



**BUILD A
BETTER MEMORY 3**



**7 SURPRISING
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**A LEAKY BLADDER
IS TREATABLE 10**

bottomline HEALTH

Actionable advice you can trust from top wellness experts October 2022 Vol 36/No 10 | \$6

This Month's ACTION PLAN

■ **Boost your memory by using different parts of your brain.** If you want to remember someone's name, instead of just thinking about the name, imagine yourself writing it on their forehead. Adding writing tells your brain that the information is important enough to retain. (Page 3)

■ **Vary your probiotics.** If you take the same probiotic supplement every day, you can get overgrowth of even friendly bacteria. Once you've used up a bottle of probiotics, switch to another brand, take it until it's done, and then switch again. (Page 4)

■ **Stand up for your health.** Sitting for more than eight hours a day is as bad for your health as smoking. To stand more, start with a simple goal, like standing up for one minute every 30 minutes throughout the day, and increase your standing time gradually. (Page 8)

■ **Use smaller bowls to eat less.** Larger dishes make portions seem smaller. Select smaller bowls and dishes, and whatever you're eating will appear to be more plentiful, which helps make you feel more satisfied for fewer calories. To get more vegetables, do the opposite. Use your dinner plate for salad and your salad plate for the entree to get the best of both worlds. (Page 14)



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The Secret to Portion Control

Portion distortion makes it far too easy to overeat. Here are three quick tricks to overcome it.



Lisa R. Young, PhD, RDN
New York University

Pop quiz time: You purchased a 3-ounce bag of potato chips. Its small size and mouth-watering flavor make it seem perfect for a quick snack. Within five minutes, the bag has been devoured. How many servings of chips did you just consume?

The answer probably isn't what you think. A serving of potato chips is one ounce, or about 12 chips. That "snack-sized" bag actually contained enough chips for three adults, which means you consumed three times as many calories, grams of saturated fat, and milligrams of salt as you likely intended.

Portions are growing

Today's portion sizes of ultra-processed foods (such as chips, fast food, sodas, ice

cream, and candy) are up to five times larger than they were when first introduced to market. For instance, the original Coca-Cola bottle was 6.5 ounces. Today, it's available in six different sizes—all marketed as single servings—ranging from 7.5 ounces to 24 ounces. And when Hershey's came out with its first chocolate bar in 1908, it weighed one-half of an ounce—the same size as today's fun-size Halloween candy bar.

Consumers are drawn to these foods, which have been engineered using sugar, salt, fat, and other palate-pleasing ingredients to keep us craving more, lighting up the reward centers of the brain, similar to how illegal drugs work.

Older adults may like them the most: In a new *American Journal of Clinical Nutrition* study, researchers analyzed data from nearly 41,000 U.S.

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Carrie Ali
Editor

Dear *Bottom Line Health* reader,

When it comes to health care, the mouth is treated as if it exists in isolation from the rest of the body, even though numerous studies have shown that the two are inextricably linked. About 70 percent of older adults have gum disease (periodontitis) and 20 percent have untreated tooth decay, putting them at risk for hypertension, cardiovascular disease, and double the chance of dying from heart attack or stroke. A meta-analysis of 81 studies found that people with severe periodontitis had 49 percent higher odds of being hypertensive. Moderate periodontitis was associated with a 22 percent higher risk. Hypertension is just one of many conditions linked to gum disease. Oral bacteria and inflammation can worsen asthma and chronic obstructive pulmonary disease; increase blood sugar in people with diabetes; and cause earlier onset, faster progression, and increased bone and cartilage destruction in people with rheumatoid arthritis.

Despite the importance of keeping gum disease and tooth loss at bay as we age, the cost of care can be prohibitive. Prevention can help avoid many big problems, and the following tips can help make it more affordable:

- **Look into dental savings plans**, which can slash up to 60 percent off costs.
- **Visit a dental school.** Supervised students can clean your teeth and perform a variety of procedures for 20 to 70 percent less than you'd pay otherwise.
- **In 42 states, you can skip the dentist** and see a dental hygienist directly. (Visit www.adha.org/direct-access.)
- **Visit a low-cost dental clinic.** You can find listings at Authority Dental (www.authoritydental.org/toothwisdom).
- **If you need an expensive procedure**, ask your dentist if the cost is negotiable. Many dentists will offer a prepayment discount.

PURPOSE: To help our readers achieve and maintain health by providing the latest findings from the world's leading experts in both mainstream and natural/complementary medicine, and guidance through the increasingly complex and often hostile health-care system. *Bottom Line Health* is an independent publication that neither accepts outside advertising nor answers to any institution. **Our only allegiance is to you, our reader.**

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B *Bottom Line Health* USPS 001-537 (ISSN 1092-0129) is published monthly for \$59.90/yr., \$6/issue by Belvoir Media Group, 535 Connecticut Avenue, Norwalk, CT 06854-1713. Periodicals postage paid at Norwalk, CT, and additional mailing offices. Canadian and foreign price \$66.90/yr. (US funds). Canadian GST#: 128044658. Robert Englander, Chairman and CEO; Timothy H. Cole, Chief Content Officer; Phillip L. Penny, Chief Operating Officer; Greg King, Chief Marketing Officer; Ron Goldberg, Chief Financial Officer; Tom Canfield, Chief Circulation Officer. Postmaster: Send address changes to *Bottom Line Health*, P.O. Box 8535, Big Sandy, TX 75755-8535.

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HEALTH Discoveries

Green tea extract improves blood sugar and gut health, we

heard from Richard Bruno, PhD, RD. People who took a green tea extract supplement for one month had lower blood sugar, less gut inflammation, and reduced small intestine permeability than those in a control group. The effects were seen in both healthy people and those with metabolic syndrome (a combination of excess belly fat, high blood pressure, low HDL "good" cholesterol, and high levels of fasting blood glucose and triglycerides). The benefits suggest that it may be possible to alleviate or even reverse the inflammation that is linked to cardiometabolic disorders. The dosage was equal to five cups of green tea.



