



Harvard Health Letter

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Losing steam? Avoid these energy zappers

What may seem like harmless lifestyle habits may really be robbing you of your get-up-and-go.

et's face it: we all get more fatigued Las we get older. It's part of the aging process: we lose mitochondria (energyproducing engines in the cells) and we produce less adenosine triphosphate (ATP)—the molecule that delivers energy to cells throughout our body. Other causes of fatigue, such as medication side effects or chronic illness like depression or heart disease, can increase the feeling of tiredness or sluggishness.

But age- and disease-related factors aren't the only drains on your energy. Your lifestyle habits may be to blame for some of your daily fatigue. The following energy zappers

are common culprits that you can change.

Inactivity

We naturally lose muscle mass as we age. "If you have less muscle mass, you have fewer mitochondria and less ATP," points out Dr. Marcelo Campos, a primary care physician with Harvard Vanguard Medical Associates in Boston. Being sedentary compounds the problem by weakening and shrinking muscles and causing them to use energy inefficiently.

Physical activity strengthens muscles, helps them become more efficient and conserve ATP, and increases the production of energy-producing brain chemicals. Don't be intimidated by the recommendation of 30 minutes per day, at least five days per week, of moderate-intensity exercise. The 30 minutes can be spread out into several shorter periods. And you don't need to break a sweat. "Whatever exercise you can do will help,"



Dr. Campos says. "It can be simple, like climbing stairs or walking farther in a parking lot."

Too much stress

Chronic stress can increase levels of cortisol, a hormone produced by the adrenal glands. "Cortisol reduces production of ATP and it increases inflammation. which also reduces ATP production," explains Dr. Campos. However, stress-reduction techniques are associated with lower cortisol levels.

Try yoga, mindfulness meditation, tai chi, breathing exercises, or guided imagery. Even 10 minutes per day can help

A poor diet

If you're not nourishing your body, you won't have the vitamins and minerals necessary to produce enough ATP, and you'll feel more tired. "Eating too much processed food can increase inflammation, which impairs the production of ATP and energy. Or, if you're older and your appetite isn't what it used to be, you may not give your body the calories and fuel it needs to function," Dr. Campos explains. On the flip side, if you're eating too much food at one time, that can cause blood sugar spikes and lead to fatigue.

The fix: eat whole foods, including vegetables, fruits, whole grains, and lean proteins like fish, chicken, nuts, and seeds. The fatty

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FROM HARVARD MEDICAL SCHOOL Starting to Exercise: Workouts to help you get fit, firm, and flexible www.health.harvard.edu/fit12

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Harvard Health Letter



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ASK THE DOCTOR

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

What is ALS?

A friend says that the worst disease of all is ALS. What is it?

What makes a disease the "worst?" For many, it would be a disease that robs them of their mind. For others, it would be a disease that creates constant pain. For still others, it would be a disease that makes them unable to care for themselves or to control their bodily functions-in full view of their family and closest friends.



Amyotrophic lateral sclerosis, also known as Lou Gehrig's disease or ALS, can cause all of that. Fortunately, it is quite rare. It is a disease of the motor neurons, the nerve cells through which the brain sends signals to the muscles, causing them to move parts of the body. The most common initial symptom of ALS is slowly progressive weakness, usually of one arm or leg-a weakness that subsequently spreads to other parts of the body. Muscles lose their bulk, become stiff, develop painful spasms and start twitching. Movements become very slow and poorly coordinated.

In some people with ALS, weakness also can spread to the muscles of the face and throat. Speech becomes slurred, it's hard to swallow, and the voice becomes hoarse. Spasms cause the muscles of the mouth to clench, or the vocal cords to snap closed, briefly shutting off breathing.

Weakness of the breathing muscles-the muscles between the ribs and the muscle called the diaphragm—can make it necessary



for people with ALS to be hooked up to a breathing machine. Ultimately, most people with ALS die from their inability to breathe. Average life expectancy from the time of diagnosis is three to five years, although some people live longer. Two medicines can slow but not stop the progression of the disease.

