

MIND & BODY

75

PERCENT

of American adults have a heart age surpassing their actual age.

Exercise keeps the heart young and ready to pump the blood you need to nourish your brain and body.

AGE WELL

How to Keep Your Organs Younger Than Your Age

Healthy habits, certain foods, and specific products can help you stay younger than your years

By Mercura Wang

Have you ever wondered how some people defy their chronological ages, appearing remarkably youthful? The body's biological age, a measurement of health and vitality based on the body's condition, can often differ from one's chronological age, the number of years lived. This distinction holds true for organs as well.

In a study published in Nature Medi-

cine in April 2023, researchers discovered that our organs and tissues can age at varying rates, giving further evidence that our biological age does not align precisely with our chronological age.

The researchers observed a connection between the aging of different organ systems. For instance, if someone's heart seems younger than his or her actual age, his or her other organs likely share this youthful vitality. Conversely, advanced organ age significantly heightens the risk of chronic illnesses.

To delve deeper into this intriguing

Stem cells throughout the body play a crucial role in maintaining and repairing tissues and organs.

phenomenon, researchers used a tool called the "organ age clock" to evaluate the health and functionality of essential organs such as the brain and heart. This opens the door to uncovering the secrets of organ aging and this kind of aging's effect on overall well-being.

Why Younger Organs Are Less Prone to Diseases

Aging is commonly associated with declining cellular, tissue, and organ function, leading to old age, diseases,

Continued on Page 6

AXEL_KOCK/SHUTTERSTOCK

Infrared Therapy Shows Promise for Tinnitus: Study

By Megan Redshaw

Researchers found that 15 minutes of infrared therapy was more effective than drugs and herbs in treating tinnitus

Tinnitus, or ringing in the ears, is an often debilitating condition with no approved treatment or cure. However, some sufferers may find relief from low-level infrared light therapy, according to a new peer-reviewed, first-of-its-kind study published in the Journal of Personalized Medicine.

Over four weeks, researchers evaluated treatment for tinnitus in more than 100 men and women aged 18 to 65 whose condition either had an un-

known cause or had been unresponsive to treatment and divided them randomly into 10 groups. Researchers investigated personalized treatment options involving low-level laser therapy (LLLT) using red and infrared light in the inner ear or cochlea, where tinnitus often occurs, and LLLT combined with other treatments, such as vacuum therapy and drug therapy.

LLLT uses a narrow spectral width of light close to infrared to promote tissue regeneration, reduce inflammation, and

Continued on Page 6



▲ Damage to the inner ear affecting how signals are carried from the brain may cause tinnitus.

Debunking THE DOGMA ABOUT FAT

PART 4 DIFFERENT FATS, DIFFERENT DISEASES

Saturated fat's controversial link to heart disease isn't as clear cut as nutrition guidelines suggest

In this series, we will break down the actual health effects of vegetable oils and whether they're a better alternative to saturated fats. Follow this series to find out whether what you're using to cook with is really the best option.



Previous Parts:
TheEpochTimes.com/Fat

By Marina Zhang

For more than half a century, central health authorities told the public to limit saturated fat intake as much as possible to prevent heart disease.

But a growing number of scientists and researchers have come to prominence challenging this narrative, arguing that saturated fat may not be that harmful and that limits on its intake shouldn't be so stringent.

A Matter of Scientific Interpretation Scientists from the two sides are looking at different studies on saturated fat and coming to different conclusions on its health effects.

The current dietary guidelines are based on the "diet-heart hypothesis," which postulates that saturated fats are the leading culprits of cardiovascular disease.

The theory posits that when someone consumes food containing saturated fat, this fat increases LDL cholesterol (so-

called bad cholesterol). This cholesterol accumulates in the blood vessels, forming atherosclerotic plaques that restrict and ultimately block blood flow, causing coronary heart disease.

However, this link between LDL cholesterol and heart disease has been challenged and so has the role of saturated fat in causing heart disease.

The Dietary Guidelines for Americans recommend limiting saturated fat to 10 percent or less of one's daily calories, while the American Heart Association advises keeping saturated fat intake at 5 to 6 percent of one's daily calories.

Evidence Supporting the Saturated Fat and Heart Disease Link

The argument in favor of limiting saturated fat intake is based on evidence that shows that replacing saturated fat with unsaturated fat decreases the risk of cardiovascular events. But usually, overall mortality rates don't significantly improve.

The Dietary Guidelines for Americans recommend limiting saturated fat to 10 percent or less of one's daily calories.

The core studies showing this link were carried out in the 1960s and '70s, forming the foundations against saturated fat intake.

SATURATED FAT IN PROCESSED FOODS

Contrary to popular belief, the primary source of saturated fat may not be animal-based food but processed food.



Research Finds Safer Way to Detect Colon Polyps

Microbiota signatures unique to specific precancerous colon polyps may lead to better tests with less risk

By Amy Denney

A new study conducted by researchers from the Broad Institute of MIT and Harvard, Harvard Medical School, and Massachusetts General Hospital linked precancerous colon polyps to specific gut bacteria.

Published in Cell Host & Microbe, the study compared the stool samples and colonoscopies of 971 participants. Stool samples were used to get a snapshot of the gut microbiome—the community of bacteria, viruses, and fungi that live primarily in the colon.

The study revealed a distinct microbial fingerprint among those who were found to have tubular adenomas and sessile serrated adenomas—two types of colon lesions that are considered premalignant. One of the largest studies of its kind, it detected 19 significantly different bacterial species in those patients with

tubular adenomas and eight significantly different species in those with sessile serrated adenomas.

The finding suggests that a simple stool test may be able to reduce the number of more invasive and dangerous colonoscopies performed.

The research also raises the question of whether bacteria—in the form of a probiotic supplement or pill—could become a third way, with diet and medication, to reduce risk of colon cancer.

"The goal is ultimately to determine if there are species of bacteria we want to use to influence our patients' outcomes. Getting to this point is still a ways away," Dr. Daniel C. Chung, medical co-director of the Center for Cancer Risk Assessment at the Mass General Cancer Center, told The Epoch Times. "The other potential way this can be applied is to study whether we can use this as a diagnostic or risk-assessment measurement."

That could drastically change the approach to early detection of colorectal cancers, which is the third most common cancer and is on the rise in developing countries and, more recently, among young adults. About 18,000 people young-

er than 50 were diagnosed with colorectal cancer in the United States in 2020, according to the National Cancer Institute. Similar trends have been documented in Canada, New Zealand, Australia, and some parts of Europe and Asia.

Colonoscopy—an invasive procedure requiring sedation recommended for adults as young as 45—is the gold standard test for detecting colorectal cancers. It has side effects and risks that make a more simple test an appealing alternative. Dr. Chung said the study makes a case for a stool analysis as a tool that could determine which patients might be in need of a colonoscopy.

Why Polyps Matter Polyps—growths from clumps of abnormal cells—are still a bit of a mystery in the medical world. Without a known cause, colon polyps are more common in people 45 and older and in those who are overweight, have diabetes, have a family history of polyps, use tobacco, or have certain gastrointestinal conditions such

as Crohn's disease and ulcerative colitis. It may take years for a polyp to turn into cancer, if it ever does, which is why colonoscopies are believed to be the best option for early detection. "Understanding polyps is an important way to influence the rise of colon cancer," Dr. Chung said. "Not every polyp becomes cancer. Most adults will get polyps, but most will not get colon cancer."

Medical researchers are still trying to determine whether there is a way to tell which polyps will develop into cancer and which ones will not. Colon polyps are currently detected and usually also removed via colonoscopy, which was scrutinized for not significantly reducing mortality in a study published last year in the New England Journal of Medicine. The study had more than 84,585 randomized participants from Poland, Norway, Sweden, and the Netherlands.

A Johns Hopkins study in 2018 also found that some outpatient centers have infection risks 100 times higher than expected for patients undergoing colonoscopies and upper gastrointestinal endoscopies.

Other Ways to Test There are three tests currently used to help physicians determine whether someone should have a colonoscopy. Because colonoscopies are usually only recommended every 10 years, these other tests can help screen more frequently. In some instances, they are the only screening tests

recommended for healthy adults.

The fecal immunochemical test and fecal occult blood tests both detect blood in the stool. Medicaid will pay for one of these tests annually. Usually, people with blood in their stool are referred for colonoscopies.

A stool DNA test, also called a Cologuard test, is able to detect changes in the cells of the colon by looking at DNA in the stool and blood. It's recommended every three years for adults 45 to 85 who don't have a high risk of or symptoms of colorectal cancer.

While colorectal cancer rates are decreasing in older adults, they've been steadily increasing in adults 50 and younger. Colorectal cancer causes more deaths in the United States than all but two other types of cancer.

Nearly all colorectal cancers arise from a precancerous polyp, and one of the best ways to reduce the incidence of colorectal cancer is to stop growth at the polyp stage. Risk factors for colorectal cancer and polyps include being overweight, having low physical activity levels, eating a diet high in red and processed meats, smoking, and using alcohol.

These risk factors also influence intestinal bacteria. It's unknown whether the bacteria are initiating polyps or the polyps are progressing because of the microbial makeup, Dr. Chung said.

comes from cohort studies that follow large populations.

One such cohort study published in 2015 examined more than 120,000 men and women. The researchers found that those who replaced 5 percent of their saturated fat intake with polyunsaturated fat and whole grains had fewer cardiovascular events. Another 2014 cohort study published in Circulation followed more than 2,700 people and found that high levels of linoleic acid, an omega-6 fatty acid, in the blood were associated with fewer cardiovascular events.

