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Why You Need a Good Night's Sleep and How to Get It

By Gary Greenberg

People grumble about losing an hour of sleep every year when we spring forward into daylight saving time, but falling back into standard time is also disruptive to slumber, say experts at the American Academy of Sleep Medicine (AASM). “We tend to think we gain an hour of sleep in the fall, but most people wind up getting the same amount or less,” says pulmonologist Adeel Rishi, M.D., director of the AASM’s public safety committee. “The impact is more profound in the spring transition, but on the fall side your body is not used to going to sleep earlier, and it’s hard to transition quickly.”

Rishi was lead author of an AASM paper recommending the elimination of daylight saving time in favor of national year-round standard time.

But many people seem to shrug off the time change pretty easily.

“When you move one hour one way or another, it takes most people’s bodies a day to adjust,” contends Michael Breus, Ph.D., a clinical psychologist known as The Sleep

Doctor. “Some people make a much bigger deal out of it than it is.”

Despite that difference of opinion, Rishi, Breus, and other experts agree that sleep problems in general are a very big deal in the U.S., with an estimated 50 million to 70 million people not getting enough shut-eye. One reason is that we tend to undervalue the importance of sleep which, alongside diet and exercise, is a major pillar of health.

“Sleep has been neglected in the health conversation,” says Matt Walker, Ph.D., a professor of neuroscience and psychology at the University of California, Berkeley, and director of the Center for Human Sleep Science. “A lack of sleep will impact almost every major physiological system in your body, and almost every operation of your mind.”

The Importance of Sleep

Walker emphasized the importance of sleep during a video interview with *Impact Theory* host Tom Bilyeu. He pointed out that while the *Guinness World Records* sanctioned a daredevil’s death-defying skydive from nearly 128,000 feet (during which his body broke the sound barrier), the

Guinness folks won't sanction sleep deprivation records because it is considered too hazardous to health.

Researchers have found that sleep deficiencies contribute to a host of ailments, including obesity, diabetes, cardiovascular disease, Alzheimer's disease, anxiety, depression, and substance abuse. Lack of sleep also increases the risk for accidents and injuries, and can negatively impact social relationships and performance, sometimes with catastrophic consequences. In fact, investigators have concluded that a lack of sleep played a role in some of the worst disasters of our time, including the Chernobyl nuclear accident, the Exxon Valdez oil spill, and the explosion of the Challenger space shuttle.

What Happens During Sleep

There are four basic phases of sleep, a cycle that repeats about every 90 minutes throughout the night. The first two phases are buffers, as sensory and motor connections to the outside world quiet down, and body temperature, heart rate, and breathing rate all drop.

The third phase is the deepest and most restorative one. New memories are made and the brain's glymphatic cleaning system kicks into high gear, flooding cells with cerebral spinal fluid to wash away the metabolic waste that accumulated during the day.

The fourth phase is rapid eye movement (REM) sleep, the stage in which we dream. The brain connects new memories to old ones, creating a network of associations that enhance creativity and problem-solving. REM sleep is also when emotional experiences are processed, a form of self-therapy that stabilizes emotions.

"The phases are not evenly distributed across sleep cycles," notes Breus, a diplomate of the American Board of Sleep Medicine. "The first cycle is heavy on the restorative phase with a minute or two of REM. The last cycle could have a couple minutes of restorative sleep and 30 of REM."

What Goes Wrong

For the most part, modern life is the great disrupter when it comes to sleep because it impacts

the circadian rhythm, our natural sleep-wake cycle.

"Before the industrial era, our sleep cycle was dictated by one thing: sunlight," Rishi tells *Health Radar*. "When the sun came up, we'd wake up and go to work. When the sun went down, we'd go to sleep. The modern world added artificial light to the equation, and that has disconnected our internal clock from the solar clock. This affects us in many ways, but the most obvious consequence is that people are getting less sleep."

Technology has compounded the problem by turning the world into a 24/7 hub of activity. People have too much to do and not enough time in the day to do it all. Often, if it's a choice between sleep and finishing a work assignment or binge-watching the latest season of your favorite TV show, sleep loses the battle.

When people finally decide to turn in for the night, they often have trouble dropping off. One reason for this is that blue light emanating from TV, computer, and smartphone screens, along with other artificial light sources, delays



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release of the sleep-regulating hormone melatonin.

“The secretion of melatonin only happens when there is little to no light,” says Rishi. “When secretion of that hormone is suppressed, it pushes back the onset of sleep.”

Even after falling asleep, many things can disrupt your slumber, including stress, hormone imbalances, digestive issues, the need to urinate, pain, caffeine or alcohol consumption, medications, and conditions such as sleep apnea and restless legs syndrome.

Determining How Well You Sleep

How well do you sleep? The answer may surprise you because many sleep problems go undiagnosed. For example, researchers estimate that 20 percent of Americans have sleep apnea — episodes of disrupted breathing that degrade sleep quality — and 90 percent of them don’t know it.

In the past, people had to spend a night in a special lab to determine how well they slept. These days, there are at-home devices and wearable sleep trackers (such as a wristband or watch).

“Historically, we have focused on sleep quantity,” says Breus. “But I argue that sleep quality is even more important. There are quite a few trackers out there that people can utilize to understand more about the quality of their sleep.”

How to Optimize Your Sleep

The first thing to do to improve both sleep quantity and quality is to treat underlying health issues that may be disrupting it. Conditions such as sleep apnea, heartburn, and incontinence can

be managed through medical devices, medications, and/or procedures. But for most Americans, the key to getting sufficient sleep is an attitude shift.

“Unfortunately, sleep takes a back seat to everything else that is going on in our lives,” says Rishi, an associate professor at the Indiana University School of Medicine. “But research tells us that lack of good quality sleep can cause a lot of health problems, so people need to make time for it.”

Along with making sleep a priority, Breus recommends a five-step plan to improve sleep quality:

1. Set a sleep schedule based on what’s called your “chronotype,” or circadian classification. Pick one wakeup time and count back 7.5-8 hours to determine bedtime. To find your chronotype, consult Breus’ website thesleepdoctor.com
2. Don’t consume caffeine after 2 p.m.
3. Limit alcohol to two drinks a day, and follow each with a glass of water; stop drinking alcohol three hours before bedtime.
4. Get at least 20 minutes of exercise a day, but not within four hours of bedtime.
5. Follow the rule of 15s upon waking. Take 15 deep breaths, drink 15 ounces of water, and get 15 minutes of sunshine to reset your circadian clock.

“If you do those five things, I can guarantee your sleep quality will improve,” says Breus, co-author of the new book “Energize! Go From Dragging Ass to Kicking It in 30 Days.”