As for pain, it can come from muscle spasms, or from bedsores due to a person with ALS being bedridden. Compared with other terminal illnesses, in ALS pain is less of a problem.

Although I was taught in medical school that the "thinking neurons" are spared, we now know that's not always true. Although their memory is preserved, people with ALS can have trouble thinking clearly and using language. They can become apathetic, lose empathy for others, say inappropriate things, and laugh or cry inappropriately. But they remain well aware of what is happening to them.

I once visited a friend whose husband was dying of ALS. He lay on the living room couch, motionless and speechless, but his eyes could move: he stared at me, his eyes asking, "Can't you do something?" I could do nothing. "Worst" or not, ALS is a terrible disease: we have to find a cure. Fortunately, new tools are available to research teams today, giving me hope.

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Send us a question for Ask the Doctor By mail: Harvard Health Letter

4th Floor, 4 Blackfan Circle, Boston, MA 02115 By email: health_letter@hms.harvard.edu (Please write "Ask the doctor" in the subject line.)

Because of the volume of correspondence we receive, we can't answer every question, nor can we provide personal medical advice.

Stay active, even with stiff ankles

Exercise and stretch daily to keep ankles flexible.

A nkle stiffness can do a number on your mobility. It can make it difficult to remain active or even get out of bed in the morning and walk across the room. "Motion restriction usually occurs more in the upward than downward direction, so it becomes harder to walk uphill, wear flat shoes, or keep feet pointed straight ahead," says Dr. Christopher DiGiovanni, chief of foot and ankle surgery at Harvard-affiliated Massachusetts General Hospital.

A tricky joint

The ankle is a vulnerable structure. It's made of the ends of the lower leg bones (the tibia and fibula), which hold the talus bone of the foot in between them. The joint is stabilized by ligaments and powered by muscles that work in concert to enable ankle and foot motion and accommodate uneven surfaces when you stand or walk.

Ankles, however, must also support and distribute your weight. That can be a tall task when you're running, climbing, or jumping, which puts even more force on these joints and risks injury if it happens too much or if a foot or ankle lands the wrong way.

What's causing ankle stiffness?

There are many reasons why your ankles may feel stiff, not the least of which is simply age. "As we get older, our collagen stiffens, making soft tissues like our ligaments and tendons stiffer and less resilient. That makes vulnerable joints like the ankle much tighter," Dr. DiGiovanni says.

Many other conditions can worsen this age-related ankle stiffness.

Osteoarthritis. Osteoarthritis is the wearing away of cartilage in the joints. "Arthritis is the most common reason for ankle stiffness between ages 50 and 80," Dr. DiGiovanni says. A classic symptom is "startup" pain and stiffness that loosens up with movement.

A blockage. "A bone spur or a loose bone fragment may block or lock the ankle, impeding normal motion," explains Dr. DiGiovanni.

Impingement. Sometimes soft tissue buildup or scarring can become pinched inside the ankle joint and between the bones, restricting motion.

Previous ankle injury.

"Maybe you had a bone break when you were young and now the ankle doesn't align or work properly," Dr. DiGiovanni says. "Or maybe you had chronic ankle sprains and the ankle no longer moves properly."

Inflammatory disease. Gout, rheumatoid arthritis, lupus, and other conditions that cause inflammation can lead to ankle stiffness that gets worse over time.

MOVE OF THE MONTH: CALF STRETCH

Movement: While standing, hold on to a counter or chair. Extend your right

leg straight back and press your heel toward the floor. Allow your left knee to bend, while keeping your right heel grounded on the floor. Hold 10–30 seconds. Return to a standing position, then repeat with your left leg.



Yoga can keep ankles flexible.

Tendinitis. Inflammation of any of the ankle tendons (on the sides or back of the ankle or the top of the foot) can

cause stiffness. This can result from injury, overuse, or inflammatory conditions. The Achilles tendon is most commonly affected.

Congenital defects. "Some people are born with a defect in cartilage or bone that isn't perceived as a big deal early on but takes its toll on the ankle over time," says Dr. DiGiovanni.

Foot problems. Flat feet or high arches over time cause excessive wear on the ankle,

which can take decades to manifest.

