

Harvard Health Letter

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FIVE THINGS TO DO THIS MONTH

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Easy ways to keep inflammation in check

Incorporating lots of healthy habits into your day may help ward off chronic inflammation and keep you healthier.

A mattress, a toothbrush, and a salmon dinner: on the surface, those items don't seem to have much in common. But they all represent healthy lifestyle habits that help fight chronic inflammation, a persistent state of the immune system that's linked to many health problems. And the more healthy habits you practice, even simple ones, the better chance you'll have at thwarting chronic inflammation and disease.

What is inflammation?

Normally, inflammation is part of how the body responds to threats such as injury or invading microbes. The body sends special cells to attack and isolate invaders, clean up debris, and heal tissue and organs. It's an important system that kicks into high gear when we need it, and returns to normal when health is restored.

But sometimes the immune response continues indefinitely, fueled by unhealthy lifestyle habits. A constantly active immune system does more harm than good. It damages tissues and organs, and increases the risks for asthma, rheumatoid arthritis, inflammatory bowel disease, diabetes, heart disease, dementia, weight gain, heart attacks, and strokes.

Fighting back

Fortunately, for reasons we don't fully understand, certain healthy habits can counter chronic inflammation. A healthy diet, exercising regularly, getting enough sleep, maintaining good oral health, and reducing stress all reduce inflammation.

If those strategies seem too big to take on all at once, just start with small steps in their direction, such as the following.



Eating salmon regularly, as part of a lifestyle with many healthy habits, may help fight chronic inflammation.

Eat fatty fish twice a week. Here's that salmon dinner we mentioned earlier. Salmon and other fatty fish (such as anchovies, halibut, sardines, and tuna) contain omega-3 fatty acids that reduce inflammation. "Omega-3s disrupt the production of chemicals that cause inflammation by certain immune system cells. They may even help lower the risks for stroke and for the type of brain inflammation associated with Alzheimer's disease," says Dr. Robert Shmerling, a rheumatologist and medical editor of the Harvard Special Health Report *Fighting Inflammation* (www.health.harvard.edu/ui). "But our body doesn't make omega-3s. We need to get them from food." Other ways to fight inflammation with diet include minimizing processed foods and added sugars, and eating lots of fruits and vegetables, legumes, whole grains, poultry, fish, and healthy oils (such as olive and canola).

Get a new mattress. Does your mattress make you toss and turn? "Even one night of disturbed sleep can spark inflammation," Dr. Shmerling says. "It increases inflammatory substances in the blood. Regularly missing sleep contributes to obesity, which is also

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ASK THE DOCTOR

by ANTHONY L. KOMAROFF, M.D., *Editor in Chief*

What's the minimum amount of exercise I need each week?

Q You're always writing that regular physical activity improves our health. I believe you. But I don't particularly like to exercise. So what's the minimum I need to do to get a benefit?

A You're not alone in disliking exercise: only 20% of middle-aged and older adults spend even 15 minutes per week in vigorous physical activity. By "vigorous physical activity," I mean activity in which it is hard to talk or sing when you do it, like jogging or exercising on a treadmill.

What's the minimum you really should do? I have some good news. A recent study conducted by scientists around the world, including colleagues here at Harvard, concludes that you don't need that much physical activity each week to gain substantial health benefits.

The study enrolled nearly 72,000 people (most between 50 and 80 years old). All of them were free of diagnosed heart disease or cancer at the start of the study. A strength of the study was that the amount of vigorous physical activity people did was tracked by a device that measured their *actual* level of activity. (Many past studies just relied on participants to report their physical activity, which can be inaccurate.) The study participants' health was followed over the next five years.



Just 15 minutes of weekly vigorous activity is linked to a reduced death risk.

Even the people who did only 15 minutes *per week* of vigorous physical activity had a 17% lower risk of death from any cause and death from cancer compared with people who were inactive. With about 50 minutes per week, death from any cause was reduced by 36%. The reduction in risk of death from all causes, and death from cancer, was greatest in the first 40 minutes of vigorous physical activity per week. In contrast, death from heart disease continued to decline substantially with each additional minute beyond 40 minutes.