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Richard Bruno, PhD, RD, professor of human nutrition and director of the Bionutrition Core Laboratory, Ohio State University, Columbus, Ohio.

Enriching your diet with foods high in calcium and potassium may prevent recurrent kidney stones, we

heard from Andrew Rule, MD. His team at the Mayo Clinic found that low dietary calcium and potassium are a more important predictor of recurrent kidney stone formation than fluid intake is. Diets with a daily intake of 1,200 milligrams of calcium may help prevent first-time and recurrent kidney stones. While higher potassium intake is recommended, the study didn't recommend a specific level. High-potassium foods include bananas, oranges, grapefruits, cantaloupes, honeydew melons, apricots, potatoes, mushrooms, peas, cucumbers, and zucchini.

Andrew Rule, MD, professor, nephrology and hypertension, Mayo Clinic, Rochester, Minnesota.

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Build a Better Memory

Remember names, find your keys, and boost your brain power at any age.



Marc Milstein, PhD
author of
The Age-Proof Brain

We all have memory lapses: We forget the name of the person we just met, where we put our keys, or why we walked into the kitchen. These are perfectly normal—they don't signify impending cognitive decline—but they're a nuisance, nonetheless. So *Bottom Line Health* asked memory expert Marc Milstein, PhD, how we can improve our recall.

Slow down

When you process new information, it first enters a “waiting-room” in the brain's hippocampus, where it resides for seven to 10 seconds. If you focus on something for less than seven seconds, it doesn't have a chance to stick, so the first tip to improve memory is to simply give yourself more time before moving on to the next task.

Mark it as important

Your brain is constantly deciding if information is important enough to move into longer-term storage or if it can be discarded. You can boost

memory, then, by telling your brain what's important.

One way to do this is to recruit different parts of your brain. If you want to remember someone's name, instead of just thinking about the name, try imagining yourself writing it on their forehead. Writing—or imagining it—activates the frontal lobe and helps mark the information as worth remembering.

Say it out loud

Speaking activates parts of the brain used in speech and hearing, so simply

Why Memories Change Over Time

Have you ever shared an experience with someone and later realized you have very different memories of the same event? That's because every time you learn something, you make a connection. Every time you revisit it, you break it apart and put it back together, but you don't exactly attach it the same way. Over time, memories can become distorted. The bright side is that therapists can use this process to help traumatic or difficult memories become easier to bear.

saying something out loud helps you better remember it. If you tend to lose your keys or wallet, the next time you put them down, say out loud where you put them. Putting information to music can also activate the motor, emotional, and speech parts of the brain, which all aid in memory.

Add details

Your brain loves a story, but a single word, like a name or a password, not so much. So, add detail to boost your memory. If you are trying to remember that someone's name is George, embellish that information. For example, you might make a mental picture of King George sitting in a pub in England.

Use it or lose it

Nowadays, we don't have to work to recall information when we can just Google it. But pushing your brain to find a memory can strengthen your power of recall overall. Play trivia games or join a book club. When the name of an actor in a movie eludes you, don't immediately look it up. Let your brain work on it a bit. When you go shopping, take your list, but also see if you can recall what's on it without looking.

Learn new things

Simply learning something new can boost your brain power and help you practice moving information from your short- to long-term memory. Pick something outside of your expertise, such as painting, a sport, or a new language, as learning new information is one of the best things you can do for your brain.

Manage, but don't avoid, stress

Short bursts of stress are good for the brain. In fact, people with some stress have memories that stay sharper longer. But when that stress tips into being chronic, the hippocampus can actually shrink. To reduce stress and improve memory, exercise, take relaxing breaks, practice mindfulness, and spend some time in nature. ■

Bottom Line Health interviewed Marc Milstein, PhD, author of *The Age-Proof Brain*. He is a researcher and speaker.



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Probiotics Keep Your Gut Happy and You Healthy

Support your microbiome to lower inflammation and slash disease risk.



Elizabeth Lipski, PhD, CNS
Maryland University of
Integrative Health

There are more than 500 species of bacteria in the human gut. This internal ecosystem, which scientists call the *gut microbiome*, contains both health-promoting and disease-inducing bacteria, and one of the keys to good health is maintaining the right balance of the two. When the gut microbiome is healthy, friendly bacteria digest milk sugar (lactose) and protein, increase the absorption of minerals, manufacture vitamins B and K, make essential and short-chain fatty acids, and prevent dysbiosis—the overgrowth of bad bacteria.

Lower disease risk

These friendly bacteria can even lower the risk of specific diseases and disorders, like depression, autoimmune disease, heart disease, and diabetes.

•**Mental health problems.** Maintaining an optimal level of gut probiotics through a probiotic-rich diet and supplementation can reduce depression, reduce anxiety in chronic fatigue syndrome, help relieve stress-related psychological symptoms, boost mood in healthy people, and enhance memory and concentration, research shows.

That's because of the gut-brain axis—a direct link from the brain to

the gut via the vagus nerve. The link is so strong that some researchers are now talking about *psychobiotics*: supplemental probiotics like *Lactobacillus helveticus* and *Bifidobacterium longum* that are uniquely effective in helping to restore and improve mental health.

•**Autoimmune disease.** There are approximately 100 different autoimmune diseases in which the immune system mistakenly attacks a part of the body as if it were a foreign invader. They include type 1 diabetes, celiac disease, rheumatoid arthritis, Hashimoto's disease, and multiple sclerosis (MS).

Dysbiosis is a feature of most cases of autoimmune disease, and many studies suggest that correcting it with a probiotic supplement can help relieve the symptoms of autoimmunity. Researchers reported in the journal *Nutritional Neuroscience* that people with MS who took a probiotic supplement for six months had higher levels of brain-derived neurotrophic factor (a compound that helps nerve cells grow and survive), lower levels of IL-6 (an inflammatory biomarker), and less fatigue, pain, and depression (three common symptoms of MS).

In a study published in the *British Journal of Nutrition*, people with rheumatoid arthritis who took a supplement that contained both probiotics and prebiotics (nutritional factors that nourish probiotics) had less inflammation, joint stiffness, pain, and swelling, and better blood sugar control than people who took a placebo.