What You Can Do When You Can’t Sleep

People often have trouble falling asleep (sleep onset insomnia), or

going back to sleep after waking up in the middle of the night (sleep maintenance insomnia). Rishi suggests winding down before bed by turning off electronic devices and dimming lights (to promote melatonin secretion) and detaching yourself from the affairs of the day through reading, prayer, meditation, or another distraction.

If you still toss and turn, try:

- **Deep breathing.** A standard technique is to inhale for four seconds, hold your breath for seven seconds, and exhale for eight seconds. That will engage your parasympathetic nervous system to reduce stress and anxiety.
- **Progressive muscle relaxation.** To calm your mind, tense one muscle group in your body for 5-10 seconds, relax for 10 seconds, then repeat with the next muscle group. Work systematically from lower extremities to the face.
- **Cognitive behavioral therapy for insomnia.** A therapist helps you identify thoughts, feelings, and behaviors that interfere with sleep, then uses various techniques to adjust them in ways that promote sleep.
- **Sleep medication.** Although they tend to be overprescribed, Breus says some people may need drugs to sleep. But avoid benzodiazepines such as Xanax, Valium, and Librium, because they interfere with the restorative sleep phase. Melatonin supplements and cannabis may help, but be sure to consult your doctor.
- **Aromatherapy.** Lavender, valerian, chamomile, and some other essential oils have soothing effects that can promote sleep. Diffuse them in your bedroom, or rub some drops on your pillow or the soles of your feet. □



Making **YOU** Live Healthier

with Mehmet Oz, M.D. & Michael Roizen, M.D.

Cultivating Healthy Stress

Stress that turns to chronic distress is clearly negative, harming your physical and mental well-being. The persistent knotted-up sensation can cause muscle pains, headaches, gastrointestinal woes, sexual dysfunction, dizziness, and sleep problems, and can increase or suppress your appetite and make you more vulnerable to infection, heart disease, and other chronic illnesses.

It can also affect a person's emotional well-being. Mismanaged stress can trigger depression and anxiety.

But stress that turns to action, cleverness, problem-solving, and excitement can be productive, even enjoyable, and new research shows it may even improve your brain power. In fact, people who say they don't feel stress do less well on cognition tests, and the difference in cognition is equal to more than eight years of aging, according to a study published in the journal *Emotion*.

The chronically stress-free are also less likely to experience positive events or to give or receive emotional support, add the researchers from Penn State. Boredom and lack of motivation can set in.

So how can you dismantle your negative stress response and harness the benefits of positive stress?

Toning Down Chronic Stress

Identify your stress triggers. Certain people, places, or situations might inevitably cause you distress. Admit it, out loud, either to yourself (maybe written in a journal) or to a close friend or family member (or therapist). That will help keep distress from sneaking up on you and ruining your day.

Expel the stress. The trio of stress-busting techniques is aerobic exercise, meditation, and deep breathing. They lower levels of stress hormones, relax your muscles, improve your mood, ease aches and pains, and restore calm. Your goal: 60 minutes of moderate activity every day; 10-15 minutes of meditation every morning; progressive muscle

relaxation and/or deep breathing routine every night before bed.

Reduce worry. It may sound hard to do, but small steps will make a big difference in the amount of worry you suffer.

Cultivating Positive Stress

We know stress can be positive when a grizzly bear is threatening you. It spurs you to get away from the danger. In those moments, your body goes through hormonal and biochemical changes that cause an increase in heart rate, blood pressure, and respiration, and a dampening of pain response. Your muscles act — immediately.

But that's not the kind of positive stress we're talking about. We're talking about the stress that comes from challenges you enjoy, from extending yourself to care for another person to learning or experiencing something new. Turning a challenge into a welcome opportunity is positive stress we want to help you cultivate.

Pick a new activity. Walk 10,000 steps a day, learn Italian, ask your boss for a new project — anything will do to get started. Then plan and execute it, making sure to praise yourself for your accomplishment.

Set an attainable daily goal. Keep it easy, such as calling a friend, making your bed (if you don't usually), brushing the dog. Accept that having to do something is positive not negative; it will teach your body a new way of reacting.

Reframe a worry. Instead of focusing on how hard it is to help your ailing mother get to the doctor, consciously tell yourself to appreciate the fact that you still have time together. Focus on what is, instead of what's lost. □

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Prepare Now for a Nasty Cold and Flu Season

By Lynn Allison

Experts warn that this year's cold and flu season could be severe. Many people are already coughing and sneezing, with respiratory diseases making a comeback after the lessening of COVID-19 mitigation procedures.

The Centers for Disease Control and Prevention (CDC) reported that the number of cases of influenza in the U.S. plummeted by 98 percent last season. The reasons for the dramatic decline include fewer people traveling, more people wearing masks and social distancing, and more Americans getting the flu shot.

But experts caution that the flu is expected to make a deadly comeback this year. With COVID-19 restrictions lifted and children returning to school, we can expect a particularly harsh season. "Even though it's smoldering out there, it could take off at any time," said William Schaffner, M.D., a professor of infectious diseases at Vanderbilt University School of Medicine.

During the pandemic, the viruses that cause the common cold were at historic lows because of safety measures. But the pathogens have returned, so it's important to prepare for what could be a challenging winter.

While nothing can completely remove the risk of contracting a cold or flu, there are many things you can do to greatly reduce your chances of getting sick.

"Preventive measures, in addition

to getting the flu vaccine annually as recommended by the Centers for Disease Control and Prevention, are gold standards for helping to reduce your chances of getting sick during the upcoming season," says Joshua Murdock, doctor of pharmacy, and pharmacy editor at telehealth company GoodRx.

Stock your medicine chest.

Take time while you are healthy to examine your medicine cabinet. Get rid of expired items and make a list of what you need to replace and replenish, advises Sarah Lewis, a pharmacist and medical writer who earned her doctor of pharmacy degree from Massachusetts College of Pharmacy. "Be sure to include fever and pain relief medicines, decongestants, antihistamines, and cough medicines," she adds. Always check with your healthcare provider if you have any questions about interactions between over-the-counter medications and prescription drugs you're taking.

Murdock advises that when you buy combination medications, make sure you aren't using products that contain the same ingredients. "For example, acetaminophen is a fever-reducing medication that is found both as a standalone product as well as in combination medications," he says. More is not always better, so check with your doctor or pharmacist if you are uncertain about dosages.

Practice proper handwashing and don't touch your face.

Murdock reminds people to wash their hands frequently with soap

and water, for at least 20 seconds each time. "This is preferred over using alcohol-based hand sanitizer," he tells *Health Radar*. "Avoid touching your face and always cover your mouth and nose when you cough or sneeze — but don't use your hands!" Sneeze and cough into your elbow. Stay home when you are sick or feverish.