For me, there are several important messages from this study. If *vigorous* physical activity doesn't immediately appeal to you, *moderate* physical activity like brisk walking—for at least 150 minutes per week, and ideally 300 minutes per week—also has proven health benefits. But if you're up for at least trying some vigorous physical activity, aim for 40 minutes per week—unless you're at increased risk for heart disease, in which case you should strive for more. Your activity does not have to be done all at once. It can be done in short bursts that add up over the week to your goal. Some of these short bursts can be things you are doing anyway, like climbing stairs.

And if you're someone like me who enjoys physical activity because you feel good during and after that activity, be as active as you can be: you get additional health benefits with each additional minute. It's the best return on investment you'll ever get. ♥



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How to choose and guide your health care proxy

Make sure it's someone you can trust, who'll be able to carry out your wishes in a variety of circumstances and environments.



Imagine the people in your life as workers in a company that takes care of you. The job of health care proxy or health surrogate—the person who'll make health care decisions for you if you become unable to make them yourself—would be considered a high-level executive. But many people leave that job vacant, or they give little direction to the person appointed to fill the role. If you do that, there might not be anyone to carry out your wishes.

How can you avoid that? You need to choose a health care proxy carefully, and then make clear to that person what you want. For advice on this challenging task, we turned to Dr. James Tulsky, chief of the Division of Palliative Medicine at Harvard-affiliated Brigham and Women's Hospital and chair of the Department of Psychosocial Oncology and Palliative Care at Dana-Farber Cancer Institute.

Q Who's the best person for the job?

A: It should be someone you trust, who knows you well, such as a family member or friend. This person will need the emotional ability and presence of mind to be a decision maker. And the decisions will have to reflect what you would want, no matter the health scenario or environment, such as a hospital, long-term care facility, or your home.

Q What scenarios will your proxy face?

A: That's hard to predict. Patients are often in situations where they're impaired, but they're not brain-dead or in a persistent vegetative state. So it's not a matter of whether to "pull the plug." It's usually more of a nuanced situation: someone is seriously ill, there are a number of potential treatment options, and there's a huge amount of uncertainty about what's going to happen next.

For example, maybe you've lost decision-making capacity due to a major infection. During treatment, things go poorly. Aggressive treatments could be pursued, and there might be a small chance of recovery. But that has to be balanced with the large reality of

suffering, expense, and the possibility that you'll be severely incapacitated and unaware of your surroundings when you recover. The proxy must decide how much longer you receive treatment, and it's difficult. That's why the proxy must understand your wishes and how you'd want them to be applied in any situation.

Q How do you convey your wishes?

A: It's a process. You need to have a conversation with your proxy about the values that are dear to you. Consider discussing your personal faith or beliefs, who'll be available to care for you, quality of life, the possibility of dementia and disability, and the financial and emotional burden of long-term care. Talk about the fact that there may be complicated situations, and what that might mean for decisions to be made on your behalf.

Q Should you write out your wishes?

A: It might be useful to write a letter to your proxy summarizing what you talked about, so he or she can refer to it in a challenging situation. But it's not just about having a checklist, because almost certainly what you'd

want would be something you haven't considered. It's more about a general understanding of the kind of decision you'd make.

Q What else do you need on paper?

A: You need a legal document to formalize your selection of a health care proxy. It's called a durable power of attorney for health care. You can have an attorney create the document, often as part of your advance directive, or you can find a document online for free, typically on your state health department website. You'll have to get it notarized.

Q Who needs to see the document?

A: Your health care proxy and your health care team need a copy of the document. Ask the team to upload it to your electronic health record. If that doesn't happen and the document can't be found, it's useless.

Q What if you don't have a proxy?