In Taiwan, investigators reported that people



Probiotics and Cancer

A paper published in *Integrative Medicine* looked at more than 30 studies on probiotics and cancer and found that probiotics can stop cancer cells from dividing and spreading, kill existing cancer cells, and slow and reverse tumor growth in a wide range of cancers. Researchers reported in *Frontiers of Nutrition* that people who ate the most yogurt had a 13 percent lower risk of developing colon cancer. In a study of patients with bladder cancer, published in the *Nutrition Journal*, those who received the probiotic *L casei* had an average disease-free period that was 44 percent longer than those receiving a placebo. And in a Japanese study of women with advanced cervical cancer, adding a probiotic to the treatment regimen improved the efficacy of radiation, extending survival time. The probiotics also decreased the incidence of side effects from radiation.

with type 1 diabetes who took a probiotic supplement had lower, healthier blood sugar levels and less inflammation than those in the placebo group.

• **Cardiometabolic disorders.** This category of interrelated health problems (also called the metabolic syndrome) includes high blood pressure, high blood sugar, low HDL cholesterol, high triglycerides, and abdominal obesity (excess belly fat). Cardiometabolic conditions also include fatty liver disease, polycystic ovary syndrome, and gout.

Scientists are finding that the gut microbiome plays a role in all of these problems, probably because dysbiosis triggers chronic, low-grade inflammation and interferes with the digestion and assimilation of macronutrients (carbohydrate, fat, and protein).

Enriching the diet with probiotics through food or supplements may lower high blood pressure, high blood sugar, high LDL cholesterol, and high triglycerides, research suggests. It can trim abdominal fat, reduce body mass index, reduce fat in the liver, lower biomarkers of liver toxicity, and decrease inflammatory biomarkers.

• **Digestive diseases.** It's no surprise that friendly gut bacteria improve gut health, reducing the risk of digestive disease and helping to treat and reverse gut problems. Probiotics have been used to treat irritable bowel syndrome, stomach ulcers, ulcerative colitis (a type of inflammatory bowel disease), celiac disease, and antibiotic-induced diarrhea.

In fact, a prescription supplement called VSL#3 has been developed specifically to treat irritable bowel syndrome and ulcerative colitis. Probiotics have also been used to treat bacterial infections in the gut, such as *Helicobacter pylori* and small intestinal bacterial overgrowth.

What to eat to support your gut

The best way to maintain your gut microbiome is to eat a whole-foods diet, especially foods that are rich in prebiotics. (Probiotics are beneficial bacteria, and prebiotics feed friendly bacteria.)

They consist of foods rich in soluble fiber and colors, and are found most abundantly in whole grains, beans, peas, vegetables, fruits, nuts, and seeds.

Foods that are rich in these nutritional compounds include artichokes, asparagus, avocados, bananas (under ripe), barley, beet root, bran, burdock root, chia seeds, chicory, Chinese chives, cocoa, cottage cheese, dandelion greens, eggplant, flax seeds, fruit, garlic, green tea, honey, Jerusalem artichokes, jicama, leeks, legumes, lentils, onions, peas, plantains, potatoes, radishes, root vegetables, rye, sea vegetables, soybeans, spices and herbs, sweet potatoes, tomatoes, vegetables, and yams. Eat several servings of foods from this list each day.

Probiotic foods

You can also fill up on probiotic-rich foods:

• **Yogurt**, which typically contains several *Lactobacillus* species (such as *Lactobacillus acidophilus*, *Lactobacillus thermophilus*, and *Lactobacillus bulgaricus*), is a good choice. Kefir, another milk product, is even richer in probiotics than yogurt. Buttermilk and acidophilus milk also have plenty of probiotics. Among cheeses, gouda and cottage cheese are particularly rich in probiotics. If dairy doesn't agree with you, look for an oat, soy, or nut-based yogurt.

• **Try sauerkraut or kimchi.** Look for an unpasteurized variety. Fermented foods naturally contain probiotics.

• **Sour pickles** (not cured with vinegar) are packed with probiotics, as are most olives.

• **Miso soup**—which contains fermented soybean paste—is rich in probiotics. There are over 150 species of microbes in it. So is tempeh, fermented soybean patty.

• **Authentic sourdough bread** (made from a yeast-containing culture) delivers plenty of probiotics—which the latest research shows can improve the microbiome even though they've been through the baking process.

• **Unpasteurized beer and wine** are also fermented foods. But pasteurization

Vary Your Supplements

If you take a probiotic supplement, vary the type you take. The risk of taking the same probiotic supplement every day is that you're always ingesting the same, limited species of probiotics, and you can get overgrowth of even friendly bacteria. To vary the supplement, once you've used up the bottle, switch to another brand, taking that one until it's done. Then switch again.

(common in mass-produced beers) kills the friendly bacteria.

• **Raw honey** contains up to 14 species of probiotic bacteria.

• **Other foods** that deliver probiotics include coffee, chocolate, coconut, and black tea. And don't forget kombucha, a fermented, effervescent form of tea.

Slowly add more servings of probiotic-rich foods to your daily diet. If you introduce too many foods too fast, you may develop gas and bloating.

Cut back on ultra-processed foods, particularly those that contain sugar and white flour, which feed bad bacteria.

Probiotic supplements

Despite all the research on probiotics and disease, researchers are cautious about recommending probiotic supplements for self-care. However, if you have one of the diseases or disorders that probiotics can help, taking a daily probiotic supplement might benefit you. (These conditions include the diseases and disorders discussed here as well as infections like cold and flu; skin problems like acne, eczema, and psoriasis; and genitourinary problems like vaginal infections and kidney stones.) ■

Bottom Line Health interviewed Elizabeth Lipski, PhD, CNS (certified nutrition specialist), a professor of clinical nutrition and director of academic development for clinical nutrition programs at Maryland University of Integrative Health. She is the author of *Digestive Wellness* (5th Edition). www.innovativehealing.com; www.digestivewellnessbook.com.