What you should do

If you continually wake up with stiff ankles and joints and initially have trouble walking, you may need to see your doctor to check for an inflammatory condition.

Treatment depends on the cause of the ankle stiffness. Icing and rest can help tendinitis or inflammation. In cases of misalignment, bone spurs, or significant joint arthritis, surgery may be the best option. Often, however, ankle stiffness can be treated simply with physical therapy, weight control (to relieve added pressure on your ankles), daily exercise, and stretching.

Dr. DiGiovanni recommends stretching your calves to keep your ankles flexible (see "Move of the month"). He also suggests yoga, as well as exercises that put the joint through its full range of motion (for instance, writing the alphabet in the air with your toes).

Warm up your muscles with a few minutes of exercise before you stretch. "And be sure to stretch daily," says Dr. DiGiovanni. "It doesn't matter when, but it should become part of a daily routine."

Aichael Carroll | Harvard Health Publishing



What's in your frozen treat?

Do a little detective work before digging into that dessert.

Treating yourself to a small dish of an icy dessert used to be simple: we had a limited number of dessert types and flavors available, like chocolate ice cream or orange sherbet. Today there are so many options at the grocery store you may feel a brain freeze before you even take a bite.

You'll find ice cream, frozen custard, frozen yogurt, sherbet, and gelato. It may be full fat, reduced fat, low fat, nonfat, low carbohydrate, or sugar-free.

For people who can't digest the milk sugar lactose or people who don't eat animal products, there is a vast array of dairy-free options.

"What concerns me is all the packaging. Some make things seem healthy when they're not," says Teresa Fung, adjunct professor in the nutrition department at the Harvard T.H. Chan School of Public Health.

Frozen dairy treats

The most important ingredient in ice cream is milk fat (cream). The FDA requires a product to contain at least 10% milk fat in order to be called ice cream.

Other ingredients include milk proteins; sugar; stabilizers and emulsifiers (lecithin and mono- and diglycerides) to make ice cream smooth; flavor; fruits, nuts, or chunks of other goodies (like brownie pieces); and lots of air to keep ice cream from becoming a solid frozen rock of ingredients. Other dairy-based frozen desserts contain ingredients similar to those in ice cream. But frozen custard also contains egg yolks; frozen yogurt contains milk fermented with yogurt cultures; and gelato has less milk fat and air than ice cream (making it a little denser).

Sherbet contains much less milk fat than ice cream (1% to 2% as opposed to 10%). It's often very high in sugar, with fruit juice an important ingredient.

Nondairy frozen treats

The selection of dairy-free frozen desserts has exploded in the past decade. These products mimic ice cream by using nondairy milks (like almond milk, coconut milk, soy milk, or cashew milk) and proteins (like soy or pea protein).

How do dairy-free "ice creams" get their creamy texture? Some nut milks (coconut and cashew for instance) are high in fat, a natural thickener. When using milks that are lower in fat, like almond milk, food makers have to add other fats, such as coconut oil, cocoa butter, or avocado oil.

Is one healthier than another?

All frozen desserts are treats with varying amounts of calories, fat, and sugar. For example, a serving (half a cup) of Breyer's chocolate ice cream contains 140 calories, 7 grams of fat, and 16 grams of sugar. A half-cup of Breyer's fat-free chocolate ice cream has 90 calories, no fat, and 12 grams of sugar.

Three frozen desserts on the healthier side (serving size: half a cup)					
BRAND/FLAVOR	CALORIES	SATURATED FAT (in milligrams)	SODIUM (in milligrams)	SUGAR (in grams)	
Arctic Zero Light Ice Cream, Vanilla Bean	70	0.5	70	9	
Cado Avocado Frozen Dessert, Deep Dark Chocolate	170	1.5	45	12	
Yasso Frozen Greek Yogurt, Best of Both Swirlds	100	0.5	60	14	



Ice cream is rich in fat and sugar. It's not a good idea to eat more than a half-cup serving, but it is okay to add fruit and nuts to it.