A problem with cohort studies is that, unlike randomized controlled trials, they can't prove causality. "Since researchers can't control factors in participants' lives, including dietary choices, any relationship is linked only by association. Cohort studies also take a long time, so participants may be lost during follow-up, which can introduce bias into the findings.

They often cite the large randomized controlled trials that show that lowering saturated fat or replacing it with polyunsaturated fat had no effect or even caused harm.

Opposition to the link between saturated fat and heart disease includes the Sydney Diet Heart Study, the Minnesota Coronary Survey, and the Women's Health Initiative Dietary Modification Trial.

In the 1990s, the Women's Health Initiative Dietary Modification Trial involved nearly 49,000 postmenopausal women who had to reduce either their saturated fat intake to less than 10 percent or make no change in their diet. The study found that reducing



A DIET FOR HEART HEALTH?

Researchers found people that replaced 5 percent of their saturated fat intake with polyunsaturated fat and whole grains had fewer cardiovascular events, but there are contradictions in related research.

fat didn't affect the women's heart disease or weight loss. The Sydney Diet Heart Study was conducted between 1966 and 1973. It put 458 men who had had a heart attack on a diet that replaced their saturated fat with soy oil. While the men's LDL cholesterol dropped, their risk of death increased by more than 60 percent, and their risk of heart disease increased by 70 percent.

The Minnesota Coronary Survey, conducted at about the same time, followed 9,000 people and reported similar findings: LDL cholesterol levels fell while risks of death and cardiac events increased.

In 2020, 12 researchers came together to publish a state-of-the-art review in the Journal of the American College of Cardiology (JACC).

"Whole-fat dairy, unprocessed meat, and dark chocolate are SFA-rich [saturated fatty acid-rich] foods with a complex matrix that are not associated with increased risk of CVD [cardiovascular disease]. The totality of available evidence does not support further limiting the intake of such foods," the authors wrote.

Regarding cohort studies, the perceived benefits of replacing saturated fats with polyunsaturated fats "could be attributed to a possible beneficial effect of polyunsaturated fatty acids and not necessarily to an adverse effect of SFAs," according to the authors. "The effect of saturated fat and raising LDL cholesterol is pretty small. So it's not a really powerful fat," Mr. Clifton said.

There are also large meta-analyses with findings that support both sides of the argument, such as the 2020 Cochrane Review.

Cochrane Reviews are recognized



70% OF DAIRY

of dairy is saturated fat, yet studies have shown that high dairy consumption is heart-protective.

ALL PHOTOS BY GETTY IMAGES

as the gold standard in research. The authors examined 15 randomized, controlled trial findings on replacing saturated fat with polyunsaturated and monounsaturated fat. The study concluded that this replacement reduced the risk of a cardiovascular event by 17 percent but didn't affect overall mortality.

In his meta-analysis, Mr. Clifton used the study findings to support the dietary recommendation.

However, the same study was also cited in a 2021 commentary that called for more evidence.

The authors of this commentary emphasized findings that show that reducing saturated fats didn't reduce total mortality, cardiovascular mortality, coronary heart disease mortality, fatal and nonfatal heart attacks, and coronary heart disease events.

The current dietary guidelines are based on the 'diet-heart hypothesis,' which postulates that saturated fats are the leading culprits of cardiovascular disease.

Not All Saturated Fats Are Created Equal

Another argument put forward by the authors of the JACC report is that not all saturated fatty acids are equal, so health professionals should look at the sources rather than the overall consumption of saturated fat.

Lauric acid, a type of medium-length saturated fat commonly found in coconuts, strongly raises LDL cholesterol; therefore, some studies suggest that it elevates cardiovascular risk. However, studies on unrefined coconut oil suggest that it has an overall cardioprotective effect.

Butter is high in palmitic acid, another saturated fat with a potent LDL cholesterol-raising effect. However, a

meta-analysis on butter has shown it to have a cardioprotective effect.

About 70 percent of dairy is saturated fat, yet studies have shown that high dairy consumption is heart-protective. Milk has short-chain saturated fat, which is linked to cardioprotective effects.

Beef has also been shown to have a relatively neutral effect on heart disease. Although beef is often associated with having high saturated fat, monounsaturated and polyunsaturated fats make up about 50 to 60 percent of beef fat.

Contrary to popular belief, the primary source of saturated fat may not be animal-based food but processed food, as argued by obesity researcher Zoe Harcombe, who holds a doctorate in public health nutrition.

The 2020–2025 Dietary Guidelines for Americans shows that processed food accounts for 42 percent of saturated fat consumed by Americans aged 1 year and older. On the other hand, animal-based food, including milk, meat, and poultry, makes up 27 percent.

Saturated fats are often added to processed food to prolong their shelf life and improve their texture.

Processed foods are also high in sugar, and professor Benjamin Bikman, a cell biology expert at Brigham Young University with a doctorate in bioenergetics, told The Epoch Times that the combination of saturated fat and refined carbohydrates is the most toxic.

Sugar in the blood oxidizes LDL cholesterol. This forms small, dense LDL cholesterol more prone to atherosclerosis. Sugar also increases triglyceride levels in the blood vessels. Oxidized LDL cholesterol and raised blood triglyceride levels are risk factors for heart disease.

To make things more complicated, research has shown that LDL cholesterol may not be the best predictor for cardiovascular risk.

Next week: Part 5

Research suggests LDL cholesterol was vilified too quickly.

Doctors wanted to operate, but Ms. Burne, a certified health coach and nutritional therapist, talked her client into giving her 30 days to try to reverse his gastrointestinal damage.

After analyzing his diet, which consisted of sushi eaten all over the world, she put him on a parasite protocol. He returned to the doctor for a sigmoidoscopy, a scope that examines the descending colon, and a second biopsy, and the precancerous cells were downgraded to inflammation.

"This client was very lucky that he was able to turn it around as fast as he did. He could have very well ended up in a diaper and a colostomy bag," Ms. Burne told The Epoch Times. "The real problem I see is the fear tactics doctors use to drive people into procedures and medications."

"People are signing on the dotted lines



▲ Detecting polyps is thought to be key to preventing colon cancer, but current tests can't tell which polyps could become cancerous.

before they leave the office and they don't go home and research and find out that a lot of these are conditions that can be healed."

Preventing Cancer

Normally, stomach acid will help kill parasites, but Ms. Burne said Americans largely suffer from low stomach acid due to diet and habits such as eating too fast, too much, and too frequently. Additionally, she said many people are eating when they are in a state of stress, and digestion requires relaxation. Processed and fast food made with cheap seed oils also cause inflammation that can aggravate the colon.

"The body has the capacity to heal when it's given the right environment. But Ms. Burne said it does take discipline to turn things around, and most people aren't motivated to make meaningful changes in diet or exercise until faced with a drastic situation such as the potential loss of part of one's colon.

"People get better when they tend to stick to the basics, just real food without the food colorings, without the dyes, without the toxic oils," Ms. Burne said. "There's no biological purpose for a polyp. The body finds ways to store [excess] if it can't get rid of it in the normal elimination pathways. We're putting too much stress on the system. People need to demand better care ... other than just cutting things out or getting a pill."



RICHARD DRURY/GETTY IMAGES

Keep your elbow in work-ready shape with exercises that provide strength and flexibility.

Easy Exercises to Combat Chronic Pain

PART 7 ALLEVIATE CHRONIC ELBOW PAIN

6 easy exercises to relieve pain often caused by repetitive movements

In this series, "Easy Exercises to Combat Chronic Pain," occupational therapist Kevin Shelley focuses on common issues associated with chronic pain and simple and exercises to strengthen weak muscles and enhance joint mobility, with the goal of helping you become pain-free.



Previous Parts:
TheEpochTimes.com/Chronic

By Kevin Shelley

As one of the largest joints in the body, the elbow allows for a wide range of movement. Repetitive movements of the hand, wrist, and arm can lead to problems with the elbow's bones, muscles, joints, tendons, and ligaments, resulting in pain and tenderness.

"Once elbow pain sets in, it can be highly persistent and often grows worse over time," Phil John, an occupational therapist specializing in injury management and functional rehabilitation, told The Epoch Times. These problems can eventually progress into deeper pathology.

Chronic elbow pain isn't something you should have to live with. Specific exercises can stretch and strengthen the soft tissues of the elbow to expedite the healing process.

Causes of Chronic Pain in Healthy Elbows

Your elbow joint is one of the most active joints in your body, making it more prone to injury.

"Many of the pain syndromes of the elbow don't originate from single events, but rather from the frequent repetition of relatively low-stress movements," Mr. John said.

The two primary contributing factors to elbow pain are unhealthy functional patterns and muscle weakness.

Functional Patterns

The following types of activities can increase the likelihood of an elbow problem:

- repetitive motions (e.g., painting, using a computer, and chopping food)
- leaning on elbows for an extended period
- sports such as tennis, golf, and any involving throwing a ball

Muscle Weakness

The muscles of the elbow need to be strong to ensure proper functioning of the joint.

The elbow is a synovial joint—the bones do not directly connect, instead

coming together within a joint cavity. The walls of the joint cavity are formed by a fibrous capsule, and the entire structure depends on balanced muscle strength to function correctly. Muscle weakness in the elbow can contribute to the development of chronic pain.

Fortunately, there are safe and effective exercises that can help maintain the flexibility of the elbow joint, strengthen the muscles, and help decrease or eliminate chronic pain.

Kevin Shelley is a licensed occupational therapist with over 30 years of experience in major health care settings. He is a health columnist for The Epoch Times.

