

MIND & BODY



Gambling can increase the risk of suicide, depression, and criminal activity.

ADDICTION

There are **2,150** casinos in the United States, the most in the world.

Gamblers Crushed by Losses Find Hope and Recovery

By Huey Freeman

The internet and sports betting have fueled a gambling boom that puts millions at risk of suicide, financial ruin

Ted Hartwell had learned to gamble from his father. It was a way to relax and have fun. But by the time he had racked up \$90,000 in secret gambling debts as an adult, it wasn't fun anymore. He had told his wife that he had quit years ago and knew that he was on the verge of losing everything.

Mr. Hartwell's story is far from isolated. As a student at Texas Tech University, he had supported himself by playing in

a weekly high-stakes poker game. After completing his master's degree in anthropology, he got a job at the Desert Research Institute in Nevada.

"I thought I had landed at one of the best places," Mr. Hartwell told The Epoch Times.

Las Vegas, the cradle of worldwide gaming, is a magnet for gamblers across the globe. Nevada, the first state with legalized gambling, has about 400 working casinos, almost one-fifth of the nation's gambling houses. The United States, meanwhile, has about

2,150 casinos, the most in the world and more than a quarter of all the casinos on Earth, according to the World Casino Directory online.

"I only played live poker at first in Las Vegas," Mr. Hartwell said. "It was years before I hit my first jackpot of \$1,000. A large win or a series of wins often changes your mind about gambling. I thought I could make money gambling once more."

But as everyone knows, casinos aren't in the business of losing money; that's

Continued on Page 10

WOMEN'S HEALTH

Breast Implant Illness: Controversial and Devastating

Many women are told the symptoms are all in their heads—but that doesn't make the pain go away

By Emma Suttie

Janna Durkee, a nurse and active mother of four, was having unexplained symptoms for years, but testing always yielded normal results.

After two severe allergic reactions a few months apart—one being so severe that she'd called an ambulance—she was scared.

"Something is desperately wrong with me," she remembers thinking. Mrs. Durkee had a feeling of impending doom

that wasn't lessened by her doctor's inability to tell her what was wrong.

She had more blood drawn, a mammogram, and a breast ultrasound. They all showed normal results. Then, she stumbled across a Facebook group that her friend had shared and everything changed. It was called Breast Implant Illness and Healing by Nicole. The group presently has more than 180,000 members.

"When I started diving into all these



There are ongoing debates over the safety of breast implants and their potential cancer risk.

Continued on Page 6

Debunking THE DOGMA ABOUT FAT

PART III OILS AND THEIR OXIDATION POINTS

How popular cooking oils stack up in terms of stability and health effects

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

By Marina Zhang

Vegetable oils have been recommended as a healthier alternative to saturated animal fats for decades. But emerging data suggest the opposite—at least when it comes to the heavily refined, denatured seed oils most people are consuming.

Most vegetable oils consist primarily of monounsaturated and polyunsaturated fats that are more prone to oxidation than saturated animal fats. To explain that in molecular detail, saturated fat has no double bonds, so no oxidation through these bonds. Monounsaturated fats have one such bond, so they're slightly less stable. Polyunsaturated can have two to six of these bonds, or as many as seven, so they're far less stable.

This oxidation can lead to inflammation and the formation of cancer-causing byproducts, such as aldehydes, according to professor Martin Grootveld from De Montfort University in the UK, who specializes in bioanalytical chemistry and chemical pathology.

How Quickly Oil Produces Harmful Substances

Oxidation in oils can be measured by calculating the stability of heated oil over time, according to Grootveld. This process determines how quickly an oil produces potentially harmful compounds.

To measure its stability, oil is heated to a specific temperature, usually about 230 degrees Fahrenheit (110 degrees Celsius), triggering oxidative processes and the formation of oxidants. These oxidants dissolve into water-filled conductivity cells, altering the water's conductivity. The test continues until the water's conductivity changes significantly, indicating significant oxidation.

A longer oxidative stability time signifies higher oxidation resistance. Oils with longer stability times can withstand higher temperatures and prolonged heating without producing significant amounts of oxidants.

Next Week: The next article in this series will explore how saturated fat affects heart diseases.

MAIN COOKING OILS RANKED FROM LEAST TO MOST STABLE

Choosing the right oil for our cooking needs is a complex process.



1 SUNFLOWER AND SOYBEAN

Sunflower and soybean oils are prone to oxidation because of their high polyunsaturated fatty acid (PUFA) content. Sunflower and soybean oils contain 69 and 61 percent PUFAs, respectively. According to an article in Inform Magazine by Min Hu, a principal scientist at DuPont Nutrition and Health, these oils become highly unstable when heated for a long time and quickly produce oxidants at high temperatures. Efforts have been made to enhance the

oxidative stability of sunflower and soybean oils by increasing oleic acid levels. Oleic acids are more stable monounsaturated fatty acids. Research is exploring genetic editing, selective breeding, and refinement processes to make these oils more oxidation-resistant.

Increased oleic acid levels have successfully improved soybean oil's oxidative stability. Sunflower and soybean oils with higher oleic acid content exhibit enhanced resistance to oxidation when heated.

2 CANOLA

Canola oil is predominantly composed of monounsaturated fatty acids—about 60 percent. The oil exhibits varying levels of oxidation stability.

Canola oil has an induction hour (another term for oxidative stability) of about six to eight hours. However, Grootveld's studies suggest that when heated to temperatures of 365 degrees F (180 degrees C) or higher, oxidant production can occur as early as 60 to 90 minutes. Further research is needed to understand canola oil's complete oxidative stability profile.



4 PALM

Palm oil, derived from the flesh of the palm fruit, consists of approximately 50 percent saturated fat. It exhibits good resistance to oxidation, with an oxidative stability score of around 16 hours.

Red palm oil, in particular, is abundant in vitamin E and beta-carotene, a precursor to vitamin A. These antioxidants contribute to the oil's resistance to oxidation and its vibrant orange-red color. Prolonged heating destroys carotene, leading to a color loss in the oil.



5 COCONUT AND PALM KERNEL

Both coconut and palm kernel oil have a saturated fat content of more than 80 percent, making them highly resistant to oxidation.

However, the length of the saturated fats also influences their heat and oxygen resistance. Since both oils consist mainly of medium-chain fatty acids, they have lower melting and smoke points than other saturated fats.

The laboratory study on coconut oil mentioned above revealed that when the oil is heated to 230 degrees F (110 degrees C), it takes approximately 51 hours for the oil to generate significant amounts of oxidants. While the oxidative stability of palm kernel oil isn't known, it's chemically very similar to coconut oil, making them suitable substitutes for one another.



3 OLIVE AND AVOCADO

Both olive and avocado oils are rich in monounsaturated fatty acids, which constitute about 60 to 80 percent of their respective compositions. The high monounsaturated fat content contributes to their heat resistance.

A laboratory study showed that at 230 degrees F (110 degrees C), extra-virgin olive oil exhibits an induction period of about 32 hours, while avocado oil has an induction period of about 10 hours. However, when subjected to higher temperatures, about 356 degrees F (180 degrees C), both oils can begin to oxidize within approximately 90 minutes, according to Grootveld's studies.

Studies suggest that unrefined extra-virgin olive oil and avocado oil tend to have better resistance against oxidation than their refined counterparts. Refinement processes may remove natural antioxidants that protect against oxidation.

When purchasing extra-virgin olive oil and avocado oil, it's essential to check that it isn't adulterated. Because of the high prices of both types of oil, the industry has faced fraud issues. Previous studies of avocado oil found that 82 percent of avocado oil was adulterated or rancid.

One way to verify the authenticity of extra-virgin olive oil is by sipping it. Genuine extra-virgin olive oil contains oleocanthal, which can give you a tickling or coughing sensation when you taste the oil.



6 TALLOW, BUTTER, AND GHEE

Tallow is the rendered fat from beef or lamb and contains more than 50 percent long-chain saturated fatty acids. Both clarified butter (ghee) and regular butter are high in saturated fat, with saturated fat accounting for more than 70 percent of their total fat content.

Tallow exhibits high stability, as evidenced by the Inform Magazine report indicating an oxidative stability score of 69 hours for beef tallow. This means that when heated to 230 degrees F (110 degrees C), it took the oil 69 hours to produce significant amounts of oxidants.

Limited studies exist on the oxidative stability index of butter. However, research has shown that both ghee and regular butter produce low oxidation during the first 20 hours when heated to 230 to 250 degrees F (110 to 120 degrees C). Ghee demonstrates greater stability when heated at higher temperatures, up to 284 degrees F (140 degrees C). For ghee to possess superior preservation characteristics to tallow, it must be heated to temperatures of 266 to 284 degrees F (130 to 140 degrees C).

Tallow is highly resistant to high-heat cooking. In a study comparing tallow with lard and canola, soybean, and peanut oils heated to 365 degrees F (185 degrees C) for five hours, tallow produced the lowest peroxide-related oxidants.

Choosing the right oil for cooking needs is a complex process. But that's not all—there's more to explore.



Choose your oils based on the flavor you seek and the temperature you plan to use it at, as well as the duration of cooking.

SUPPLEMENTATION

Berberine May Reduce Atherosclerosis, Promising Study Finds

This plant compound outperformed conventional drug therapy in a research study—and has side benefits

By Allison DeMajistre

Is berberine the key to a healthy heart? A recent study published in Nature found that supplementing with berberine may prevent atherosclerosis by reducing the size of plaques in the carotid arteries.

Berberine acts on harmful bacterial substances produced in the gut during digestion that can eventually enter the bloodstream and cause vascular inflammation, ultimately resulting in atherosclerosis.

What Is Berberine?

Berberine is a compound isolated from *Coptidis rhizoma*, an herb used in traditional Chinese medicine to treat infections, diarrhea, diabetes, and hyperlipidemia. Berberine is also found in various plants used in homeopathic medicine including goldenseal, Oregon grape, bar-

berry, and Chinese goldthread.

The same group of researchers that conducted the Nature study has been investigating berberine since 2004 and has concluded that it is a "safe and effective medicine" for treating high cholesterol and Type 2 diabetes.

Blood samples from study participants indicated only about 1 percent of berberine, yet the effect of oral berberine was still significant. Hence, the researchers suspected something in the gut might make the berberine more bioavailable. They then discovered that berberine was entering the gastrointestinal tract and changing the gut microbiota.

The Role of Gut Microbiota in Cardiovascular Disease

The gastrointestinal tract, commonly called "the gut," was once recognized solely for its ability to absorb nutrients. However, we now know that it harbors more than 100 trillion microbial cells or gut microbiota that influence many factors associated with human physiology,

including nutrition, metabolism, and immune function.

Gut microbiota is now considered its own physiological functional unit. Scientists sometimes refer to it as an endocrine organ, as it plays a crucial role in regulating metabolism and maintaining health.

"Intestinal microbiota play a critical role in regulating inflammation in the body," Dr. Kevin Huffman, a board-certified bariatric physician, told The Epoch Times. "Disruption of this microbiota, either through antibiotics or dietary changes, can trigger or accelerate the development of inflammatory diseases like inflammatory bowel disease, obesity, and atherosclerosis."

Berberine can reduce insulin resistance, improve Type 2 diabetes, and prevent diabetic encephalopathy (brain disease or damage) in the most severe cases.

High Levels of TMAO Increase CVD Risk

The gut microbiota breaks down foods that are high in choline (e.g., red meat, dairy products, and egg yolks) and L-carnitine (e.g., some supplements, energy

drinks, and red meat) into a compound called trimethylamine (TMA), which is then converted into another compound called trimethylamine N-oxide (TMAO).

TMAO was initially considered a waste product. However, recent research has shown that it's a factor in the formation of atherosclerotic plaque, and that high levels of TMAO are associated with an increased risk of cardiovascular disease (CVD).

Chris Kresser, a renowned expert in functional medicine and the author of "The Paleo Cure" and "Unconventional Medicine," wrote an article challenging the idea that increased TMAO levels in the blood from red meat consumption cause atherosclerosis. He believes that further study is needed to determine whether red meat is to blame for increased TMAO levels or if a poor diet is actually the underlying cause.

Mr. Kresser explained: "In order to know whether red meat is really to blame for changes in the gut flora that increase TMAO production, we'd have to do another study with two groups: one that follows a Paleo diet rich with fruits, vegetables, and soluble fiber, as well as red meat; and another vegan/vegetarian diet with equivalent amounts of plant matter and no meat. If the Paleo diet followers still had higher levels of TMAO, this hypothesis would be a lot stronger."

Although preliminary studies don't show the exact mechanism behind TMAO and how it contributes to CVD, evidence suggests that TMAO stimulates

an inflammatory response that leads to atherosclerosis. TMAO also interferes with platelet function, promoting the formation of blood clots in the arteries.

"The gut microbiome also affects lipid metabolism and helps regulate lipid levels in blood and tissues. Changes to the microbiota can trigger dyslipidemia, cause cholesterol deposits to arterial walls, and add to atherosclerosis and other chronic cardiovascular conditions," Dr. Huffman said.

How Berberine Reduces Atherosclerotic Plaque

Reduces Gut TMAO

When the berberine study researchers discovered that the supplement was changing the gut microbiota, they wanted to know how. They found that when taken orally, berberine enters the gut microbiota and deactivates the enzymes that make TMA and TMAO. The berberine may not completely eradicate the formation of TMAO, but reduces it enough that less of the compound enters the blood vessels, thus reducing the risk of developing atherosclerotic plaque formation.

Reduces Plaque Formation in Blood Vessels

The study enrolled 49 patients. Group 1 consisted of 16 participants whose blood lipids and glucose levels were within normal range. This group served as a reference for TMA and TMAO levels.

Group 2 consisted of 21 of the study participants who were hyperlipidemia

patients with high blood glucose or lipid levels; all had been diagnosed with atherosclerosis, and none had undergone treatment before enrolling in the study. A dose of 500 milligrams of berberine was given twice daily to the 21 participants in group 2 for four months.

The remaining 12 participants (group 3) were atherosclerosis patients with elevated baseline glucose and lipid levels. These 12 participants were treated with the statin rosuvastatin plus aspirin and anticoagulant therapy of either clopidogrel sulfate or ticagrelor as needed, according to the guidelines for treating cardiovascular diseases.

Each patient's plaques were examined and analyzed before and after treatment to determine the therapeutic efficacy. There were a total of 49 plaques in group 2, and 28 of them were reduced in size after berberine treatment.

Group 2 patients showed a significant average plaque score decrease of 3.2 percent, suggesting a potential anti-plaque berberine effect in atherosclerotic pa-

tients. The group also had a decrease in blood glucose and lipid levels, and average levels of elevated total and LDL cholesterol were lowered into the normal range.

In addition to the plaque score reduction seen in group 2 participants, researchers also observed decreases of 37 percent in TMA and 35 percent in TMAO in participants' feces.

Group 3 patients treated with conventional drug therapy had 54 plaques. After four months of using conventional drug therapy, the group had an average plaque score increase of 1.9 percent.

The researchers concluded that taking 500 milligrams of berberine twice daily could effectively prevent plaque development in atherosclerosis by decreasing levels of TMAO in the gut and, ultimately, in the blood.