Get the flu vaccine. Flu vaccines are recommended for people over age 6 months, says Murdock. "In 2019-2020 alone, flu vaccines prevented an estimated 7.5 million flu-related illnesses," he points out. "It's best to get the shot by the end of October."

Build up your immunity. Get at least eight hours of quality sleep a night and stay hydrated, advises Jacob Teitelbaum, M.D., an expert on immunity and the author of "From Fatigued to Fantastic!" Teitelbaum tells *Health Radar* that it's also critical to avoid excess sugar. "The nine teaspoons of sugar in one can of soda or glass of fruit juice suppresses your immune system by 30 percent for three hours," he says. To optimize your immune system, take 15-30 mg of zinc, 200-500 mg of vitamin C, 1,000-4,000 IU of vitamin D, and 2,500 IU of vitamin A daily. But do not exceed 8,000 IUs of vitamin A per day, which could cause birth defects in pregnant women, cautions Teitelbaum.

"These four supplements can improve immunity dramatically," he says. □

Can You Prevent a Kidney Stone?

By Chris Iliades, M.D.

An estimated half-million people endure the pain of passing a kidney stone each year. If it has happened to you, you know the pain is excruciating. The good news is that if you have had a kidney stone, there's a way to reduce the risk of further kidney stones by 90 percent or more — even though chances are you've never heard of it. It's called a 24-hour urine test for kidney stone prevention. A study of close to 30,000 kidney stone patients at high risk for further stones found fewer than 8 percent had undergone this test.

A recent review in the National Library of Medicine's journal *StatPearls* says there may be no medical test more useful and less used.

"For those who are interested in preventing stones, we recommend a 24-hour urine collection for kidney stone prevention testing. With this information, physicians can identify the changes in diet, lifestyle, medications, or supplements that will significantly reduce the risk of new stone formation," says Stephen W. Leslie, M.D., an associate professor of urology at Creighton University School of Medicine in Omaha, Neb., who is the lead author of the review.

Are You at Risk?

The biggest risk factor for kidney stones is having recently had a stone. "Kidney stones often

recur," says Leslie. "There is about a 50 percent chance over the next five to seven years."

But even if you've never had a stone, you may still be vulnerable. The risk of a first kidney stone has more than doubled since the 1970s. For most people, the lifetime risk is about one in 10.

Kidney stones form when minerals and other chemicals build up in your kidneys. Not drinking enough fluid to flush out your kidneys is a common cause. Obesity and a family history of kidney stones also increase the risk. Medical conditions that increase your chance of developing a kidney stone include:

- Diabetes
- Kidney disease
- Inflammatory bowel disease
- Irritable bowel syndrome
- Gastrointestinal surgery, especially bypass surgery for weight loss
- Recurrent urinary tract infections
- Gout

What Can You Do to Reduce Your Risk?

Whether you have had a kidney stone or not, the most important thing to do is drink water. In fact, global warming is a kidney stone risk factor. More heat means more heat-related dehydration. You should drink enough water to produce at least 2 liters of urine daily, which will keep your urine clear or a pale-yellow color. That could be eight to 12 glasses of water per day. You should also reduce excess dietary salt and lose the extra pounds if you are overweight.

Diet is important. The best diet might include avoiding calcium, eating lots of fruits and vegetables, avoiding some nuts but not all, and limiting animal proteins such as fish, beef, and poultry. The problem is no single diet works for everyone because everyone's urinary chemistry and risk factors are different. The best diet for you depends on your individual risk factors. That's where the 24-hour urine test comes in.

Who Should Get 24-Hour Kidney Stone Urine Testing?

"The American Urological Association recommends that all patients with stones be informed about 24-hour urine testing," says Leslie. If you have had a kidney stone and want to avoid getting more, ask your doctor about the test. You may need to see a urologist for interpretation of the test and to design a treatment plan.

"In my practice, I tell all my kidney stone patients about 24-hour urine testing, but warn them that it's difficult to follow treatment long term because there is no immediate penalty for stopping therapy or cheating on the recommended diet," says Leslie. "They will feel just fine for a while. But one day easily turns into two, then into weeks, and eventually they are off treatment. Patients don't feel or see a daily benefit, but they do see the restrictions or limitations on their preferred diet. Those who follow treatment will see a 90 percent or more reduction in new stone formation. That's the benefit." □

Take Steps to Prevent a Fall

By Fran Kritz

More than one in four older adults takes a fall each year, according to the Centers for Disease Control and Prevention (CDC). That's a whopping 36 million falls. And while not all falls cause serious injury, many can result in broken bones, a head or brain injury, or even death.

“Every second of every day, an older adult falls in our country,” says Debra Houry, M.D., director of CDC’s National Center for Injury Prevention and Control. “We know that falls are preventable and are not an inevitable part of aging. [Preventive steps and strategies] can help reduce falls, prevent injuries, and save lives,” Houry says.

Roseanne Gillespie, a physical therapist at Bridgeport Hospital in Connecticut, says that “falls increase as people age due to changes in sensation, flexibility, vision, equilibrium, and activity level.” But making some changes and taking precautions can reduce your fall risk while still allowing you to enjoy your life.

Alert Your Doctor

If you’ve had a fall, discuss it with your doctor at your next appointment, says Gillespie. Your doctor will review your medications to see if any impact balance or cause dizziness and may switch you to other drugs or adjust the times you take your medications. If the drugs can’t be changed, your doctor may advise a cane and other strategies to help keep you steady when walking.

Your doctor may also check you for eye and ear disorders that increase your risk of a fall, but can be treated.

Gillespie also advises people to regularly check their blood pressure, which can result in dizziness and affect balance.

Exercise

Regular exercise can help you avoid falls. Check with your doctor before beginning an exercise program, and discuss options such as walking, water workouts, or tai chi — a slow and graceful dance-like exercise. These can all help improve strength, balance, coordination, and flexibility. No class available? Go

to the AARP website, aarp.org, or search for videos on YouTube that provide exercise instruction to help prevent falls and improve balance.

Change Your Shoes

Your footwear may look good or feel comfortable, but high heels, floppy slippers, shoes with slick soles, and shoes without backs can increase your risk of falling, stumbling, and slipping, as can walking in socks or hosiery. Opt instead for low heels, shoes that fit well, and nonskid soles, says Gillespie.

The Problem May Be Inside Your House

Many falls happen at home because people stumble or trip on things left on the floor or in the way. Reduce your risk by removing clutter — such as newspapers, boxes, and wires — from the floor, and secure loose rugs with backing or double-sided tape. If floorboards or carpeting have come loose, get them fixed.

Clean food spills right away to keep from forgetting and slipping later. Get nonslip mats for your shower and bath.