Next week: Part 8

Simple exercises to strengthen foot muscles and relieve pain

THE BONES AND MUSCLES OF THE ELBOW

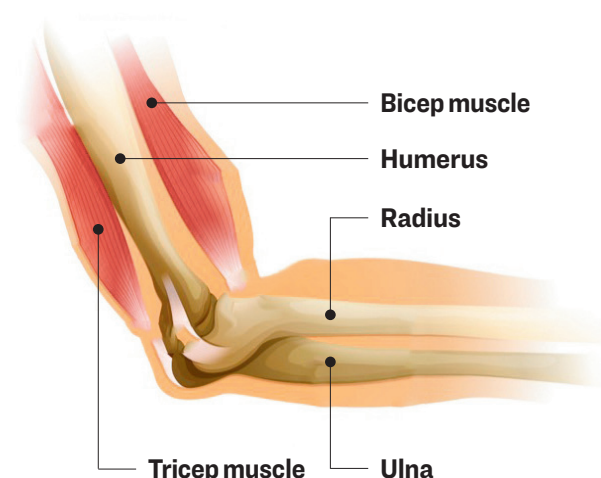
The elbow is composed of three bones, including the humerus of the upper arm and the radius and ulna of the forearm. These bones join together with three joints and supporting ligaments.

Synovial joints are highly mobile joints that allow for a wide range of movement, and the elbow allows four distinct movements: flexion and extension (bending and straightening), and supination and pronation (turning

your hand palm up and palm down).

The largest muscles of the elbow are the biceps brachii and the triceps brachii. The biceps facilitate elbow flexion and contribute to wrist supination.

The pronator teres and pronator quadratus muscles contribute to pronation. Many smaller muscles also contribute to elbow movement.



BLUERINGMEDIA/SHUTTERSTOCK

EXERCISES FOR CHRONIC ELBOW PAIN

Effective stretches and resistance exercises can strengthen the elbows and alleviate pain when performed properly

1 FLEXED-ELBOW SUPINATION AND PRONATION

This exercise allows you to stretch the elbow joint via supination and pronation movements to ensure that your joints and ligaments are kept limber.

Step 1: While sitting or standing, bend one of your elbows 90 degrees out in front of you and rotate your palm away from you.

Step 2: Grasp your wrist with your other hand and use it to rotate the palm even farther, as far as you comfortably can. Hold the position for three seconds.

Step 3: Slowly turn your palm to face you, rotating it as far as you can. Use your other hand to help turn it even farther and hold for three seconds. Perform these movements 10 times for each arm.

Pay attention to your elbow during these movements and don't provoke pain. It's better to rotate your hand by holding onto your wrist instead of holding directly onto your other hand.



2 ACTIVE TABLETOP SUPINATION AND PRONATION

Combining supination and pronation exercises allows you to work muscles above and below the elbow joint, ensuring flexibility of the joint while keeping elbow muscles strengthened and trained.

Step 1: While sitting or standing, bend your elbow 90 degrees with your palm facing up. You can use a tabletop, chair armrest, or desktop.

Step 2: Holding your arm still, slowly turn your hand until your palm is flat on the table, or rotated as far as you can. Hold for one second, then rotate your hand back to the original position. Move slowly and control the movement, taking one second to move in either direction.

Perform three sets of 12 repetitions.

You can intensify this exercise by holding the base of a hammer or the end of a stick as you move your hand in both directions, touching the end of the object to the table as you complete the movements. Pay attention to your elbow during these movements and avoid pushing into pain.



3 TRICEPS STRETCH

This stretch is a great way to elongate the triceps to keep them from becoming tight. It provides maximum stretch without stressing the shoulders.

Step 1: While standing or sitting, reach over your shoulder and slide your hand down your back as far as possible while pointing your fingers toward the floor.

Step 2: Cup your elbow with your free hand and gently push your elbow down to slide your hand farther down your back.

Step 3: Hold the stretch for 10 seconds.

Perform 10 total stretches per side.

Move slowly in both directions and don't push into pain. Don't jut your chin, and keep your back and shoulders as upright as possible.



4 BICEPS STRETCH

The biceps muscles are strong and can exert a great deal of stress across your shoulder and elbow joints when tight. This exercise is a safe and simple way to stretch your biceps.

Step 1: Bring your arms straight out to your sides while standing as upright as possible. Keep your shoulders and back straight, and don't jut your chin.

Step 2: Point your thumbs down and sweep your arms straight back while rotating your thumbs as far to the rear as possible, keeping your elbows straight.

Step 3: Hold the stretch for 10 seconds.

Perform 10 total stretches.

Pay attention to your body and don't push into pain. Be sure to concentrate on the proper posture during this activity.



5 ELBOW FLEXION

This exercise is one of the classic elbow exercises and allows strengthening of the biceps muscles while also being easy to control.

Step 1: While standing or sitting, hold onto a dumbbell, can, or kettlebell.

Step 2: Keeping your shoulders tall and upright, slowly bend your elbows and lift the weights up as far toward your shoulders as you can. Don't move your upper arm, and keep your palms facing each other or facing up as you perform the exercise.

Step 3: Slowly move in either direction, and don't rush.

Try to perform three sets of 10 repetitions, and adjust the amount of weight to challenge yourself.

"It's easy to get sloppy with this exercise, so pay careful attention to movements in order to maximize the efficacy of the exercise," Mr. John said.



6 SUPINE ELBOW EXTENSION

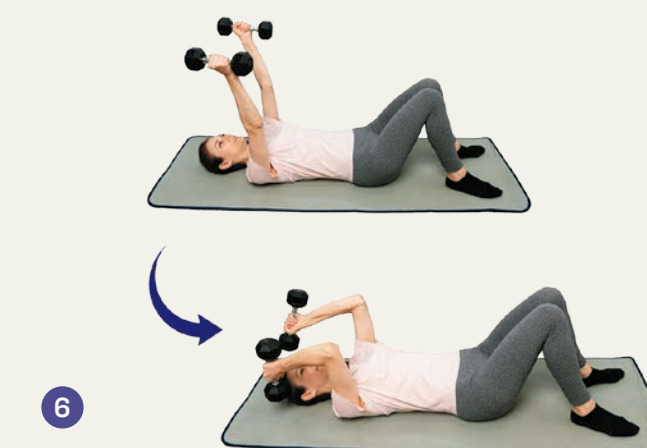
This exercise allows you to strengthen your triceps muscles in a well-controlled movement pattern. Even beginners will find it easy to perform.

Step 1: Lie flat on your back, holding a can, dumbbell, or kettlebell in each hand.

Step 2: Push your arms straight up with your arms shoulder-width apart and your palms facing each other. Slowly lower the weights down to the side of your head, then push them straight back up. Don't rush the movements—take approximately two seconds to move in either direction.

Try to perform three sets of 10 repetitions.

Be sure to keep the weights to the side of your head during movements for safety. Focus on moving smoothly—don't "bounce" the movements.



Consult a Professional if the Pain Won't Go Away

While exercises can often decrease pain, persistent chronic pain may indicate a problem requiring medical attention. Mr. John recommends consulting with your family physician for an initial evaluation and possible referral.

"If you have health or mobility issues that may present problems, consult with your physician before commencing exercise activity."



Insight into the inseparable nature of the mind and body is reshaping how we treat mental illness.

ALL IMAGES BY GETTY IMAGES

MENTAL HEALTH

A Root Cause of Mental Illness: Harvard Professor

The ketogenic diet is curing mental illness for many, and the science suggests that it's because of how it shifts our metabolism

By Michelle Standlee

What causes mental illness? For years, despite medical advances, this pressing question has remained unanswered. Often, patients seeking clarity encounter

explanations such as "it's genetic" or "depression is a lack of serotonin." Of course, there are countless experiences that can contribute to mental illness, including social isolation, addiction, and trauma. But researchers have also long known that there's a biochemical aspect to depression.

Dr. Christopher Palmer, a Harvard pro-



Mitochondria power our cells. When they malfunction, our brains and psychological function suffer.

fessor of psychiatry, has been connecting the dots of thousands of research articles regarding the relationship between mental illness and mitochondrial dysfunction. According to Dr. Palmer, this collective research raises concerns about the current treatments used for mental disorders.

A Chance Discovery
Dr. Palmer started his investigation in 2016, when he helped a patient with schizoaffective disorder lose weight. The patient suffered not only from severe mental illness, but also from low self-esteem due to the weight gain he experienced while on psychotropic medication.

Weight loss brought a dramatic drop in symptoms. Dr. Palmer said he initially couldn't believe that switching to a low-carbohydrate, ketogenic diet could have stopped the patient's chronic auditory hallucinations and paranoid delusions. He quickly started using this intervention in other patients and saw similar—sometimes even more dramatic—results.

This experience encouraged him to learn how a change in diet could help with severe mental illness. He found decades of studies revealing the connection between

metabolic health and brain health.

"The more I uncovered in terms of those concrete mechanisms of action, I realized there's something much bigger here. I'm beginning to connect a lot of dots that our field hasn't been able to connect before," he told The Epoch Times.

In November 2022, he released the book "Brain Energy," highlighting his discoveries and theorizing that mitochondrial disorders are the root cause of all mental illnesses.

Drawing from decades of research on metabolism and mitochondria, Dr. Palmer said he believes that mental disorders are metabolic disorders of the brain. This means that these conditions aren't permanent defects and can be corrected by identifying and addressing their root cause. This insight challenges the notion that conditions such as schizophrenia and bipolar disorder are life-long disorders.

"People with labels such as schizophrenia and bipolar disorder can put their illnesses into remission, they can heal, and they can recover," he said.