A dairy-free option isn't necessarily healthier. For example, a half-cup of So Delicious Creamy Chocolate Cashewmilk Dairy-Free Frozen Dessert contains 160 calories, 10 grams of fat, and 16 grams of sugar. Plus, it has twice the sodium—105 milligrams (mg)—as the plain Breyer's ice cream (55 mg).

"If you're a vegetarian or lactose intolerant, that may be a trade-off you're willing to make. Otherwise, dairy-free may not be the best choice," Fung says.

When you want to indulge

Look at the Nutrition Facts label and the ingredient list before selecting your frozen treat. "If you see a dessert that's free of one ingredient—like fat—it may be higher in other ingredients—like sugar, thickeners, or emulsifiers—to compensate," Fung warns.

Look for the shortest ingredient list possible (the fewer additives, the better). Aim for the lowest amounts of sugar, fat, calories, and sodium. And remember that the amount of nutrients you're willing to consume in a frozen treat should fit into your food intake for the day, not just one meal. "Limit your total intake of added sugar to no more than 10% of your daily calories. Likewise, limit your total intake of saturated fat to no more than 10% of your daily calories," Fung says.

Two last points: Stick to a serving size, which is just a half-cup. "Make it bigger by adding fruit and nuts," suggests Fung. "And savor it. Eat it slowly and really let your taste buds become saturated. You'll enjoy it more." ■



Feeling woozy when you stand?

It might be orthostatic hypotension, a condition that can be challenging to catch and treat.

When blood pressure drops as you

stand, you may feel lightheaded.

You stand up and suddenly feel unsteady on your feet. It's easy to brush off this experience as a fluke or a bug, but don't. You may have a condition called orthostatic hypotension,

a temporary drop in blood pressure when you stand. It's tricky to catch.

"Blood pressure is highly variable, and depends on position, timing, the method of measurement, and circumstances associated with its measurement," says Dr. Lewis Lipsitz, chief of gerontology at Harvard-affiliated Beth Israel Deaconess Medical Center and director of the Marcus Institute

for Aging Research at Hebrew Senior-Life. "It may take multiple blood pressure measurements at different times of day, lying and standing, in order to detect orthostatic hypotension," Dr. Lipsitz says.

Why it happens

When you stand, blood rushes to your abdomen and legs, and away from your head and brain, simply because of gravity. Your body's autonomic nervous system senses this and alerts the brain to make the heart beat faster and narrow your blood vessels. That restores normal blood flow to your brain and elsewhere.

But over time, the system can weaken. Heart rate may not increase and blood vessels become stiffer and less able to adapt. Blood pressure may also fall if you're dehydrated or taking medications that affect heart rate or blood vessel function. Some diseases (such as Parkinson's disease and diabetes) can also contribute to the problem.

The result is that standing up reduces blood flow to the brain, causing lightheadedness, blurred vision, or

> fainting. Fortunately, the condition is mild in most people: you just need to be careful when sitting up or standing up, ready to sit back down if you feel you might faint. Some people don't have any lightheadedness, but fall anyway.

What's the fix?

When orthostatic hypotension is more severe, treatment can be challenging. "Stand-

ing blood pressure may be very low, while lying blood pressure may be very high," Dr. Lipsitz explains.

He recommends treatments ranging from wearing compression stockings and elevating the head of the bed to reduce overnight blood pressure, to medications such as midodrine (Orvaten, ProAmatine) and fludrocortisone (Florinef).

What else helps for this low blood pressure condition? "I start with a highsalt diet, then add fludrocortisone, then add nonsteroidal anti-inflammatory medications such as ibuprofen [Motrin, Advil] to force fluid and salt retention," says Dr. Randall Zusman, a cardiologist with Harvard-affiliated Massachusetts General Hospital.

A few final tips: "Drink at least one or two quarts of fluid daily to prevent dehydration, keep moving your legs when you're upright, and maintain good muscle strength in your legs," Dr. Lipsitz suggests.

How to monitor your blood pressure at home

You don't have to wait for a doctor appointment to monitor your blood pressure. An automatic monitor that doesn't require a



stethoscope is easy to use and widely available in drugstores or online for \$50 to \$100. You may need to ask your doctor or nurse to help you calibrate it first (to make sure it's accurate) and help you learn to operate it.