Light the Way Around Your House

Put night lights in your bedroom, bathroom, and hallways, and place a lamp within reach of your bed to light up your room if you get up at night. Other lighting tips for fall prevention include:

- Add glow-in-the-dark light switches to make them easier to see at night.
- Headed up or downstairs? Switch on the light first so you can see your way.
- Store flashlights in reachable spots in case of power outages.

In addition to a cane or walker, if needed, for stability when getting around, your doctor might advise fall prevention devices for your home. These include stairway handrails, nonslip strips for steps, grab bars for the shower or tub, and railings in the bathroom or other areas of your home.

Ask your doctor about a referral to a physical or occupational therapist (often covered by insurance) who can discuss fall prevention strategies and may even visit your home to look for hazards and suggest solutions, advises Gillespie. □

Should You Take a Probiotic?



Geoffrey A. Preidis M.D., Ph.D., is a pediatric gastroenterologist whose goal is to provide the highest quality of compassionate patient care with the latest advances in gastroenterological, liver, nutritional, and microbiome research. He is an assistant professor at Baylor College of Medicine in Houston.

Q: What are probiotics and how do they differ from prebiotics?

A: Probiotics are live microorganisms that may help maintain digestive health and boost the immune system. Most probiotics are bacteria, but probiotics can be other small organisms such as yeasts. In contrast, prebiotics are nonliving substances that come mostly from fiber-rich foods. The beneficial bacteria in your gut feeds on this type of fiber. Eating balanced amounts of probiotic and prebiotic foods can keep your gut bacteria, also called microbiota, healthy. Yogurt is an example of a food that contains probiotics, while legumes, beans, and peas contain prebiotics.

Q: How popular are probiotic supplements?

A: Millions of Americans take probiotics, which are now the third most common dietary supplement, after vitamins and minerals. One survey from the National Institutes of Health found that the number of U.S. adults who take probiotics quadrupled between 2007 and 2012. Probiotics can be found almost everywhere — in supermarkets, drugstores, health food stores, and online — in pill or powder form and in some foods and beverages. However, to date, no probiotic products have been approved by the Food and Drug Administration to treat, cure, or prevent any disease.

Q: Why are they so commonly used?

A: Probiotics have become very popular because they are widely available without a prescription, and they have significant appeal due to the possibility of treating the growing number of digestive disorders in this country. But in most circumstances, there is not enough evidence to suggest a clear value

to be gained for most consumers. The benefits of probiotics must be established in scientifically rigorous studies. Individuals should consult with their doctors prior to starting any probiotic regimen.

Q: What are your caveats about probiotics?

A: My main concern is the lack of regulation in manufacturing probiotics and in clinical studies touting their potential benefits. Consumers should be skeptical when reading product labels because many health claims are not supported by trustworthy data. Probiotic strains, doses, viability, and additional ingredients might not match what is advertised, and formulations could differ from batch to batch. Importantly, although probiotics are generally regarded as safe for most people, most of the published trials have not been as stringently reviewed as pharmaceutical trials, so the risk of side effects could be higher than we think. As living microbes, probiotics can move from the intestines into the bloodstream, potentially causing sepsis. Contamination in the manufacturing process has been reported. Risks may be highest among people with weak immune systems, so we typically wouldn't recommend probiotics for those individuals. And there might be other long-term effects that we are not yet aware of.

Q: When are probiotic supplements recommended?

A: The American Gastroenterological Association recommends that specific probiotics should be considered for only three groups of patients: preterm, low birth weight infants, adults and children taking antibiotics, and patients with pouchitis (a complication of chronic inflammatory bowel disease). On the other hand, probiotics are prescribed to many children with acute gastroenteritis, but recent data indicates probiotics are not beneficial and should not be used routinely in this context. Some clinicians recommend probiotics for other gastrointestinal conditions, including *C. difficile* infection, Crohn's disease, ulcerative colitis, and irritable bowel syndrome — but until additional trials are conducted, there is not enough evidence to support taking probiotics to treat these conditions. □

13 Key Factors for Preventing Dementia

By Gary Greenberg

Even though Alzheimer's disease and other dementias typically don't strike until later in life, it's never too early to make lifestyle adjustments to lower your risk of the heartbreaking conditions.

"We have learned that control of certain risk factors in middle age and younger has a bigger impact on later life than addressing them in middle age itself," says Ronald Lazar, Ph.D., director of the Evelyn F. McKnight Brain Institute at the University of Alabama at Birmingham School of Medicine. "If these factors are not addressed, that raises risk of [dementia-associated] pathology beginning. And once pathology has taken its path, it's difficult to turn back."

Lazar served as lead author of an American Heart Association (AHA) statement identifying 13 modifiable risk factors for brain health. Seven of the factors concern cardiovascular issues:

1. Hypertension. In one of many examples, a British study found that elevated blood pressure in the late-30s and early-40s predicted abnormal brain changes at age 70. "High blood pressure has one of the most profound effects on cognition over time," says Lazar.

2. Smoking. Cigarette smoking is the third most important modifiable risk factor for dementia. Experts believe the oxidative stress generated by smoking may be the main culprit. The good news is that quitting the habit can dramatically decrease risk.

3. Diabetes. "Diabetes causes all kinds of bad things in the

brain," notes Lazar. These include inflammation, the breakdown of the blood-brain barrier (letting in toxins from the bloodstream), and amyloid plaque buildup.

4. Cholesterol. Though our bodies need these fats, unfavorable cholesterol profiles can promote atherosclerosis, inhibiting blood flow to the brain.

5. Diet. Heart-healthy diets, such as the Mediterranean and DASH (Dietary Approaches to Stop Hypertension) diets, are associated with slower cognitive decline. Go easy on the meat and avoid processed foods.

6. Obesity. Being obese is one of the most common risk factors for dementia, in part because it contributes to conditions such as diabetes and hypertension, which increase risk. "These risk factors are all interrelated," says Lazar. "They are not isolated."

7. Physical activity. "Exercise is unique because it favorably impacts the other six," says Lazar. "As a result, it's one of the best ways to maintain cognition."

Six other factors include:

8. Alcohol consumption. An occasional drink protects the brain from cognitive impairment, but too much alcohol has far-ranging destructive effects. The AHA recommends no more than one drink a day for women and two for men.

9. Sleep. A growing body of evidence suggests that poor sleep leads to neurodegenerative diseases, in part because deep sleep stages help to clear the brain of toxic buildup. Shoot for seven to eight hours of quality sleep per night.

10. Social engagement.

"Being with people gives you psychological support and cognitive stimulation," says Lazar. "A recent study showed cognitive activity like you get from social interaction pushes back decline in cognitive function by years."