"That goes against much of what we tell people today."

What's Mitochondrial Dysfunction?
Cellular structures called mitochondria are vital for all cells to function normally, including brain cells. When mitochondria aren't operating correctly, various health problems can arise, including cardiovascular disease, hypertension, obesity, and Type 2 diabetes.

Dr. Palmer pointed out that when mitochondria fail to work correctly, this can also lead to mental disorders such as anxiety, depression, bipolar disorder, and schizophrenia. The brain needs a considerable amount of energy to work efficiently. When mitochondria aren't churning out enough energy, this can lead to abnormalities in the brain's structure and function, leading to mental illness.

Dr. Christopher Palmer said he believes that mental disorders are metabolic disorders of the brain.

Dr. Palmer said mitochondrial dysfunction can produce several changes in the brain that can cause mental illness to develop. These changes include fluctuations in neurotransmitter levels, oxidative stress, and inflammation.

If the origin of mental disorders is mitochondrial dysfunction, treatments that address the underlying issue could be more successful than traditional tools. Some of Dr. Palmer's patients have experienced remission of mild to severe symptoms, including depression, psychosis, and hallucinations, and then reduced or discontinued their medications. Although helpful for some patients in the short term, psychiatric medications can often produce side effects such as reduced libido, increased risk of suicide, and weight gain.

"We seriously need to look at the risks and benefits of those treatments over the long term," Dr. Palmer said.

He cautioned that people should never discontinue the use of medications without speaking with their medical providers.

Dr. Palmer suggests numerous strategies to mitigate

the effects of mitochondrial dysfunction, including common-sense lifestyle changes such as exercise, improved diet, stress reduction, and adequate sleep.

The ketogenic diet has proven to be the most successful for Dr. Palmer's patients. The ketogenic diet, which dates back to 1920, was first used to treat epilepsy. The diet—high in fat, moderate in protein, and low in carbohydrates—has been shown to increase the number of mitochondria in cells and enhance their function.

One of the ways the ketogenic diet benefits mitochondrial health is through the production of ketones. When the body is in ketosis, it produces ketones from stored fat as an alternative, more efficient fuel source. These ketones can provide energy to cells, including brain cells, which rely heavily on mitochondria for their energy needs.

Mitochondria assist in the production of neurotransmitters, chemicals that influence mood and behavior, such as serotonin and dopamine.

The ketogenic diet also improves insulin resistance because it's low in sugar and carbohydrates. Insulin resistance can also impair the creation of new mitochondria. Insulin resistance results in dysfunction of the mitochondria, reduced energy production, and cellular damage, including in brain cells.

A Picture of the Research

Research from 2015 found that the ketone metabolite, which is the energy molecule created when the liver breaks down fat, could block NLRP3 inflammasome-mediated inflammatory diseases. A study published in BMC Psychiatry in April found that inflammatory processes linked to NLRP3 were an important contributor to severe psychiatric disorders and that NLRP3 inflammasome was elevated in people with psychiatric disorders.

A review published in Neuroscience and Biobehavioral Reviews in 2018 looked at research regarding a ketogenic diet's effect on mood disorders. A ketogenic diet fuels the body with fat rather than carbohydrates.

According to the review, preclinical studies at the time found that the diet had antidepressant and mood-stabilizing effects.

The researchers said the diet should be considered a "promising intervention."

Michelle Standlee, R.N., is a health reporter for The Epoch Times. She has a background as a registered nurse and medical writer, covering topics including mental and behavioral health, women's and children's health, traditional health care, complementary medicine, and alternative medicine.



The ketogenic diet is high in fat, moderate in protein, and low in carbohydrates.

Nightmares and Night Terrors May Predict Parkinson's

Research finds that certain dreams may indicate neurodegeneration years before other symptoms show up

By Vance Voetberg

Dreams can—and often do—feature the most random assortment of people doing the most random things. You, a childhood friend, and a celebrity you've never met are all fighting an enemy in a parallel universe or playing hide-and-seek in Paris.

You wake up confused, happy, or scared, knowing that the adventure you just experienced was only an illogical journey that didn't represent anything significant. Or did it?

What if our dreams do mean something? Not in a lucid, transcendental manner, but in a real, scientifically proven way? What if dreams are mirrors that reflect the state of a person's physical and mental well-being?

This concept seems far-fetched to many, but according to recent science and leading dream experts, we're just beginning to understand what dreams may indicate about our health and how our health might affect our dreams.

Are Bad Dreams Warning Signs of Parkinson's Disease?

Recent research suggests that nightmares and bad dreams may be early warning signs of neurodegenerative diseases, including Parkinson's. A 2022 longitudinal study spanning 12 years and involving 3,818 men aged 67 or older discovered a significant association between frequent distressing dreams and developing Parkinson's disease five years after the initial assessment. However, this association noticeably diminished during the subsequent seven years of the study.

"This suggests," the study's author noted, "that late-onset distressing dreams, rather than life-long distressing dreams, may be linked with increased [Parkinson's disease] risk."

REM sleep behavior disorder—a sleep condition characterized by night terrors—can act as an early indicator of neurodegenerative disorders such as Parkinson's, sometimes decades before their onset, according to Patrick McNa-

mara, who holds a doctorate in behavioral sciences and is an associate professor of neurology at Boston University School of Medicine.

"In REM sleep behavior disorder, people tend to act out their dreams during sleep," Mr. McNamara told The Epoch Times. "They jump out of bed or flail about as they typically dream of being attacked by an intruder."

Although nightmares can be associated with neurodegenerative diseases such as Parkinson's, experiencing a single bad dream doesn't automatically indicate neurodegeneration. However, as Mr. McNamara pointed out, symptoms of neurodegenerative diseases can manifest in dreams years before they become apparent in waking life. Therefore, you should consult a doctor



60-75
PERCENT
of adults experience recurring dreams.

if you routinely experience nightmares.

What Recurring Dreams Might Indicate

According to the Academy of Sleep and Wellness, 60 to 75 percent of adults experience recurring dreams. Recurring dreams can often be attributed to "the mind working through current stress, processing a past event, or preparing for a future event," Dr. Alex Dimitriu, a psychiatrist specializing in sleep health, told The Epoch Times.

"Freud called this 'day residue' or the tendency to dream at night, as a continuation of thoughts or concerns from the daytime," he added.

Therefore, when we experience repetitive dreams, it could indicate that the mind is attempting to compartmentalize stress and trauma, allowing for processing and resolution.

Is Vitamin B6 the Secret to Vivid Dreams?

Although the science of dreams is still highly speculative, researchers have found that nutrition may affect our dreams. One nutrient that has shown a close relationship with dream quality is vitamin B6.

To investigate B6's influence on dreams,

a team of scientists conducted a study in which 12 trial participants were randomly assigned to receive either 100 milligrams of vitamin B6, 250 milligrams of B6, or a placebo. Considering that most adults consume no more than 2 milligrams of B6 daily, this was a significant intervention.

Recent research suggests that nightmares and bad dreams may be early warning signs of neurodegenerative diseases, including Parkinson's.

Researchers used a dream composite score that assessed participants' dreams' vividness, bizarreness, emotionality, and color. The results supported their hypothesis, demonstrating that B6 supplementation significantly increased the composite scores and dream recall.

Vitamin B6 is integral in synthesizing serotonin, a neurotransmitter that has been found to play a role in dream quality. Scientists theorize that supplementing B6 increases serotonin production, enhancing dream salience.

Based on the findings, the inability to recall dreams could indicate a deficiency of vitamin B6. However, the current evidence doesn't definitively explain the relationship between vitamin B6 and dreams.

How to Have Good Dreams

Quality of sleep is closely related to the quality of dreams we experience, Dr. Dimitriu said. He advises against consuming meals, alcohol, or caffeine too close to bedtime, as these can undermine sleep architecture and, consequently, dream quality.

Furthermore, Dr. Dimitriu emphasizes the significance of maintaining regular sleep and wake times, allowing for an eight-hour window to ensure sufficient sleep. "This means nothing exciting—screens, etc.—ideally one to two hours before bedtime," he said.

"Good sleep loves quiet, darkness, regularity, and rhythm."

Vance Voetberg is a freelance journalist for The Epoch Times based in the Pacific Northwest. He holds a B.S. in journalism and aims to present truthful, inspiring health-related news. He is the founder of the nutrition blog "Running On Butter."

INTENTIONAL LIVING

If Your Goal Is More, You'll Never Get There

Gratitude and satisfaction can bloom inside us when we recognize that enough is enough

By Joshua Becker

Many of us fall into the trap of spending our entire lives reaching for something we can never attain.

I'm talking about our constant pursuit for more: more money, more home, more status, more likes, more success.

We believe that if we have a little more, we will be happier.

But the very nature of "more"—and our desire for it—makes it unattainable. Constantly needing more to be happy is like chasing the proverbial carrot just out of reach, or a mirage that recedes as we approach it.

Because when more becomes the goal, we'll never get there. The finish line always moves away from us.

Rarely do we stop long enough to ask, "How much do I need to be happy?" How much money, how much house, how expensive a car, how many pairs of shoes?

Very few people sit long enough to answer that question.

Instead, we just assume, for one reason or another, that "more than I have now" is the right answer. We fail to recognize that it is our desire for more that leaves us wanting.

We can never arrive at contentment if more is always required to achieve it.

The relentless pursuit of "more" obscures our arrival at "enough." When we focus on the things we don't have, we lose sight of all that we do have.

This may not be true in every situation, but many of us are already living with more than we had before—including the debt it took for us to get it.

Meanwhile, we devalue what we already have, blinded by the allure of what we don't. And our existing blessings get overlooked by the race for "more."