For general monitoring, take your blood pressure once or twice per month (or when your doctor recommends). The best times are early mornings, after meals, and evenings.

To ensure accurate readings:

- Sit quietly for 10 minutes first.
- Relax your arm and keep it supported at heart level.
- Wrap the blood pressure cuff around the skin of your arm, not over a shirtsleeve.
- Keep both feet on the floor.

If you have orthostatic hypotension, check your blood pressure a few times per week, either in the morning or evening. Each time, get at least two different measurements: one measurement while lying down, and one while standing up.

Wait a few minutes in between each reading for your blood pressure to stabilize.

If you notice big changes in your blood pressure, report them to your doctor. "But don't take your blood pressure too often. It's not helpful, and it may increase stress or anxiety, which isn't good for your heart or blood pressure," suggests Dr. Randall Zusman, a cardiologist with Harvard-affiliated Massachusetts General Hospital.

And remember: home monitoring should not replace regular visits to your doctor.

> marina_ua | Getty Images



Answers to the top questions about cannabis extract

Sales of cannabidiol-infused products are expected to top \$2 billion by 2021. But is CBD right for you?

C annabidiol (CBD) is touted as a natural wonder that can help treat symptoms of everything from anxiety to arthritis pain. The plant extract comes from two varieties of cannabis—hemp and marijuana and is available in creams, tinctures, oils, patches, gummy bears, capsules, and more. You can even add CBD to a latte if you walk into a coffee shop in some cities.

But is CBD safe for older adults? There haven't been a lot of large studies of CBD's safety, but more traditional medicines for pain and anxiety are not free of adverse effects, either. "I think CBD is likely safer than many other treatments people use for pain, insomnia, or anxiety," says Dr. Peter Grinspoon, a primary care physician with Harvard-affiliated Massachusetts General Hospital. Other physicians don't think we know enough about the safety profile of CBD to be sure.

What is CBD?

CBD is different from tetrahydrocannabinol (THC), the psychoactive chemical in cannabis that some people use to get high. CBD doesn't produce a high, and it's not addictive. "It doesn't get you stoned or woozy, and it doesn't affect driving," Dr. Grinspoon says.

It's not yet fully understood how CBD works to alleviate symptoms of various ailments. Our bodies make natural cannabinoids that help regulate sleep, appetite, and mood. It is believed that CBD from plants binds to CBD receptors in the body, and therefore may affect body systems.

How is CBD used?

People typically take CBD by mouth (such as a drop or two of oil placed



under the tongue, or in pills or edible products like gummies) to help reduce symptoms of many conditions, including anxiety, bipolar disorder, arthritis, diabetes, a muscle disorder called dystonia, seizures, multiple sclerosis, Parkinson's disease, Crohn's disease, chronic pain, post-traumatic stress disorder, and insomnia.

CBD is also used in many other products: liquids that are vaporized and inhaled; creams that are rubbed onto aching joints; and cosmetics such as creams, lip balms, and even salt scrubs.

Does it work?

The National Institutes of Health (NIH) notes there is some evidence that CBD helps reduce pain, anxiety, and symptoms of psychotic conditions (such as schizophrenia). However, the NIH points out that we don't yet have enough evidence to prove that CBD reduces anything except epileptic seizures. Most evidence comes from studies with lab animals.

As we reported in March, the FDA recently approved the first marijuana-derived CBD (Epidolex) for the treatment of seizures associated with rare forms of epilepsy.

In his clinic, Dr. Grinspoon sees CBD making a difference for people with insomnia and anxiety. "It seems to take the edge off people's anxiety. And for insomnia, it seems to help you get to sleep and stay asleep," he says.

But not everyone who uses CBD has success. "The feedback I am getting is mixed. I have one patient who feels the CBD cream she uses every day for her hands has gotten rid of the pain. Another said it did nothing," says Dr. Suzanne Salamon, associate chief of gerontology at Harvard-affiliated Beth Israel Deaconess Medical Center.

Is it safe?

While the World Health Organization maintains CBD is considered generally safe and well tolerated, it's not clear yet what quantity of CBD is safe and for how long.