11. Hearing. A meta-analysis of 36 studies found that age-related hearing loss was associated with both cognitive decline and dementia. This may be due to the lack of stimulation, as well as contributing to other factors such as social isolation.

12. Depression. In another large review, people with mild cognitive impairment who had depression were more likely to progress to dementia than those who weren't depressed.

13. Education. Higher education protects people against cognitive decline because it promotes mental stimulation as well as a buildup of cognitive reserve, which helps to preserve cognitive function despite dementia pathology.

Your best bet, says Lazar, is to talk to your primary care provider about monitoring these 13 factors.

"A recent study of 1,000 adults found that only 5 percent had a conversation with their primary care provider about these risk factors," he tells *Health Radar*. "The conversation has to take place to act proactively. If it's done early, before any problems, it becomes easier to integrate things that people can do to keep the brain functioning at the highest level possible for the longest period of time." □

How to Get Out — and Stay Out — of the Hospital

By Gary Greenberg

Nothing's worse than having to be admitted to a hospital — except being readmitted days or weeks later. The truth is that hospital stays are very stressful to body and mind, and they can trigger additional health woes that can send you back sooner rather than later. The phenomenon is so common it has earned its own designation: post-hospital syndrome (PHS).

“We find that about one in five patients are back in the hospital within 30 days of admission,” says cardiologist Harlan Krumholz, M.D., a Yale School of Medicine professor who has researched readmissions and coined the term post-hospital syndrome. “Readmission is generally not for the initial problem. After being in the hospital, your risk has skyrocketed for a whole range of bad things.”

Some of the leading causes for readmissions are heart failure, infections, gastrointestinal problems, chronic obstructive pulmonary disease (COPD), and trauma from falls or other accidents.

During a hospital stay, doctors are typically focused on treating the problem that put the patient there, and overlook the toll hospitalization itself can take on health, Krumholz adds. Sleep disturbances, skipped meals, lying in bed 24/7, a lack of privacy, roommates who snore, moan, vomit or even die . . . these are

some of the things that can cause stress for a patient, increasing the likelihood of a return visit.

“People’s physical reserves are depleted following a hospital stay for an acute illness, so they have heightened vulnerability to further health setbacks and are less able to handle them,” says hospital admission researcher Hallie Prescott, M.D., an assistant professor of pulmonary and critical care medicine at the University of Michigan. “Readmissions are more common in elderly patients, patients with multiple chronic conditions, and following longer hospitalizations.”

Krumholz hopes that as more people become aware of PHS, hospitals will start developing a more holistic healing approach that transcends treatment of the initial problem.

“Hospitalized people are experiencing some of the scariest moments of their lives and are stressed to the max,” Krumholz tells *Health Radar*. “We need to be able to provide a healing, quiet, soothing environment to help them recover faster.”

Unfortunately, it will likely be a while before hospitals become less stressful for patients. In the meantime, to best prevent a return visit, you can start taking measures before being released:

- For meals, try to order more fresh fruits and vegetables, and less sugary juices and processed food. You also may be able to skip the hospital fare altogether by ordering something from outside,

or having friends or family bring in a dish.

- If possible, get out of bed and walk around. Even a little bit of activity is better than none, and by occasionally using your muscles, you may help to prevent a fall at home that could send you back to the hospital.

- Get a good night’s sleep, which in a hospital can be difficult. Bring some earplugs or a white noise device to help tune out ambient sounds. An eye mask may also help.

Once you get home, Prescott suggests the following:

Sort out your medications.

“Often, medications will need to be stopped or started, or the dose changed around the time of hospitalization, which increases risk for errors,” she says. “Keep an up-to-date medication list and dispose of old meds.”

Sleep well. Your body needs some quality shut-eye to recover. Go to bed at the same time every night, and make sure to get at least seven hours of quality sleep.

Eat well. Your body needs good nutrition to heal, so focus on healthy foods. And drink lots of water.

Get moving. It’s common to have decreased stamina after a hospital stay. Gradually increase your activity each day, but be careful not to overdo it. Walking is a good start. It may help to keep an exercise log for motivation.

Follow up with your primary care physician. If you don’t have one, get one. □

FDA Approvals: COVID Vaccine, Stroke Recovery, Rare Sleep Disorder

Compiled exclusively by Health Radar, here are the most significant new drugs and medical devices approved by the U.S. Food and Drug Administration.

Full Approval of Pfizer COVID Vaccine

The U.S. Food and Drug Administration granted full approval for Pfizer's coronavirus vaccine. U.S. health officials hope the decision will trigger more vaccine mandates and boost vaccination rates among Americans who remain hesitant about immunization, *The New York Times* reported. The approval is likely crucial for greater vaccine uptake. About 60 percent of eligible people in the United States are now fully vaccinated, according to figures from the U.S. Centers for Disease Control and Prevention. Three in 10 unvaccinated adults said they would be more likely to get vaccinated if one of the vaccines currently authorized for emergency use were to receive full approval from the FDA. For the 45 percent of unvaccinated Americans who have steadfastly said they will not get the vaccine, full approval will likely prompt new restrictions, including limitations on employment and an increase in health insurance premiums.

Some states and municipalities could follow the lead of New York City, which will soon require at least one vaccine dose for those seeking to enter indoor restaurants, gyms or cultural events. Regulators are still reviewing Moderna's application for full approval for its vaccine, and a decision could come at least several weeks after the one for Pfizer.

Nerve Stimulation Device for Stroke Recovery

A first-of-its-kind nerve stimulation treatment for people who have problems moving their arms after a stroke has been approved by the FDA. The Vivistim System is a prescription therapy for ischemic stroke patients who have moderate to severe difficulty moving their arms and hands. Used either at home or in a clinic, the system electrically stimulates the vagus nerve, which runs from the brain to the abdomen. An implantable generator that produces a mild electrical pulse is implanted just under the skin in the chest of the patient. A wire that's attached to the generator

is also implanted under the skin and sends pulses to electrodes that are placed on the left side of the neck, where the vagus nerve is located. The system also includes laptop software and a wireless transmitter to be used only by the patient's healthcare provider. The FDA approval of the system was based on a clinical trial of 108 stroke patients in the United States and United Kingdom.

Patients were asked to complete 300 to 400 physical therapy exercises for 90 minutes a day, three times a week for six weeks, but only the treatment group received an appropriate level of vagus nerve stimulation. A control group received only a very low level of stimulation. After three months of follow-up, the trial found that stroke survivors treated appropriately with the system gained greater increases in the use of their arms and hands compared to those in the control group. Side effects of using the Vivistim System included difficulty speaking, bruising, falling, hoarseness, pain, low mood, fracture, headache, rash, dizziness, throat irritation, urinary tract infection, and fatigue.