Other Berberine Studies

A systematic review and meta-analysis concluded that berberine can help to reduce obesity and lower lipid levels by reducing total glucose, and total and

LDL cholesterol, and by increasing HDL cholesterol. The review also found that berberine can reduce insulin resistance, improve Type 2 diabetes, and prevent diabetic encephalopathy (brain disease or damage) in the most severe cases.

Berberine Recommendations

Since plants containing berberine are uncommon in the United States, most people will add it to their diet as a supplement.

While berberine is considered safe for most adults, Dr. Huffman recommends consulting a health care provider before taking berberine supplements, "especially if already on medications like cyclosporine, dextromethorphan, azithromycin, clarithromycin, macrolide antibiotics, blood pressure, and cholesterol medications, sleeping aids, as well as blood thinners."

Pregnant women and breastfeeding mothers, as well as people with diabetes, should avoid taking berberine supplements, he said.

Additional and more extensive clinical trials are needed to determine the benefits of berberine for treating atherosclerosis. The potential cardiovascular benefits could help reduce or eliminate the extensive drug regimens for people suffering from cardiovascular diseases.

Allison DeMajistre, BSN, RN, CCRN is a freelance medical writer for The Epoch Times. She is a registered nurse who previously worked in critical care. She specializes in cardiology-related topics.

WESTEND62/GETTY IMAGES



Spending hours hunched over our devices is taking a toll on our necks that needs to be counteracted.

Easy Exercises to Combat Chronic Pain

PART V | STRENGTHEN THE NECK TO RESOLVE PAIN

These 6 easy exercises can help you alleviate ongoing neck pain

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.

By Kevin Shelley

Whether you've slept in an awkward position all night or looked down at your cell phone for too long—your neck muscles will probably let you know.

Neck pain, or cervicgia, is one of the most common pain presentations in the country and the fourth-leading cause of disability. When neck pain strikes, it can be highly disruptive to our lives.

Exercise can help decrease pain, increase mobility, and strengthen the muscles of the neck.

Common Causes of Chronic Neck Pain

Ryan Garratt, a chiropractor and certified selective functional movement specialist, told The Epoch Times that one of the largest groups in his practice includes patients seeking care for chronic neck pain.

Though pain can be severe enough to limit function and decrease quality of life, it isn't always related to an underlying medical condition or diagnosis. The source of the pain is often related to functional patterns, muscle weakness, mobility deficits, or stability and motor control deficits.

Functional Patterns

Because the head accounts for about 7 percent of our total body weight, misalignments and poor posture can impact how the rest of our body functions. Abnormal head positioning was shown in a systematic review to have a significant effect on muscle activity, breathing patterns, ability to sense movement, and yes—neck pain.

Our modern technology-driven culture has significantly contributed to an increase in chronic neck pain. Due to cell phones and computers, most people spend hours every day in repetitive postures that can initiate or exacerbate neck pain.

Instead of merely focusing on bad postures, Mr. Garratt recommends adjusting your posture throughout the

day and making an effort to move using a full range of motion.

"Your next posture is your best posture, and movement is key," he said.

Muscle Weakness

Neck muscles can become weak due to sedentary lifestyles or habitual behaviors that limit neck movement and exercise. Weak neck muscles can lead to alignment and movement limitations that enable neck pain to develop.

Thankfully, a regimen of safe, simple, and practical exercises can help reduce or eliminate neck pain, while also helping to maintain good posture.

Combining Exercise With Chiropractic Care

Chiropractic care can be a useful adjunct to exercise when it comes to managing or alleviating neck pain. A chiropractic physician can shed light on the cause of neck pain, then perform spinal manipulation that can improve mobility and restore range of motion. Depending on your particular neck issues, a chiropractor can tailor an exercise program specifically for you.

The International Journal of Occupational Medicine and Environmental Health published a review of 41 randomized controlled trials that aimed to develop effective treatment recommendations for chronic neck pain. Researchers concluded that the best treatment interventions for both acute and chronic neck pain included chiropractic manipulation and manual therapy combined with exercise.

While it's important to be aware of functional patterns that may be responsible for common neck problems, regular exercise can strengthen your neck muscles and provide greater mobility. Combining exercise with chiropractic care could make a world of difference in reducing and preventing neck pain.

Next Week: 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.

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.

MORPHART CREATION/SHUTTERSTOCK

THE BONES AND MUSCLES OF THE NECK

The neck, also called the cervical spine, includes the first seven vertebrae of the spine. The muscles of the neck are divided into three distinct areas:

Anterior

The anterior muscles lie along the front of the neck and help rotate the head and flex the neck both laterally and to the front, such as when you look down or look down to the side.



Lateral

The lateral muscles lie along the side of your neck and help you to turn your head from side to side, facilitating movements of the cervical spine.

Posterior

The posterior muscles lie along the back of the neck and help you to extend your head when you look up.



Sedentary work and recreation can leave neck muscles weak and vulnerable.

ALL PHOTOS BY MARIE HE/THE EPOCH TIMES UNLESS OTHERWISE NOTED

COMMON EXERCISES FOR CHRONIC NECK PAIN

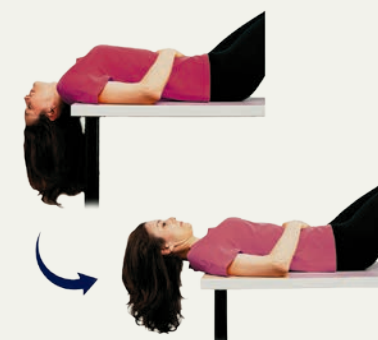
Neck exercises should focus on both strengthening and mobility; therefore, Mr. Garratt recommends isometric exercises for strengthening and stability and range-of-motion exercises for neck mobility.

Isometric exercises tense the muscles but without actual movement. Planks are a popular example of isometric exercise. For the neck, these exercises should always be performed in conjunction with the active movements of range-of-motion exercises. Mr. Garratt recommends alternating these exercises by doing one round of isometric exercises, then one round of full movement or range-of-motion exercises.

RANGE-OF-MOTION EXERCISES

Range-of-motion exercises provide mobility and allow muscle strengthening through a full range of motion. While neck movements should include a full range of movement, they should never go past the point of discomfort.

"You're allowed to flirt with pain, just don't take it out to dinner," Mr. Garratt said.



1 SUPINE NECK FLEXION

Step 1: Lie flat on your back on a bed or strong table with your head completely over the side.

Step 2: Slowly relax your head, allowing it to sag toward the floor.

Step 3: Slowly bring your chin all the way up to your chest or as far as you can.

Step 4: Hold for 10 seconds.

Step 5: Slowly lower your head all the way back down, pause for one second, and then start back up again.

Move slowly, taking two seconds to move in either direction. Try to do three to six sets of 10-second holds. You may only be able to do a few repetitions at first, which is acceptable. Keep your shoulders flat on the bed as you move.



2 PRONE NECK EXTENSION

Step 1: Lie on your stomach across your bed with your head completely over the side.

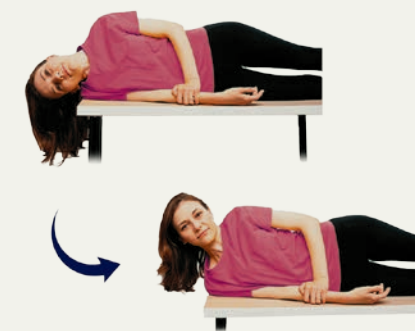
Step 2: Slowly relax your head, allowing it to sag toward the floor.

Step 3: Slowly bring your head up as far as you can and look straight toward the wall.

Step 4: Hold for 10 seconds.

Step 5: Slowly lower your head all the way back down, pause for one second, then start back up again.

Move slowly, taking two seconds to move in either direction. Try to do three to six sets of 10-second holds. If you can only accomplish a couple of repetitions at first, keep at it until you are able to reach your goal.



3 SIDE-LYING LATERAL NECK FLEXION

Step 1: Lie on your side in bed or on the floor with your head over the side.

Step 2: Slowly relax your head all the way down, allowing it to sag toward the floor.

Step 3: Slowly bring your head up and your ear toward your shoulder.

Step 4: Hold for 10 seconds.

Step 5: Slowly lower your head all the way back down, pause for one second, and then start back up again.

Step 6: Roll to your other side and repeat the exercise on the other side.

Move slowly, taking two seconds to move in either direction. Try doing three to six sets with 10-second holds. You may find that your head goes further to one side than the other at first, which is common. Work on making movements the same on both sides over time.

ISOMETRIC EXERCISES

Isometric exercises allow you to exercise your muscles without having to move your head, helping you to strengthen muscles while avoiding potentially painful movements.

Don't push too hard into the movements; pay attention to what your neck tells you. Don't push into or through pain, and stop whenever you need to. Keep your head tall and upright for all of these exercises.



4 RESISTED FLEXION

This exercise strengthens the front of the neck and is beneficial for balancing it with the back of the neck.

Step 1: Sit upright in a chair for stability.

Step 2: Place one of your palms on your forehead.

Step 3: Push your forehead into your palm while resisting the movement with your hand. Your head shouldn't move.

Step 4: Push against the resistance for 10 seconds and then relax.

Step 5: Perform eight to 10 repetitions and try to do three to six sets.

This movement can be performed in a standing or sitting position. The direction of the push should be straight out instead of down.



5 RESISTED EXTENSION

This exercise strengthens the back of the neck to support good neck posture.

Step 1: Sit upright in a chair for stability.

Step 2: Place one of your palms on the back of your head.

Step 3: Push your head into your palm while resisting the movement with your hand. Your head shouldn't move.

Step 4: Push against the resistance for 10 seconds and then relax.

Step 5: Perform eight to 10 repetitions and try to do three to six sets.

Be careful not to rotate your head to either the left or the right; keep your nose pointing forward and push straight back.



6 RESISTED LATERAL FLEXION

This exercise increases neck stability and coordination during side-to-side head movements.

Step 1: Sit upright in a chair for stability.

Step 2: Place one of your palms on the same side of your temple.

Step 3: Push your temple into your palm while resisting the movement with your hand. Your head shouldn't move.

Step 4: Push against the resistance for 10 seconds and then relax.

Step 5: Repeat the exercise on the other side.

Step 6: Perform eight to 10 repetitions and try to do three to six sets.

Be careful not to rotate your head to either the left or the right; keep your nose pointing forward. It's important not to slump during this movement and to sit as upright as possible.

ALL PHOTOS BY GETTYIMAGES

WOMEN'S HEALTH

Breast Implant Illness: Controversial and Devastating



Many patients are not aware of the potential risks associated with breast implants because the condition is still elusive to many doctors.

Continued from Page 1

ladies' stories, it clicked," she said. "I could see myself in so many of these ladies' stories."

Breast implants and their failure have fed personal horror stories related to a range of symptoms—and doctors telling these women that it's all in their heads.

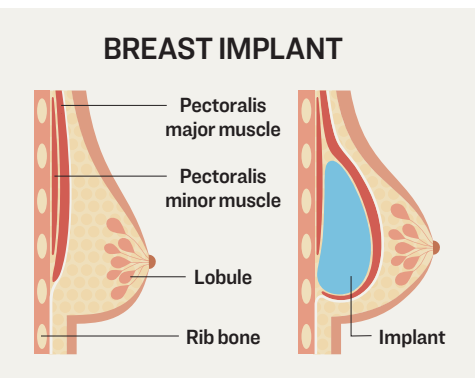
What is Breast Implant Illness?

Although not an official disease diagnosis, breast implant illness (BII) is a complex collection of symptoms that occur in previously healthy women after having breast implants. It can affect the entire body and include physical and psychological symptoms that are often severe and debilitating. The symptoms are so numerous and varied that it's difficult for doctors to arrive at a diagnosis, and it confounds many of them.

In 2020, the top 10 symptoms reported to the Food and Drug Administration's (FDA's) medical device report database experienced by patients with breast implant illness were fatigue (49 percent), brain fog (25 percent), joint pain (25 percent), anxiety (24 percent), hair loss (21 percent), depression (19 percent), rash (18 percent), autoimmune diseases (18 percent), inflammation (18 percent), and weight problems (18 percent).

Because symptoms can be so diverse, vague, and disconnected, it often takes time for women to make the connection that they might be a result of their implants. Doctors, too, often don't make the association, and many are unaware of BII.

For more than a decade, between



2006 and 2019, breast augmentation surgery was the most popular cosmetic surgical procedure in the United States, and according to recent statistics, there were 364,753 breast augmentation surgeries in the United States in 2021, making it second only to liposuction in popularity, though The American Society of Plastic Surgeons say the numbers are dropping.

With so many women having breast augmentation, the number who experience symptoms could be significant.

A Controversial Diagnosis

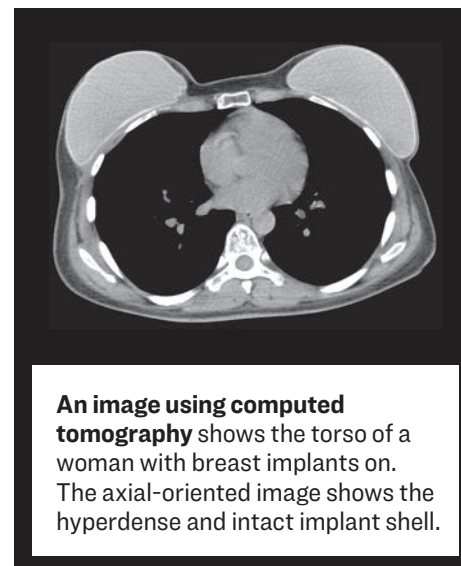
The issue is complicated by the fact that some doctors, surgeons, and other medical professionals don't believe that BII is real, with many chalking it up to a kind of hysteria fueled by social media.

"Breast implant illness (BII) is a condition characterized by elusive diagnostic criteria and self-reported diverse disabling and distressing physical and psychological symptoms," a research review published in *Aesthetic Plastic Surgery* in 2022 titled "Breast Implant Illness (BII): Real Syndrome or a Social Media Phenomenon?" noted.

Breast implant illness (BII) is a complex collection of symptoms that occur in previously healthy women after having breast implants.

The authors wrote that the condition is "perhaps becoming the most controversial subject in aesthetic and reconstructive breast surgery, generating heated debates between those who do not believe such a condition exists and those who demand its acceptance as a recognized diagnosis." There's no single diagnostic test for breast implant illness, and many women who suspect that they have symptoms caused by their breast implants turn to their doctors looking for answers. Unfortunately, many women are told that there's nothing wrong with them, that their implants could not possibly be the cause of their symptoms, or that their symptoms are all in their heads.

Because BII isn't well understood and the symptoms are so diverse, many doctors either don't know about the condition or haven't connected the dots between the wide range of symptoms and the possibility that breast implants could be the cause. Other doctors and surgeons don't believe it's a real condition.



An image using computed tomography shows the torso of a woman with breast implants on. The axial-oriented image shows the hyperdense and intact implant shell.

The FDA, however, is aware of BII and has been since at least 2019, when it released a statement that read, "The current evidence supports that some women experience systemic symptoms that may resolve when their breast implants are removed, referred to by some patients and health care professionals as breast implant illness."

