat healthy whole foods. Avoid processed foods that contain additives (including titanium dioxide), colorants, and mold inhibitors.

Choose organically grown food. Even though it can be harder to find and may cost more money, it plays a crucial role in eliminating harmful toxins from your diet.

According to T. Colin Campbell, a biochemist and nutrition expert who's healthy and hale in his late 80s, a diet high in organically grown vegetables and fruits can not only protect us against cancer and other diseases (including diabetes and heart disease), but it can actually reverse these health problems.

De-stress. In addition to eating nourishing toxin-free cancer-busting foods, there's a growing body of scientific evidence that links higher stress to poor immune function. Dr. Gabor Maté, a physician based in Canada, discusses how stress primes the body for cancer and other health problems in his book, "When the Body Says No: Exploring the Stress-Disease Connection," which may be more relevant today than when it was first written in 2003.

Consider this: A 2020 peer-reviewed study found that stress can actually reactivate dormant cancer cells.

In today's busy stressful world, slowing down, relaxing, and enjoying the present moment may be among the most empowering things you can do to take back your health.

Jennifer Margulis, Ph.D., is an award-winning journalist and book author, as well as a contributing writer at The Epoch Times.



Cancer begins when human cells are harmed by cytotoxic substances.

3 Ways to Avoid Titanium Dioxide

In the absence of appropriate government and industry regulation, consumers must do their best to avoid any and all DNA-altering toxins that may contribute to the rise in cancer and other health problems, including titanium dioxide and glyphosate.

Change can be hard, and this can feel overwhelming. So where do you start?

Check your toothpaste. Titanium dioxide is often used in toothpaste. Find a natural toothpaste or toothpowder that only contains ingredients that you recognize. You can also try brushing your teeth with baking powder or make your own natural toothpaste.

Eat few if any sweets. Titanium dioxide is a common additive in candies and sweets. Earlier this year, on July 14, 2022, California resident Jenile Thames filed a class-action lawsuit against Mars, the company that makes Skittles. The suit alleges that the company "has long known of the health problems posted by TiO₂." In fact, in 2016, Mars publicly announced that it would remove the chemical from its products. But it hasn't. It's likely that your chewing gum, pastries, powdered sugars, and sweetened coffee creamers also contain it.

These sweets may deliver you a one-two cancer-causing punch. We know that sugar feeds bad bacteria, and some studies have also shown that sugar raises the risk of colon and other cancers. So if you're craving sweets, choose homemade foods made with honey, maple syrup, or whole organic dates. There are natural, organic, dye-free, TiO₂-free candies available at health food stores, which are perfect for children's birthday parties or when you absolutely must have a sweet treat.

Check your cosmetics. Unfortunately, titanium dioxide may also be lurking in your soaps, make-up, skincare, and beauty products. Get in the habit of reading ingredient labels and avoid putting anything—from sunscreens to lip gloss—on your skin that contains it.

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MADE TO MOVE

Study: Men, Women Benefit From Exercise at Different Times of Day



CHRIS CHEN

Though the advantages of exercise are well known, for middle-aged and elderly people, exercise is a particularly essential everyday activity. Physical immunity can decrease with age, leaving one more vulnerable to everything from simple colds to chronic diseases. Exercise helps strengthen immunity and prevent cardiovascular disease, diabetes, and other ailments.

To reap the benefits of exercise, choosing the best time for various activities is important. In May 2022, researchers from Skidmore College and California State University published the findings of a study in the journal *Frontiers in Physiology*. Researchers followed 27 women and 20 men between the ages of 25 and 55, all of whom were highly active and fit. The subjects were given 12 weeks of physical training. They exercised in the morning and evening, one hour per day, four times a week. The exercises were common exercises, including resistance training, sprint intervals, stretching, and endurance training.

The study found that the best time of day to exercise was related to gender.

For women, exercising in the morning compared to evening exercise resulted in greater reductions in total and abdominal fat, lower blood pressure, and markedly increased lower-body muscle power. Women who exercised in the evening had "significantly greater gains in upper body muscle strength," power, and endurance—along with improved mood.

Men who exercised in the evening "experienced a significantly greater reduction in systolic blood pressure," along with fatigue and higher fat oxidation compared to morning exercisers.

The reason there's a significant difference in exercise results in women may be related to the previous night's fasting. Research suggests that overnight fasting can increase the utilization of fat during aerobic exercise, and increased resistance exercise prompts the loss of fat tissue.