The very pursuit of "more" cultivates a sense of lacking, a feeling of insufficiency, an ingrained discontent in our hearts.

What if we recognized that contentment isn't about acquiring more, but about appreciating what we already have?

A whole new way of life would open for each of us.

So let's redefine our pursuits, and let's aim for "enough" instead of "more." Consider how your attitude, your days, and your pursuits would change if you did.

Do you have food on your table and a roof over your head? Are there clothes in your closet? Do you have love in your life and opportunity to serve others? If so, maybe you already have all that you need to be happy.

Just to be clear, this article isn't about settling for less in life; it's about understanding the value of contentment and the ambition that accompanies it.

And removing the unquenchable desire for more may be the most life-giving decision you make today.

Enough is a reachable destination. More is a journey with no end.

Joshua Becker is an author, public speaker, and the founder and editor of Becoming Minimalist, where he inspires others to live more by owning less. Visit BecomingMinimalist.com

Contentment isn't about acquiring more, but about appreciating what we already have.



SYDA PRODUCTIONS/SHUTTERSTOCK

TRUTH and TRADITION

In Our Own Words

The Journey to Good Health



“It’s made me realize that getting healthy doesn’t have to be about sacrifice or self-denial. When you know better, you naturally want to do better.”

Conan Milner
Senior Health Reporter

Dear Epoch VIP,

My name is Conan Milner, and I’m a health reporter for The Epoch Times. I’ve been writing for the paper since 2005, and exclusively for the Mind & Body section since 2014. This job has given me the opportunity to research and report on subjects I’m very passionate about, such as understanding how our bodies work and learning new ways I can take care of mine.

Health was not always my passion. For years, it wasn’t even a concern. In college especially, I had about as unhealthy a life as you can imagine. I smoked compulsively, worked nights, and slept little. My diet consisted primarily of Coney dogs and Burger King. **But it all caught up with me by my early 20s. It seems so young, but I felt old—miserable both mentally and physically.**

Luckily, I met (and then married) an acupuncturist and my lifestyle changed dramatically. In addition to writing for The Epoch Times, I have helped my wife manage her clinic for over 20 years. In that time I’ve learned a ton about herbs, witnessed the power of natural medicine, developed an enormous respect for ancient Chinese wisdom, and have honed exceptional kombucha brewing skills.

My own health journey has served me well as a reporter because it has given me the kind of perspective that only comes with falling on your face, picking yourself back up, and walking a new road. This process has taught me that better health is often about making better choices. Even if you’re born with great genes and enjoy top-notch health insurance, you still must eventually face the consequences of your lifestyle.

My articles give me a chance to share this journey with my readers. For example, after the opportunity

of talking to several trainers, physical therapists, and a couple of back surgeons, I began to see exercise in a whole new light. Previously, I had little time or interest for anything athletic, but I’ve since developed a regular weight lifting routine that is still going strong after more than three years. Likewise, I’ve learned how to take care of my microbiome, discovered that a simple walk in the woods can inspire and help me let go of anxiety, come to know how to meditate for a clear mind, and have found that I should always be kind to others and grateful for what I have.

For me, these habits have little to do with willpower, and much more to do with an understanding of what hurts me and what heals me. It’s made me realize that getting healthy doesn’t have to be about sacrifice or self-denial. When you know better, you naturally want to do better.

I choose the topics I write about primarily on what I would like to read, and I know I couldn’t find such freedom at any other publication. The Epoch Times has given me the support and encouragement to tackle subjects that many other organizations shy away from. It’s allowed me to cover controversial subjects such as vaccines, wireless radiation, GMOs, and other topics that are often ignored or censored due to corporate interests.

Of course, I always keep in mind that our success comes from our readers—individuals who are curious, thoughtful, and hold the truth in high regard. Thanks for sharing this journey with me.

In truth and tradition,

Conan Milner
The Epoch Times

THE EPOCH TIMES

Learn more about The Epoch Times at EpochSubscription.com



▲ Seasonal fruits and vegetables are at their peak ripeness and bursting with flavor. They will also help keep the body cool during the peak summer months.

SEASONAL LIVING

Living in Harmony With Summer

Get the most from the season with insight from Chinese traditional culture

By Emma Suttie

In a time not so long ago, people lived in harmony with the world around them. The shift from one season to another signaled a change in behaviors—what to eat and how to prepare foods, when to get up and go to bed, and so on. Our level of activity also naturally aligned with the planet’s rhythms. In spring, we worked more, in the winter, less.

This interplay is still a vital part of life in some places, but most people today are disconnected from nature, from each other, and even from themselves.

In Chinese medicine, living in harmony with the world is not only vital for a healthy body, mind, and spirit but is also an essential aspect of a happy, fulfilling life. Here’s how this ancient discipline looks at adjusting to the seasons.

The Summer Season

Summer is the most yang time of year.

Yang represents fire, activity, expansion, motion, and outward expression. Summer is a time of growth and abundance, when the plants, trees, and flowers flourish—fed by the sun’s nourishing rays. Summer is the time when we should embody these qualities, rising early to benefit from the sun’s energy and enjoying nature’s beauty and plenitude. We feel these yang qualities most in summer—being drawn outside to engage with friends, family, and the planet; moving our bodies; and expressing ourselves freely.

The Heart and Joy

In Chinese medicine, summer is the season of the heart, which represents our capacity for joy. This means that cultivating joy strengthens the heart and all of its processes. Conversely, a lack of joy in life adversely affects the heart and, if prolonged, can lead to symptoms such as insomnia, dream-disturbed sleep, palpitations, and poor memory. So cultivating

In Chinese medicine, living in harmony with the world is not only vital for a healthy body, mind, and spirit but is an essential aspect of a happy, fulfilling life.

joy is vital for good health.

Because summer is the season associated with the heart, it’s the best time to feed the heart energy and engage in activities and pursuits that make you joyful and fill you with a sense of wonder and delight. Think about what makes you happy, and do it with the intention of feeding your heart energy—whether it’s calling a friend who makes you laugh, spending time with pets who love you unconditionally, or engaging in creative pursuits that feed your spirit.

Those with healthy, balanced heart energy are friendly, open, and humble. They have a clarity of mind that makes them able to effortlessly deal with difficulties and find smart solutions to nearly any problem. They bring positivity to their interactions, regardless of the situation.

Summer Behaviors

In the summer months, Chinese medicine encourages us to get up early with the sun and go to bed later so that we can enjoy longer days and warm summer nights.

The sun revitalizes and rejuvenates us, so being outside and active in summer is what feeds our bodies and spirits. Physical activity is yang as opposed to activities such as meditation or yoga, which are slower and more introspective—or yin. Running, biking, swimming, or playing sports are all yang activities that we tend to be drawn to at the most yang time of year.

Continued on Page 18

Cooling Summer Foods

Thankfully, many of the cooling foods that we need to counteract the intense heat of summer are abundant this time of year. Because balance is necessary, we want to add cooling foods to our meals to balance all the yang energies outside and inside our bodies.

Here are some cooling foods that you can add to your diet in the hottest months:

- Salads
- Fruits such as apples, watermelons, lemons, and limes
- Sprouts
- Cucumber
- Tofu
- Flower and leaf teas such as mint, chamomile, and chrysanthemum

Some cooling, pungent herbs and spices are also beneficial at this time of year. They include peppermint, spearmint, lavender, lemon balm, lily bulbs, and zucchini blossoms.

Have Fun, Productively

Test your brain with one of the biggest libraries of crosswords, puzzles, brain games, and sudoku on the web.

Play now at EpochFun.com

THE EPOCH TIMES
EpochFun

ENJOY SHEN YUN AT HOME

Stream something spectacular with Shen Yun’s all-new video platform!

SHEN YUN ZUO PIN

PAST SHEN YUN PERFORMANCES • ORIGINAL MUSIC
CONCERTS & OPERAS • MASTERCLASSES • SHORT FILMS

Watch Now
ShenYunZuoPin.com/Watch

Sucralose May Harm the Immune System

Try these 5 safer options to the popular artificial sweetener better known as Splenda

By Sean Lin & Jacky Guan

Widely embraced as a safe sugar substitute, the popular artificial sweetener sucralose is now under scrutiny for its potential effects on the immune system. More than 140 million Americans use sugar substitutes. These biochemicals undergo rigorous tests for stability, safety, and toxicology to gain approval from the Food and Drug Administration. Sucralose (sold as Splenda), boasting a sweetness that’s 600 times stronger than sugar, is one of the most popular artificial sweeteners in the United States. However, a recent study published in Nature suggests that sucralose hinders

Raw honey is rich in antioxidants from the flower nectar it’s created from and is a surprisingly close substitute to real sugar.

Try these 5 safer options to the popular artificial sweetener better known as Splenda

Widely embraced as a safe sugar substitute, the popular artificial sweetener sucralose is now under scrutiny for its potential effects on the immune system. More than 140 million Americans use sugar substitutes. These biochemicals undergo rigorous tests for stability, safety, and toxicology to gain approval from the Food and Drug Administration. Sucralose (sold as Splenda), boasting a sweetness that’s 600 times stronger than sugar, is one of the most popular artificial sweeteners in the United States. However, a recent study published in Nature suggests that sucralose hinders

a crucial function of T cells, the immune system’s first responders against pathogens. T cells rely on T-cell receptors (TCRs) to recognize threats such as bacteria and viruses and activate the immune system. When present in high concentrations, sucralose inhibits TCR-dependent proliferation, limiting T-cell production.