In 2006, the FDA ended a 14-year ban on silicone-gel breast implants despite decades of debate over safety concerns and a mountain of litigation from women who'd claimed the implants leaked and made them sick, causing conditions that included rheumatoid arthritis and cancer.

At the time, the FDA approved the manufacture of implants by two California companies, Mentor and Allergan, for breast reconstruction and cosmetic breast augmentation and limited the cosmetic use of the implants to women aged 22 and older.

Recent Recall of Breast Implants

In 2019, the FDA called for a worldwide recall of all textured breast implants from the pharmaceutical company Allergan. The FDA requested Allergan recall the implants because of a drastic increase in a rare and deadly form of cancer called breast implant-associated anaplastic large cell lymphoma that's been associated with Allergan's Biocell textured implants.

Breast implant-associated anaplastic large cell lymphoma is an immune system cancer that develops in the scar tissue capsule that forms around the breast implants.

Of 1,130 cases of the disease reported to the FDA, 953 patients had Allergan implants, and of the 59 deaths reported from the disease, 34 of the deceased patients had Allergan implants as of April 2022, according to FDA statistics.

Similar recalls have occurred in France, Australia, and Canada, and Allergan halted the sale of its textured implants in Europe.

The FDA first identified a link be-

tween breast implants and cancer in 2011, noting that recent reports had suggested that women with breast implants were more susceptible to being diagnosed with anaplastic large cell lymphoma.

The worldwide recall fueled new debate over breast implant safety and the potential cancer risk and shone a light on the growing number of women who've been experiencing breast implant illness.

On October 24, 2019, the FDA issued a black box warning for breast implants; a black box warning is the most serious warning mandated by the FDA and the last step before a ban. The warning is intended to inform the public about the risk that breast implants can cause systemic symptoms (BII) in some patients and also about the connection between textured implants and breast implant-associated anaplastic large cell lymphoma.

Women Helping Women

Not getting the help that they needed from the medical community, tens of thousands of women who suffer from the condition have coalesced on social media to share their stories and support each other through the often confusing and painful process—getting the implants, their removal (explant surgery), and the long road to recovery.

Danica Patrick opened up recently in a series of interviews about her experience with BII; she urged women with breast implants to have them removed and to trust their intuition when they first suspect something is wrong. In an interview with *People* magazine, the former NASCAR driver said that she made the decision to get breast implants in 2014 in her quest to attain "an ideal body."

Within a few years, Ms. Patrick began experiencing symptoms that she said included fatigue, weight gain, hair loss, hormonal problems, heavy metal toxicity, dysbiosis, and leaky gut, which led to a diagnosis of BII and the removal of her implants in March 2022. She said that it helped her to go on YouTube and other social media platforms to learn about so many other women's BII stories.

Recovery After Explant Surgery

Through recommendations from women in the group, Mrs. Durkee was able to find a surgeon qualified to perform the explant surgery to safely remove her breast implants. Removal of the implants and the capsule, which is the scar tissue that grows around the implant, is what many surgeons and countless women believe must be done to make a full recovery.

Within months, Mrs. Durkee had

the surgery; two weeks afterward, she made a Facebook post that read:

"I will be two weeks post op tomorrow, and I can tell you that the joint pain I had is gone, the brain fog is lifting, heart palpitations are minimal and only if I have some coffee, dry eyes are gone, the blurred vision is better, red eyes clear, and the extreme thirst I had is gone. I'm pretty happy with that for only two weeks out. I'm still recovering, so I can't really say about the fatigue yet, but I am hopeful."

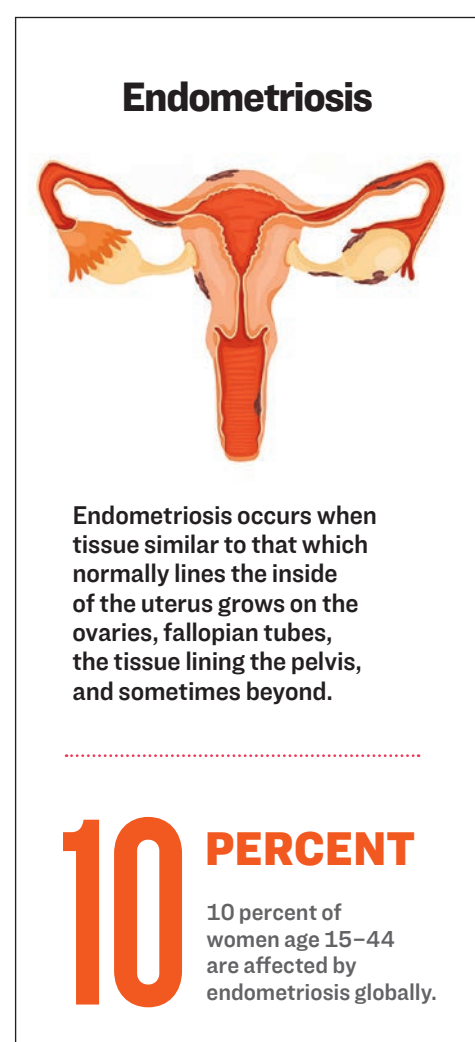
Symptoms of Breast Implant Illness

BII is associated with a variety of symptoms that can include, but aren't limited to:

- joint and muscle pain
- brain fog
- rashes and other skin problems
- chronic fatigue
- problems with memory and concentration
- sleep problems and disturbances
- depression
- anxiety
- panic attacks
- allergies
- thyroid problems
- gastrointestinal issues
- recurring infections
- persistent viral and bacterial infections
- palpitations
- frequent candida or urinary tract infections
- autoimmune diseases such as multiple sclerosis and Hashimoto's disease
- diagnosis of cancers
- rapid weight loss or gain
- shortness of breath
- burning sensation
- hair loss
- metallic taste in the mouth
- numbness and tingling in the upper and lower limbs
- vertigo
- headaches
- migraines
- tinnitus (ringing in the ears)
- difficulty swallowing
- fibromyalgia
- sudden food intolerances and food allergies, and
- an overwhelming feeling of doom or that you're going to die

Researchers Link Gut Bugs to Endometriosis

New evidence suggests certain bacteria in the gut microbiome contribute to endometriosis



Endometriosis

Endometriosis occurs when tissue similar to that which normally lines the inside of the uterus grows on the ovaries, fallopian tubes, the tissue lining the pelvis, and sometimes beyond.

10 PERCENT
10 percent of women age 15–44 are affected by endometriosis globally.

By George Citroner

Endometriosis, a debilitating condition that affects fertility in many women, has no cure or clear preventative. However, a new study from Japan offers hope, as it has uncovered a possible link between endometriosis and a specific type of bacteria.

This finding implies that targeted antibiotic treatment could be key in curing this chronic ailment.

Endometriosis affects about 11 percent of women between the ages of 15 and 44 in the United States, and 10 percent of women globally. It can lead to severe pain because abnormal tissue growth occurs outside the uterus, affecting organs such as the ovaries and fallopian tubes.

Until now, available treatments have focused on symptom management using medications such as non-steroidal anti-inflammatory drugs (NSAIDs) and painkillers such as acetaminophen, which carry their own health risks—including the possibility of infertility.

A Bacterium Linked to Endometriosis

By analyzing 76 healthy women and 79 women with endometriosis, the

researchers found that 64 percent of those with endometriosis had *Fusobacterium* in their uterine lining, compared with only 7 percent of the healthy women. *Fusobacterium* is a naturally occurring type of bacteria commonly found in the mouth, gut, and vaginal region.

Diagnosing endometriosis can be lengthy, often taking about 10 years from the onset of symptoms.

This bacterium has also been associated with colorectal cancer and inflammatory conditions such as periodontitis, or gum disease.

Researchers believe *Fusobacterium* is responsible for the physical changes seen in the disease. To confirm their findings, they infected female mice with *Fusobacterium* and treated them with antibiotics, specifically metronidazole and chloramphenicol. They observed that the treatment reduced the size and frequency of lesions commonly associated with endometriosis.

According to the study's findings, *Fusobacterium* is a critical factor in stimulating the growth and aggregation of connective tissue cells called fibroblasts, which contribute to the formation of lesions in endometriosis.

Therefore, the study's authors suggest that by targeting and eliminating *Fusobacterium* through antibiotic treatment, it may be possible to disrupt the processes that lead to the progression and symptoms of endometriosis, according to lead study author Dr. Yutaka Kondo, professor at the Graduate School of Medicine at Nagoya University.

"Our data provide a strong and novel rationale for targeting *Fusobacterium* as a nonhormonal antibiotic-based treatment for endometriosis," Dr. Kondo said in a statement.

He said that eliminating this bacterium with antibiotics could be a practical approach when used for women who test positive for the infection, and that "such women could be easily identified by vaginal swab or uterus swab."

The Most Common Theory on the Cause of Endometriosis

There are various theories regarding the cause of endometriosis, Dr. Adi

Davidov, associate chair of obstetrics and gynecology at Northwell Staten Island University Hospital in New York, told *The Epoch Times*.

"The most prevalent theory is that of retrograde menstruation," Dr. Davidov said. Women with anatomical obstructions that impede the normal flow of menstruation may have an increased risk of developing endometriosis, he said, adding that surgical correction of these anatomical obstructions, such as a transverse vaginal septum or an imperforate hymen, could potentially reduce risk.

Diagnosing endometriosis can be lengthy, often taking about 10 years from the onset of symptoms. Furthermore, the age at which symptoms begin can influence the time it takes to receive a proper diagnosis; the younger a woman is when symptoms begin, the longer it may take to diagnose the condition.

Common symptoms of endometriosis include excruciating menstrual cramps, abdominal or back pain during or between periods, pain during sexual intercourse, and heavy bleeding during menstrual periods.

Microbiome May Influence Endometriosis Risk

Researchers have been exploring the role of microbes in endometriosis. Ramakrishna Kommagani, an associate professor of pathology at Baylor College of Medicine with a doctorate in biomedical sciences, and his team recently researched the gut micro-



ALL PHOTOS BY SHUTTERSTOCK

The pain of endometriosis can be severe—a physically debilitating and emotionally draining condition.

biome's influence on endometriosis.

The gut microbiome is a community of microbes living inside the gut that are typically beneficial by aiding digestion and producing metabolites used by the body.

Using a mouse model, the researchers found evidence that suggested that an altered gut microbiome could play a crucial role in the progression of the disease. By using antibiotics to eliminate the gut microbiome in test animals, researchers observed that mice without a gut microbiome had smaller lesions than untreated mice.

Furthermore, when gut

microbiome-free mice were implanted with gut microbes from mice with endometriosis, their lesions grew to a similar size as those in mice that still possessed their original microbiome.

Bowel issues like colitis and inflammatory bowel syndrome often coexist with endometriosis.

"We are interested in determining whether changes in the gut microbiome could affect bowel conditions and the possibility of controlling them by modifying the microbiome or with their metabolites," Mr. Kommagani said in a statement.

While this research didn't establish a direct link between uterine microbes and endometriosis, the team identified a distinct signature of metabolites in the feces of mice with endometriosis. These metabolites, particularly quinic acid, enhanced cellular proliferation and lesion growth in endometriotic cells and mice.

These findings indicate that specific communities of microbiomes or their metabolites might contribute to the progression of endometriosis. Modifying the composition of microbiomes could potentially offer therapeutic benefits for treating endometriosis in humans. "We are currently investigating this possibility," Mr. Kommagani said.

HERBAL FIRST AID

Treat Acute Injuries With Natural Medicine

PART V PEOPLE'S PASTE: A TRADITIONAL REMEDY WITH PROVEN INGREDIENTS

First aid for minor cuts, burns, insect bites, and rashes

In this series, "Herbal First Aid Kit," we look at natural alternatives to modern first aid kits, which usually consist of medications made from synthetic chemicals. If you're looking for natural solutions for acute conditions, these herbs are safe, effective, and easily available.

By Sina McCullough

My first experience with people's paste was when a mountain lion bit my dog. The bite punctured through the ear, as well as the skin on his head, exposing the bone.

I immediately applied compresses, but the bleeding persisted. Suddenly, I remembered a friend had previously given me an herbal remedy designed to stop bleeding. I found the remedy and packed it into both wounds. The bleeding stopped within seconds!

Over the next few days, I continued to reapply the remedy as needed. Within a few weeks, the wounds had completely healed. No antibiotics or stitches had been required. Even the veterinarian was dumbfounded that an herbal remedy could be so powerful.

Since that moment, I have been hooked on people's paste!

What Is People's Paste?

People's paste is a combination of herbs that were used by ancient cultures to stop bleeding, disinfect

People's paste is a combination of herbs that were used by ancient cultures to stop bleeding, disinfect wounds, and heal cuts and punctures.

Goldenseal has been used to treat skin infections for centuries. Native Americans used it for wounds, ulcers, digestive disorders, skin ailments, and more.



wounds, and heal cuts and punctures. In an emergency, it can take the place of stitches.

While several recipes for people's paste exist, my favorite herbal combination includes goldenseal, slippery elm bark, comfrey, and myrrh gum.

Goldenseal (Hydrastis canadensis) has been used for centuries in traditional medicine to treat skin infections. Native Americans have used goldenseal for healing wounds, as well as ulcers, digestive disorders, skin and eye ailments, and cancer.

Goldenseal contains berberine, which is used in modern medicine to combat infections. Berberine has antimicrobial, anti-inflammatory, and antioxidant properties, making goldenseal a great choice for healing cuts and other skin wounds.

Slippery Elm Bark (Ulmus rubra) is a tree native to North America. The inner bark has been used in traditional medicine as a remedy for wounds, as well as fever, cough, sore throat, hemorrhoids, and digestive disorders.

Native Americans would mix the inner bark from twigs and branches with water to create a sticky material known as mucilage, which was used topically to treat inflammatory and traumatic skin conditions, such as cuts and wounds.

During the American Revolution, surgeons used slippery elm bark to heal gunshot wounds.

Slippery elm bark contains antioxidant and antibiotic properties. A 2019 study concluded that slippery elm bark was an effective antibacterial against streptococcus, a major bacterial cause of pharyngitis (sore throat).

The mucilage in slippery elm provides a natural protective layer that guards the wound against infection or irritants.

Due to the combined antibacterial, antioxidant and protective properties of slippery elm bark, it's a great remedy for wounds and inflammatory skin conditions, such as psoriasis and burns.

Comfrey (Symphytum officinale) is reportedly an effective topical treatment for pain, swelling, inflammation, sprains, contusions, and strains, as well as blunt trauma and skin wounds.

A 2012 study published in the German journal Pharmazie reported that comfrey repaired damaged tissue in rats by decreasing inflammation as well as depositing new collagen.

"This work clearly demonstrates that comfrey leaves have a wound healing activity," the authors concluded.

Comfrey has been reported to be safe for treating both intact and broken skin.

Myrrh Gum Myrrh was one of three gifts that the wise men gave to Jesus at his birth, indicating reverence for the plant.

The use of myrrh gum (Commiphora guidottii or Commiphora myrrha) in traditional medicine to treat skin wounds is well documented. Recently, science has provided evidence to substantiate that claim.

Myrrh contains anti-inflammatory and analgesic properties, which can help reduce swelling and pain.