For men, compared with morning exercise, evening exercise is better for lowering blood pressure (9 percent and more in systolic blood pressure), reducing fatigue (55 percent and more), and weight loss (5 percent and more in fat oxidation). Therefore, exercise time for men should be scheduled in the evening for better weight loss and reduction of risk for cardiovascular disease.

It's currently unknown why evening exercise for men is more beneficial in lowering blood pressure than morning exercise, but it may be related to the circadian interaction of nighttime exercise and hormonal factors. The significant increase in fat oxidation for men who exercise in the evening could be attributed to the circadian regulation of metabolism, which is at its peak in the late afternoon and could facilitate fat burning.

How to Prepare for Morning and Evening Exercise

In general, morning exercise is often praised as superior because it provides energy in the morning and sets the stage for better productivity throughout the day. When you want to exercise in the morning but your muscles and joints aren't very flexible, the first thing you need to do is warm up your body so that you can avoid muscle strains or sprains.

What do you need to prepare for when you exercise at night? You shouldn't go to sleep immediately after exercise; there should be at least one to two hours between exercise and sleep. That's because exercise can stimulate the nerves and muscles, and the

body needs a process to enter a dormant state after this stimulation. After exercise, rest before bathing and sleeping may help the body better enter the best sleep state.

Choose Exercise Based on Intensity

When exercising, it's important to consider safety, the correct time, and your favorite sports so that you can have fun while working out. This will help ensure you maintain a regular exercise schedule. It should also be noted that people of different ages and physiques can withstand different intensities of exercise. Therefore, the right exercise should be chosen according to physical condition.

Choose the right exercise with the right intensity for you.

There are three broad exercise intensities: low, moderate, and high. Heart rate usually acts as an indicator to evaluate exercise intensity. The higher the intensity of exercise, the faster the heart rate.

There's a significant correlation between heart rate and exercise intensity, oxygen uptake, and energy metabolism. Usually, an exercise with a heart rate below 120 beats per minute belongs to low intensity; between 120 and 150 beats per minute belongs to moderate, and between 150 and 180 beats per minute belongs to high intensity. When the heart rate is too fast during exercise and exceeds the maximum tolerance, fatigue and sports injuries are more likely to occur.

Besides heart rate, other indicators are also used to evaluate exercise, including maximum oxygen uptake, metabolic equivalent, self-fatigue grading scale, etc. You can also evaluate exercise intensity by your own subjective feelings. If you can still talk freely while exercising, that's a low-intensity exercise; if you have difficulty breathing and must breathe deeply to speak, it's a moderate-intensity exercise; if you can barely speak and breathe while exercising, it's a high-intensity exercise.

Choose Exercise for Your Age, Physical Condition

Between the ages of 26 and 45, the human body can easily become obese. That can be for several reasons, including a reduction in physical activity because this stage is a critical period for career development and life is usually stressful during this time, which can contribute to poor habits, including unhealthy eating.

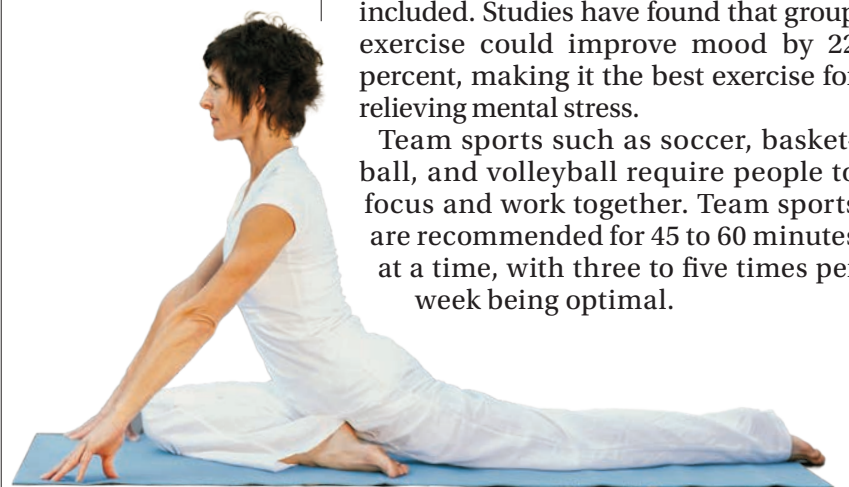
Therefore, to prevent the accumulation of fat and reduce stress, men should focus on muscle strength training, such as push-ups. It's important to control the intensity and not challenge the body too much.