The study further notes that sucralose may inhibit the immune-activating enzyme phospholipase C gamma-1, which plays a vital role in cell growth, migration, apoptosis, and proliferation. These disruptions impede the body’s defense mechanisms.

While there’s no evidence that sucralose affects other parts of the immune system, the artificial sweetener has been found to disrupt the gut microbiome, induce liver inflammation, and change the normal function of sugar receptors

in mice. High concentrations also inhibit the release of calcium, a crucial mineral that the body uses to carry out many functions.

Another recent study found that sucralose is “genotoxic,” because after it’s digested, it creates a harmful metabolite called sucralose-6-acetate. Researchers say that this substance can damage DNA.

5 Healthier Sugar Alternatives

Regarding sugar substitutes, there are various options available, each with its advantages and disadvantages. While no perfect sugar substitute exists, several alternatives offer similar qualities.

1. Stevia

Derived from the leaves of a South American plant, stevia is a few hundred times sweeter than sugar.

Continued on Page 14

THE EPOCH TIMES

Why are we America’s fastest-growing media?

See it yourself for just \$1*.

ReadEpoch.com

*digital subscription

Let Our Experts Take You Behind the Headlines



Get our exclusive news programs, documentaries, movies, lifestyle content, and more with our EpochTV streaming platform.*

INCLUDED IN YOUR SUBSCRIPTION

EPOCH TV

Watch Now at EPOCHTV.COM

*You can watch our exclusive programming live and on demand on your favorite device, anywhere, anytime. Stream all of our content on your phone, computer, tablet, or Roku TV.

Parkinson's Disease: 9 Very Early Warning Signs to Be Aware Of

Early treatment can slow the progression of symptoms and preserve quality of life for many, say experts

By George Citroner

Parkinson's disease is a progressive neurological disorder that affects movement by causing the damage or death of neurons in the brain region that's responsible for muscle control.

When assessing Parkinson's disease, doctors distinguish between two phases: the prodromal and clinical phases. The prodromal phase is characterized by patients noticing symptoms that aren't yet serious enough to warrant a diagnosis, while the clinical phase comes once symptoms are significant enough to justify testing to diagnose the disease.

Understanding this progressive neurological disorder is crucial because of its life-changing impact. Recognizing the different phases helps patients to identify concerning symptoms and enables doctors to diagnose the disease accurately.

Key Early Signs to Watch Out For

Tremors

Among the most common early signs of Parkinson's disease are tremors or shaking, primarily in the hands, arms, legs, jaw, or face, Dr. Guy Schwartz, co-director of the Stony Brook Parkinson's and Movement Disorders Center at Stony Brook Medicine, told The Epoch Times. The tremors may occur at rest or during tasks and can initially be mild, but tend to worsen over time.

Changes in Movement

Parkinson's disease can lead to changes in movement, including limb stiffness or rigidity, which can impede daily activities such as dressing and turning in bed, Dr. Schwartz said. Additionally, individuals may experience bradykinesia, a slowing of movement, which makes

simple tasks more time-consuming.

Impaired Balance and Coordination

Parkinson's disease can disrupt one's balance and coordination, thus increasing the likelihood of falls and related injuries. Common manifestations include a stooped posture, shuffling gait, and challenges in turning or changing direction during walking.

Loss of Smell

Anosmia, a loss of the sense of smell, is a notable early symptom of Parkinson's disease. Individuals may struggle to detect specific odors such as those from food or flowers and may face difficulties in identifying familiar smells.

Dr. Schwartz stressed that a clinician must identify these four cardinal signs, particularly bradykinesia, to diagnose Parkinson's disease or a Parkinsonian symptom accurately. "The slowness is an obligatory sign; there has to be bradykinesia. Without it, one can't be certain about the diagnosis," he said.

However, early nonmotor symptoms can suggest the onset of Parkinson's disease, preceding noticeable motor symptoms by several years or even decades. While there's currently no cure for Parkinson's, initiating treatment early can significantly enhance a patient's function and quality of life.

Behavioral Changes

Acting Out Vivid Dreams

Some of the earliest signs of Parkinson's disease may not be noticed by the person experiencing them but rather by friends or family members.

Dr. Schwartz explained that one of the most established early symptoms is rapid eye movement (REM) sleep behavior disorder, a sleep disorder characterized by



Dance therapy can be an effective treatment for improving gait and balance issues.

physically acting out vivid dreams and sudden, sometimes violent, arm and leg movements during REM sleep.

However, in some cases, Dr. Schwartz added, the full account of symptoms may not be obtained due to incomplete patient history, such as when a bedmate sleeps in a separate room or is a deep sleeper.

Basic Abilities, Such as Breathing, Disrupted

Another particular symptom of Parkinson's disease is multiple-symptom atrophy. This rare degenerative neurological disorder affects the body's autonomic functions, such as blood pressure, breathing, digestion, and motor control.

Multiple symptom atrophy and REM sleep behavior disorder typically appear about 10 years before the onset of Parkinson's disease, Dr. Schwartz said.

Changes in Handwriting

Handwriting changes, such as progressively smaller and cramped writing, may be an early indicator of Parkinson's disease.

Characterized by the gradual reduction in the size and legibility of handwriting, the condition—called micrographia—occurs because of the disease's impact on motor control and coordination, particularly the fine motor skills required for writing.

Constipation

Constipation is another early sign to watch for. It arises as the disease interferes with the autonomic nervous system, which controls various involuntary bodily functions, including digestion.

Parkinson's disease can affect the digestive system's muscles, leading to a slowing

Anxiety disorders are also known to co-occur with Parkinson's, with an estimated

40

PERCENT of patients experiencing "substantial anxiety."

There could be some problems with sweat, regulating sweat, and a rash. These are what we call non-motor precursors of Parkinson's disease.

Dr. Guy Schwartz, co-director, Stony Brook Parkinson's and Movement Disorders Center, Stony Brook Medicine

of bowel movements and a decrease in the muscle contractions needed for proper digestion and elimination.

Sweating

One symptom that may not be commonly associated with a neurodegenerative condition is sweating.

"There could be some problems with sweat, regulating sweat, and a rash. These are what we call nonmotor precursors of Parkinson's disease," Dr. Schwartz said.

Changes in sweat regulation are caused by the autonomic dysfunction associated with the disease.

It's important to note that experiencing one or more of these symptoms doesn't necessarily indicate Parkinson's disease. Still, the symptoms could serve as early indicators, prompting the decision to consult a doctor.

Depression and Anxiety Can Occur Before Diagnosis

A 2013 study of more than 23,000 people found that those diagnosed with depression had more than three times the risk of developing Parkinson's disease than those without it.

Another study published in 2015 observed more than 140,000 people diagnosed with depression. The condition was found to potentially serve as a prodromal symptom, a very early sign, or a contributing factor to the risk of developing Parkinson's disease.

Anxiety disorders are also known to co-occur with Parkinson's, with an estimated 40 percent of patients experiencing "substantial anxiety."

Researchers also found that anxiety often emerges before the typical movement disorders associated with Parkinson's, indicating a link to disease-related brain changes rather than psychological or social factors.

Consequences of Delaying Treatment

Delayed treatment may cause people to miss the opportunity to start medication when it's most effective. Untreated Parkinson's can lead to decreased mobility and difficulties in daily activities, significantly affecting one's quality of life.

Research published in the American Journal of Managed Care highlights the importance of early intervention for optimal outcomes in Parkinson's disease. Clinical trials suggest that early treatment may slow disease progression and alleviate symptoms, greatly improving the patient's quality of life.

Dr. Schwartz also emphasized the significance of early diagnosis, although it marks the beginning of a challenging neurodegenerative journey. "On the downside, [some] early-onset people would rather not know," he said.

A Parkinson's diagnosis can have a significant psychological impact on a person and on their social circle.

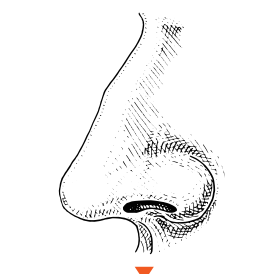
"Some patients are in denial, and that's OK," Dr. Schwartz said. "I've often got a kind of respect for that. Sometimes, ignorance is bliss. Some people have a burning desire to know, and it's only fair. Some of them, you can sense that they can wait. They'll come back in a year and revisit the diagnosis if something changes."



A change in handwriting may be an early indicator of Parkinson's disease.



Unusual sweating may indicate autonomic dysfunction associated with Parkinson's.



A loss of sense of smell is a notable early symptom of Parkinson's disease.

Crafted With Passion & Expertise

Indulge in the Finest at **DAYES** Coffee Roasters and Café!

We take pride in roasting our own coffee in house, ensuring that every batch is perfectly crafted to bring out the unique flavors and nuances of each bean. But that's not all—we're proud to introduce our specialty: enzyme-fermented coffee. This innovative coffee produces a healthier cup that is remarkably low in caffeine, low in acidity, and bursting with rich, full-bodied flavor.

Experience coffee like never before!



Find us at 28 North St., Middletown, N.Y.

Monday to Friday: 8:30 a.m. to 5 p.m. (closed Tuesdays)
Saturday & Sunday: 9 a.m. to 6 p.m.

Tel: 845-239-4789



Get **DAYES** Coffee beans delivered to your home! Order online at DayesCoffee.com

Sucralose May Harm the Immune System

Continued from Page 13

It contains virtually no calories and has shown potential health benefits, including lowering blood pressure and blood sugar.

2. Xylitol

Like many other sugar alcohols, xylitol shares a similar sweetness to sugar and offers additional advantages, such as reducing tooth decay.