A: If there's no obvious decision maker among family or friends, the state may have to appoint a guardian. That means a stranger will act on your behalf and guess what you'd want. It's better to get a health care proxy now, when you're thinking clearly and can communicate what you want. ♥

An advance directive

An advance directive can include the following documents to protect your future care.

- ▶ A durable power of attorney for health care designates a health care proxy who'll make decisions if you're unable to.
- ▶ A living will spells out your treatment preferences if you're unable to make your own health care decisions.
- ▶ A POLST form (physician orders for life-sustaining treatment) turns your health care preferences into a medical order that must be followed by health care workers.

What's keeping you from getting a good night's sleep?

Identify your sleep “interrupters” with this list of potential offenders.

Remember when you could crawl into bed at night and sleep straight through until the morning? Now you wake up several times each night, wondering if you'll ever slumber for long stretches again. This change in sleep habits, called sleep fragmentation, is a natural part of aging, and generally nothing to worry about if you can still get seven to nine hours of nightly shut-eye—the sweet spot for optimum health.

“The concern comes when sleep fragmentation regularly reduces how many hours you sleep each night or keeps you from waking up and feeling refreshed. In that case, something else is probably contributing to the problem, and we need to identify it and treat it,” says Dr. Suzanne Bertisch, clinical director of Behavioral Sleep Medicine at Harvard-affiliated Brigham and Women's Hospital.

The importance of sleep

Sleep is the body's time for restoration and recuperation. It's when toxins are flushed out of the brain, tissue is repaired, muscles grow, memories are consolidated, and hormones are released.

Over time, getting too little sleep or fragmented sleep impairs concentration and mood and increases the risks for obesity, high blood pressure, heart disease, diabetes, stroke, cognitive decline, premature death, and possibly glaucoma (see “Poor sleep linked to a common cause of blindness” on page 8).

Sleep interrupters

There's a long list of culprits that can interrupt sleep, and you may have a number of them, which compounds

the problem. Here are some examples.

Electronics. Electronic gadgets are conveniences of modern-day life. But they create inconvenient side effects when the light from smartphone screens stimulates your brain and keeps you from falling asleep, or when the noise from a TV show, music playlist, or podcast that's playing overnight rouses you from slumber.

Bed partners. Do you have a bed partner who snores or kicks while sleeping? Are pets or children climbing into bed with you? You might not be able to sleep through the disruptions, especially if bed partners crowd you into uncomfortable sleep positions.

Food or alcohol. Eating or drinking anything with caffeine later in the day (such as chocolate, tea, or coffee) can make it hard to stay asleep. So can a late-night snack: it tastes good going down, but it can come back up during the night as stomach acid that causes heartburn. Drinking alcohol in the evening also promotes interrupted sleep. “Alcohol can help you fall asleep at first, but then it causes fragmentation as it wears off,” Dr. Bertisch says.

Underlying conditions. Many health conditions can keep you from sleeping through the night. Examples are sleep apnea (pauses in breathing during sleep), chronic pain, neuropathy (pain, numbness, or tingling in the hands, feet, or legs), hot flashes, stress, anxiety or depression, bladder issues that cause frequent nighttime bathroom trips, or tinnitus (ringing in the ears).

Medications. Pills are supposed to help us cope with health problems, not cause them. Yet some medications interfere with sleep. Examples include some antidepressants, steroids, beta blockers to treat high blood pressure,



Tips for better sleep

- ▶ Cut down on caffeine intake, especially after lunch.
- ▶ Avoid eating spicy dinners or late-night meals.
- ▶ Avoid drinking alcohol at night.
- ▶ Two hours before bedtime, turn off electronic screens and turn down all the lights in your home.
- ▶ Keep your bedroom environment dark and cool.
- ▶ If you can't fall asleep, get out of bed, go to another room, read for 20 minutes, then go back to bed.

and drugs that treat attention deficit hyperactivity disorder.

The sleeping environment. Is your bed uncomfortable? Is your room too hot? Is there light coming in through a window? These can all interrupt sleep.