For women in this age group, it would be appropriate to take up medium- and low-intensity aerobic training in addition to strength exercises, such as yoga, jogging, and swimming.

From 46 to 65 years old, the body's energy gradually declines, and physical strength and muscle mass begin to decline, too. Therefore, physical exercise should be performed to fight against osteoporosis. Recommended exercises for this stage in life include softball and tai chi, though jogging and strength training remain great ways to maintain fitness.



Research suggests that overnight fasting can increase the utilization of fat during aerobic exercise, and increased resistance exercise prompts the loss of fat tissue.



There are appropriate exercises for every age and ability.

Exercise can help you maintain better energy levels.

In general, people above the age of 65 are less physically active and have less energy. For this group, exercise should focus on improving the quality of life, preventing falls, and improving cardiorespiratory function. Therefore, gentle aerobic exercises, such as walking, tai chi, and square dancing, with low-intensity strength training to strengthen muscles and bones are recommended.

Choose the Exercise You Enjoy

1. Mortality-reducing exercise—racket swinging. In a 2018 study published in the medical journal *The Lancet-Psychiatry*, researchers surveyed more than 1.2 million people and found that racket-swinging sports such as badminton, tennis, and table tennis can reduce all-cause mortality by 47 percent.

Swinging exercises can exercise the body's coordination and various muscle groups, improve cardiorespiratory function, and improve focus and brain health, which can slow down the aging of the brain. It's recommended these sports are done three to five times each week, with each session lasting between 45 and 60 minutes.

2. Exercises to relieve mental stress—team sports. Exercise also has an important impact on the mental state, especially when a social component is included. Studies have found that group exercise could improve mood by 22 percent, making it the best exercise for relieving mental stress.

Team sports such as soccer, basketball, and volleyball require people to focus and work together. Team sports are recommended for 45 to 60 minutes at a time, with three to five times per week being optimal.

3. Exercises for weight loss and fat burning—aerobic exercise. Aerobic exercise requires maintaining an adequate oxygen supply during the period of exercise. It's commonly associated with low- to moderate-intensity exercise, including brisk walking, jogging, swimming, cycling, aerobics, and jumping rope.

In June 2021, the European Obesity Research Society summarized exercise training recommendations for overweight and obese adults. The recommendation pointed out that for people who want to lose weight and burn fat, at least 150 to 200 minutes of moderate-intensity aerobic exercise per week is preferred.

4. Exercises to lower blood pressure—aerobic exercise plus strength training. The overall prevalence of hypertension is on the rise, and a lack of physical activity is one of the main reasons.

In March 2021, the European Association for the Prevention of Heart Disease and the European Society of Cardiology Committee on Hypertension published a consensus on personalized exercise prescriptions for the prevention and treatment of hypertension.

The report states that a combination of aerobic exercise and strength training can be effective for the purpose of lowering blood pressure. The main strength-training exercises include weighted squats, bench presses, jerks, plank supports, and static curls. All of these exercises can work on lowering blood pressure.

It is crucially important to your health and well-being to find a physical activity you enjoy and will keep doing.



Many plants and herbs have been studied and used for their neuropharmacological activities.

The human brain contains an incredible

86

BILLION neurons and electrolytes which help send electrical signals.

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The various biological properties include antioxidant activity, inhibition of inflammatory processes, and up-regulation of various cell survival proteins.

Various phytoconstituents may potentially suppress neurodegeneration and improve memory as well as the cognitive functions of the brain. There's further evidence that they play a pivotal role in the prevention and cure of different neurodegenerative diseases, such as Alzheimer's, epilepsy, Parkinson's, and other neuronal disorders.

A thorough study of research knowledge from available literature, Neuroprotective Strategies for Neurological Disorders by Natural Products summarizes the potential neurotherapeutic applications of natural products. Published in Current Neuropharmacology, the review authors wrote that "plants are the best source for the isolation of secondary metabolites demonstrating significant structural diversity and offer a wide range of new and exciting pharmacophores."

They also noted that "extensive research on identification and discovery of novel neuroprotective drugs has shown that plant extracts and their bioactive compounds together with nutraceuticals can have tremendous potential as neuroprotective candidates against several types of neurodegenerative disorders."

In reviewing and analyzing the information, the study states: "For the betterment of human health, a limitless source of molecules is present in nature in the form of herbs, spices, and foods. Phytochemicals from plants are known to exert additive, synergistic or antagonistic effects on the body."