ALL IMAGES BY SHUTTERSTOCK UNLESS OTHERWISE NOTED



The combination of herbs used in people's paste can help to heal many skin problems, without the need for chemicals and antibiotics.

IMAGE: GETTY IMAGES

A 1992 study concluded that myrrh has antibacterial effects against Staphylococcus aureus, which is one of the most common bacterial wound pathogens.

Myrrh healed wounds in mice faster than it took untreated mice to heal, according to a 2015 study published in BMC Complementary Medicine and Therapies. The researchers declared myrrh a "good candidate for the preparation of natural therapeutic agents for wound management, supporting its traditional use as a remedy for wounds."

Additionally, the antibacterial and antifungal activities of myrrh were declared "comparable with the standard antibiotics ciprofloxacin and griseofulvin, respectively."

As a plant-based remedy with rare side effects, myrrh may be a better alternative than ciprofloxacin, which can cause sudden kidney infections, as well as joint and muscle pain. Griseofulvin's potential side effects include tiredness, weakness, joint and muscle pain, diarrhea, fever, and confusion.

When to Use People's Paste

You can avoid man-made chemicals and still experience relief from skin issues by using people's paste.

People's paste can be used for these acute situations: minor cuts, minor burns, skin punctures, bruises, boils, rashes, and itching from insect bites.

Different Forms to Choose From

People's paste powder can be purchased online or made in your kitchen. My favorite recipe is included below.

A Word on Quality

Whether purchasing or making your own people's paste, choose ingredients that are organic or haven't been sprayed by pesticides or herbicides.

Precautions and Possible Interactions

While not common, skin reactions have occurred. Therefore, when using for the first time, apply a small amount to the skin. If no irritation or negative reaction occurs, apply liberally as needed.

Consult with a health care provider before using people's paste if you're pregnant or nursing. If sensitive or allergic to any of the ingredients, don't use.



MY PEOPLE'S PASTE RECIPE

MAKES 8 TABLESPOONS

- 2 tablespoons goldenseal powder
- 2 tablespoons slippery elm bark powder
- 2 tablespoons comfrey powder
- 2 tablespoons myrrh gum resin, blended into a powder

Mix all ingredients in a glass bowl until thoroughly combined.

Store in an airtight glass container.

DOSAGE

FOR EXTERNAL USE ONLY. Apply directly to skin.

If possible, clean wound first using soap and water.

To use dry: Apply dry powder directly to cut or wound, making sure to gently pack the powder into the wound. Apply pressure if needed.

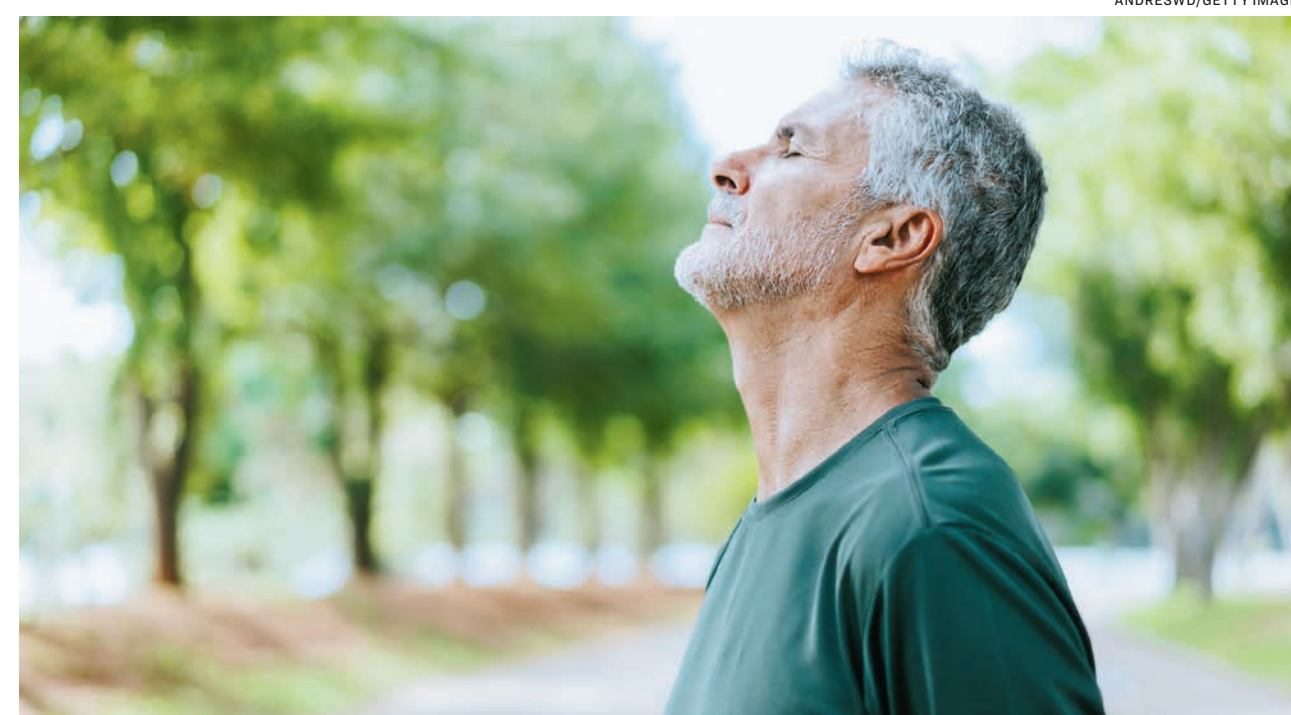
To use wet: Add raw honey, warm water, or oil to dry powder until a paste forms. Apply to cut or wound (apply pressure if needed). Let dry to create a "scar."

Once people's paste is applied to the wound, cover with gauze or a band-aid, if desired. If people's paste falls off or rubs off, gently re-apply.

Leave the wound alone until it fully heals, and don't get it wet; people's paste forms a natural band-aid or "scar" over the wound, so don't pick at it.

Next Week: The ancient Egyptians referred to aloe as "the plant of immortality." Modern scientists call it an anti-tumor, anti-inflammatory, anti-bacterial, antiseptic skin protector.

Dr. Sina McCullough is the creator of the online program "Go Wild: How I Reverse Chronic & Autoimmune Disease," and author of "Hands Off My Food" and "Beyond Labels." She has a doctorate in nutrition from the University of California-Davis. She is a master herbalist, Gluten Free Society certified practitioner, and a homeschool mom of three.



Breathwork is a gateway to living with less stress, which reduces the risk of developing dementia.

AGE WELL

Can Breathing Exercises Reduce the Risk of Alzheimer's?

New study finds daily breathwork techniques can lower protein peptide levels linked to dementia

By Ayla Roberts

Simple breathing exercises have long been associated with stress and anxiety reduction. But new research suggests that implementing breathwork into one's daily routine may also reduce the risk of developing Alzheimer's disease.

The study, conducted at the University of Southern California and published in Nature Scientific Reports, concluded that adults of all ages can reduce the levels of amyloid-beta peptides in their bloodstream through daily breathing exercises. Increased levels of amyloid-beta peptides in the blood are a known contributor to Alzheimer's disease and dementia.

Study Findings Explained

The study began with a few basic questions surrounding beta-amyloid peptide production, its clearance within the body, and why amyloid plaques develop in the brain, particularly in older adults. The researchers specifically wanted to know how the clearance of amyloid-beta peptides could be inhibited or encouraged within the brain and central nervous system.

108 participants were asked to perform breathing exercises for twenty minutes, twice a day, for four weeks. Half of the participants were told to think of calming scenarios, such as relaxing on a beach. The other half were instructed to pace their breathing to the rhythm of a pacer, which was displayed on a computer screen. The goal was to increase the heart rate fluctuations caused by breathing. Blood tests were performed before starting the breathing exercises and again after four weeks of consistent implementation.

Half of the participants were ages 18-30, while the other half were ages 55-80. Despite the wide difference in ages, all participants experienced similar positive effects of the breathing exercises on their amyloid-beta peptide levels.

The study participants who paced their breathing using the rising and falling indicator on the computer screen had decreased levels of amyloid-beta peptides, a known contributor to Alzheimer's disease, in their blood. The participants who thought peaceful thoughts experienced a higher level of amyloid-beta peptide than the paced breathing group. However, both groups experienced overall lower levels of amyloid-beta peptide compared to when they started.

The researchers determined that these results were due to increased heart rate variability, which was highest in the paced breathing group. This study is the first of its kind to determine that behavioral interventions can directly decrease the amount of amyloid-beta peptides within the blood. So far, breathing exercises are the only behavioral intervention proven to decrease amyloid-beta peptide levels.

The study did not assess how long the effects would last or if the results would be sustained or even improved through months of practicing the breathing exercises. It is also unclear if there is a certain level of amyloid-beta peptides to aim for that would provide an ideal preventative threshold for Alzheimer's. Still, the study yielded promising results for the future of Alzheimer's disease prevention.

What Are Amyloid-Beta Peptides?

Amyloid-beta peptides are proteins present in numerous tissues within the body, particularly neuron synapses inside the brain. Amyloid-beta peptides are a normal product of cellular metabolism and are primarily responsible for regulating the formation and repair of synapses, neuron transport, and iron export.

Because of their high rates of presence within neurons, amyloid-beta peptides play a crucial role in the development of Alzheimer's disease. Amyloid-beta peptides are the primary components of amyloid plaques, formations that affect brain cell signals and often result in destruction of brain tissue. When amyloid-beta peptides are produced in excess, these plaques can accumulate rapidly within the brain, inhibiting cognition, memory, and setting the stage for Alzheimer's disease development.

In healthy adults who show no signs of amyloid-beta peptide buildup in the brain, increased levels of amyloid-beta peptides in the bloodstream indicate a higher risk of Alzheimer's development in the future.

Breathwork is an easy, cost-effective way to decrease one's risk for Alzheimer's disease without having to worry about side effects or interactions with other medications or treatments.

How Breathing Exercises Affect Amyloid-Beta Peptide Levels

Biofeedback, the training used in this study, teaches people how to control certain bodily functions that are usually automatic, such as heart rate and breathing. Biofeedback training is considered safe and does not cause side effects, making it easy to incorporate into daily routines.

Breathing has a direct influence on heart rate variability. When we inhale, our heartbeat increases and when we exhale, our heartbeat decreases. Heart rate variability is controlled by the vagus nerve and indicates proper function of the parasympathetic nervous system.

Breathing is known to affect heart rate, which in turn influences the parasympathetic nervous system and the way the brain produces and clears peptide proteins. Controlled breathing creates larger heart rate oscillations, allowing the parasympathetic nervous system to clear amyloid-beta peptides more efficiently. The breathing exercises conducted during this study had a noticeable effect on the volunteers' heart rates. This resulted in a related drop in levels of amyloid-beta peptides in the participants' bloodstream over a four-week period.

The study findings suggest that integrating biofeedback practices earlier in

A devastating condition, Alzheimer's can impact the lives of the whole family.

JESADAPHORN/SHUTTERSTOCK

life has the potential to ward off late-life diseases. Regardless, the research suggests that even older adults can benefit from biofeedback exercises that promote heart rate variability.

How Aging Affects Amyloid-Beta Peptide Levels

The body requires balance between both the sympathetic and parasympathetic nervous systems in order to function at an optimal level. When we are young, our bodies tend to transition quite seamlessly between the two systems. But as we get older, our easy access to the parasympathetic nervous system decreases and our heart rate variability drops, sometimes by as much as 80 percent. This leads to increased production and decreased clearance of amyloid-beta peptides within the body.

The surplus amyloid-beta peptides build up in the brain, forming plaques that cause damage to the brain tissue. Prior research has determined that the presence of excess amyloid-beta peptides increases the likelihood of Alzheimer's disease occurrence, especially in older adults.

A Glimmer of Hope for Alzheimer's prevention

5.8 million Americans are living with Alzheimer's disease and that number is expected to nearly triple by 2060. Approximately 55 million people have dementia worldwide. Alzheimer's disease is degenerative, has no cure, and causes a significant decrease in memory, speaking ability, and self-care ability. It is an extremely stressful medical condition, for both patients and caregivers alike.

This research indicates that breathwork is an easy, cost-effective way to decrease one's risk for Alzheimer's disease without having to worry about side effects or interactions with other medications or treatments.

This study also confirmed that conducting a simple blood test to measure the levels of amyloid-beta peptides within the blood could be an affordable way for healthcare providers to determine a person's Alzheimer's risk or even assist in making an Alzheimer's diagnosis.

More in-depth research is certainly warranted, but this is a promising first step toward understanding impactful methods of Alzheimer's prevention.

Ayla Roberts is a registered nurse and freelance writer. She holds both a bachelor's and master's degree in nursing and has worked in a variety of clinical and academic roles.





Compulsive gambling can leave debts that haunt families long after the gambler has changed their ways.

▲ Compulsive gambling is typically a way to soothe issues like depression, anxiety, or other problems the person cannot face—including their debts from gambling.

ADDICTION

Gamblers Crushed by Losses Find Hope and Recovery

Gambling has become an easily-accessible—and easily hidden—vice that ruins the lives of countless Americans

Continued from Page 1

what players are supposed to do. And every compulsive gambler knows what happens as the losses mount.

“Once losing becomes a problem, it transitions into a desperation, a desire to increase those betting limits, with the excuse that you’re going to win back the money you lost,” Mr. Hartwell said.

The gambling industry exploded with the legalization of sports betting in many states in recent years. The hidden cost has also risen—a high rate of suicide, depression, and criminal activity by compulsive gamblers. A study published in the *Journal of Behavioral Addictions* in 2018 found that people with a gambling disorder are 15 times more likely to die of suicide.

This often-unseen addiction can be ruinous, but there are successful approaches that countless gamblers have used to regain control of their lives.

“Gambling disorder is a real illness,” said Mr. Hartwell, now 57 and a community liaison for the Nevada Council on Problem Gambling. “It is potentially deadly, because of the suicide rate associated with it.”

Some researchers say that compulsive gamblers have a higher suicide rate than those with any other addiction. Compulsive gambling was codified as an addictive disorder in 2013 in the *Diagnostic and Statistical Manual, DSM-5*, because of its similarities to substance abuse disorders.

Mr. Hartwell said the addiction is just as real as a substance dependence, but that those who suffer from it are more reluctant to seek treatment. There are good reasons why gambling dependence is known as the “hidden addiction.”

“There is a tremendous shame and guilt that can be associated with it,” he said. “Some gamblers have stolen from their families. How could they come out and admit they did this, which was against their own moral compass?”

Bill Johnson, executive director emeritus of the Illinois Council on Problem Gambling, said that there was a 400 percent increase in calls to the state’s help line from 2020 to 2022. A recent study identified more than 1 million Illinoisans—1 in 11 state residents—who have a gambling disorder or are at risk of developing one. The state has 10 casinos, with six more sites approved, and 44,000 video gambling terminals.

A sharp increase in gambling activities in the wake of the May 2018 U.S. Supreme Court decision allowing the legalization of sports betting has led to more gamblers finding themselves in distress.

In the five years since that decision—with sports betting now legal and live in 34 states and the District of Columbia—Americans have legally wagered \$220 billion, according to the American Gaming Association, a trade group for the gambling industry. Gamblers placed bets of about \$95 billion in the

fiscal year ending March 2023.