Drug to Treat Rare Sleep Disorder

The drug Xywav has been approved for expanded use in adults with a rare sleep disorder called idiopathic hypersomnia. The drug has a checkered history: In the 1960s, it was given to women during childbirth to dampen their consciousness. An illicit version made headlines as a "date rape" drug in the 1990s. It's the first drug to be approved by the FDA for idiopathic hypersomnia, which causes excessive daytime sleepiness even after a good night's sleep. The oral drug was already approved for the treatment of excessive daytime sleepiness and sudden loss of muscle tone in patients aged 7 and older with narcolepsy. The approval is based on a clinical trial that included 154 adult patients ages 19 to 75. Those who were switched from Xywav to a placebo experienced worsening sleepiness and symptoms of idiopathic hypersomnia compared to those who continued taking the drug. The most common side effects of the drug were nausea, headache, dizziness, anxiety, and vomiting. □

HEADPHONES CALM MRI PATIENTS

Noise and claustrophobia cause anxiety in many patients undergoing MRIs, and some even refuse to undergo scans because of the discomfort. Traditional headphones, which might deaden the noise and provide a measure of entertainment, can't be used because they contain ferrous materials (such as steel) and emit electrical noise which can compromise the integrity of scans. Scientists at SMRT Image, which develops solutions for patients undergoing MRI testing, teamed with headphone innovator Audeze to develop headphones that could be used during scans. The result was a new transducer technology that uses electrostatic force to create sound coupled with acoustic noise cancellation to mute the high noise levels emitted during MRIs. The headphones can be paired with an audiovisual system that allows patients to watch videos via a mirror.



COFFEE LOWERS COVID-19 RISK

Your risk of being infected with COVID-19 is lower if you drink a morning cup of coffee, according to a study published in the journal *Nutrients*. Researchers from Northwestern University found that drinking at least one cup of coffee daily lowered risk by about

10 percent compared to those who drank less than a cup a day.

STRESS DOES TURN HAIR GRAY

A study published in *eLife* found that stress does indeed turn hair gray, but they also found that if stress is eliminated, the process is reversed, allowing natural hair color to be restored starting at the root. A few gray hairs from healthy people were analyzed, and some of the hairs were found to be white at the tip but darker at the root, indicating the hair was re-pigmenting. When the volunteers identified periods of extreme stress, the periods correlated with hair graying, and a reduction in stress correlated with re-pigmenting. Researchers warn that a reversal of some gray hair is most likely to occur in younger people, and a head full of gray hair isn't going to return to its original color. Information gleaned from the research has implications for understanding aging: "Understanding the mechanisms that allow 'old' gray hairs to return to their 'young' pigmented states could yield new clues about the malleability of human aging in general and how it is influenced by stress," said researcher Martin Picard, Ph.D.

SOY DIET SLASHES MENOPAUSAL SYMPTOMS

A plant-based diet rich in soy reduced moderate to severe hot flashes by 84 percent, according to a study published in the journal *Menopause*. Volunteers were given either a low-fat vegan diet plus one-half cup of soybeans added to a salad or soup each day, or were told

to make no dietary changes. During the 12-week study, 59 percent of women on the soy diet experienced a total stoppage of moderate to severe hot flashes without drugs. Overall, hot flashes, including mild ones, decreased by 79 percent. There was no change in the control group.

L-ARGININE SAFEGUARDS BLOOD VESSELS

Nearly a third of adults in the U.S. have high blood pressure, which raises the risk of heart disease and stroke. That's why blood pressure drugs are among the best-selling medications in the country. Unfortunately, those drugs come with significant risks, and may not entirely control the problem. In fact, about one-third of people with high blood pressure have "resistant hypertension," meaning that their blood pressure cannot be controlled with less than four medications. L-arginine helps regulate the production of nitric oxide, which safeguards both the heart and the blood vessels. It is nitric oxide that signals the muscles in the heart's arteries to relax, enabling them to widen and blood flow to increase. This helps prevent plaque from building up on the walls of the arteries, allowing the blood to flow more smoothly and therefore lower blood pressure.

LAUGHING GAS RELIEVES DEPRESSION

A single one-hour treatment with nitrous oxide — laughing gas — can relieve the symptoms of severe treatment-resistant depression for several weeks, according to a Phase 2 clinical trial from the University of Chicago. A previous study had used a 50 percent concentration of nitrous oxide, but the current

study found that a 25 percent concentration was effective. Around 85 percent of patients reported substantial improvements in their symptoms lasting as long as four weeks. The 25 percent concentration resulted in lower risk of adverse effects such as sedation and nausea than the higher concentration. “There are millions of depressed patients who don’t have good treatment options,” said researcher Peter Nagele, M.D., who hopes nitrous oxide might find acceptance as an effective rapid treatment.

5-MINUTE COVID-19 TEST

Researchers at the University of Maryland School of Medicine have developed two tests that can diagnose COVID-19 in as little as five minutes. One is a molecular diagnostic test called Antisense that uses electrochemical sensing to detect the virus. The second test analyzes gold nanoparticles to detect a color change when the virus is present. Both tests require little lab training and are more reliable than the rapid antigen tests currently available, which detects the virus only in those with high viral levels. “These two newer tests are extremely sensitive and detect the presence of the virus, even in those with low levels,” said researcher Dipanjan Pan, Ph.D., whose team developed both tests. The tests can be performed using a nasal swab or a saliva sample.

TAI CHI EQUAL TO EXERCISE IN REDUCING BELLY FAT

Tai chi, a slow, graceful form of exercise, may be as effective in reducing belly fat in older adults as conventional aerobic exercise. A large waist circumference (WC) is a major characteristic of metabolic syndrome,



the precursor to type 2 diabetes. A 12-week randomized, controlled study involved adults 50 years of age and older with central obesity. They were divided into groups that participated in conventional exercise consisting of brisk walking and strength training, a tai chi group, or a group that did not exercise. The two exercise groups lost about the same amount of WC while the control group saw an increase. “Overall, we showed that tai chi had health benefits similar to those of conventional exercise and thus provides an alternative and more amenable exercise modality for middle-aged and older adults to manage central obesity,” the researchers wrote in the *Annals of Internal Medicine*. “There are important health care implications for older people who might be averse to conventional exercise because of physical limitations or comorbidities.”

COMMON COLD COMBATS COVID

Exposure to the rhinovirus, the most frequent cause of the common cold, can protect against COVID-19, says a Yale study published in the *Journal of Experimental Medicine*. Researchers found that being exposed to the common cold jump-starts the action of immune-related genes that can stop the SARS-

CoV-2 virus — the virus that causes COVID-19 — from replicating within airway tissues. Researchers infected lab-grown human airway tissue with SARS-CoV-2 and found that the viral load in the tissues doubled every six hours. But replication was completely stopped in tissue that had been exposed to rhinovirus. The findings open the possibility of triggering the body’s defense mechanisms early in the course of the disease by treating patients with interferons, an immune system protein. But since high interferon levels may fuel the overactive immune response found in COVID patients, interferon medicines would have to be administered early in the course of the disease before the virus replicated in large enough amounts to trigger the body’s strong inflammatory immune response.