Here, we capture just three herbs, rosemary, peppermint, and sage. We discuss how they help to improve memory and cognitive function. But, as noted above, plants with phytochemical molecules that may benefit brain health could be nearly limitless. These are just a few that are known to have neuroprotective bioactive compounds.

Aromatherapy Recipe to Improve Memory, Cognitive Function

Our sense of smell, managed by an area in the brain known as our olfactory bulb, is directly connected to our amygdala and hippocampus. This direct route is the reason that scent has a targeted effect on our memory and emotion. The use of aromatherapy may harness the brain-enhancing beneficial effects of aromatic herbs, such as rosemary, peppermint, and sage.

Try this aromatherapy recipe with other uses of these herbs in your culinary adventures, extracts, and herbal teas.

For this recipe, acquire an aromatherapy diffuser of your choice and follow the product's directions.

Acquire high-quality essential oils from your favorite essential oil brand.

Use three to five drops each of rosemary, peppermint, and sage essential oils in the diffuser. Use a diffuser during your morning routine, at your desk, or throughout your workday. Enjoy stimulating memory and cognitive function enhancement.

Be considerate of others and of pets who may be sensitive to the strong odors of essential oils.

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

Herbs to Improve Memory and Cognitive Function

Continued from Page 9

Grow Your Hippocampus

A Harvard- and Johns Hopkins-trained neurologist and neuroscientist, Dr. Majid Fotuhi, recommends the following in his article, Can you grow your hippocampus? Yes. Here's how, and why it matters, published in SharpBrains, on Nov. 4, 2015:

- Exercise is the best way to generate new hippocampal neurons. Studies show walking just 1 mile a day lowers the risk of Alzheimer's disease by 48 percent.
- Nutrition can help nourish hippocampal

neurons. Omega-3 fatty acids are the building blocks of neurons. Eating a Mediterranean diet that includes olive oil, salmon, nuts, and other food high in omega-3 fatty acids can help. Higher blood levels of these important fatty acids are associated with larger hippocampus size, better memory, and a much lower risk of developing Alzheimer's disease.

- Plenty of oxygen is another way you can grow your hippocampus. Exercise can increase oxygen in the blood. Also, treatment of sleep apnea, such as using a CPAP machine contributes to higher oxygen levels.
- A molecule called brain-derived neuro-

trophic factor (BDNF) is a key molecule involved in plastic changes related to learning and memory.

- Stimulation through learning a new language, a new instrument, or challenging one's brain by learning new facts can grow hippocampal neurons.
- Stress reduction and meditation have been shown to substantially expand the volume of the hippocampus.

Neuroplasticity Through Natural Neuroprotection

Imagine if natural substances found in herbs, fruits, nuts, and vegetables could help maintain memory and cognitive function, enhance performance, and maximize mental endurance. What if just inhaling an aromatic essential oil or sipping a fragrant herbal tea could improve memory and cognitive function? The phytochemistry and pharmacological potential in the world's incredible 250,000 different plants are continuously being explored.

Perhaps the use of aromatic herbs, such as rosemary, sage, and mint, in the Mediterranean diet may be a reason that it contributes to better brain health.

The neuro-pharmacological activities of natural plant products have been documented in recent and historical evidence.

Accomplish More by Doing Less

How taking a break can make you more productive

ZRINKA PETERS

Ask practically anyone in modern America how they're doing, and the answer is likely to be "busy." It's a sentiment—and a condition—that's so ubiquitous that the asker is likely to answer "me too" with a sympathetic nod.

Whether it's an overstuffed work schedule (complete with lunch at your desk) or an air-tight family calendar that bounces from activity to activity with hardly time for a bathroom break, we lose something when our days are packed with work and scheduled activity from dawn till dusk.

Our productivity, our sanity, and even our health suffer when we fail to make time for regular rest and renewal. But there's a simple antidote to this common problem—take a break.

Addicted to 'Busy'

It's no surprise that Americans are addicted to being busy. "Work harder and longer" may not show up as actual signage in any workplace, but it's a message that

seems to be tattooed on the American psyche.

According to the U.S. Travel Association, more than half of the U.S. workforce left valuable vacation days on the table in 2018, to the tune of 768 million unused days. That number represents work days that were essentially donated to their employers, and it's a number that has steadily increased over the past several decades.