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7 Surprising Asthma Triggers

Know what to watch for to best control your condition.



Jeffrey G. Demain, MD
University of Washington

If you have asthma, you already know that things like cigarette smoke, animal dander, and dust can trigger a dangerous attack. But there are many other—often unexpected—triggers of asthma flares.

1. Thunderstorms

During a thunderstorm, rain and lightning split pollen grains open and expose the peptides inside. Winds and downdrafts then spread those tiny particles widely. Normal, intact pollen grains measure 20 to 100 microns and settle to the ground, but these fragments, at less than 2.5 microns, remain in the air, where they can easily be inhaled deeply into the lungs.

In 2016, Melbourne, Australia, witnessed the world's most extreme case of thunderstorm asthma. Within 30 hours, more than 3,000 people went to emergency rooms for asthma attacks, 35 were admitted to intensive

care units, and 10 died. Researchers note that as global temperatures rise, thunderstorms are expected to become more common, making this a more widespread trigger.

2. Food additives

When nitrites, nitrates, and sulfites are used as added food preservatives, sensitive people can experience worsening respiratory symptoms. (Foods that contain these compounds naturally generally do not trigger asthma.) Common culprits include sauerkraut,

deli and cured meats, wine, beer, cider, dried fruits and vegetables, packaged potatoes, bottled lime and lemon juice, and pickled foods.

3. Volcanoes

If you're planning a trip to Hawaii or any other place with active volcanoes, pack extra medication and have a rescue plan in place. Volcanic ash releases sulfur dioxide, which can cause significant injury to the lungs when inhaled and trigger an asthma attack. Some people may also be sensitive to the sulfur dioxide released from natural hot springs.

4. NSAIDs

Nonsteroidal anti-inflammatory drugs, like aspirin, ibuprofen, and naproxen, worsen asthma symptoms in about one in five people with asthma. If you notice symptoms after taking any of these drugs, opt for acetaminophen (Tylenol) instead.

5. House plants

Asthma attacks can be caused by mold spores that are often found in the soil of many household plants. Minimize indoor plants and keep them out of rooms in which you spend a lot of time. English ivy, a peace lily, or a rubber plant are safer options, but keep them out of the reach of children and pets.

6. Cleaning products

Cleaning away dust and dirt can hurt asthma more than help it if you use certain products. Avoid

Warming Cities

Heat, ozone, pollen levels, and carbon dioxide levels are all higher in cities—and that has real effects on people with asthma and allergies. A team of researchers planted ragweed in urban, suburban, and rural areas. They found that in the urban areas, which had 30 percent higher levels of carbon dioxide, pollen rates were twice as high. As the world gets warmer, pollen levels are rising every year, and the pollen season is getting longer. Spring is now starting up to 30 days earlier, and the transition from summer to fall is occurring later, especially in northern states, a team of researchers reported. Climate change is also leaving more asthma attacks in the wake of receding glaciers in places like Alaska, Washington, Oregon, California, Montana, Wyoming, Colorado, and Nevada. As glaciers recede, they leave behind tiny particles of crushed rock that can be inhaled deep in the lungs.



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cleaners that contain peroxyacetic acid, peracetic acid, and fragrances (including candles and air fresheners).

Don't use bleach (sodium hypochlorite) or quaternary ammonium compounds in enclosed spaces. Instead, opt for soap and water, vinegar, lemon, hydrogen peroxide (no stronger than 3%), ethanol (ethyl alcohol), or pre-made products certified by the EPA Safer Choice Program.

7. Living near a major road

People who live, work, or go to school near a major road have higher rates of asthma and more symptoms. The closer to the road, the stronger the effect.

A study published in the *American Journal of Respiratory and Critical Care Medicine* reported that long-term exposure to traffic air pollution also may increase the risk of developing chronic obstructive pulmonary disease—especially among people who had asthma or diabetes, and researchers reported in *Environmental Health Perspectives* that traffic-related pollution decreased lung function in urban women.

Reduce risk with good control

While you can't avoid things like thunderstorms, you can protect yourself by working with your physician to make sure your asthma is well controlled. If you're using a rescue inhaler, such as albuterol, more than a few times a week, talk to your doctor about your medication regimen.

Many new medications can reach deeper into the lungs and treat your symptoms using different mechanisms.

It's also important to have a spirometry test at least once per year to measure and monitor your lung function and capacity. If your family doctor doesn't offer spirometry, make an appointment with an allergist or pulmonologist to supplement your asthma care team. ■

Bottom Line Health interviewed Jeffrey G. Demain, MD, FAAP, FAAAAI, Founder, Allergy Asthma & Immunology Center of Alaska, Clinical Professor, Department of Pediatrics, University of Washington, Affiliate Professor, WWAMI School of Medical Education, University of Alaska, Anchorage.



[SMARTER EATING]

Janet Bond Brill, PhD, RDN, FAND

Buckwheat: The Wheat and Gluten-Free Superfood

Buckwheat is a *pseudocereal*, the name for seeds from nongrass plants commonly consumed in the same way as grains. (Quinoa is also a pseudocereal.) Buckwheat is the seed of the *Fagopyrum esculentum* plant, which is related to rhubarb and sorrel. A grain and a seed are similar, but not identical. A grain is the small edible fruit harvested from grassy crops. A seed is an ovule that contains an embryonic plant. Both seeds and grains are highly nutritious and should be eaten in their whole, unprocessed forms.

Buckwheat is considered an "ancient grain," meaning a plant that has been cultivated for centuries, even millennia. Other examples of ancient grains include quinoa, barley, rye and millet. All types of ancient grains are whole grains, and, for that reason alone, they deserve consideration as a part of your healthy diet. A large body of scientific evidence illustrates the spectacular health benefits of consuming whole grains daily.

Buckwheat has no relation to wheat and is gluten-free. Gluten is a protein found in wheat and some other cereals, but it is not found in seeds. Buckwheat groats (the hearty, hulled seed of the buckwheat plant) can be eaten roasted or in products such as buckwheat flour and kasha. Buckwheat is the primary ingredient in Japanese soba noodles. (If you're avoiding gluten, check the label. Many brands include some wheat flour as well.) Buckwheat is exceptionally rich in fiber, which most Americans don't get enough of.