HIGH OMEGA-3 LEVELS INCREASE LIFE EXPECTANCY

People who have high levels of omega-3 fatty acids in their blood increase their life expectancy by almost five years, according to a study published in *The American Journal of Clinical Nutrition*. Researchers analyzed data on blood fatty-acid levels in people over 65 who were monitored for 11 years and found that the levels of omega-3s in red blood cells were good predictors of mortality. “Having higher levels of these acids in the blood, as a result of including oily fish in the diet, increases life expectancy by almost five years,” said study author Aleix Sala-Vila, Ph.D. The study reaffirms other research that indicates that small changes in the diet, such as adding omega-3s, have powerful effects, and “it is never too late or too early to make these changes.” □

Five Strategies for Warding Off Prediabetes

By Charlotte Libov

Millions of Americans have prediabetes but its symptoms are subtle and often overlooked, giving this metabolic disease a head start in damaging the body. Hopefully, a new guideline that lowers the age to start screening for diabetes will lessen the damage.

In August, the U.S. Preventive Services Task Force (USPSTF) lowered its recommended age for screening of overweight individuals from 40 to 35, a change that is expected to identify millions of people who have prediabetes. “The symptoms of prediabetes are nonspecific, and easily overlooked. This increased screening will help us pick up these cases and give people the opportunity to make changes and avoid full-blown diabetes,” says Michelle Pearlman, M.D., assistant professor at University of Miami Miller School of Medicine.

About 23 percent of all American adults — 34 million people — have diabetes, according to the U.S. Centers for Disease Control and Prevention. And more than one in three — 88 million — have prediabetes, a condition in which blood sugar levels are higher than normal, but haven’t caused irreversible changes. And more than 80 percent of those with prediabetes don’t even know they have it.

This increased screening is vitally important because diabetes is a major risk factor for heart attacks and strokes. It is also the leading cause of blindness and kidney failure in the U.S., in addition to leading to limb amputations, Pearlman notes.

The biggest warning flag for prediabetes is overweightness or obesity, says Pearlman, who is board certified in internal medicine, gastroenterology, and obesity medicine, and is a physician nutrition specialist.

“Overweightness and obesity are absolutely the most important drivers for diabetes,” she says. In addition, the long-term use of steroids, notably prednisone, to manage asthma and other inflammatory diseases, increases the risk, as does pregnancy. (Gestational diabetes occurs during pregnancy.)

When you’re overweight, losing weight can seem like a monumental challenge, so Pearlman

encourages her patients to make gradual changes, noting that, when it comes to prediabetes, even small changes can make a remarkable difference.

“There’s a lot of data showing that if you can lose seven to 10 percent of your body weight you can reduce your risk, so if a person who weighs 200 pounds can lose 10 or 15 pounds, even that can make a difference.

“But, believe it or not, it isn’t only the food that you eat. Making changes to increase activity is also important,” says Pearlman.

She advocates the government’s recommendation of 150 minutes of exercise weekly — such as 30 minutes five days a week — but, if a person has been inactive, she recommends low-impact activities such as yoga or walking in a pool three times a week to start, and then gradually increase the time. “You can make these changes slowly, but it’s making that commitment to your health that will make the difference,” she says.

Here are Pearlman’s five steps to help ward off prediabetes:

1. Cut out all sweetened beverages, including soda. If a person drinks a lot of sweetened beverages, just doing this can translate to a dramatic weight loss.
2. Cut out added sweeteners. Even natural sweeteners such as Stevia — which is 600 times sweeter than sugar — affect your taste buds, making natural foods taste bitter.
3. Personalize your lifestyle changes. After you attain your first goal, pick out a second goal meaningful to you. If you normally eat two snacks after dinner, begin by cutting out one of the snacks.
4. Take pictures of your food to really visualize the portion size you are eating. Or use an app to track your food for a few days to see how much you are actually consuming, so you can adjust portion size. You may discover you’ve been eating a lot more than you thought, and identify where you can cut down.
5. Choose whole foods, not packaged ones. “I tell my patients, an apple has no health claims on it, but, when it comes to packaged food, the more health claims, the less healthy it is,” says Pearlman. □

Could You Have COVID-Related PTSD?

By Fran Kritz

It has been quite a year and a half for everyone. Even people who haven't contracted COVID-19 have been understandably scared, anxious, and upset for themselves and their families. And if you did get even a mild case of COVID-19, the experience may well have left feelings of unease.

If you're finding that unease continuing, you could have post-traumatic stress disorder (PTSD), which generally doesn't improve on its own. The good news is that treatment can make it easier to cope with PTSD and feel much better.

Is It PTSD?

While many people experience symptoms similar to PTSD after a traumatic event, they can heal on their own after a period of time, says Geri Lynn Utter-Godfrey, a clinical psychologist based in Philadelphia. "Those who have PTSD get stuck, and aren't able to move past their trauma."

"With PTSD," explains Utter-Godfrey, "your brain takes over, you become anxious, and it's terrifying."

If that's happening to you, it's important to realize what you are going through and ask for help. "The sooner you do something about it, the more likely it is that you can prevent it from getting worse," says Utter-Godfrey.

Arthur Bregman, M.D., a clinical professor of psychiatry at the University of Miami School of Medicine says reaching out for

help is key to improvement. "If it is PTSD, you'll need help from a professional in order to get better."

Symptoms of PTSD

Feeling irritable, angry, moody, on edge? Those can be symptoms of PTSD, along with reliving a traumatic experience such as being hospitalized with COVID-19, becoming easily anxious or upset by anything that reminds you about having the virus, and going out of your way to avoid reminders. "You become unable to handle your response or emotions in a way you otherwise would be able to," says Utter-Godfrey.

Treating PTSD

The condition can be effectively treated, says Bregman, who advises speaking with your primary care physician and asking for a referral to a psychologist or psychiatrist who can treat PTSD.

Psychotherapy is a key treatment for PTSD, helping a person stay rooted in the present instead of stuck in the memory of what happened. "Psychotherapy with a mental health professional can also help you confront your fears about what happened and discuss strategies for moving forward," says Bregman.

Your mental health professional may try "exposure" therapy, which encourages people to face situations and memories that upset them, as well as cognitive behavioral therapy (CBT) to help identify and replace thoughts that prevent moving past a trauma.