And many of those who did take vacation days didn't fully leave their work behind. A recent study by passport-photo. online shows that 68 percent used their phones to work while on vacation instead of fully immersing themselves in the vacation experience.

Vacation time aside, even on-the-job break time is often underused.

According to a survey conducted by Right Management, the majority of American workers don't take what we could call a real lunch break—one that includes disengaging from work to enjoy a midday meal. The survey found that 28 percent of workers "seldom, if ever" break for lunch, while 39 percent usually eat at their desks. This is in spite of the fact that most workers say that taking a lunch break actually improves their job performance and makes them feel more

engaged and productive.

These employees are missing the opportunity to recharge and bring their best selves to their work. Research by The Energy Project has found that human beings progress from a state of alertness to physiological fatigue roughly every 90 minutes.

After that, we can, of course, continue to work, but our focus, motivation, and productivity won't be at their best.

768 million unused vacation days were left over by more than half of the U.S. workforce in 2018.

The Cost of Burnout

We might assume that all those long hours put in by American workers result in super-productivity and larger incomes, and there may be some truth to that. But our saturated work schedules, when added to other life commitments, come at a high cost. American adults receive more mental health diagnoses, including anxiety and depression, than those in any other developed country. Could this have something to do with

our failure to take time for regular, restorative breaks? Consider the fact that European countries average a minimum of between 20 and 30 paid vacation days per year for full-time workers. The average in the United States for most private industry workers is 10 days after one year of employment.

Daniel H. Pink, author of five New York Times bestsellers focusing on business, work, creativity, and behavior, has broken down both the benefits and drawbacks of the average American workday.

When it comes to the downside of breakless work, he told The Epoch Times: "The big potential impacts are declining productivity and creativity. Our brains and bodies are not built to go, go, go endlessly. They need to be recharged. And that means we need to start thinking of breaks, not as a deviation from our performance—but as 'part' of our performance.

"We've been seduced by the belief that amateurs take breaks and professionals don't. But that's 180 degrees wrong. Professionals take breaks because they know that the occasional pause to recharge enhances their ability to connect and contribute."

Breaks for a Mental and Emotional Boost

This need for renewal after prolonged, focused mental or physical effort applies to everyone, not just working adults. A Danish study of schoolchildren found

Plant-Based Medicines to Support Memory, Cognitive Function



Rosemary's needle-like leaves are deliciously fragrant and can be harvested at any time of year.

Rosemary

(*Rosmarinus officinalis*)

Rosemary is a widely available Mediterranean herb known for its earthy, woody aroma. It grows wild on the sandy slopes overlooking the Mediterranean Sea. Surprisingly thirsty, rosemary can be grown in the home herb, vegetable, or flower garden with some varieties being hardy even in Zone 5. It makes a tidy, manageable, and fragrant hedge plant. Rosemary does very well in containers and can even be grown indoors. The needle-like leaves are deliciously fragrant and can be harvested at any time of year. They can be used fresh as a culinary herb or in tea. Rosemary tea has a long history in traditional medicines with many health benefits, including enhancing memory and mood. It pairs nicely with other flavors, including lemon. The leaves also dry and freeze nicely for future use.

Rosemary infuses well into many substances. Water is normally used for tea, but you can also try rosemary-infused oil. Any of your favorite salad oils, such as olive, avocado, or sunflower, take on inspiring aromas and are great for use

in cooking or drizzling on your favorite foods. Infusing rosemary into vinegar also extracts many of the healthful benefits of rosemary's bioactive compounds.

Available through most high-quality essential oil brands, rosemary essential oil is a convenient way to obtain the powerful, brain-boosting aromas of rosemary.

ROSEMARY CONSTITUENTS AND HEALING ACTIVITY

A notable constituent of the rosemary herb is carnosic acid. It's noted for its neuroprotective electrophilic compound, which can cross the blood-brain barrier and protect the brain against ischemia/reperfusion brain injury.

A collection of studies published in Neuroprotective Potential of Aromatic Herbs show several positive effects of rosemary on memory and cognitive function.

One study on the ingestion of rosemary water shows its positive impacts on the improvement of mental activity. A 2020 aromatherapy research study of 39 adults that were given rosemary-

lemon and lavender oil to smell for a week shows that aromatherapy has a positive effect on cognitive functions in the elderly. It also reduced the feeling of drowsiness during the day. Therefore, rosemary lemon oil is effective in controlling the quality of sleep and can improve cognitive disorders by controlling memory and calming their effect on the sympathetic nerves.