What you can do

If you frequently wake up feeling that you didn't get enough sleep, and if that's interfering with your day, it's time to get help. Your primary care doctor can look for causes of sleep interruptions and prescribe treatment if necessary.

For example, treatment might be medication if you have heartburn, or a course of cognitive behavioral therapy for insomnia (CBT-i)—a combination of specific behavior changes, such as limiting your time in bed, setting regular wake times, and using relaxation techniques.

“And often, despite how long people have had trouble sleeping, with behavioral changes, treating underlying issues, and at times using targeted sleep medications, we can improve people's sleep and improve their quality of life,” Dr. Bertisch says. ♥

Bring a fuzzy memory back into focus

Treating underlying conditions, living a healthy lifestyle, and doing crossword puzzles may help.

If you're like most people ages 50 or older, your power of recall has lost a little wattage. That becomes clear if you often forget where you left your glasses or can't remember why you walked into a room. Those everyday lapses in memory are normal in middle and older age. Why is that, and can you do anything to change it?

Age-related brain changes

Subtle changes occur everywhere in the body as we get older, including in the brain. Some of those changes affect memory.

For example, a brain region called the hippocampus (which plays a big role in learning and memory) shrinks a little, and structural and chemical changes in brain cells make it harder for them to communicate. That makes it challenging for us to concentrate or absorb and recall new information.

Underlying conditions

On top of aging, some people have health conditions that make it harder to concentrate or remember information. Examples include depression, thyroid disease, vitamin deficiency, migraine headaches, or medication side effects.

Sleep deprivation can also affect your memory. "To learn new information, you need to be alert so you can pay attention. But it's hard to be alert if you're tired," says Dr. Andrew Budson, a neurologist and chief of Cognitive and Behavioral Neurology at VA Boston Healthcare System. "And to store a memory over time, you need to consolidate it during sleep, when brain cell connections become strengthened. If your sleep is interrupted or of poor quality, the strengthening process may be disrupted," Dr. Budson says. (See "What's keeping you from getting a good night's sleep?" on page 4.)



Doing a crossword puzzle, especially with a friend or loved one, may help sharpen memory.

Some memory problems can be early signs of dementia. While forgetting where you put your glasses isn't a concerning symptom, forgetting what glasses are for—or forgetting the names of family members—is something to take more seriously.

If you suspect that you have a health condition that is contributing to a fuzzy memory, see your doctor to figure out what the problem is and get it under control.

Sharpening memory

Keeping the brain as healthy as possible might help slow age-related brain changes. The best way to do that is by living a healthy lifestyle: exercising regularly (at least 150 minutes per week of moderate-intensity exercise, like brisk walking), giving yourself the opportunity to sleep seven to nine hours per night, eating a Mediterranean-style diet, managing stress, socializing, and learning new things. These habits work together to help create new connections between brain cells, and to maintain existing ones, which keeps thinking and memory sharp.

In addition, you can help keep your memory in good shape by practicing certain habits.

For learning new information: "Pay attention and put effort into the

learning process," Dr. Budson says. "Many people believe that they can learn information and retrieve memories while they multitask, but the evidence shows that they cannot. If someone is talking to you while you're checking your email or watching TV out of the corner of your eye, you're not likely to remember what they said. Write down the information, say it out loud, or repeat it back to the person."

For memory retrieval: "It's important to relax and try to go back in your mind to the time and place when you formed the memory. Think about the senses that were engaged at the time. What did you see, hear, smell, taste, or touch? What were you feeling at the time? The brain ties those perceptions to memories as a way to help you retrieve them later," Dr. Budson explains.

For overall sharpness: Make your brain work harder. Challenge it with exercises such as crossword puzzles. A small randomized trial of people with mild cognitive impairment, published online Oct. 27, 2022, by *NEJM Evidence*, found that people who did online crossword puzzles for 18 months had less brain shrinkage and performed better on memory tests than people who took part in online cognitive games that included memory, matching, spatial recognition, or processing speed tasks for 18 months.