Only His Partner Could Quit

In the early 2000s, Mr. Hartwell met his future wife, who also enjoyed gambling.

“We were going to the casino after work almost every evening,” he said. “There was financial stress as well as emotional stress in our relationship.”

They both decided to stop gambling. After his wife stopped, he followed suit for a few months and agreed to attend a 12-step program meeting. There, he heard the tragic stories of other gamblers, some who had gone to prison for embezzlement and others who had lost their families.

But Mr. Hartwell didn’t heed these warnings and secretly began gambling again. About two years after attending his first meeting, he stepped up his gambling to a higher level. After he had racked up that \$90,000 in debt, his wife asked him to seek serious help.

“This woke me up,” he said. “That was the beginning of my recovery process, which I am still engaged in today.”

“Treatment is available, and treatment is effective.”

Compulsive Gamblers Devastate Families

Travis Thompson, a licensed therapist in Murfreesboro, Tennessee, said that gambling addictions are often well hidden, especially now that the internet offers a virtual casino. Many now find it harder to avoid gambling, and most tend to wait until their situation is dire before seeking help.

“By the time therapy is desperately needed, they’ve put themselves into deep debt,” said Mr. Thompson, author of *“To Those Left Behind: Helping Partners and Families Understand Addiction.”*

It’s easy for compulsive gamblers who place bets on sports games or engage in other online gambling to hide their activities. The financial consequences are often disastrous.

“They end up creating issues that can go on for decades that will affect their spouses,” he said. “The spouses can be locked into the consequences of their addictions for the rest of their lives, depending on the severity of the addiction. Family members will find out suddenly that they are \$80,000 in debt, which they have to deal with. With gambling addictions, even after the cure there still could be crippling debt.”

At the root of addictive behavior is a need to connect to a sense of safety, purpose, and meaning in the world.

“We mostly find that in relationships,” Mr. Thompson said. “With addicts, they feel their relationships are not assured.”

His psychiatrist recommended Gamblers Anonymous.

“I felt like I fit in right away,” he said. “I started going to a couple of meetings a week. Gamblers Anonymous became a big part of my recovery right away. It was indispensable.”

Luke said that he hasn’t placed a bet since he began attending meetings regularly 11 years ago.

“To get any genuine recovery and have success, you need to attend meetings with regularity,” he said.

The Rise, Fall, and Recovery of a Successful Lawyer

Chris also found recovery through Gamblers Anonymous. Now 66 and a retired Chicago attorney, he was introduced to casino gambling during a 2004 fishing trip with his family in Wisconsin. He went back the following year and began enjoying the dice game of craps. His gambling increased when his office moved closer to a casino and he could gamble at lunch or after work.

“For the next six years, it went from once every couple of weeks, to four times a week. I started out losing a couple of hundred a week, to more than \$1,000, then as much as \$1,400 during some sessions,” he said.

Then Chris took early retirement, which gave him more free time.

“I started gambling every day at the Rivers Casino in Des Plaines. I would also drink; I had that addiction, too. That kind of fueled it,” he said.

Table craps was the only game that Chris played.

“The strategy of it fascinated me, in terms of all the different kinds of bets you could make with the dice,” he said. “It was exciting. You play it around a table with eight to 16 people. There is a camaraderie, and people whoop it up when everything’s going well. From 2007 to 2014, I was playing craps all the time.”

The most money that Chris ever won in one session was about \$4,000. He often lost as much as \$1,400 in one day. The losses far exceeded the wins, and Chris became stressed about where to find the money to cover his losses.

“My wife didn’t see what I was doing, taking money out of my checking account and my 401(k). The worst thing was the all-encompassing focus on where I was going to get my next money for gambling. I couldn’t think about anything else but that,” he said.

Chris’s luck changed when he checked himself into CORE, the Center of Recovery, an in-patient facility for compulsive gamblers in Shreveport, Louisiana.

“CORE treatment was very successful,” he said. “There was intense counseling with eight other people in the group.”

Each gambler explored how he or she became powerless over gambling and used it to soothe uncomfortable feelings.

“We worked with that,” Chris said, “how could we explain that and be honest about it? How did it affect our relationships?”

Chris attended Gamblers Anonymous meetings each night, and had one-on-one counseling with a counselor who was assigned to him.

“I understood that I lost myself in gambling. It was the thing that would take over so I didn’t have to deal with the depression and anxiety,” he said.

That was nine years ago. These days, Chris attends a gambling counseling group at the Way Back Inn, an outpatient facility, once a week. He talks with his counselor once a month.

“Continuing counseling and the CORE in-patient program have been the most effective for me,” he said. “In Gamblers Anonymous, you’re hearing the stories of other people, what they went through, how they went through it, and what’s been working for them.”

“And you play that in your mind and think, ‘If I went back there and went through that again, I’d end up right back where they did.’ When you work with other people, you stay close to the problem. You remember how it was.”

Any gambler or family member who is seeking help may call the National Gambling Helpline: 800-426-2537 (800 GAMBLER)

A newspaper reporter, editor and author, Huey Freeman recently wrote *“Who Shot Nick Lvie?” a true crime book on the murder of a Border Patrol agent. He and his wife, Kate, live in Central Illinois.*

INTENTIONAL LIVING

Mindful Eating for Health and Pleasure

Savor your meals to improve your digestion, ease bowel issues, and increase your daily joy

By Mike Donghia

In this crazy, modern world, we have a tendency to hyper-focus on what is easily measured, at the expense of everything else. We track calories and macronutrients and jump from one fad diet to another but pay very little attention to how we eat.

The effects of eating mindfully are beginning to become apparent in bits and pieces, but because the effect is more holistic, it’s hard to measure and pinpoint exactly what is merely correlation and what is causation. That said, we do know that chewing food thoroughly and eating while calm can aid digestion.

And here’s the thing—eating mindfully comes with virtually no downside. Once you’ve learned how to do it, you’ll find that it’s a much more enjoyable eating experience. And the evidence suggests it is indeed great for your health too.

What Is Mindful Eating?

Mindful eating involves paying more attention to the food that you have on your plate and the process of putting it into your mouth, tasting it, chewing it, and swallowing it. It’s a practice that involves tapping deeper into your senses and being present with the flavors, textures, sounds, and feelings of each bite.

Mindful eating is about appreciating your food and giving the act of eating your full attention. As you learn to focus on savoring your food, instead of shoveling it down your throat in a rush to get on with life, you’ll come to appreciate this ordinary pleasure in a whole new way.

Why Is Mindful Eating Important?

Mindful eating is a practice that slows you down, increases your awareness, and in the process provides a host of mental and physical health benefits. Let’s take a look at just a few of them:

Better digestion. Eating while stressed is a well-known source of gastrointestinal (GI) discomfort. A study from 2020 on a group of people with irritable bowel syndrome showed that they had fewer GI issues when they adopted a mindfulness routine.

Less overeating. Mindfulness practices were also documented, in a 2014 systematic review, to be associated with fewer incidents of binge eating and emotional eating in populations already engaging in these behaviors. Simply raising awareness of our actions, instead of acting impulsively, seems to nudge us in the direction of healthier eating patterns.

Increased relaxation. Not only is mindful eating better for your waistline, but also it can immediately improve your quality of life by reducing overall levels of stress. A 2011 randomized control study found lower cortisol levels as a result of simply being more mindful. Imagine that doing something so easy and enjoyable can

have such a direct, positive effect on the body’s hormones.

More pleasure. Mindful eating is simply more fun than the alternative. Is your life already so full of pleasurable, healthy activities that you can afford to turn one down? Life rarely offers us a free lunch (pun intended), but this might be one such opportunity.

How to Incorporate Mindful Eating Into Your Life

1. Set a peaceful mood for your meal. Consider setting a candle and turning on some gentle music. Adjust the lighting and bring out your good plates. Tap into the power of aesthetics.
2. Adopt a grateful mindset. I begin each meal with a prayer of thanksgiving and recommend a similar practice to anyone who is open to the idea. It reminds us that all of life is a gift to be cherished—as is our meal.
3. Pay attention to each one of your senses. When we rush through a meal, we fail to pay attention to the look, texture, taste, and smell of the food on our plates. And not just the food, but the whole experience of eating, wherever it’s being done, and with whoever we’re doing it with.
4. Slow down and take pauses. The key to mindful eating is simply slowing down and noticing. Chew your food more thoroughly and consider putting down your utensils after a few bites.
5. Listen to the signals your body sends you. One of the reasons we tend to overeat nowadays is that we don’t give our bodies enough time to speak to us, and we certainly don’t listen. Are you feeling full? Are you still hungry? Listen to the clear but quiet cues your body sends you.
6. Focus on what is good, and savor. Mindful eating isn’t just a healthy living practice, it’s a better way of living. If you’re doing it right, it shouldn’t feel like work, but rather a leisurely respite from the demands and busyness of the rest of your day.
7. Reduce the noise and distraction. If you’re like me, a quiet meal by yourself feels like the perfect time to reach for your phone. There is a time and place for enjoying the internet, but doing so takes our minds away from the nourishing food in front of us and treats it as a second-class pleasure, which it certainly is not.



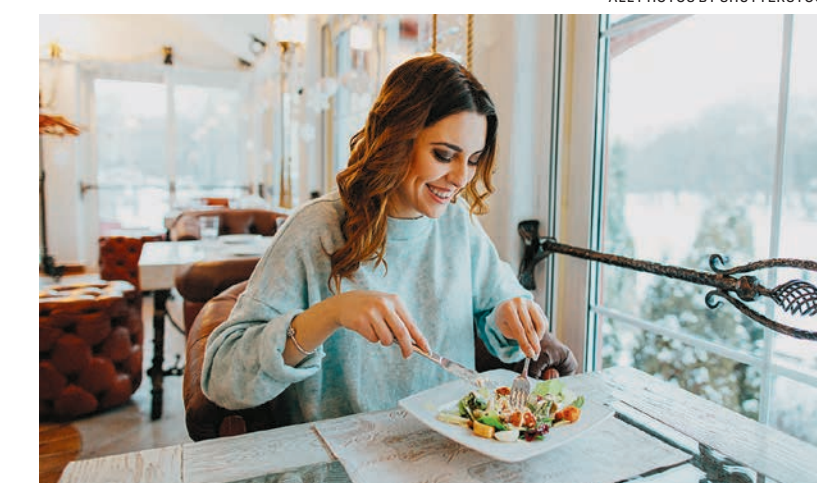
Mindful eating is about giving the act of eating your full attention and appreciating your food.

our plates. And not just the food, but the whole experience of eating, wherever it’s being done, and with whoever we’re doing it with.

Mindful eating isn’t just a healthy living practice, it’s a better way of living.

shouldn’t feel like work, but rather a leisurely respite from the demands and busyness of the rest of your day.

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.



Eating mindfully allows us to savor every meal.



▲ The group environment of a 12-step program can keep compulsive gamblers accountable and remind them of the consequences they will face if they gamble.

THE EPOCH TIMES

TRUTH AND TRADITION

THE EPOCH TIMES OFFERS UP TO 5 YEARS FREE* FOR STUDENTS

IN OUR FAST-PACED, information-rich world, it's crucial to equip our future leaders with the knowledge and insights they need to thrive.



Grab this limited time offer now and step into a world of comprehensive news coverage and inspiring insights.

Give your students this link or QR code: ReadEpoch.com/Student

For further questions, please call: 833-699-1888

* Students simply need to verify their student identity.



That's why we're delighted to offer students a free subscription of The Epoch Times, for up to 5 years—a golden opportunity for college students to dive deep into award-winning journalism, global news, insightful opinion pieces, and more.

We encourage you, our valued readers, to take this opportunity to enable your college-age kids to sign up for this unprecedented offer. It's not just a subscription—it's a ticket

to global awareness, enhanced critical thinking, and getting a step ahead in their academic journey.

Furthermore, if you have any contacts at schools or educational organizations who you believe could benefit from our student subscription, we would be grateful if you would introduce us to them.

We believe that access to quality information is a vital part of education, and we are keen to make this resource available to as many students as possible.

ALL IMAGES BY SHUTTERSTOCK



AGE WELL

The Critical Link Between Gum Disease and Dementia

Research suggests you can combat dementia by preventing a pathogenic bacteria in the mouth from entering the bloodstream

By Amy Denney

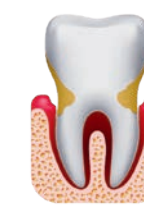
Researchers have long linked gum disease to a higher risk of Alzheimer's disease. Research has revealed that inflamed, bleeding gums are the entry point for a disease-causing bacteria to get into the bloodstream and trigger issues that can lead to dementia. That means dentists could be a first line of defense against cognitive decline—if only more of them recognized this possibility.

Nearly half of adults above the age of 30 have gum disease, and 70 percent of those who are 65 and older have periodontal disease, according to the U.S. Centers for Disease Control and Preven-

tion. That means this population has an important modifiable risk factor for Alzheimer's.

The key bacteria involved is *Porphyromonas gingivalis* (*P.gingivalis*), a cause of chronic periodontitis. Recent research has revealed that *P.gingivalis* can make its way to the brain and cause neuroinflammation, which can contribute to Alzheimer's.

P.gingivalis can produce gingipains, a class of enzymes, some of which are toxic and can cause gum inflammation. Gingipains are neurotoxic and particularly harmful to tau, a protein our brains need for normal neuronal function. In Alzheimer's, which also affects memory and communication, tau proteins begin



70

PERCENT of Americans 65 and older have periodontal disease.

to stick to one another, forming threads called neurofibrillary tangles that block the neuron transport system and harm communication between neurons.

The changes in an Alzheimer's patient's brain are suspected to come about because of these abnormal tau, beta-amyloid proteins, and other factors, according to the National Institute on Aging. Abnormal tau accumulates in brain regions involved in memory, and beta-amyloid forms clumps of plaque between neurons.

Gingipains Inhibitors

"Neuroinflammation induced by *P.gingivalis* has increasingly been recognized as a factor in the pathogenesis of AD [Alzheimer's disease]," notes a 2021 review published in *Frontiers of Neurosciences* by Dr. Ingar Olsen, a microbiologist and

Continued on Page 16



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

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



Chilean wine-berry is rich in anthocyanins, which is good for eye health.



AGE WELL

Why We Lose Our Near Vision and How We Can Retrieve It

Our stiffening eye lenses can be preserved with nutrition or improved through a variety of new treatments

By Conan Milner

You may not need glasses when you're young, but as you age, you may find yourself reaching for a pair. The urge typically develops one day while looking at a menu, a newspaper, or an exit sign on the freeway.

For many, this deterioration takes the form of near-vision loss, known to eye doctors as presbyopia. It's a condition where your eyes fail to focus on details up close. Most people begin to notice

presbyopia sometime in their 40s, but experts say that with time, it eventually impacts nearly everyone.

So why does it happen, and can we do anything to change it?

Presbyopia is part of the aging process. Just as your body may begin to lose flexibility as you get older, your eyes also lose the flexibility they once had.

When our eyes are in their prime, we typically take our vision for granted. But seeing is a complex affair, and it's a very sophisticated organ that delivers the images.