Results from an in-depth 2020 animal study show improvement of motor, learning, anxiety, and spatial memory with rosmarinic acid injections in rats with cognition deficits due to hypoxic injury. A 2016 study shows that rosemary extract treatment in the repetitive mild traumatic brain injury of rats improved cognitive deficits through decreased neuronal degeneration.

Several other studies, including this one, show the positive effects of taking rosemary extract for improved cognitive function.

It was observed that Rosmarinus officinalis and its active components could inhibit neurotoxicity, and the results of this study show the protective effects of rosmarinic acid in reversing deficits in spatial and recognition memory.



Peppermint pairs beautifully with many other flavors, such as lemon, ginger, and honey.

Peppermint

(*Mentha x piperita*)

Candy canes, peppermint bark, and peppermint schnapps each entice with their delightful refreshing herbal scent. A favorite evening herbal tea that soothes the digestive tract, peppermint is also well known for its soothing effect on headaches.

Peppermint grows in zones 3-8 and is a perennial that grows somewhat aggressively via underground stolons. Terminal flower spikes are adored by bees and butterflies. It's the oblong-pointed serrated leaves that hold the fragrance and me-

dicinal virtues. Peppermint thrives in full sun to partial shade in moist rich soils. To harvest, simply cut back peppermint plants before the flowers form in early summer. The leaves can be used fresh, frozen, or dried. They pair beautifully with many other flavors, such as lemon, ginger, and honey, and the aroma blends perfectly with rosemary and sage.

PEPPERMINT CONSTITUENTS AND HEALING ACTIVITY

The various constituents in peppermint are menthol, menthone, neomenthol, and iso-menthone. These volatile metabolites are the components of

peppermint essential oil. These bioactive compounds share anti-inflammatory, antibacterial, immunomodulatory, neuroprotective, antifungal, and antioxidant activities. There's mounting evidence that peppermint essential oil has pharmacological effects that protect many body systems, especially the brain and nervous systems.

Peppermint is well known for its soothing effect on headaches.



Sage has demonstrated its cognitive effects across several studies, revealing improvements in memory, mental fatigue, cognitive performance, anxiety, and alertness.

Sage

(*Salvia officinalis*)

The distinctive bold peppery flavor of sage carries more than its weight as a culinary herb. The strong leaves are gorgeous to use fresh and hold their structure even under high temperatures. This makes them a great partner in sauces and stuffings.

Hardy in Zones 4-11, culinary sage is a slow-growing herb with strong but soft velvety leaves. Harvest young, plump, undamaged leaves for fresh use. Sage leaves infuse nicely into oils and vinegar. Sage also infuses beautifully in honey and pairs extraordinarily well with ginger.

Sage tea has a long-standing traditional use as a brain-enhancing tonic.

Try a couple of sliced sage leaves, some thin slices of ginger, and a lemon wedge steeped in two to three cups of water for an invigorating tea.

Sage essential oil, prepackaged sage tea, and sage supplements are simple ways to benefit from this health-promoting herb.

SAGE CONSTITUENTS AND HEALING ACTIVITY

As a tea, a culinary herb, and traditional medicine, sage acts as a brain-enhancing tonic. Sage extracts have both cognitive and memory-enhancing outcomes. In a study published International Journal of Molecular Sciences, the evaluation of culinary sage extracts led to the discovery of benzyl 6-O-beta-D-apiofuranosyl-beta-D-glucoside (B6AG). B6AG was shown to

upregulate neurotrophic factors in C6 glioma cells with upregulation of BDNF.

A research review, Neuroprotective Potential of Aromatic Herbs, examined the effect of sage on cognitive deficits revealed by several previous studies. Salvia officinalis extract showed a considerably better effect on cognitive functions compared to a placebo. A study of 36 healthy subjects receiving oral sage extract resulted in improvement in secondary memory performance, decreased mental fatigue, and elevated alertness. Another study shows marked improvement following the consumption of sage extract in cognitive performance and short-term memory in healthy young adults. The cholinesterase-inhibiting effects of sage showed improvement in cognitive performance, mood, and anxiety state in yet another study of 30 healthy young individuals.

that students' test scores were highest first thing in the morning and decreased by 0.9 percent for each successive hour throughout the school day because of increased mental fatigue as the day went on.