Dr. Budson isn't surprised. "Many studies have shown that doing moderately difficult cognitive tasks is better for your brain than doing easy tasks," he says. "A good crossword puzzle in particular causes you to use large areas of your brain to come up with the correct word, and that will, in turn, keep those areas of your brain strong. Finally, crossword puzzles—at least in my household—are usually a social activity, in that the person with the puzzle will frequently call on others nearby for help. And the more we connect with others, the more we'll keep our brain cells connected, firing, and ready to work." ♥

Reduce or avoid back pain during these everyday activities

It takes a combination of quick fixes and long-term strategies. Here's what you can do.

There's never a good time for back pain to strike. But there are good strategies for coping with it. If you're among the millions of people struggling with back pain—eight out of 10 people experience it at some point in their lives, especially low back pain—you'll want to know what to do.

What causes back pain?

The spine is a strong and complex tower of bones (vertebrae) with many parts that are prone to irritation, injury, or wear and tear. For example, joints that connect one vertebra to another can deteriorate (spondylosis); discs that act as cushions between vertebrae can become deformed (herniated),

irritating nearby nerve roots; and the bones themselves can sprout little growths or spurs that jab into nerves (stenosis).

Common scenarios and quick fixes

You may already know that you have a back problem, or you may discover it when you suddenly experience pain. What should you do in the moment? Consider the following scenarios and responses.

Driving a car. Sitting for long periods or in awkward positions puts pressure on your back.

Quick fixes: “Use a lumbar pillow to support your lower back. If you don't have a pillow, try using a water bottle wrapped in towel. And if you're sitting too far from the steering wheel, try moving it closer and see how you feel,” says Mason Gray, a physical therapist at Harvard-affiliated Spaulding Rehabilitation Hospital. Other ways to relieve pain while driving: “If your vehicle has heated seats, turn them on as heat therapy, to reduce pain and relax muscles. Or pull over and take pressure off your back by walking around for a few minutes,” Gray suggests.

Sitting at a desk. Like sitting in a car for a long time, sitting at a desk for prolonged periods can lead to back pain.

Quick fixes: “Try to move every hour,” Gray says. “Go get a drink of water or stand up and stretch.” He also recommends using a lumbar pillow to support your lower back, using heat or cold, or switching to a standing desk for a little while (or simply working at a bar-height countertop—again, just for a little while, to get you out of a seated position).

Shopping. You might think walking around a mall is mostly hard on your feet, but it can also cause a sore back.



Carrying heavy loads on one side of the body while shopping may lead to back pain.

Quick fixes: “It could be that you're carrying a heavy shopping bag or handbag on one side of your body, which puts an uneven load on that side for long periods,” Gray says. He recommends carrying bags on both sides of your body, not just one, to distribute the weight. If you carry a handbag, remove some of its contents before you go out, so you'll lighten the load.

Exercising. Lifting weights is a great way to build a strong and healthy back, but if you aren't mindful of your form and technique, you can set yourself up for back pain.

Quick fixes: If you experience pain while exercising, Gray says you shouldn't push through the discomfort. “Stop what you're doing and evaluate what's causing your back pain,” he says. “Are you using more weight than you can handle? Consider reducing the weight. If you can't modify your way out of pain with an exercise, your best move may be skipping it for that day.”

Lifting something heavy. When lifting a heavy load—whether it's a grocery bag, a laundry basket, or a precious grandchild who runs into your arms—the sudden increase in pressure on your back can irritate the back's joints, discs, muscles, and nerves.

Quick fixes: Put down your heavy load immediately, so you don't injure your back. Try lifting the load again with the right technique: get as close to the object as you can, and bend your knees a little. Wrap your arms around the object, push down with your legs, and stand up straight. To carry the object, keep it close to your chest.

Lying in bed. Sometimes back pain occurs while you're simply lying in bed.

MOVE OF THE MONTH: CAT-COW

Strengthen and stretch the back with a “cat-cow” exercise.



Get down on all fours, with your hands directly beneath your shoulders and your knees beneath your hips. Inhale and lift your chest and tailbone toward the ceiling like a cow.