Experience its toasty, nutty flavor and a soft, chewy texture with this fiber-packed recipe.



Kasha Varnishkes

Ingredients:

4 cups uncooked bow tie pasta	1 large egg, at room temperature and beaten lightly
2 large white onions, chopped	2 cups low-sodium chicken broth, heated
1 cup sliced fresh mushrooms	½ tsp. salt
2 Tbsp. extra virgin olive oil	Dash pepper
1 cup roasted whole-grain buckwheat groats (kasha)	Minced fresh parsley

Directions:

Cook pasta according to package directions. In the meantime, sauté onions and mushrooms in oil in a large skillet until lightly browned, 7 to 9 minutes. Remove from pan and set aside.

Combine buckwheat groats and egg in a small bowl and add to the same skillet. Cook and stir over high heat for two to four minutes or until the buckwheat is browned, separating grains. Add the hot broth, salt, and pepper.

Bring to a boil. Add the onion mixture. Reduce heat, cover, and simmer for 10 to 12 minutes or until the liquid is absorbed. Drain the pasta, add to pan, and heat through. Sprinkle with parsley.

Yield: Makes 8 servings

Nutrition per serving (3/4 cup): 270 calories, 6 g fat, 28 mg cholesterol, 408 mg sodium, 47 g total carbohydrate, 4 g sugars, 4 g fiber, 9 g protein.

Janet Bond Brill, PhD, RDN, FAND, is a registered dietitian nutritionist, a fellow of the Academy of Nutrition and Dietetics, and a nationally recognized nutrition, health and fitness expert who specializes in cardiovascular disease prevention. Based in Hellertown, Pa., Dr. Brill is author of *Intermittent Fasting for Dummies*, *Blood Pressure DOWN*, *Cholesterol DOWN*, and *Prevent a Second Heart Attack*. <http://DrJanet.com>.



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Stand Up for Your Health

Sitting all day can be as bad for you as smoking. Just a little standing can make a big difference.



Sara K. Rosenkranz, PhD
University of Nevada,
Las Vegas



Emily Mailey, PhD
Kansas State University

You've probably heard this official recommendation dozens of times (if not more): For good health, engage in moderate physical activity, like brisk walking, for at least 150 minutes per week. More physical activity lowers high blood pressure, cuts the risk of death from heart disease or stroke, decreases the risk of several cancers, helps prevent and control prediabetes and diabetes, prevents falls, relieves depression and anxiety, and boosts memory and concentration.

But here's a fact about activity very few doctors and health researchers are telling you: You can get many of the same types of health benefits just by standing up.

Scientific research shows that the simple act of standing up from a sitting or lying down position—particularly if you stand up repeatedly

during the day and stay standing for a little while—is very good for you. That's because sedentary behavior—spending a long time sitting and barely moving—is an independent risk factor for poor health. In other words, exercising too little is bad for you—but so is sitting too much.

Sedentary behavior

On average, Americans spend half their waking hours in sedentary behavior, particularly sitting at work, school, and home, while driving, and in restaurants and movie theaters. In a recent survey of nearly 6,000 people conducted by the U.S. Centers for Disease Control and Prevention, 25 percent said they spent more than eight to 10 hours a day sitting—the level of sedentary behavior that puts you most at risk for poor health.

Sitting sickness

Sitting hurts your health for several reasons. When you're sedentary and expending low levels of energy for a long period of time, your body essentially shuts down its metabolic machinery. You generate fewer of the enzymes that stimulate the metabolism of fats for fuel. The heart pumps less blood. Your breathing becomes shallower. The muscles in your legs and buttocks—which burn most of your calories—burn far fewer.

In a study published in *The Lancet*, researchers reviewed data from 13 studies on sedentary behavior involving more than 1 million people and found that people who sat for more than eight hours a day with no physical activity had a risk of dying similar to that of smokers.

Excessive sitting can also make you sick. It puts you at a higher risk for high blood pressure, heart disease, stroke, type 2 diabetes, and several cancers (breast, colon, endometrial, and ovarian). Sitting too much is also linked to increased depression and anxiety.

Even a little standing is good

While sitting is bad for you, standing is good: Recent research shows that simply standing up decreases several of the risks from sedentary behavior.

In a study published in the February 2021 issue of the *British Journal of Sports Medicine*, researchers looked at 33 studies that analyzed the effects of standing. They found that the people who stood more lost body fat and weight, had trimmer waistlines, lowered systolic blood pressure and insulin, and increased HDL, the “good” cholesterol that moves heart-hurting fats out of the artery into the liver for disposal. The changes

Toxic Combo: Sitting and Screen Time

Studies show that sitting *and* watching a screen, such as a TV, computer, smartphone, or video game, is worse for you than just sitting. Scientists aren't sure why. One reason may be that bouts of sitting tend to be more prolonged when you're watching a screen.

Another possible factor is that screen time means you're likely to be sitting *and* mindlessly eating unhealthy foods such as chips and sweets.



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were small, but they were significant in terms of better health. The more sedentary the person, the bigger the benefit. If you're sitting a lot each day and not exercising at all, standing is going to do you a lot of good.

In another recent study, published in the *Journal of Science and Medicine in Sport*, researchers found that standing—and nothing more—was linked to better insulin sensitivity in people with blood sugar problems, reducing their risk of type 2 diabetes.

So how do you sit less and stand more? It's easy. In a study published in the February 2022 issue of the *Journal of Occupational and Environmental Medicine*, researchers from Kansas State University were able to reduce occupational sitting by up to 206 minutes a day in 95 university employees who were working at home. Here are some of the ways they did it.

Set a goal

If you sit a lot, your goal might be to stand up for one minute every 30 minutes throughout the day. Write that goal down and, as you take your breaks throughout the day, check off your accomplishment.