Interestingly, however, after a 20- to 30-minute break, average test scores went up by 1.7 percent—more than making up for the earlier decline. Aside from the implications for the timing of scheduling tests, the study also highlighted the importance of break times for cognitive performance, an important consideration as some schools have canceled or reduced recess times in a misconstrued attempt to improve test scores.

The effects of allowing some downtime to recharge can be far-reaching. In 2011, researchers studied more than 1,100 rulings given by judges on two Israeli parole boards that serve four major prisons in Israel. Data collected included the time of day the decision was handed down, as well as its place within the sequence of decisions for that day. In their study published in the PNAS, the researchers reported that, in general, the judges were more likely to issue a favorable ruling (such as granting parole or removing a tracking device) in the morning than in the afternoon.

There's more to productivity than just putting in more hours. The quality of those hours matters. When you're facing weariness and fatigue, whether it's mental, emotional, or physical, a well-

utilized break—even a very short one of 10 minutes or less—can make the difference between excellence in performance and working at a subpar level. Our energy, focus, creativity, and even emotional stability are finite resources that need to be replenished when depleted. We can't run on empty.

A study published in the February 2008 issue of The Academy of Management Journal, "Making the Break Count: An Episodic Examination of Recovery Activities, Emotional Experiences, and Positive Affective Displays," examined the effect of work breaks on emotional states via data collected from 64 cheerleading instructors who were chosen because cheerleading requires continual positive affective displays. In other words, cheerleaders need to continually look



We need to start thinking of breaks, not as a deviation from our performance—but as "part" of our performance.

cheerful, regardless of how they're actually feeling.

The researchers concluded that "employees who engaged in more respite activities during work breaks experienced higher levels of positive emotions and lower levels of negative emotions during these breaks and exhibited higher levels of positive affective displays after the breaks."

It's not much of a stretch to think that customer-facing employees, managers, and parents, to name a few—all of whom face continual demands on their emotional resources—can benefit greatly from regular breaks.

The Type of Break Matters

For breaks to be truly effective in helping us perform at our best, a week-long vacation, as wonderful and revitalizing as it might be, isn't a long-term solution to day-to-day burnout. In fact, most vacation-derived benefits fade quickly after returning home—within just a few weeks. Breaks don't need to be long to be effective, but the quality of the break does matter. A break that does its job of leaving you refreshed, recharged, and ready to refocus can take many different forms, but according to research published in the Journal of Occupational Health Psychology in 2007, it must provide psychological detachment from the work at hand and positive emotions.

Eating lunch at your desk while scrolling through work emails won't provide much, if any, real benefit. Using your break time

to vent about a problem at work with a frustrated colleague also fails to pass the test.

However, what can be beneficial is break time spent going for a walk (especially in a park or other green space), exercising, eating lunch with someone you enjoy talking with (so long as it's not about work), or even taking a short nap of 10 to 20 minutes. These are the sorts of breaks that are likely to leave you more energized, motivated, and with greater cognitive and emotional resources—all things that are vital not only to doing your best work but also to being your best self.

For those who feel too overworked to make time for a break or two (or three) during the day or for whom guilt, perceived employer expectations, or an effort to "look busy" keeps them from taking a time out, Pink suggests: "Start small. Taking a break doesn't mean going on a two-hour siesta every afternoon. It means taking any kind of break you can fashion. My advice: Tomorrow afternoon, take a 15-minute walk break outside, preferably with someone else and leaving your phone behind. It's helpful—and it will be—do it the next day."

Zrinka Peters is a freelance writer focusing on health, wellness, and education topics. She has a BA in English Literature from Simon Fraser University in Canada and has been published in a wide variety of print and online publications including Health Digest, Parent.com, Today's Catholic Teacher, and Education.com

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CHINESE WISDOM FOR SEASONAL LIVING

Staying Healthy at the Coldest Time of the Year

Solar Term: 'Minor Cold'
(Jan. 5 to 19)

Embrace the cold. It serves an essential purpose in nature—and our bodies.



EMMA SUTTIE

A solar term is a period of about two weeks, based on the sun's position in the zodiac. Solar terms form the traditional Chinese calendar system. The calendar follows the ancient Chinese belief that living in accordance with nature will enable one to live a harmonious life. This article series explores each solar term, offering guidance on how to best navigate the season.

Solar Term: Xiao Han 'Minor/Lesser Cold'

2023 Dates: Jan. 5 to 19

The holidays are synonymous with the hustle and bustle of family gatherings, traditional foods, and hopefully, some joyous celebration. We've also arrived at the coldest days of the year.