While you should consume sugar alternatives only in moderation, xylitol won't raise blood sugar or insulin levels. Keep in mind that xylitol is toxic for dogs and contains a fair amount of calories. It also may cause some

digestive problems for some people.

3. Erythritol

Tasting almost like sugar, erythritol doesn't cause spikes in blood sugar or insulin levels, making it suitable for diabetics. Unlike xylitol, this sweetener is less likely to cause digestive issues.

Erythritol should be consumed in moderation because it takes a long time to metabolize in the body. Concerns have arisen regarding a potential link between high intake and adverse cardiac events, although further research is needed to establish a definitive connection.

4. Honey

Raw honey is rich in antioxidants, benefits blood sugar control, reduces throat irritation, and offers a pleasant taste. It's essentially pure sugar derived from flower nectar and is a surprisingly close substitute to real sugar. Unheated raw honey has more benefits, as it contains live enzymes.

5. Monk Fruit Extract

Made from a fruit that's native to Southeast Asia, monk fruit extract is approximately 250 times sweeter than sugar but without the calories or carbohydrates.

It contains compounds that fight inflammation and is generally considered safe for humans. However, you should always check the packaging when purchasing monk fruit extract, as it may have been diluted with other sweeteners or even sugar.

Dr. Xiaoxu Sean Lin is an assistant professor in the Biomedical Science Department at Feilitan College in Middletown, N.Y. Dr. Lin is also a frequent analyst and commentator for Epoch Media Group, VOA, and RFA. He is a veteran who served as a U.S. Army microbiologist and also a member of Committee on the Present Danger: China.

More than

140

MILLION AMERICANS use sugar substitutes.

Monk fruit extract is a natural sugar alternative that is around 250 times sweeter than sugar without the calories or carbohydrates.



VICTOR MOUSSA/SHUTTERSTOCK

TIPS TO REDUCE SUGAR INTAKE

To prevent potential health issues associated with excessive sugar consumption, developing a balanced approach to sugar cravings from an early age is crucial. This is to proactively prevent the potential adverse health effects at their source rather than addressing the consequences after they've already occurred. Excessive sugar intake contributes to obesity, dental problems, and an increased risk of chronic conditions such as Type 2 diabetes.

To promote a healthier lifestyle and reduce the likelihood of children developing a sweet tooth at a young age, here are some tips:

- Offer a balanced diet:** Provide a variety of nutritious foods, including fruits, vegetables, whole grains, lean proteins, and healthy fats, to develop diverse tastes.
- Limit sugary beverages:** Encourage water as the primary choice and reduce consumption of sodas, fruit juices, and sports drinks, as they're often high in added sugars.
- Control portion sizes:** Teach moderation by serving sweets and desserts in small quantities.
- Educate about nutrition:** Teach children the importance of a balanced diet and the potential adverse effects of excessive sugar consumption. Emphasize that sweets should be enjoyed in moderation as occasional treats.
- Explore healthier alternatives:** Introduce naturally sweet foods such as fruits, which provide essential nutrients and natural sugars. Experiment with healthier dessert options, such as homemade fruit popsicles or yogurt parfaits.
- Focus on other rewards:** Celebrate achievements or milestones with outings, fun activities, or small gifts instead of relying on sugary treats.

Remember, every child is different, and it's important to balance promoting healthy eating habits and allowing occasional indulgences. It's about fostering a lifelong relationship with food that prioritizes nutrition while leaving room for enjoyment.

The Rise of POTS in the COVID-19 and Vaccine Era

A surge in cases of this debilitating autonomic nervous system disorder is spurring innovative treatments

By Sheramy Tsai

The COVID-19 pandemic casts a concerning shadow in the form of postural orthostatic tachycardia syndrome (POTS). This perplexing health issue, marked by a significant surge in heart rate when standing, is gaining increasing attention in the medical community because of a rise in cases.

2 Journeys, 1 Diagnosis

Phoebe Eaton and Aubrey George, two active women in their mid-20s, found their lives abruptly disrupted by the puzzling symptoms of POTS.

Ms. Eaton, a 25-year-old teacher in training, noted the onset of symptoms after her initial COVID-19 vaccine. She reported recurring urinary tract infections, persistent fatigue, migraines, weight loss, and erratic blood sugar levels. Her health deteriorated after her final vaccine dose.

"I started passing out, which developed into seizures, forcing me to abandon my teacher training," she said.

For Ms. George, her symptoms surfaced after enduring three concussions within six months. Chronic headaches, dizziness, and fatigue became her unwelcome constants.

Previously dubbed the "Energizer Bunny," Ms. George now grapples with many symptoms spanning the cardiovascular and digestive systems.

"Every single activity requires extra thought and preparation, which can be exhausting," Ms. George said.

POTS poses a unique challenge as it's frequently overlooked.

"Lots of people say to me, 'but you look so well,' which is nice to hear, but when you feel rubbish, it makes you feel like you're lying or making it up," Ms. Eaton said.

Unmasking the Hidden Disorder Called POTS

POTS falls within the wider category of disorders called dysautonomia. It signifies a malfunction in the autonomic nervous system, which quietly controls crucial functions such as breathing, digestion, and heart rate. When this system falters, as in POTS, it can undermine health and daily quality of life. POTS primarily manifests as a substantial increase in heart rate when moving from a sitting or lying position to standing. It's typically diagnosed when a person's heart rate rises by more than 30 beats per minute within just 10 minutes of standing. For instance, if someone's heart rate jumps from 70 while seated to 100 or more upon standing, it's a strong indication of POTS.

For children and adolescents, the diagnostic threshold is higher, requiring an increase of 40 beats per minute or more. The ramped-up heart rate doesn't coincide with a drop in blood pressure.

POTS presents a wide array of symptoms, including fatigue, headaches, lightheadedness, heart palpitations,

“There has been a significant increase in referrals to our POTS clinic since the COVID pandemic.”

Dr. Tae Chung, lead researcher, POTS program, Johns Hopkins University School of Medicine

“I started passing out, which developed into seizures, forcing me to abandon my teacher training.”

Phoebe Eaton, teacher-in-training



ALL PHOTOS BY SHUTTERSTOCK

POTS symptoms can include fatigue, lightheadedness, heart palpitations, and cognitive issues.

6 MILLION

An estimated 6 million Americans are affected by postural orthostatic tachycardia syndrome.

nausea, and cognitive disturbances such as brain fog. The mix and intensity of these symptoms, which must be present for at least three months, can fluctuate significantly among patients.

Historically, POTS has been viewed as a rare disorder. Dysautonomia International, a key nonprofit organization dedicated to dysautonomia research and awareness, estimates that POTS affects about 6 million Americans. This number has doubled since the COVID-19 pandemic began, they reported. However, due to the elusive nature of the disease and limited awareness in the health care community, the actual prevalence may be significantly higher.

The variability of POTS symptoms is matched only by their impact on patients' daily lives. While some individuals with mild symptoms manage to keep up with their regular work, school, and social activities, others may find routine tasks such as bathing, housework, eating, sitting upright, and even standing or walking significantly challenging because of severe symptoms.

"I can't drive. I tire very quickly and have heart pain and lack of breath when carrying out tasks. I can't do simple things like emptying the shopping or the dishwasher without passing out. I have lost most of my independence," Ms. Eaton said.

Specialists treating POTS often compare the functional impairment

observed in these patients to those with conditions such as cancer or congestive heart failure.

A pivotal study with more than 5,500 participants has uncovered the economic and employment impacts of living with POTS.

The research, which was carried out in collaboration with Dysautonomia International, revealed that only 48 percent of POTS patients were employed. Among them, 67 percent desired to work more hours but were hindered by their condition.

Nearly three-quarters of participants reported income loss attributed to POTS, with one-third losing more than \$10,000 in the year preceding the survey. The research also highlighted broader societal effects, as 28.5 percent of caregivers suffered income loss because of their caretaking duties.

The authors said, "POTS poses a significant risk for reduced employment and increased economic loss in individuals with this disorder and their caregivers."

Dr. Tae Chung, who leads the POTS program at Johns Hopkins University School of Medicine, observes the stark reality of these statistics in his clinic daily.

"Many POTS patients who remain employed have to modify their lifestyle due to their symptoms," he told The Epoch Times. "For example, a significant number manage to retain their full-time roles primarily because they are afforded the flexibility to work remotely. This condition hits young people particularly hard, as they often have to work to keep their medical insurance."

Drawing from his frontline experience, Dr. Chung emphasized the critical situation.

"For these reasons, there's a pressing need to develop disease-modifying treatment for POTS, alongside improved recognition, diagnosis, and treatment," he said.

COVID-19 and the Unexpected POTS Increase

POTS continues to pose challenging questions, with a clear-cut cause still eluding scientists. However, the scientific community is increasingly uncov-

ering connections to COVID-19 and its associated vaccines.

While the precise cause of post-COVID POTS is still under scrutiny, potential theories include the production of autoantibodies, direct toxic effects from the virus, or a stimulated sympathetic nervous system response.

"There has been a significant increase in referrals to our POTS clinic since the COVID pandemic," Dr. Chung said.

He suggested that COVID-19 may predispose individuals to POTS, a theory that he says is supported by emerging research.

Echoing this, Dr. Jordan Pastorek, supervising physician at The POTS Treatment Center, has observed this shift.

"A significantly large portion of our patients now report their POTS symptoms starting after a COVID infection or a dose of the vaccine. This is a noticeable shift from pre-pandemic times when we commonly saw POTS cases resulting from infections like influenza, Lyme disease, and mononucleosis, as well as concussions," Dr. Pastorek said.