Behavioral scientists say this type of self-monitoring and accountability is an effective way to increase “self-efficacy”—the ability to make a behavioral change.

Even better than just standing up is standing and moving around a bit, or what the researchers call engaging in *light activity*:

- Walk to the bathroom.
- Pick up something at the printer.
- Go to the kitchen or the water cooler.
- Use a smaller water bottle, so you'll have to get up and fill it more often.
- Walk to a colleague's desk instead of sending an e-mail.
- Do some quick standing stretches.

Use a reminder

Even with the best intentions to stand up more during the day, it's easy to forget your goal—for example, because you're so wrapped up in what

you're doing that you lose your sense of time. To counter this all-too-human tendency, use a reminder on your computer or smartphone.

Apps for the computer suggested in the Kansas State University study included Time Out, Tomato-Timer, BreakTimer, and Big Stretch Reminder. Apps for the phone included 1 Minute Desk Workout, Randomly RemindMe, and Stand Up! The Work Break Timer.

Use everyday cues

Sometimes, a timer doesn't work because you're in the middle of a task and can't stop, so use other cues, too. When you finish writing an email—stand up. After a meeting—stand up and walk around for a few minutes. When you're on the phone—stand up and stroll.

Use a height-adjustable desk

The most effective intervention in the study was a height-adjustable desk that allowed people to stand up as they worked. If a height-adjustable desk isn't in your budget, you can put an object such as an upside-down Rubbermaid tub on top of your existing desk or use a laptop computer placed on a counter top.

Small changes make a big difference

The goal is to make small changes that reduce your sedentary behavior. If you're not used to standing for a long time, don't strain by immediately trying to stand for four to eight hours at your desk. Rather, switch postures frequently and work up to standing longer. You may find that you'll gain many short-term benefits, too. Study participants noted less low-back pain, less leg pain, less fatigue, and more ability to focus. ■

Bottom Line Health interviewed Sara K. Rosenkranz, PhD, an associate professor in the Department of Kinesiology and Nutrition Sciences at the School of Integrated Health Studies, University of Nevada, Las Vegas, and Emily Mailey, PhD, an associate professor in the Department of Kinesiology, and director of the Physical Activity Intervention Research Lab, at Kansas State University.

News ALERT

Nursing Homes Suing Residents' Friends, Families

Long-term care facilities in Rochester, New York, are routinely suing residents' children, grandchildren, neighbors, and others to recoup debts, according to an investigative report from *Kaiser Health News*.

From 2018 through 2021, 24 nursing homes in Monroe County (where Rochester is located) filed 238 debt collection cases, two-thirds of which targeted a resident's friend or relative. In more than one-third of those cases, the defendants had no power of attorney or access to residents' money to pay bills on their behalf.

One nursing home sued a resident's daughter and granddaughter over a \$5,942 debt. Another sued a woman for \$82,000 for her cousin's care, alleging that the resident was her mother. An 81-year-old widow was sued for \$21,000 after she signed papers to admit an older friend to a nursing home.

A spokesperson for the American Health Care Association said lawsuits against families are “not a common occurrence” nationwide, but consumer attorneys in California, Illinois, Kentucky, Massachusetts, New York, and Ohio disagree. One attorney in New York said that nursing homes see adult children as more appealing targets than older residents because they are more likely to have assets and wages that can be garnished.

Federal law prohibits nursing homes from requiring a resident's relatives or friends to financially guarantee their bills, but consumer advocates say nursing homes sometimes slip agreements into the stacks of papers that people sign when a loved one is admitted. To protect yourself and your loved ones, don't sign any paperwork for yourself, a family member, or friend without having a lawyer review it first. If you are sued for a loved one's debts, don't ignore it. Seek the advice of a lawyer or consumer activist to understand your rights and responsibilities.

Source: *Kaiser News Network*



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Treating a Leaky Bladder

Urinary incontinence is not a normal part of aging, but it is very common—and treatable.



Jason Kim, MD
Stony Brook Medicine
Women's Pelvic Health &
Continence Center

It's the stuff of a million embarrassed asides: *I better not drink any water before getting in the car. I'm not sure I can make it to intermission. I pee a little when I cough.* Urinary leakage, or incontinence, is not a normal part of aging, but it is very common, especially among women. People who struggle with urinary leakage or with fear of not making it to the bathroom in time often believe there is little they can do about it, but the two most common causes—stress incontinence and overactive bladder—are often treatable.

Stress incontinence

About one in three women will develop what's known as stress urinary incontinence, the kind of urinary leakage that

can happen when you cough, laugh, or move in other ways that put pressure on your bladder. Women who have given birth are especially vulnerable because their pelvic floor muscles, which are involved in urination, can be stretched, weakened, or damaged during labor and delivery, but it also strikes about one in five women who have not given birth. Women of any age can have this problem, but it's most common after age 65.

Overactive bladder

Overactive bladder is when you have frequent strong urges to urinate that interfere with your life. About 40 percent of women and 30 percent of men in the United States have symptoms of overactive bladder, according to the American Urological Association.

This condition can make it difficult to get through daily routines without frequent pit stops. At night, constantly

getting up to pee can disrupt your sleep. Some people with overactive bladder have leaking accidents, but even those who don't may live in fear of the day they can't make it to a bathroom.

In men, overactive bladder is often a result of changes in the prostate gland, which is located just below the bladder and surrounds the urethra, the tube used for urination. An enlarged prostate, which is common in older men, can cause frequent urges to urinate and make it difficult to empty the bladder completely. In women, damage to pelvic nerves during childbirth, along with the hormonal changes of menopause, can contribute to overactive bladder and urine leakage.

In men and women, overactive bladder can result from pelvic or back surgery or certain neurological conditions, such as stroke, Parkinson's disease, and multiple sclerosis.

In women, a combination of stress incontinence and overactive bladder is quite common.

Treating stress incontinence

Your doctor may suggest some immediate steps you can take to try to stop or minimize your symptoms. For example, you might visit a specially trained physical therapist to learn pelvic floor exercises that can help you control your urine flow.