According to NIH, CBD supplements in pill form have been used safely for six months in daily doses of up to 300 milligrams (mg), and for up to four weeks in daily pill doses of 1,200 to 1,500 mg. A 2.5-mg dose of CBD spray under the tongue has been used for up to two weeks safely.

These are some of the known risks:

Side effects. These can include diarrhea, upset stomach, nausea, fatigue, irritability, low blood pressure, lightheadedness, or drowsiness.

Medication interference. CBD can decrease or slow the way some medications are broken down in the body. "That means CBD may increase the levels of some medications in the blood," Dr. Grinspoon says. The big concern is with the blood thinner warfarin (Coumadin), but there are other medications that may be affected as well, including the heartburn drug omeprazole (Prilosec, Omesec) and the antidepressant amitriptyline (Elavil).

Is it legal?

CBD comes mostly from hemp plants, which contain a trace amount (0.3%) of THC. In December 2018, Congress legalized hemp in all 50 states, removing hemp from the controlled substances list. But there are still restrictions and regulations in place at the federal level that dictate where, how, and if CBD products can be sold. For example, CBD-infused edibles cannot be sold across state lines but may be legal within your state, and all CBD supplements are illegal if they are marketed with medical or therapeutic claims.

But laws are changing rapidly; it may or may not be legal to buy or possess CBD-infused products in your state, and you may or may not need a doctor's prescription, depending on laws in your community.

Contact a pharmacist or your local health or police department for more information.

CBD can also come from marijuana plants, which are abundant in THC but have less CBD. Marijuana use is legal for recreational use in 10 states and the District of Columbia. Medical marijuana use is legal in 33 states.

What's in your CBD product?

The FDA does not test CBD products. This means that you don't really know what's in the CBD product you're buying—just like supplements you purchase in a drugstore. The risks? First, the product may not have the expected amount of CBD in it, or any at all. Second, it may contain THC without your realizing it. "The THC content is concerning. If you don't know you're taking THC and get behind the wheel, your driving could be impaired," Dr. Grinspoon says.

Which kind of CBD is best?

Hemp-derived CBD and marijuanaderived CBD are widely available online, in retail stores, or in cannabis dispensaries, depending on your state's laws. Which type of CBD is best? "It certainly is safer to start with hemp-derived CBD, as there won't be the psychoactivity associated with THC," Dr. Grinspoon says.

On the other hand, a small amount of THC added to marijuana-derived CBD may aid the CBD's effectiveness, even though it also increases the chance a person will become a little high and have problems functioning.

Should you try it?

Only you and your doctor can decide if CBD is right for you. If you get a green light, Dr. Grinspoon recommends using

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acids in protein-rich foods also help boost ATP. And aim for smaller meals with snacks in between to provide your body with a steady supply of nutrients and fewer blood sugar spikes.

Too little sleep

A lack of sleep increases cortisol and also promotes inflammation. If sleep issues are caused by sleep apnea (pauses in breathing during sleep), the dips in blood oxygen levels lowers ATP and energy.

Talk to your doctor about underlying problems that may rob you of sleep, such as health conditions (sleep apnea or frequent trips to the bathroom) or medication side effects.

And work on improving sleep hygiene: go to bed and wake up at the

same time each day, and keep your room cool, quiet, and free of electronics, which stimulate your brain.

Poor fluid choices

Drinking sugary sodas can cause blood sugar spikes followed by a drop that causes fatigue. Being dehydrated can also make you feel tired, as can drinking too much alcohol or caffeinated drinks near bedtime (alcohol interrupts sleep in the middle of the night). Healthy people need six to eight cups of fluid per day, and more if they're exercising. Avoid soda. "And stop drinking caffeine or alcohol within six to eight hours of bed," Dr. Campos advises.

Social isolation

Being isolated—not seeing others on a regular basis—is associated with

products made from cannabis grown in the United States or in Canada (which both have stricter



Cannabidiol products are derived from either hemp or marijuana.

safety regulations than other countries) that list the amount of CBD and THC on the label, and do not make claims to cure anything.