One part of the eye that contributes to our sight is called the lens. Unlike a camera lens (which focuses on details by adjusting the distance between two glass discs), the lens of your eye actually changes shape, becoming flatter or more curved depending on whether the objects you're looking at are near or far.

However, as our eyes grow older, their once-dynamic lenses start to stiffen. As a result, they lose the ability to view things up close.

Over time, this sight deterioration results in a significant loss of performance. A study published in a 2015 edition of the journal *Ophthalmology* estimated that, based on census records, the potential productivity loss due to uncorrected or undercorrected presbyopia would be more than \$25 billion, or 0.037 percent of global gross domestic product.

Continued on Page 17

THE EPOCH TIMES



Care about health? So do we.

Get practical health news for your daily life 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](https://www.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.

CHEMICAL TOXINS

Hormone-Disrupting Plasticizers Used in Many Drugs

Studies reveal that phthalates are common in prescription and over-the-counter drugs

By Vance Voetberg

Phthalates have been linked to reproductive and developmental problems, hormonal disruptions, and even certain types of cancer. Many people know that these are chemicals used to enhance the durability of plastics and are commonly present in various household and personal care products such as shampoo, hair sprays, and laundry detergent. Fewer people know that phthalates are a common ingredient in pharmaceuticals.

Why Are They Being Used in the First Place? Chemists often rely on versatile phthalates to formulate different products, including pharmaceuticals, because phthalates enhance the effectiveness of certain drugs through various mechanisms.

"Pharmaceutical companies that produce gastrointestinal (GI) medications often utilize phthalates for their ability to localize medication release," an article published in the World Journal of Gastroenterology reads.

Phthalates have high compatibility with a wide range of ingredients and oils. They can also slow evaporation and give products long-term stability. These properties make phthalates attractive for their solvent capabilities in liquid formulations and as plasticizers for plastic products and packaging, according to Homer Swei, senior vice president of Healthy Living Science for the Environmental Working Group. They can help main-

tain ingredient integrity, regulate the release and delivery of functional components, and enhance durability, he said.

Toxic Substances in OTC Drugs and Supplements

A 2012 study that investigated the use of phthalates as ingredients in drugs found that a wide range of prescription and over-the-counter (OTC) products and supplements from different therapeutic categories incorporate various phthalates.

The study found that phthalates are used in these products as "inactive" ingredients. Inactive ingredients in medicine are usually added to improve the efficacy of active agents, mitigate unpleasant tastes, or preserve medications until their expiration date.

Phthalates are categorized as endocrine-disrupting chemicals, which can interfere with the normal functioning of male and female hormones.

While phthalates can be found in prescription and nonprescription drugs, they're very commonly used in medications designed to treat GI symptoms associated with conditions such as acid reflux. More than 20 million Americans take these drugs, known as proton pump inhibitors.

However, some medical professionals express concerns that the phthalates contained in these drugs may have adverse effects.

"Exposure to low dosages like in drugs can change gene expression by reprogramming the molecular system in cells, protein level, receptor expression, and DNA methylation," said Dr. Luiza Mirpuri, a renowned phthalate expert. "All of these are known to influence health adversely."

Further research is necessary to understand the extent of these potential risks fully.

COVID-19 & VACCINE

Spike in Dangerous Skin Disorder Linked to COVID-19 and Vaccine

Researchers pose three theories to explain 'alarming' sevenfold increase in Stevens-Johnson syndrome

By Megan Redshaw

A sudden increase in Stevens-Johnson syndrome (SJS)—a rare and potentially fatal skin disorder—may be triggered by COVID-19, increased vaccination rates, or a lowered threshold caused by vaccines or previous infection, according to a large case series recently published in the medical journal Burns.

While SJS isn't caused by fire, it's usually treated by burn units in hospitals because of its similarities to actual burns.

Researchers with the burn unit at Concord Repatriation General Hospital in Australia saw two to four cases of SJS, or toxic epidermal necrolysis (TEN), per year before COVID-19. In the first six months of 2022 alone, the same burn center observed a sevenfold rise in cases.

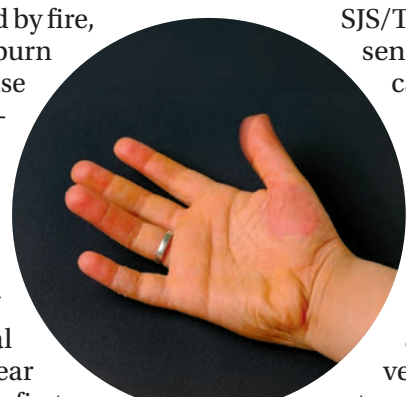
Of the 14 reported cases, five patients had COVID-19 a month before developing

SJS/TEN, and three of 14 patients received a COVID-19 vaccine one month prior. Not a single case of SJS/TEN was reported in an unvaccinated individual.

Researchers said the rarity of the condition and presence of medications known to trigger the disease make the link difficult to prove, but the rapid rise in cases since the beginning of the pandemic and vaccine rollout is "alarming."

SJS/TEN is a severe hypersensitivity condition that causes the skin to develop rashes, blisters, and peels forming painful areas that resemble a severe hot water burn. Mucous membranes, including the eyes, genitalia, and mouth, are often affected or severely damaged, leading to sepsis, pneumonia, infection, or death.

Although SJS and TEN were once considered separate conditions, they are now considered part of the same disease—with SJS represent-



Stevens-Johnson syndrome can cause rashes and blisters that resemble a severe hot water burn.

MOHAMMED_AL_ALI/SHUTTERSTOCK

Hormone-Disrupting Chemicals

Phthalates are categorized as endocrine-disrupting chemicals, which can interfere with the normal functioning of male and female hormones.

Research has established a link between phthalate exposure and male and female infertility, birth abnormalities, and cancer.

Significant apprehension regarding their effect on human health has prompted regulatory agencies in the European Union, Japan, and Canada to ban or significantly restrict the use of many types of phthalates.

Do Phthalates Cause Breast Cancer?

To explore the effects of phthalates on human health, a team of Danish researchers conducted a study to examine whether there was an association between phthalate exposure via pharmaceuticals and higher breast cancer rates.

The study's hypothesis was based on the understanding that phthalates, known for their estrogen-mimicking properties, could influence the occurrence of estrogen receptor-positive breast cancer.

In a comprehensive review involving almost 10 million women, the researchers found that women exposed to high levels of phthalates had a two-fold increase in the likelihood of developing breast cancer. The study was published in the Journal of Clinical Oncology in 2019.

"Our results suggest that women should avoid high-level exposure to dibutyl phthalate, such as through

long-term treatment with pharmaceuticals formulated with dibutyl phthalate," the study's authors wrote. Dibutyl phthalate is used to enhance the flexibility and softness of plastics.

Although this study was the first to investigate the correlation between breast cancer and phthalates in drugs, its findings align with a growing body of evidence that consistently demonstrates a parallel relationship.

FDA Oversight Questioned

While the U.S. Food and Drug Administration (FDA) is widely perceived to have stringent oversight in the regulatory process for phthalate-containing drugs, a paper published in Environmental Health Perspectives notes that even though certain phthalates aren't technically approved for general use as inactive ingredients, they're allowed to be included in approved drug products with specific maximum levels.

According to the paper, OTC drugs don't require the same ingredient review as their prescription drug counterparts as long as no new ingredients are included.

And although the FDA may know the ingredients in certain drugs, manufacturers aren't obligated to disclose a complete ingredient list to the public because of patent protection laws. As a result, consumers may not know whether a particular drug contains phthalates.

According to Dr. Mirpuri, there's concern that regulatory agencies, such as the FDA, may not fully grasp the potential health risks associated with phthalates.



ALL PHOTOS BY SHUTTERSTOCK

▲ Phthalates are frequently used in drugs to give them long-term stability and regulate the release of active ingredients.

"They say that low-dose exposure is harmless," she said. "I find this to be unacceptable as a doctor."

Dr. Mirpuri cited literature demonstrating that phthalates at low doses can impair male fertility and accelerate liver damage.

She drew a comparison between phthalates and DDT, an insecticide that was widely produced in the past but was banned because of its cancer-causing properties. According to her, the similarity lies in the fact that both substances weren't initially recognized as significant pollutants or contaminants. However, both can persist, accumulate, and exhibit toxic effects.

"I believe [phthalates] to be another 'Silent Spring,'" Dr. Mirpuri said.

PHTHALATES LINKED TO ADVERSE EFFECTS

Dr. Luiza Mirpuri, a renowned phthalate expert, warns that even at low dosages, phthalates can change gene expression and cause problems. She compares them to DDT, an insecticide banned because of its cancer-causing properties, that would also persist, accumulate, and exhibit toxic effects.

Phthalates interfere with the normal hormone function.

Phthalates exposure was linked to a doubled risk of breast cancer.

Phthalates can impair male fertility and accelerate liver damage.



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](https://www.dayescoffee.com)



The first theory is that the SARS-CoV-2 virus induces SJS/TEN by directly binding to receptors that trigger a T-cell-mediated response.

time, she received allopurinol for gout and experienced a reaction despite that she had taken the drug in the past with no ill effect. The woman had received two doses of an mRNA vaccine.

- A 45-year-old male developed a reaction to a seizure prophylaxis drug. He was diagnosed with COVID-19 four weeks before developing SJS/TEN and was triple vaccinated with an mRNA vaccine.

- A 53-year-old female received a viral vector vaccine three weeks before the onset of SJS/TEN. She was quadruple vaccinated with viral vector and mRNA vaccines and reacted to medications received for a life-threatening scleroderma complication.

Regulatory agencies in the United States and abroad have not acknowledged the potential link between SJS/TEN and COVID-19 vaccines or studied the ability of the virus or vaccine to prime the immune system. The study's authors say more research should be done to investigate the effect that viruses have on immune-mediated disorders such as SJS/TEN.

Megan Redshaw is an attorney and investigative journalist with a background in political science. She is also a traditional naturopath with additional certifications in nutrition and exercise science.

While SJS isn't caused by fire, it's usually treated by burn units in hospitals because of its similarities to actual burns.

ing the less severe end of the disease spectrum and TEN representing the most severe.

Medications, including epilepsy medicines, antibiotics, and anti-inflammatory painkillers, are the chief cause of SJS/TEN, but certain viruses and vaccines can also cause the condition. Because it can be fatal, SJS/TEN is considered a medical emergency.

Researchers' Theories for Sudden Rise The researchers proposed three theories for the sudden increase in SJS/TEN cases.

Virus-Induced

The first theory is that the SARS-CoV-2 virus induces SJS/TEN by directly binding to receptors that trigger a T-cell-mediated response. Other viruses known to cause SJS/TEN include the herpes simplex virus, Epstein-Barr virus, and influenza.

Vaccine-Induced

A second theory is that COVID-19 vaccines may directly bind to cell receptors that trigger SJS/TEN and influence the body's T-cell immune response, initiating SJS/TEN. This T-cell response peaks at seven and 28 days post-vaccination, consistent with the observed cases.

Of the three cases attributed to vaccination in the study, two patients had received an mRNA vaccine, and one received a viral vector vaccine within a month of developing SJS/TEN. Researchers identified eight other cases

of SJS following COVID-19 vaccination in published literature—four were associated with mRNA vaccines, three with viral vector vaccines such as AstraZeneca and Johnson & Johnson, and one with a whole virus vaccine.

According to the U.S. Vaccine Adverse Event Reporting System (VAERS), 198 cases of SJS/TEN following COVID-19 vaccination were reported between Dec. 14, 2019, and June 23, 2023. Historically, VAERS has been shown to report fewer than 1 percent of actual vaccine adverse events, which means other cases of SJS/TEN may have occurred but were unreported.

Threshold Lowering

The third theory proposed by the authors is that developing a COVID-19 infection or receiving a vaccine "primes" the immune system, lowering the threshold for a drug to trigger SJS/TEN. Without this "priming," the drug would otherwise not cause the condition, as noted in each of the following cases:

- A 26-year-old male received two previous doses of a viral vector vaccine and one mRNA vaccine dose. After experiencing vaccine-associated symptoms, he took paracetamol and ibuprofen and developed SJS. He had previously taken both medications with no adverse effects.

- A 60-year-old female had COVID-19 six weeks before the onset of SJS/TEN. During that



Dentists often warn their clients about gum disease—but rarely its link to Alzheimer's.

AGE WELL

The Critical Link Between Gum Disease and Dementia

Continued from Page 13

dentist with the department of oral biology at the University of Oslo in Norway.

Dr. Olsen looked at previous research to dig deeper into how this neuroinflammation contributed to Alzheimer's disease pathogenesis. He noted that Pgingivalis and gingipain have been detected in the brains of Alzheimer's patients, and Pgingivalis DNA has been found in the brains and cerebrospinal fluid of patients. Pgingivalis lipopolysaccharide, a large pathogenic molecule, has also been detected in the brains of people with Alzheimer's disease.

An animal study published in Science Advances in January 2019 had already concluded that Pgingivalis could cause Alzheimer's disease by showing that negating the bacteria's influence could prevent the disease.

In the study, researchers were able to block the bacteria's neurotoxicity with synthesized small-molecule inhibitors targeting gingipains in mouse brains. The outcome was reduced Pgingivalis, blocked beta-amyloid protein production, reduced neuroinflammation, and rescued neurons in the hippocampus. While it's undoubtedly a great discovery, rodent research doesn't always translate into human success. That study was funded in part by Cortexyme Inc., which went on to test its gingipain inhibitor, called atuzaginstat, in humans. It was eventually put on hold by the U.S. Food and Drug Administration due to liver toxicity concerns.

An Overlooked Warning

The link between Alzheimer's and Pgingivalis may be well established, but it's still overlooked, according to some experts.

A case in point is The Lancet's international commission for dementia prevention, intervention, and care. The commission releases reports every few years about important insights into Alzheimer's. Its last report came out in 2020, 6 months after the Science Advances-published study.

Functional dentist Dr. Mark Burhenne was disappointed that the report omitted any mention of the Pgingivalis connection.

"It was shocking to me that we're not including gum disease as a risk factor. To me, it should be number one,"

Dr. Burhenne told The Epoch Times. "We have a causal link now. If you can prevent gingipain from getting to the brain, then you're in good shape."

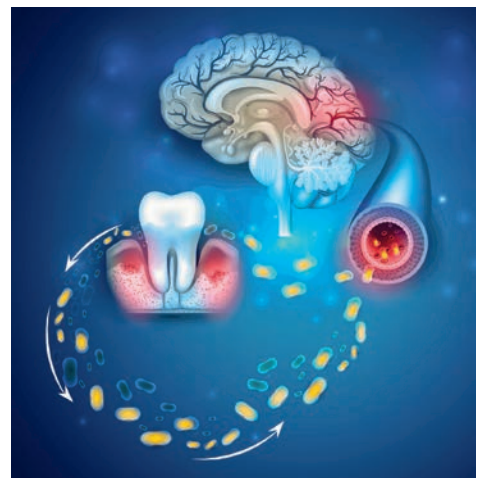
Given that gum disease is easily visible and has an established causative link to Alzheimer's, some argue that dentists should be playing a more significant role in the battle against this degenerative brain disease.