His insights align with increasing global case reports suggesting a trend of previously healthy individuals developing POTS after mRNA COVID-19 vaccinations. One report details a 42-year-old male with no previous POTS symptoms who developed the condition following his first mRNA COVID-19 vaccine dose.

The findings may be associated with the operation of mRNA vaccines. These vaccines utilize a snippet of the virus's genetic code to create a protein in our cells, prompting the immune system to generate antibodies.

"The formation of antibodies triggers an autoimmune response that stimulates POTS disease," the report's authors wrote.

A detailed study in Nature Cardiovascular Research, published in December 2022, also identified a potential correlation between POTS and COVID-19 vaccination but highlighted a stronger link between POTS and the residual effects of a SARS-CoV-2 infection.

Using a dataset of 284,592 vaccinated individuals, 93 percent of whom received the mRNA vaccine, the study found a 33 percent increase in the likelihood of developing POTS. More than

half of the 4,526 total POTS diagnoses occurred after vaccination.

"POTS-related diagnoses appear to be acquired with increased frequency after, compared to before, COVID-19 vaccination, particularly when compared to more commonly diagnosed conditions, but at a rate that is approximately five times lower than after SARS-CoV-2 infection," the authors concluded.

The authors cautioned against using the study results to avoid vaccination. "These study results are not intended to discourage use of the COVID-19 vaccine, especially given the relatively higher risk of developing POTS after SARS-CoV-2 infection," they wrote.

The Health Care Hurdles Facing POTS Patients

Amid a health care system strained by the aftermath of a global pandemic, POTS patients confront issues of time and resources.

"We're facing a backlog of over two years just to get patients into our treatment center," Dr. Chung said.

Despite its global impact on millions, POTS remains largely unknown to many health care professionals, often resulting in a lengthy and challenging path to an accurate diagnosis. A 2013 survey by Dysautonomia International highlighted this struggle for more than 700 POTS patients.

On average, patients face a six-year delay before receiving a correct diagnosis. Only 25 percent are diagnosed within the first year of symptom onset, and many travel more than 100 miles for POTS-related medical care. Further complicating matters, 59 percent of patients are initially dismissed by doctors who believe that their severe symptoms are purely psychological.

Dr. Chung highlights many other hurdles that POTS patients face—a lack of awareness, elusive biomarkers, limited treatment options, and debilitating disease severity.

Yet he underscores a critical roadblock.

"While my view may be biased, I believe the dearth of research funding presents one of the most formidable challenges for advancing POTS care," Dr. Chung told The Epoch Times.

Multifaceted Treatment Approach for POTS Patients

One of the complexities in treating POTS arises from the stark variations in individual symptoms, necessitating a personalized treatment strategy. At the Johns Hopkins POTS Treatment Center, the process begins with a patient-centric focus, devising strategies that range from subtle lifestyle adjustments to the use of medications.

A vital cornerstone of this strategy involves enhancing fluid intake to bolster blood volume and adjusting daily activities, such as altering how patients move from sitting to standing. Physical therapy exercises, tailored to suit each patient's tolerance levels, are also integral to the therapeutic regimen.

The role of medication is twofold, targeting both POTS symptoms and any underlying conditions. This could encompass the use of beta-blockers or other heart rate-reducing drugs. For some, medications that amplify the body's ability to absorb salt and fluid or those promoting blood vessel constriction to improve blood flow to the heart and brain may be recommended.

The prescription of dietary modifications, such as increased salt intake

and hydration, form another line of attack, providing symptomatic relief. A small Vanderbilt University study corroborates this approach, demonstrating symptom improvement in POTS patients on a high-salt diet, although it fell short of complete symptom eradication.

Compression stockings have shown promise in aiding POTS management by helping to improve blood flow and alleviate symptoms. Ms. Eaton championed this intervention.

"Compression leggings really help in managing my day-to-day symptoms," she said.

The final crucial element of the approach involves counseling, providing patients and their families with practical strategies to manage life with POTS.

Addressing POTS With Holistic Approaches

While conventional medicine typically focuses on managing POTS symptoms, there's a shift toward targeting the root causes.

POTS Care in Texas pioneers this approach by integrating biofeedback, specialized supplements, and low-inflammatory diets into its treatment. Biofeedback, a noninvasive method, enables patients to control bodily functions such as heart rate. The facility provides personalized supplement regimens to meet individual nutritional needs and recommends a low-inflammatory diet to minimize symptom triggers.

"Our efforts go towards locating and treating the underlying cause of POTS and its numerous comorbid conditions," the clinic's website reads.

The goal extends beyond symptom relief—it aims for lasting, sustainable health improvement.

Board-certified cardiologist Dr. Jack Wolfson, lauded for his success in treating POTS patients through natural methods, runs the Natural Heart Doctor clinic. Known for his affinity toward holistic therapies, Wolfson echoes the ethos of POTS Care, setting a firm stance on curative over symptomatic treatment.

"POTS is an inflammatory condition at its core," Dr. Wolfson told The Epoch Times. "Our approach is about identifying and treating the cause. For some patients, it's mold toxicity. For others, it's a high burden of other toxins. Still, for others, it's an imbalance in the nervous system. We've seen remarkable progress in our patients by directly addressing these factors."

The move toward alternative treatments and a deeper comprehension of POTS signals a fresh chapter in managing this intricate syndrome. Despite the ongoing challenge of fully understanding POTS, integrating alternative therapies with traditional methods offers renewed hope for many patients.

Sheramy Tsai, BSN, RN, is a seasoned nurse with a decade-long writing career. An alumna of Middlebury College and Johns Hopkins, Ms. Tsai combines her writing and nursing expertise to deliver impactful content. Living in Vermont, she balances her professional life with sustainable living and raising three children.

Many postural orthostatic tachycardia syndrome patients reported symptoms starting after a COVID infection or a dose of the vaccine.



Postural orthostatic tachycardia syndrome is typically diagnosed when a person's heart rate rises by more than 30 beats per minute within 10 minutes of standing.

WISE HABITS

The Joy of Small Comforts

We all need breaks and measured indulgences from time to time

By Leo Babauta

Some days, I need some comfort. I'm tired, emotionally drained, or just feeling besieged by the world.

On these days, I try to recognize my physical, mental, and emotional state, and I ask myself what I need.

Just noticing is a big step for most of us. We often don't recognize when we're feeling drained or a bit battered by life. We just focus on what we think we need to be doing, and we push through. This might feel necessary, but it's rarely helpful because we're forcing ourselves to act when we're depleted or feeling confronted.

So if we notice, we might pause, take a breath or two, and check in with ourselves to ask, "What do I need?"

Sometimes, for me, it's a little rest. I'll take a nap. This is a beautiful little comfort I give myself, and I feel much refreshed after.

Today, I would love to advocate for small comforts. A nap is a great example, but there are so many more.

Here are some of my favorite small comforts:

- A minute of breathing and being present to what I'm feeling.
- A luxurious stretch.
- A hot cup of tea.
- A hot shower.
- A relaxing walk in nature.
- Some berries or another delicious fruit.
- A hug from a loved one.
- A short meditation session.
- A spoonful of peanut butter.
- Curling up with a good book.
- A massage.
- Sitting in a hot tub.
- Sitting with someone and listening



▲ Savor the small comforts that restore your well-being and bring easy joy.

- to music.
- Having a square or two of dark chocolate.

Small comforts are generally risk-free, but there are a few tips that can help you really get the most from them.

1. Avoid Overdoing It

While it might seem weird to talk about overdoing comforts, many of us are capable of overindulgence to the point of approaching addiction.

For example, if you enjoy the small comfort of a glass of wine, you can overdo it by feeling like you need to have wine whenever you're feeling stressed. Then it can move to needing to have five glasses of wine per day.

The same kind of thing can happen with food, watching TV, playing

video games, and so on. There's nothing wrong with any of these—just have them in nice small doses. Use a variety of ways to find comfort when you need it, not just one thing that you become reliant upon.

2. Face Discomfort When You Can

You can't always be comfortable. If that's your goal, you'll end up shrinking from life. I'm a strong advocate of learning to be with more and more of life, including what's uncomfortable. That's how we grow.

That said, we can't do that all the time. Sometimes we need some nurturing, replenishing, and revitalizing. Sometimes we need comfort. This isn't an all-or-nothing kind of deal—we can find a balance that's right for ourselves.

3. Let Go of Guilt

Despite what I said in the first two tips, this article is about small comforts, not "guilty pleasures." Comforts, when we need them, are healthy and wonderful. See if you can give yourself full permission to savor these small pleasures.

4. Be Present and Enjoy Them

Eating a treat isn't much of a comfort if you're distracted by your phone. Let yourself fully savor and find the wonder and deliciousness in small comforts.

I hope you'll give yourself permission to take care of yourself when you need it. Here's to the small comforts in life.

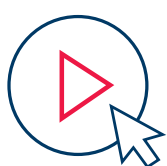
Leo Babauta is the author of six books and the writer of Zen Habits, a blog with over 2 million subscribers. Visit ZenHabits.net

We often don't recognize when we're feeling drained or a bit battered by life.

HELP IS JUST A CLICK AWAY!

TheEpochTimes.com/help

From This Page You Can:



Video Library

- Watch the video to see how others are getting the most out of their subscription



Find Answers From A Comprehensive FAQ Section

- Troubleshoot common problems
- Learn our terms and conditions



Use Our Customer Service Live Chat

- Tell us your subscription inquiries or concerns



Submit Requests Online

- Report delivery and other subscription issues
- Provide editorial and other feedback



Access The Customer Portal

- Manage your subscription account