While these exercises are similar to the Kegel exercises many women learn after childbirth, it's important to learn the particular techniques that help with urinary leakage. Performing the exercises incorrectly might make matters worse.

You may also want to lose some weight. Multiple studies show that being overweight or obese increases the risk for stress incontinence and that losing even a few pounds can help relieve symptoms.

If those simple steps don't work, you may want to consider a medical procedure or medications. For stress incontinence, your doctor may recommend in-office injections of a gel-like substance to "bulk up" the urethra and temporarily reduce urinary leakage.

Don't Be Shy: Talk to Your Doctor

If your urinary problems are interfering with your life, tell your doctor. To get a clear picture of what's causing your problems, the doctor may take a variety of steps:

- He or she will ask about your medical history, including any recent changes that might be causing temporary urinary problems, such as surgery, medications, or urinary tract infections. The doctor will ask if you have noticeable triggers for urinary leakage, such as coughing, sneezing, or laughing. If you have, the doctor may ask you to put on a pad and try to cause a leak.
- The doctor may perform a physical exam, including a pelvic exam in women or a prostate exam in men, and ask for a urine sample to test for infection.
- He or she may ask you to use the bathroom, then return for a scan that looks at how much urine is left in your bladder.
- The doctor may ask you to start keeping a bladder diary in which you jot down how often you use the bathroom, what fluids you drink and, if you have any leaks, what you were doing when they happened.

Another option is sling surgery. In this outpatient procedure, a small strip is placed under the urethra to hold it in place. The slings can be made of surgical mesh, your own tissue, or donor tissue. Infections and other complications can occur, so you should discuss potential risks with your surgeon.

Managing overactive bladder

People with overactive bladder may benefit from the same pelvic floor exercises that help people with stress incontinence. Men can do these exercises, too.

You may also need to change the timing of your drinks and limit your consumption of caffeine and alcohol, which can irritate the bladder. Some people find that spicy foods, citrus fruits, or tomatoes are irritants as well. Keeping a bladder diary can help you discover which changes make a difference for you.

Your doctor may also recommend timed or delayed urination. You might try urinating on a schedule (for example, every two or four hours during the day), or you might resist the urge to urinate for a few minutes at first and then longer to see if you can regain control over your bladder. These changes should be tried only under the supervision of a doctor.

Advanced treatments

For overactive bladder, you might also benefit from medications. Some women find that vaginal estrogen creams help with their bladder symptoms. In addition, many people try drugs from two groups: anticholinergics (available in pills and patches) and beta-3 adrenergic receptor agonists (available as pills). The medications are sometimes used in combination.

The drugs have side effects ranging from dry mouth and constipation to increased blood pressure. Anticholinergic drugs also have been linked to an increased risk of dementia, so they should be used with great caution in older adults. Botox injected into the bladder can reduce or eliminate leaking temporarily. People who don't get relief other ways can choose from several implanted devices that work on nerve pathways involved in overactive bladder. One procedure is called sacral neuromodulation and relies on a pacemaker-like device implanted under the skin of the upper buttock. Other options depend on devices placed near the ankle to stimulate the tibial nerve, which communicates with nerves in the spine that are important for bladder function. ■

Bottom Line Health interviewed Jason Kim, MD, a clinical associate professor of urology and director of the Stony Brook Medicine Women's Pelvic Health & Continence Center, East Setauket, New York.

Research REPORT

Sleep testing at home. A new home sleep test can diagnose moderate-to-severe obstructive sleep apnea (OSA) with 95 percent accuracy, researchers from Northwestern Medicine have found. Anne Sleep is the first wearable system that has been cleared by the U.S. Food and Drug Administration as a sleep diagnostic platform and a general patient monitor. It will be available by prescription later this year. OSA is a condition in which the airway closes up to 30 or more times every hour during sleep. It can lead to severe daytime fatigue, stroke, hypertension, diabetes, depression, and motor vehicle accidents. The home device could help diagnose more patients to prevent and improve the adverse effects of sleep apnea on cardiovascular, metabolic and brain health.

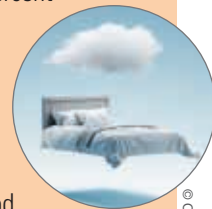
Source: *Northwestern Medicine*

Vitamin D might prevent chronic inflammation. A study that examined the genetic data of 294,970 participants showed a direct link between low levels of vitamin D and high levels of inflammation. Increasing vitamin D in people with deficiencies may reduce that inflammation and lessen the risk or severity of chronic illnesses with an inflammatory component, such as cardiovascular disease, diabetes, and autoimmune diseases. It might also mitigate the ill effects of obesity.

Source: *International Journal of Epidemiology*

Sniffing out friendships. People may choose friends with a similar body smell, new research suggests. Using a tool called an eNose, researchers assessed the chemical signatures of study participants' body scents. They found that people who had more positive interactions smelled more like each other. When the researchers entered the data into a computational model, they were able to predict with 71 percent accuracy which people would have a positive social interaction, based on eNose data alone.

Source: *Science Advances*



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The Power of the Placebo Effect

Simply believing in a treatment can make it work—even when it's fake.