The Commission's Findings

The Lancet commission published its initial findings in 2017 showing that less education, hypertension, hearing impairment, smoking, obesity, depression, physical inactivity, diabetes, and low social contact were factors associated with dementia risk. Three years later, it added excessive alcohol consumption, traumatic brain injury, and air pollution due to "newer, convincing evidence."

The latest report was published in July 2020 in The Lancet, concluding that "together the 12 modifiable risk factors account for around 40 percent of worldwide dementias, which consequently could theoretically be prevented or delayed."

Alzheimer's disease is one of many forms of memory loss, but there are a variety of studies that find that many modifiable risk factors can help reverse these effects through lifestyle changes—if enacted in the early stages. New research indicates that Alzheimer's can even be screened in preclinical stages through the gut microbiome.



Pgingivalis grows in inflamed gums where it enters the bloodstream and makes its way to the brain, contributing to Alzheimer's.

The Epoch Times reached out to the head of the commission, Gill Livingston, to ask why gum disease was omitted from The Lancet's list. She said dental health is a topic they are considering for the next update, which is expected in June 2024.

"It's discussed in the next Lancet commission, and I therefore cannot say much," Ms. Livingston, professor of psychiatry of older people at the University College in London, wrote via email. "But you might want to ask whether people with bad dental health are likely to be less or more educated, wealthier, and healthier."

The Cost of Dental Care

There's a major disconnect between the medical and dental professions when it comes to the holistic, systemic connections of health—and also in dental insurance coverage. Medicare coverage only extends to dental emergencies and doesn't reimburse the costs of basic dental cleanings, fillings, and dentures.

Dr. Burhenne said that often, people won't pay for any health expenses not covered by insurance, even if they're able to budget for it.

He relayed the story of one patient who had a great salary and benefits, but when he retired—even though he likely could have afforded the out-of-pocket expenses of cleanings and maintenance—he stopped coming. That patient developed gum disease and dementia rapidly.

Dr. Burhenne said that, ideally, patients ought to find a functional dentist who understands the systemic danger of gum disease on the entire body and recognizes it as a metabolic, autoimmune disease. However, insurance rarely covers expenses related to these professionals.

"I realize when I discuss all this, I'm telling everyone what to do, and it's not as easy as it sounds. A lot of things have to change," Dr. Burhenne said. "People are better when they have insurance. We need insurance for the retired."

Medicaid, healthcare coverage for the poor, isn't much better, although New York state is currently implementing expanded coverage, in part due to a lawsuit challenging the state's stance that only four back teeth in addition to



A healthy diet and oral hygiene—like brushing, flossing, or using a Waterpik—can prevent gum disease.

the front teeth are necessary.

Gum disease is the leading cause of tooth loss in adults. That's why dental care is vital for screening and educating patients, even if dentists don't acknowledge the connection between periodontitis and other diseases. Oral health habits—such as proper brushing and flossing—can prevent gum disease.

For anyone losing teeth or exhibiting other symptoms of gum disease well before they enter their golden years, intervention could go a long way toward preventing dementia, too.

Dr. Burhenne suspects that there will eventually be an affordable test for gingipain levels. Right now, the technology is too expensive and inaccessible. And while there may ultimately be a pill or mouthwash that targets gingipains, it could come with unwanted side effects or still be somewhat ineffective.

On the other hand, there are ways to prevent gum disease and preserve the good bacteria in the mouth that help maintain balance in the oral microbiome, which is the total collection of microorganisms, predominantly bacteria, that reside in the mouth.

Reversing Gum Disease Naturally

Boosting the good bacteria in a microbiome helps the environment achieve homeostasis. Katherine Dahl learned that lesson first with her gut, when she was able to use probiotics for a severe bacterial infection caused by Clostridioides difficile, better known as C. diff. But she still had cavities and poor oral health after three pregnancies.

"Dentists tend to be, 'This is what I do: heal teeth, fill cavities, and make sure the mouth is functioning properly,'" Ms. Dahl said. But dentists don't address the bacterial dimension to oral health, something she thinks could be a part of their responsibilities.

"We can disrupt the biofilm and then

put new bacteria on the scene," she said. Biofilm in the mouth is bacteria that clump together and form plaque. New techniques can actually test saliva for the balance of bacteria, Ms. Dahl said, and allow people to detect signs of disease far before symptoms emerge. Her experience of using oral probiotics successfully prompted her to launch a new oral probiotic product with the help of her family of dentists.

Dr. Burhenne recommends probiotics to his patients and teaches dentists to incorporate oral microbiome testing. With his online and podcast presence, he educates the public on how to monitor their own gum health regularly.

"You can look at Google images of gum disease and look in the mirror, and you as a lay person could potentially have a good idea of where you're at," he said. "You don't even need a test. You don't need a dentist. Certainly if you're spitting in the sink after brushing and you see a little blood, that's not healthy."

Balancing the Oral Microbiome

Besides brushing your teeth after eating and flossing a few times a week, other lifestyle choices can help prevent gum disease, including:

- Avoiding mouthwash and other dental products that are disinfectants or antibacterial, as they kill off even the commensal, or good, bacteria.
- Eating a whole food diet and avoiding processed foods.
- Avoiding glycosylate, emulsifiers, and GMOs, which can damage the microbiome.
- Not drinking or eating from plastics, which are linked to systemic inflammation.
- Avoiding mouth breathing and dry mouth and boosting saliva production.

Many of these practices contribute to gum disease by destroying the microbiome, leaving the mouth without beneficial bacteria and vulnerable to invasion by pathogenic bacteria.

"It's about having the right philosophy on what is the root cause of oral disease," Dr. Burhenne said. "Unfortunately, most dentists aren't there yet. They're great clinicians, but they've been taught in the curriculum that you really need to disinfect the mouth."

AGE WELL

Why We Lose Our Near Vision and How We Can Retrieve It

Continued from Page 13

Solving the Problem Via Spectacles Difficulty reading small print is a tell-tale sign of presbyopia, but the condition doesn't just impact jobs that require reading. A study published in a 2018 edition of The Lancet looked at tea pickers in India who were older than 40 years of age. This randomized study is known as the PROSPER trial, which stands for productivity study of presbyopia elimination in rural-dwellers. Researchers found that providing workers with reading glasses increased the daily weight of tea picked by nearly 22 percent compared to the control group.

When it comes to treating presbyopia, wearing glasses remains the most common approach. Basic reading glasses are found in most drug stores and can be purchased for only a few dollars. It's affordable to own several pairs, which can be placed in the car, office, living room, or any location where you might have to read fine print, pick tea, or do some other detail-oriented task.

Glasses serve as a magnifying glass to assist your eye in doing what it no longer can on its own. The basic design of spectacles has been around for a few hundred years, but simpler prototypes existed much earlier. Monks in the Middle Ages, for example, used glass spheres to read manuscripts.

The basic design of spectacles has been around for a few hundred years, but simpler prototypes existed much earlier.

If your distance vision is also compromised, the glasses needed for the onset of presbyopia become a little more complicated. You need one type of assisting lens to help you see far and another to see near. Benjamin Franklin is credited with creating the first set of glasses that tackle both jobs. Known as bifocals, the invention incorporates two needed lenses set in a spectacle frame. Modern bifocals, including bifocal contacts, still follow Franklin's basic design.

Eye Drops

Glasses are tried-and-true and for years had been the only option for dealing with presbyopia. But a number of alternatives are now available.

In 2021, the U.S. Food and Drug Administration (FDA) approved the first eye-drop drug to treat presbyopia, called Vuity. Similar drops are expected to gain approval later this year.

Vuity is a very dilute solution of the chemical pilocarpine hydrochloride. The drops work by reducing the pupil size, making it easier for the eyes to see up close. Recommended use is once per day for adults with mild to moderate presbyopia, but even with this small dosage, there are some cautions. The drug's maker, Allergan, warns that Vuity may cause temporary dim or dark vision and urges those who use it to take care while driving at night or performing hazardous activities in poor lighting.

Temporary problems when changing

focus between near and distant objects may also occur. However, some of the more worrisome side effects include sudden onset of flashing lights, floaters, or vision loss.

Dr. Bobby Saenz, an optometrist and clinical director of LASIK San Antonio in Texas, says Vuity can give your near vision a "boost," but he believes that the help it offers is more appropriate for special occasions rather than as a long-term fix.

"This is a solution that could be used in early presbyopia during certain situations where you don't want to wear glasses," Dr. Saenz said. "Date night, for example."

Exercise and Lifestyle

Aging is a fact of life, but can we keep it from taking such a strong toll?

People can regain some of the strength and flexibility of their aging bodies by eating healthy food and exercising regularly. But can such habits preserve or perhaps even improve our vision as well?

Dr. Saenz says there are obstacles to aging eyes that make it difficult.

"The problem in presbyopia is not the muscle, it's the replication of the skin-like cells in the lens," he said. "Currently, there is no way to stop these cells from replicating or these bonds from forming."

Dr. Saenz pointed to studies testing drops that aim to break these age-hardened eye bonds to make the lens more flexible. Yet progress is slow. One drop was already in clinical trials, but it never met its statistical endpoint.

But we may still hold some power to preserve our near sight. Aging is the biggest risk factor for presbyopia, but UV light exposure may also play a role. Some research suggests that presbyopia may be delayed by providing aging eyes with UV protection (sunglasses).

"This may be the reason why in the south we see presbyopia a few years sooner than for patients in the north," Dr. Saenz said.

Since presbyopia isn't an issue of muscle weakness, strength training exercises aren't likely to bring back lens flexibility. But Dr. Marc R. Grossman, an optometrist and acupuncturist licensed in New York state, believes that there are some holistic ways to preserve or maintain vision that includes lifestyle and dietary changes, as well as certain supplements. He mentioned one product that contains beta carotene, tomato extract (for its lycopene content), rosemary, and Aristotelia chilensis (Chilean wineberry).

Other supplements often recommended for eye health include lutein, zeaxanthin, and bilberry.

Periods of rest and relaxation are always important for good health, so consider giving your eyes a well-deserved break once in a while as well. Dr. Grossman mentioned one easy habit that you can try to put into practice.

"I advise adhering to the 20/20/20 rule of every 20 minutes, looking 20 feet away for 20 seconds to relax the eyes," Dr. Grossman said.

Another way to give your up-close vision a break is to manage your screen time and spend some hours away from your favorite devices.

"They can damage the eye silently over a period of time," Dr. Grossman said.



A study gave a group of older tea pickers in India reading glasses and their productivity dramatically improved.

Other lifestyle considerations to preserve eye health include the same commonsense guidelines known to help the whole body, such as getting enough sleep and avoiding smoking.

Surgical Solutions

Surgery is a newer option for addressing presbyopia, and the most common technique is LASIK—a procedure used to reshape the cornea (a part of the eye beneath the lens) using lasers. However, success depends on several factors.

LASIK can't help bring the lens of your eye the flexibility it once had, but it can provide an option to improve near vision. Dr. Saenz explained one common strategy using LASIK for presbyopia that involves shaping one eye for better near vision and leaving the other eye dedicated to distance-vision duties.

The results can take some getting used to, and not everyone can comfortably make the adjustment. And even those who can adjust may eventually need glasses anyway.

"As you age, and the lens gets harder, you will need to wear glasses for up close again," Dr. Saenz said. "Now, many patients are okay with this, because for 80 percent of activities, they aren't wearing glasses, it's just for the tiny objects up close."

Dr. Saenz's preferred surgical technique for presbyopia is a newer procedure. It's called laser lens exchange, or refractive lens exchange.

The procedure involves a laser that's used to break up the lens cells that have hardened over time. Next, the patient receives an intraocular lens placed just beneath the surface of the eye.

I advise adhering to the 20/20/20 rule of every 20 minutes, looking 20 feet away for 20 seconds to relax the eyes.

Dr. Marc R. Grossman, optometrist

"The lens used most commonly is a trifocal lens, and this allows patients to see at distance, intermediate (computer range), and up close," Dr. Saenz said. "This is a diffractive lens, meaning the No. 1 side effect will be circles on the lights at night, but your brain adapts over a three- to six-month period."

Recent research shows a high rate of patient satisfaction with the procedure. One significant benefit of laser lens treatment is that it can save you from more eye surgery in the future. Because you're removing those hardened lens cells, it also removes the risk of cataracts later in life.

Cataracts are another common occurrence with the aging eye. And one study suggests that the same protein linked to cataract formation may also be a root cause of presbyopia.



While there are eye drops to treat presbyopia, they come with side effects that make them a poor long-term solution for many people. They are typically best for short-term use, like a special event.

EAT WELL

Nuts:

All About 8 of the Healthiest Varieties

Upgrade your diet with a handful of these quick and delicious nutrient-dense super snacks

Do you want a quick, easy, and no-prep snack that can keep you fueled on the go while reducing your risk of disease and death? It sounds nuts—and it is nuts!

If you are interested in maintaining a healthy diet and lifestyle, nuts are a food group that you simply need in your life. Compact and convenient, nuts come

Eating just a handful of nuts per day has been associated with a 20 percent reduced risk of death.

in a wide variety of shapes, sizes, and flavors. They are an easy way to boost nutrition and energy levels with no preparation required.

Eating nuts has been shown to improve heart health and reduce mortality from cardiovascular disease. Consumption of tree nuts and even peanuts (technically a legume, but nutritionally similar) has been significantly associated with a reduced risk of certain cancers, found a meta-analysis published in Nutrition Reviews. Other research has linked eating these foods to reduced risk of all-cause mortality. These nutritional powerhouses are so potent that eating just a handful of nuts per day has been associated with a 20 percent reduced risk of death, found a study published in The American Journal of Clinical Nutrition.

In this overview, we explore eight of the healthiest varieties of nuts on the planet. And unlike some exotic superfoods, these exemplars of nutritional potency are generally affordable and available anywhere food is sold. So, read on and discover the many reasons that nuts are a great snack choice for keeping you well-fueled and satisfied throughout your busy days.

Here are eight of the healthiest varieties of nuts and some of the nutritional and therapeutic benefits they offer.

Walnuts

Walnuts not only look like bihemispheric “brains” in miniature but they have also been scientifically linked to better brain health. Walnuts are a significant source of omega-3 alpha-linolenic acid, a nutritional requirement for optimal neurological functioning. Moreover, walnuts contain well-known neuroprotective compounds, such as gallic acid, vitamin E isomers, melatonin, folate, and polyphenols.

Another benefit of adding walnuts to your diet is better heart health. Walnuts have been shown to improve vascular endothelial function, which aids blood clotting, immune function, and platelet adhesion.

Other benefits of walnuts include

beneficial microbiome enhancement, which has been linked to improved overall immunity and resistance to disease. There's even evidence that eating walnuts preserves youthful telomere strands, a key element in anti-aging.

Hazelnuts

Hazelnuts, also known as filberts, are believed to have originated more than 5,000 years ago in China. Today, nearly 100 percent of the U.S. crop is grown in the Willamette Valley in Oregon. While not as common a snack as many other nut varieties, hazelnuts pack serious nutritional punch and a light, sweet flavor that shouldn't be overlooked.