As you exhale, round your back, bringing your chin toward your chest and tucking your tailbone under like a cat. Repeat the exercise 10 times.

Quick fixes: Maybe your sleep position is putting pressure on your back. “If you’re a back sleeper, try putting a pillow under your knees to distribute pressure a little better,” Gray suggests. “If you’re a side sleeper, put a pillow between your knees or use a very long, narrow ‘body’ pillow and put your arm over it.”

Long-term fixes

Easing back pain when it strikes is important, but it’s not a permanent solution. If back pain lasts more than a week, see your doctor for an evaluation. If you need treatment, the first line of defense will most likely be exercise and strengthening regimens—two keys to staving off an aching back.

Other long-term fixes include always using a lumbar pillow when sitting (not just when you’re in pain); getting a new bed topper or a new mattress if you feel

your bed is contributing to back problems; and sitting up straighter at your desk, with your knees at a 90° angle.

Managing chronic stress may also help ease your discomfort. “People who have a lot of stress are more likely to have back pain,” Gray says. “Managing

Will TENS therapy ease your back pain?

Transcutaneous electrical nerve stimulation (TENS) therapy uses low-level electrical current (tiny shocks) on the skin to interrupt pain signals. While some people swear by it, it doesn’t work for everyone, and studies about its effectiveness for low back pain have produced mixed results. Some medical organizations, such as the American Academy of Neurology and the American College of Physicians, do not endorse TENS for chronic back pain. Still, TENS therapy is a low-risk option that doctors often recommend. You can see a physical therapist for TENS therapy, or you can get a home TENS unit (ask your doctor or physical therapist about the voltage that’s safe for your condition). Prices for a home TENS unit start at about \$25.

stress with exercise, meditation, a healthy diet, and better sleep may be one of your secret weapons to keep your back from bothering you.” ♥



TENS therapy uses tiny shocks of electricity on the skin to interrupt pain signals.

inflammation. “It helps reduce body fat, which contains inflammation-promoting substances. Exercise may also increase the production of hormones that help keep inflammation in check,” Dr. Shmerling says. We all need at least 150 minutes of aerobic activity per week to stay healthy. If you’ve been inactive for a while, start with a five-minute daily walk and work your way up to 20 or 30 minutes a day. If you have heart disease or are at increased risk for it, check with your doctor about your best exercise program.

Do some deep-breathing exercises. Feeling stressed? Chronic stress promotes inflammation and is linked to several chronic inflammatory conditions, including rheumatoid arthritis, cardiovascular disease, depression, and inflammatory bowel disease.

To reduce stress, practice relaxation-promoting exercises, such as yoga or deep breathing. “Studies have found that people who take part in those types of exercise have less stress and fewer inflammatory markers in the

blood,” Dr. Shmerling says. An easy deep-breathing exercise: Sit quietly, take a deep breath, and hold it for a count of three. Breathe out, then pause for a count of three. Continue for one minute. Make sure you feel your belly rising and falling with each breath, so you know you’re breathing deeply.

Will it really work?

Practicing just one of these simple strategies probably won’t be enough to ward off all chronic inflammation. “For example, we don’t have convincing evidence that an individual food choice, such as salmon, will make a meaningful difference against chronic inflammation if processed foods and sugary drinks—which promote inflammation—are still part of your diet,” Dr. Shmerling says. “But you have to start somewhere. If that’s swapping out an unhealthy meal for a healthier one, you’re on the right track. Then add another healthy habit, and another. The combined effects of those habits will eventually add up and keep you healthier.” ♥

Keep inflammation in check ... from p. 1

linked to inflammation.” If you suspect that the fix for your poor sleep is a new mattress (or maybe just a mattress topper), it’s worth the investment. Getting seven to nine hours of sleep per night is associated with reduced risks for many chronic diseases, including dementia.