How should you take it?

"Start with a low dose," Dr. Grinspoon suggests. How much CBD you use depends on the delivery system (whether it's an edible, tincture, or pill, for example) and your individual needs. And of course, as with any new drug, try it first in a safe environment, when you know you'll be home and you'll have someone there to make sure you're okay. Write down side effects and report them to your doctor if they're concerning.

There's still a lot we don't know about CBD. "We're in the very early stages of this," Dr. Salamon says, "but I suspect that in the next couple of years, we will know a lot more, for better or worse."

depression, and depression is linked to fatigue. "The power of interacting with other human beings and connecting with others can bring a different outlook and give you more energy. We are learning more about this. We probably produce different types of brain chemicals that make us happier and give us more energy when we connect to people," Dr. Campos says. Resolve to get together with others at least once per week. It can be friends, family, neighbors, or even new acquaintances.

When is low energy a problem?

"If fatigue is affecting your day," says Dr. Campos, "or if fatigue is accompanied by any other symptoms like headache, muscle or joint pain, fever, or stomach or urinary problems, it's time to see your doctor."

NEWS BRIEFS



Can exercise and diet help mild cognitive impairment?

We often tell you about using aerobic exercise and a healthy diet to try to stave off dementia. But will those approaches help if you already have the slight but noticeable change in memory and thinking known as mild cognitive impairment (MCI)? A small randomized trial (the gold standard type of study) published online Dec. 19, 2018, by Neurology suggests the combination of diet and exercise may indeed help. Researchers studied 160 sedentary older adults who had MCI as well as one or more cardiovascular disease risk factors, such as high cholesterol. Participants were randomly assigned to do aerobic exercise, to follow a heart-healthy diet (the Dietary Approaches to Stop Hypertension, or DASH, diet), to do a combination of aerobic exercise and the DASH diet, or to just get weekly heart health education. After six months, people who just exercised several times a week got a little bump in executive function (thinking skills that help us plan and organize), but the big-

gest change was seen in people who both followed the DASH diet and did aerobic training three times a week. Their improved planning skills were equivalent to reversing nearly 10 years of brain aging, compared with study participants who didn't exercise or improve their diets. The findings demonstrate that it's never too late to start exercising and eating right.



Fiber linked to lower risk for chronic disease and early death

Are you eating enough fiber each day? The recommended dietary fiber intake

in the United States is 25 grams per day for women (about three half-cup servings of legumes) and 38 grams per day for men. But most people eat only half of that. Now a study commissioned by the World Health Organization, published

online Jan. 10, 2019, by The Lancet, offers more evidence about why fiber is an important player in good health. Researchers combed through more than 240 studies and clinical trials and found that people who

A risky combination: Healthy weight but unhealthy activity level

Many people think the only reason for regular exercise is that it helps you maintain a

healthy weight. Not true. A sedentary lifestyle can cancel the potential heart benefits of weight control, according to a study published online Dec. 4, 2018, by the American Journal of Cardiology. Researchers looked at five years' worth of health survey responses and weight calculations from thousands of overweight and normal-weight people ages 40 to 79 who'd never had heart disease. Scientists noted the participants' amount of abdominal fat, waist size, and self-reported amounts of physical activity, then ate the most fiber-rich foods had the lowest risks for dying or developing chronic disease during the



studies, compared with people who ate the least amount of fiber-rich foods. How much did the risks fall? For every 8-gram increase in dietary fiber eaten each day, the total number of deaths and cases of heart disease, diabetes, and colorectal

cancer decreased by 5% to 27%. The authors say that eating 25 to 29 grams of fiber per day is adequate, but eating more than 30 grams per day might offer even more protection.

calculated everyone's cardiovascular disease risk. The results: 30% of sedentary people with a normal weight had about the same risk for a heart attack or stroke as people who were overweight. Sedentary adults whose weight was normal also had higher levels of belly fat, shortness of breath upon exertion, and an unhealthy waist circumference compared with normal-weight adults who exercised regularly. However, people with a normal weight who exercised at least 150 minutes per week were 58% less likely to have a heart attack than those in the study who were overweight.

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