According to Nuts.com, “hazelnuts have one of the highest ORAC (oxygen radical absorbance capacity) scores of any nut,” signifying high levels of antioxidants. They also contain the highest proanthocyanidins concentration of any tree nut, with antioxidant capabilities that are 20 times more potent than vitamin C and 50 times more than vitamin E.

As a further testament to the antioxidant power of this tiny tree nut, a hazelnut-enriched diet modulates oxidative stress and inflammation gene expression without weight gain. And dietary supplementation with hazelnut oil has been shown to reduce serum hyperlipidemia and slow the progression of nonalcoholic fatty liver disease.

Almonds

Almonds are a high-protein staple of many athletes and fitness buffs, and for good reason. Clinical studies have shown that almond supplementation two hours before exercise can improve performance in endurance exercise in trained subjects.

Fitness enthusiasts and others who are intent on reducing fat in their diet need not shy away from indulging in a healthy handful of these little wonders. Almond supplementation in combination with a low-calorie diet has been shown to alleviate abnormalities associated with metabolic syndrome while reducing hyperlipidemia, the presence of high levels of fat in the blood.

Besides being good for your blood and your physical fitness, almond consumption may even reduce your risk of cardiovascular disease, according to a meta-analysis published in Advances in Nutrition. In fact, one of the best things you may be able to do for yourself is to simply eat 15 almonds per day. But don't conflate almonds with almond milk, which can contain a measly 2 percent almonds but a lot of carrageenan, which has been linked to inflammation and colon disease.

Macadamias

Macadamia nuts are one of the more expensive nut varieties on our list, depending on where you live and shop.

Large, velvety, and exotic, macadamias are rich and flavorful, with U.S. suppliers based almost exclusively in the Hawaiian Islands.

Studies on the health benefits of macadamia nuts show that, once again, eating fat from healthy sources such as nuts won't make you fat, nor will it create problems with cholesterol. Quite the opposite—a macadamia nut-rich diet reduces total and LDL (low-density lipoprotein) cholesterol in men and women with slightly elevated cholesterol.

Macadamia nuts are high in mono-unsaturated fat. When combined with a moderately low-fat diet, macadamias have produced beneficial effects on cholesterol and low-density lipoprotein cholesterol levels when compared with a typical American diet. So ditch the chips and cookies—when you're ready for a snack, fortify yourself with a handful of delicious macadamia nuts instead.

Pecans

Like most nut varieties, pecans are a great source of vitamins, minerals, and dietary fiber. Flaky and sweet, pecans are a favorite among Southerners. Georgia is one of the leading U.S. producers of this nut variety, and people there love to use them in decadent desserts such as pecan pie. While skipping the corn syrup and added sugar is best for your health, don't skip on pecans.

If their delicious taste and inviting texture weren't reason enough, studies on pecans have demonstrated a significantly positive effect on cardiometabolic risk, thus reducing the likelihood of developing atherosclerotic cardiovascular disease and diabetes mellitus.

Pecans have significant antioxidant activity, possibly due to their high vitamin E content, a powerful antioxidant that protects against cell damage. They have also been shown in clinical studies on mice to support brain health by slowing down the progression of motor-neuron degeneration.

Brazil Nuts

Brazil nuts are large tree nuts native to the Amazon rainforest. Besides their satisfying taste and texture, brazil nuts are one of the best sources of the vital nutrient selenium.

Selenium is an essential trace mineral that's only found in certain foods. Low levels of selenium have been linked to fatigue and brain fog, as well as more serious deficiencies such as thyroid problems, immune system dysfunction, infertility, and cognitive decline.

Getting more selenium through eating Brazil nuts has been associated in clinical trials with improved thyroid hormone levels, as well as significantly improved blood levels of selenium and glutathione peroxidase in kidney patients undergoing dialysis.

Eating Brazil nuts can also improve



Eating just a few Brazil nuts each day will keep your selenium tank filled up and make sure you have the benefits of good mood and sufficient energy to tackle your day.

your mood. Results of a clinical trial of adults suffering from anxiety showed that the group that was supplemented with 100 micrograms (mcg) of selenium per day for five weeks had less anxiety than the placebo group. According to the report, the lower the level of selenium in the diet, the higher the levels of anxiety, depression, and tiredness among patients, all of which decreased following five weeks of selenium therapy.

The Recommended Daily Allowance of selenium for adults is at least 55 mcg. Eating just a few Brazil nuts each day will keep your selenium tank filled up and ensure that you have the benefits of a good mood and sufficient energy to tackle your day.

Cashews

Cashews are easily one of America's favorite nuts. This is one snack food that actually works. Incorporation of cashews into typical American diets could decrease total cholesterol and LDL cholesterol, research suggests. Cashews have the honorable distinction of also having anti-cancer effects: Cashews contain an anti-cancer catechol, which has demonstrated activity against drug-resistant cancer cell lines.

Cashews may even be able to help the body in utero. In a 2017 animal study, pregnant mice that were fed a cashew supplement produced offspring with more highly matured reflexes and better memory than mice that weren't fed cashews.

Essential fatty acids are indispensable during pregnancy, lactation, and in-

fancy, and researchers believe that this nutritional boost positively influenced the transmission of nerve impulses and brain function to the offspring. Whether you're pregnant or not, eating cashews can be a satisfying way to get the essential fatty acids and dietary fiber that you need each day to enjoy optimal health.

Pistachios

Pistachio nuts may typically come in a shell, but they're worth the effort. These small, flavorful nuts are actually the seeds of the Pistacia vera tree, and they're packed with enough nutrients to make them worth the bit of work required.

Pistachios are a potent source of essential B vitamins, including B6, which is vital to a healthy central nervous system. Pistachios also promote heart-healthy blood lipid levels thanks to their fatty acid content that helps maintain antioxidant and anti-inflammatory activity in the body. Studies have shown that a pistachio- and walnut-enriched diet could lower triglycerides, LDL cholesterol, and total cholesterol, adding to the heart-centric benefits of this delicious snack.

Don't worry about overdoing it—one ounce of pistachios has less than 160 calories and is actually quite a robust serving of 49 to 50 nuts. So, go ahead and indulge in a handful (or two). Your heart will thank you for it.

Republished from GreenMedInfo.com

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

HAZELNUTS have an antioxidant capability

20x more potent than vitamin C and

50x more potent than vitamin E

50 PISTACHIOS have only **160** CALORIES

Nuts have been an important part of the human diet for millions of years.



ALL PHOTOS BY SHUTTERSTOCK

NATURE IS MEDICINE

Nature Prescriptions Improve Physical and Mental Health

Research confirms the nourishing effect of enjoying the beauty of the natural world

By Emma Suttie

How good does it feel to walk barefoot on the beach, sit in the grass on a sunny day, or stroll through a forest and enjoy the grandeur of the trees?

Although most of us can feel the therapeutic benefits of being in nature, we may not think of them as prescriptions for some of our most common ills. Could doctors prescribe a walk in the park for an ailment the way they prescribe medication for an infection or heart condition?

The idea isn't so far-fetched, according to a recent analysis of 28 studies that show that spending time in nature, especially around trees, benefits our physical and mental health. And although it seems like a logical conclusion, it hasn't been widely explored scientifically until recently.

The study, a systematic review and meta-analysis published in The Lancet Planetary Health in April 2023, “aimed to synthesize evidence on the effectiveness of nature prescriptions and determine the factors important for their success,” according to the authors.

The analysis concluded that those in nature prescription programs had a

greater increase in daily step counts, had lower blood pressure, and improved their depression and anxiety.

“This study is built upon a long-term program of research that we are doing, where we show contact with nature—and trees especially—is really good for strengthening mental and physical health across our lives,” Professor Xiaoqi Feng, of the University of New South Wales in Sydney and one of the study's lead authors, said.

In Australia, there is a growing public interest in nature prescriptions. A recent survey led by Ms. Feng found that more than 80 percent of Australian adults are receptive to the idea.

Previous research by Ms. Feng has shown that living near green spaces can improve health. In a study of almost 47,000 adults in New South Wales (NSW), those living in the 30 percent of areas with the most trees reported better health and well-being. This research has informed Sydney's \$377 million strategy to attain a 40 percent green cover by 2050.

“But even if you have a high-quality green space like a park nearby, it doesn't mean that everyone will visit and ben-

efit from it,” Ms. Feng said. “How can we encourage and enable people to (re) connect with nature? That's where the idea of a nature prescription comes in.”

The Rise of Nature Prescriptions Worldwide

The study results support a growing trend. Nature prescriptions are emerging as a supplement to standard medical care in places beyond Australia.

For example, the United Kingdom recently invested £5.77 million (\$7.41 million) in a pilot program for green social prescribing.

The program links people to nature-based interventions and activities such as local walking, community gardening, and food-growing projects.

The two-year initiative will explore how to implement green social prescribing into communities to improve mental health outcomes, reduce health inequalities, reduce the demand on the health and social care system, and develop the best ways to make green social activities more resilient and accessible, according to the National Health Service. The United Kingdom has already been

implementing other social prescribing programs to help people make use of nourishing activities such as dance and crafting.

Canada also has a national nature



ALL PHOTOS BY SHUTTERSTOCK

prescription program. Park prescriptions, or PaRx, is Canada's first federal, evidence-based nature prescription program, according to its website. PaRx was a health initiative started by the BC Parks Foundation in 2020 and has now been officially introduced in every province across Canada. The initiative is driven by health professionals who want to improve their patient's health by connecting them to nature. Doctors can prescribe time in nature and give patients passes to National Parks to improve their health.

“How can we encourage and enable people to (re)connect with nature? That's where the idea of a nature prescription comes in.”

Xiaoqi Feng, professor, University of New South Wales, Sydney

◀ Could doctors prescribe a walk in the park for an ailment the way they prescribe medication for an infection or heart condition?

Park prescriptions started as a grassroots movement in the United States more than a decade ago and have been growing ever since.

The United States offers numerous park prescription programs all over the country, which are searchable through a directory on parkrx.org.

There was even a 2020 National ParkRx census conducted by the Institute at the Golden Gate.

The census information is used to determine how ParkRx programs are being adopted, different ParkRx program activities (ranging from self-guided meditation to park ranger-led walks), types of health benefits, and how the data are collected.

The census represents a sample population of 37 ParkRx programs, but the Institute hypothesizes that more than 100 ParkRx programs exist nationwide.

In Japan, the art of shinrin-yoku, or forest bathing, has been recommended by health practitioners since 1982 and involves connecting with nature through the senses. In fact, the word “shinrin-yoku” was coined by the Japanese Ministry of Agriculture, Forestry, and Fisheries. A range of guided tours offers shinrin-yoku throughout Japan to teach people the

benefits of forest bathing.

Although there are not yet large-scale nature prescription programs in Australia, there likely will be soon. According to Ms. Feng, there are some questions that still need answering.

“So, how long should the nature prescription be for? What should be in the prescription? How should we deliver it, and by whom? These questions don't have firm answers yet,” Ms. Feng said.

“If we want nature prescriptions to become a national scheme, we really need to provide the evidence.”

And then there is the question of accessibility. Nature prescriptions should be available to everyone, regardless of their circumstances.

Previous research conducted by Ms. Feng and her colleague Thomas Astell-Burt has shown that low-income communities are the least likely to have access to green spaces. Yet these communities have a higher risk of chronic health issues such as Type 2 diabetes, obesity, and cardiovascular disease.

“We don't want nature prescriptions to be a luxury item for the rich who already have access to beaches and a lot of high-quality green space,” Ms. Feng said. “We want these benefits for everyone.”

£5.77 MILLION

£5.77 million (\$7.41 million) was recently invested by the UK government in a pilot program for “green social prescribing.”

POWER OF PURPOSE

To Fight Loneliness, Find a Sense of Purpose

By Chris Woolston

A sense of purpose in life—whether it’s a high-minded quest to make a difference or a simple hobby with personal meaning—can offer potent protection against loneliness, according to new research.

“Loneliness is known to be one of the biggest psychological predictors for health problems, cognitive decline, and early mortality,” says Patrick Hill, associate professor of psychological and brain sciences at Washington University in St. Louis. “Studies show that it can

be as harmful for health as smoking or having a poor diet.”

The new study, based on surveys of more than 2,300 adults in Switzerland, found that feelings of loneliness were less common in people who reported leading a purposeful life, regardless of their age.

The researchers asked respondents to score their feelings on a lack of companionship, isolation from other people, and a sense of being “left out or passed over” during a four-week period. Participants also filled out the six-item “Life Engagement Test,” which asked them to rate statements such as “There is not enough purpose in my life,” and “I value my activities a lot.”

“A sense of purpose is this general perception that you have something leading and directing you from one day to the next,” Mr. Hill said. “It can be something like gardening, supporting your family, or achieving success at work.”

Many of the activities that can provide a sense of purpose, such as joining a club, volunteering at a school, or playing in a sports league, involve interaction with others, which is one

“**Loneliness is known to be one of the biggest psychological predictors for health problems, cognitive decline, and early mortality.**”

Patrick Hill, associate professor of psychological and brain sciences, Washington University, St. Louis.

▼ Loneliness can sneak up on us. Maintaining friendships and meeting new people can keep us happy and healthy.

reason why a purpose-filled life tends to be less lonely. In the study, people who say they received or provided social support were especially likely to report feelings of purpose.

But Mr. Hill notes that there’s more to fighting loneliness than simply being around others.

“We’ve all had time in our lives when we’ve felt lonely even though we weren’t actually alone,” he said.

There’s something about having a sense of purpose that seems to fight loneliness regardless of how many other people are involved, he says.

The study found a slight uptick in reports of loneliness for people in their 70s and beyond, an age when a sense of purpose can be especially important.

“We’re trying to dispel the myth from previous generations that this is simply a time for retiring and resting,” Mr. Hill said. “There are no downsides to finding something meaningful later in life.”

Still, it’s important to keep in mind that a quest for purpose can be somewhat self-defeating if taken too seriously.

“Feeling like you need to save the world can lead to existential dread and distress,” Mr. Hill said.

When it comes to purpose and meaning, even small things can matter.

“It’s OK if someone else thinks that your purpose is trivial, as long as it’s meaningful to you,” he said.

The research was published in Psychology and Aging.

Additional co-authors are from the University of Zurich in Switzerland and Tilburg University in the Netherlands.

This article was originally published by Washington University in St. Louis. Republished via Futurity.org



Activities such as gardening, art, or volunteering enrich our sense of purpose in life.








ALL PHOTOS BY SHUTTERSTOCK



HELP IS JUST A CLICK AWAY!

TheEpochTimes.com/help

From This Page You Can:

 <p>Video Library</p> <ul style="list-style-type: none"> • Watch the video to see how others are getting the most out of their subscription 	 <p>Find Answers From A Comprehensive FAQ Section</p> <ul style="list-style-type: none"> • Troubleshoot common problems • Learn our terms and conditions 	 <p>Use Our Customer Service Live Chat</p> <ul style="list-style-type: none"> • Tell us your subscription inquiries or concerns 	 <p>Submit Requests Online</p> <ul style="list-style-type: none"> • Report delivery and other subscription issues • Provide editorial and other feedback 	 <p>Access The Customer Portal</p> <ul style="list-style-type: none"> • Manage your subscription account
--	--	---	--	---