Brush your teeth regularly. We’re all supposed to brush our teeth twice per day, and floss them at least once per day. It’s necessary to brush away the bacteria that can inflame the gums, lead to infection, and cause inflammation or infection elsewhere in the body. “Evidence suggests bacteria can travel to the heart, lungs, and even the brain. Inflammation in the gums also is strongly associated with diabetes,” says Dr. Tien Jiang, a prosthodontist in the Department of Oral Health Policy and Epidemiology at the Harvard School of Dental Medicine.

Go for a walk. Aerobic exercise—the kind that gets your heart and lungs working, like brisk walking—is an important way to fight chronic



Poor sleep linked to a common cause of blindness

Poor sleep is tied to many health problems, such as weight gain, mood disorders, and even dementia. Now, a large study published online Nov. 1, 2022, by *BMJ Open* suggests that poor sleep is also linked to higher risk for developing glaucoma, a leading cause of blindness. The study involved more than 400,000 people without glaucoma (ages 40 to 69) who were followed for 10 years. Researchers evaluated participants' medical records and self-reported sleep habits. People who had unhealthy sleep patterns (those who snored, experienced daytime sleepiness, had insomnia, slept less than seven hours per night, or slept more than nine hours per night) were more likely to develop glaucoma than people who

had healthy sleep patterns. People who had insomnia or slept too much or too little had the highest risks for glaucoma—13% higher than people without these problems. The study was observational and doesn't prove conclusively that unhealthy sleep behaviors caused glaucoma. So what's the possible link? Study authors say eye pressure increases when you lie down and when your sleep hormones are out of kilter (which occurs in insomnia). That might be a plausible explanation for glaucoma risks, since the condition is caused by increased pressure on the optic nerves, which connect the eyes to the brain.

Don't count on a supplement to fix high cholesterol

Six types of supplements touted to reduce high cholesterol don't do the job, according to a randomized trial published online Oct. 19, 2022, by the *Journal of the American College of Cardiology*. Researchers (including Harvard experts) randomly assigned 190 people (ages 40 to 75) with high levels of "bad" LDL cholesterol to take either 5 milligrams of the cholesterol-lowering statin drug rosuvastatin; a supplement containing fish oil, cinnamon, garlic, turmeric, plant sterols, or red yeast rice; or a placebo (inactive pill). After four weeks, people in the statin group showed a 37% drop in LDL cholesterol, a 24% drop in total cholesterol, and a 19% drop in blood triglycerides. Meanwhile,

people in the supplement and placebo groups didn't have any significant decreases in these measures. In fact, there were some adverse effects: LDL cholesterol went up for people taking the garlic supplement, and "good" HDL cholesterol dropped for people taking the plant sterols, compared with people taking a placebo. The study was brief, and researchers say it's possible it wasn't long enough to give some supplements a chance to work. But they also point out that the contents of dietary supplements vary and don't produce consistent results. They warn that supplements that are marketed for cholesterol or heart health are unlikely to be effective.

A pill-free way to treat anxiety

For people with an anxiety disorder—chronic, intense worry that makes it hard to concentrate or sleep—first-line treatments are often medications called antidepressants. They can have side effects such as nausea, fatigue, headache, or sexual dysfunction. But a randomized trial published online Nov. 9, 2022, by *JAMA Psychiatry* found that a pill-free approach might be just as effective for reducing anxiety symptoms. Scientists

randomly assigned almost 300 people to either take an antidepressant called escitalopram (Lexapro) every day or participate in a mindfulness-based stress reduction program. The program included 45 minutes of daily meditation at home and a weekly 2.5-hour in-person class with an instructor. Participants learned a number of mindfulness techniques, such as breath awareness and stretching designed to bring awareness to the body. After eight weeks, both groups had similar results, reducing anxiety symptoms by about 30% over that period. ♥



What's coming up:

- ▶ What to expect from over-the-counter hearing aids
- ▶ The warning signs of four dangerous conditions
- ▶ Hate needles and other tests? Here's how to cope.
- ▶ Why you're waking up to go to the bathroom

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