Medication for PTSD

Your doctor may also prescribe medications to reduce your anxiety and help control your fear. That can make you much more able to discuss what happened, and work on strategies for reframing and dealing with your fears, says Bregman. Common medications to treat PTSD include antianxiety and antidepressant drugs, which can help reduce your overall sense of threat.

More Strategies

In addition to help from a mental health professional, Patricia Rehmer, a nurse, and president of the Hartford Healthcare Behavioral Health Network, in Connecticut, suggests speaking to loved ones you trust, wearing a mask where appropriate, avoiding news if it causes you anxiety, and trying exercise, yoga, deep breathing, and meditation, to help you achieve a sense of calm.

Support Can Help — Even If It's Not PTSD

What if you don't have PTSD, but you're having a difficult time dealing with events from the past year? "Social support is key — doing activities that will help you get out and reengage with life, while adhering to CDC guidelines such as hand washing, distancing, and wearing a mask where advised," says Utter-Godfrey, who recommends safely connecting with friends and family who make you feel comfortable. □

Nonsurgical Implants Can Cure Back Pain

Engineers and clinicians from the University of Cambridge have developed an ultrathin, inflatable device that can cure severe back pain without invasive surgery. The device, which is no thicker than a human hair, uses ultrathin electrodes, along with other techniques, according to the journal *Science Advances*. It can be rolled up into a tiny cylinder, inserted into a needle, and implanted in the epidural space of the spinal column, the same area where pain medication is administered during childbirth. Once positioned, the device is filled with water or air and unrolls like a miniature air mattress, covering a large section of the spinal cord. It's then connected to a pulse generator and the electrodes begin sending currents to the spinal cord to disrupt pain signals. Tests in vitro and on cadavers indicate it could treat many severe forms of pain, including intractable back and leg pain. "An effective device that doesn't require invasive surgery could bring relief to so many people," said researcher Christopher Proctor.

Smartwatch Measures Blood Glucose

Thai researchers have developed a wristwatch that can check blood sugar levels from sweat in real-time with no needle sticks. Previous research found that the level of glucose in sweat is directly related to blood sugar. "We used this finding to innovate a device that helps tell the patient's glucose level in real time," said Natnadda Rodthongkam of Chulalongkorn University. The device uses a special yarn material that is biochemically modified to absorb sweat, and is sensitive to glucose and lactate enzymes. People with diabetes will be able to monitor their blood glucose and lactate levels at any time while wearing the smartwatch. "This special yarn transmits the obtained data to a test

sheet inserted inside the smartwatch case," said Rodthongkam. "If blood glucose is low, the color will be light; if high, the color will be dark."

Blood Test for Depression, Bipolar Disorder

Diagnosing and treating depression and bipolar disorder are mostly trial and error, but researchers at the Indiana University School of Medicine have developed a blood test that can determine how severe a patient's depression is, the risk of developing severe depression in the future, and the risk for bipolar disorder. The four-year study monitored participants in both high and low mood states and recorded changes in their blood. Researchers identified the top 26 biomarkers for depression, and matched patients with medications. "The brain cannot be easily biopsied in live individuals, so we've identified blood biomarkers for neuropsychiatric disorders," said researcher Alexander Niculescu, M.D., Ph.D.

Universal Vaccine for Coronaviruses?

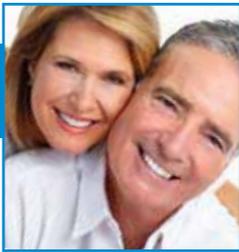
Although COVID-19 knocked the world on its heels, most people had already been sick with a coronavirus. That's because the common cold is caused by a coronavirus, though a far less dangerous one than SARS-CoV-2, the virus that causes COVID-19. Scientists from Scripps Research studied how the immune system's exposure to coronaviruses influenced the immune response to COVID-19. They found that an antibody that develops after recovering from a cold can neutralize SARS-CoV-2. "By examining blood samples collected before the pandemic and comparing those with samples from people who had been sick with COVID-19, we were able to pinpoint antibody types that cross reacted with benign coronaviruses as well as SARS-CoV-2," said researcher Raiees Andrabi, Ph.D. In later tests, the antibody also neutralized SARS-CoV-1, the coronavirus that causes severe acute respiratory syndrome or SARS. "We were able to determine that this type of cross-reactive antibody is likely produced by a memory B cell that's initially exposed to a coronavirus that causes the common cold, and is then recalled during a COVID-19 infection," Andrabi said. The scientists say their findings could help find a vaccine that works against all or most coronaviruses. □

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Adults Hail Anti-Aging Miracle

Doctor-developed formula provides potent antioxidant support and inflammatory balance.

By S.A. Nickerson, Health Correspondent

Researchers were stunned recently to discover that one specific factor predicts successful aging better than anything else.

That factor? Your level of body inflammation.

When you maintain lower levels of inflammation, you help your brain, heart, and body age more successfully. And of course, this improves your odds of enjoying a vigorous, healthy life for many years to come.

Why Maintaining Proper Inflammatory Balance Is Crucial

A certain level of inflammation is a good thing. You need it for cell repair and overall health. But for many reasons (including merely growing older), the process often goes haywire.

Science has linked out-of-control inflammation to many adverse outcomes when it comes to health.

In fact, retired neurologist and natural health advocate Dr. Russell Blaylock considers inflammation to be the "ground zero" of health concerns.

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– Fakhroddin, Bethany, OK

"It is working quite well. My blood circulation has improved."

– Errol, Marina, CA

"Surprise... my checkup showed marked improvement."

– Pam, Chattanooga, TN

"I have found a noticeable improvement... it has made a definite difference." – Herb, Coatesville, PA

That's why Dr. Blaylock, a famed medical doctor and neurosurgeon, has scoured the medical literature looking for natural ways to promote and support inflammatory balance.

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2. Fights free radical damage at the cellular level
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4. May support normal blood flow
5. Supports heart and brain health
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ADVANCIN promotes successful aging in two easy ways: by providing excellent antioxidant protection and by supporting a proper inflammatory response. Take this opportunity to try **ADVANCIN** for yourself today!

Trial of ADVANCIN® AT NO COST



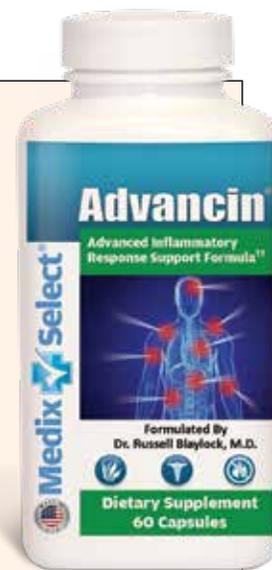
DR. BLAYLOCK

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