This year, Minor Cold starts on Jan. 5 and goes until Jan. 19. It's the 23rd of the 24 solar terms and the fifth solar term of winter. This is the solar term that traditionally has the coldest days of the year. Although some may not like the cold, it serves an essential purpose in nature and our bodies.

This time of year may appear barren in the natural world, with no signs of life amid the snow-covered landscape, but in reality, there's a bustle of activity just under the surface, preparing for spring. This is a time for energies to converge and draw inward, gathering the strength needed for renewal and expansion as the warmth returns.

If we think in terms of yin and yang—yin being slow, cold, and dark, and yang representing quick, hot, and bright—this solar term is when yin is at its peak and yang, its minimum.

In traditional farming communities in ancient China, this was the time to rest and consolidate energy before the cycle of planting and farming began again. Minor Cold was also when ancient people started planning and preparing for the biggest and most influential Chinese festival of the year—the Spring Festival.

Attune Your Lifestyle

The cold weather tells our bodies to conserve energy but our bodies may miss that signal if we spend all our time in the heated indoors. Going for walks outside in the cold air can help our bodies adjust to the depths

of winter and draw inward to conserve and protect yang energy.

Another way to help ourselves adjust is to lower the temperature of our indoor spaces and use clothing to keep warm.

The kidneys are the organs associated with winter. They are responsible for our most fundamental energies and are the root of all yin and yang of the body. As we are trying to protect our yang, keeping the lower back covered (where our kidneys are located) is particularly important, especially when we are out in cold weather. In Chinese medicine, the neck is where the cold most easily enters the body, so wearing a scarf will protect this vulnerable area and ensure we don't catch a chill. A brisk walk on a beautiful winter's day keeps our qi or energy moving and invigorates yang.

Going to bed early and sleeping later is one way to conserve energy during winter. Cultivating the deeper, internal aspects of ourselves with activities such as meditation, writing, yoga, prayer, and creative pursuits such as music, painting, and photography are ways to feed our spirits in this most yin time of the year.

Seasonal Eating

Some foods eaten traditionally by the Chinese during the Minor Cold solar term were vegetables and rice, glutinous rice, and Laba congee. Foods varied depending on the region, and many traditional, warming foods were enjoyed during the coldest part of winter.

Chinese glutinous rice, also called sweet rice or sticky rice, can be identified by its short, round grains and sticky texture when cooked. Its glue-like texture is due to the almost complete lack of the starch amylose. The rice comes in short and long-grain varieties and is about twice the price of regular rice.

Congee is a sort of rice porridge eaten throughout Asia. Laba congee was enjoyed during Minor Cold by traditional Chinese people and usually contained red beans, peanuts, and dried fruit.

Eating in the depths of winter is focused on balancing our yin and yang energies, particularly preserving and protecting yang at the coldest time of year. Being aware of our natural tendencies toward yin or yang qualities are also a part of achieving this balance.

If you are a warm person who often sweats and sleeps without the covers at night, you probably already have abundant yang and can eat more yin or cooling foods in the winter months. If you tend to get cold easily, need to bundle up, and sleep with the covers pulled up to your chin, you are likely more yin and will need to add some extra warming foods to your diet to preserve your yang energies.

Hearty soups, whole grains, small amounts of lean meats, and roasted nuts warm the body and benefit the kidneys on cold days.

Adding a little high-quality sea or Himalayan salt to the diet is also helpful as the salty flavor is known in Chinese medicine to support kidney function and promotes the elimination of fluids via urination. Salt is also cooling.

Bitter-flavored foods are also a good addition at this time of year, as these can clear out any excess heat while helping distribute fluids and keep the body hydrated. Adding the cooling quality of salty and bitter flavors is helpful to balance the heat of warming foods during the winter months.

Minor Cold is the point in winter where the seed of yang begins slowly growing as we move toward spring. Slowing down and taking time to rest and rejuvenate while keeping yin and yang energies balanced will help to nourish your mind, body, and spirit.

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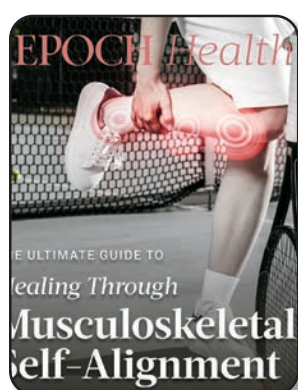
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