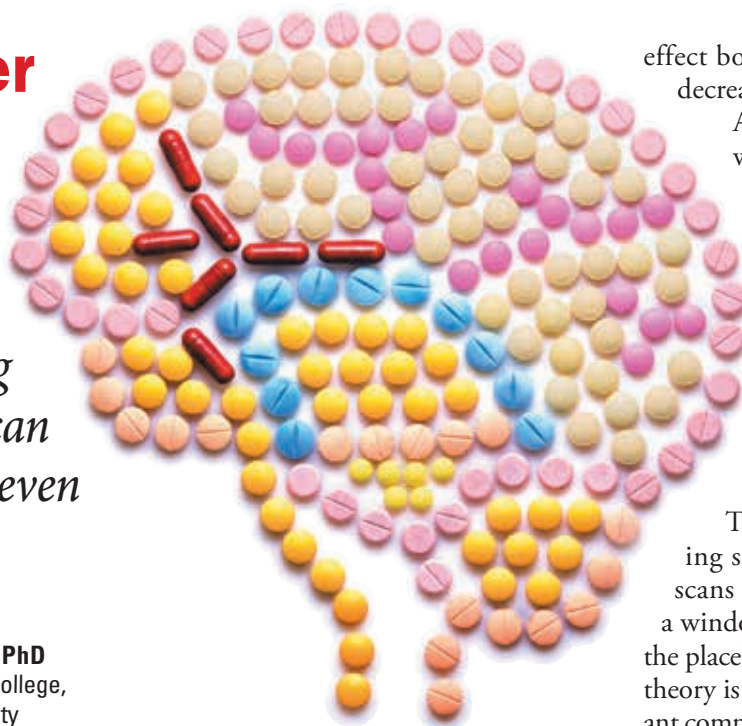


Yoni K. Ashar, PhD
Weill Medical College,
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During World War II, Henry Beecher, MD, a Harvard-trained anesthesiologist, ran out of morphine to use for anesthesia. He turned to a placebo and began injecting patients with saline instead. That simple salt water worked well enough for him to perform surgery on many of his patients. The reason? They believed it would.

The placebo effect is a phenomenon in which patients can take a nonmedical substance, whether it's a saline injection or a sugar pill, and experience a positive response. In 1955, Dr. Beecher estimated that 35 percent of any treatment success was due to the placebo effect. Today, we know that the response rate ranges from 26 to 50 percent, and depends on several factors.

Type of placebo. In a review published in 2017 in the journal *Annual Review of Clinical Psychology*, it was shown that the more bells and whistles attached to a placebo, the higher the effect. For example, placebo acupuncture was more powerful for relieving pain than a placebo pill, and as powerful as actual acupuncture. In the review, placebo pills and injections had about a 26 percent placebo response, placebo acupuncture had a 38 percent response, and placebo surgery had a 50 percent response.



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The condition being treated. Placebos work best in diseases with symptoms like pain, itching, or fatigue and less well on symptoms like high blood pressure, fever, or abnormal heart rate. A placebo may not stop a tumor from growing, but it can help reduce pain and the side effects of cancer treatment. Mental health disorders respond very well to placebos, especially anxiety, panic attacks, and depression. A possible explanation is that the anticipation of an

The Nocebo Effect

Just as belief can make a treatment more effective, the opposite can be true. If you don't think a medication is going to work for you, it might not. In one study, when researchers administered pain medication disguised as vitamins, study participants reported less pain relief than the people who knew they were taking a real medication. The nocebo effect can even cause you to experience side effects simply because you expect to. Bottom line: When you start a new treatment, think positive. It really can change your experience.

effect boosts dopamine, which can decrease depression and anxiety.

A review of 215 studies that was published in the journal *Pain* found that up to 75 percent of any pain treatment is due to the placebo effect. Getting a placebo from a trusted health-care provider also makes any placebo more powerful.

How placebos work

The availability of brain imaging studies like MRIs and PET scans has given brain researchers a window into understanding how the placebo effect works. The current theory is that there are three important components: classic conditioning, expectations, and neurobiology.

Classic conditioning is the most basic component. It is a learned, automatic reaction gained from prior experience. If a lab animal is fed every time a bell rings, it will start to salivate at the ring of the bell, whether it receives food or not.

Brain imaging shows that brain neurons that recognize an injection of morphine will become wired to brain neurons that release pain-relieving brain messengers called neurotransmitters. Over time, triggering the injection neurons will automatically trigger the pain-relieving neurotransmitters, even if the injection is just salt water, because neurons that fire together wire together.

Expectation is a higher brain function that involves memories, emotions, and evaluations. Brain imaging shows that areas of the brain that are responsible for hope and belief are activated during a placebo response.

Neurobiology. The placebo response can generate the same neurotransmitters that are generated by real medications or treatments. They include the neurotransmitters serotonin, dopamine, and endorphins.

Placebos in research

The gold standard to determine the safety and effectiveness of a new

A Brief History of Placebo

Placebos have been a part of medical treatment since the time of Ancient Egypt (3100 BC to 332 BC). They became more commonplace in the 17th century, when physicians referred to them as a necessary deception for certain patients, sometimes called a “humble humbug.”

In the early 1800s, physicians used metal rods (called Perkins rods) to treat painful conditions like rheumatism. It was believed that the magnetic properties of the rods could draw out pain when placed against the body. A physician named John Haygarth compared actual rods to wooden rods painted to look like the metal rods. Patients had the same response to both rods. Haygarth had the insight to conclude that both rods worked due to the “wonderful effects” of faith and hope.

In 1807, Thomas Jefferson wrote, “The most successful physicians I know use more bread pills, colored water, and powders from ashes than all their other medicines.”

treatment or medication is to use a randomized, placebo-controlled trial in which one group of volunteers is randomly assigned to a placebo group and the other is assigned to a real treatment group. Neither group knows if they are getting the treatment or the placebo. The placebo response is generated solely by the patient. Anything beyond that response is attributed to the new medication or treatment.

Growing power of placebos

New research, however, is complicated by the growing power of the placebo response. More patients in placebo groups are experiencing symptom relief than ever before, which makes the active treatments in the study appear to be less effective by comparison.

A study published in the journal *Pain* reported that, in 1996, clinical trial participants reported a 27 percent difference between the effectiveness of placebo and active drugs. In 2013, the difference was just 9 percent.

Interestingly, this association is seen only in the United States. There are two possible explanations: First, American drug trials tend to be larger, longer, and have more clinical staff interacting with study participants. Both factors—complexity and relationships with health-care providers—have been shown to increase the placebo effect. In addition, the United States is the only country that allows pharmaceutical companies to market their products directly to patients, so

patients may be primed by advertising to expect greater benefits.

Harnessing placebo power

Now that we know how powerful the placebo is, why not start using placebos as actual treatments? The main reason is ethical. Outside of a clinical trial, doctors can't give a placebo to a patient without telling them. The solution may be an open-label placebo.

Studies show that when patients are told they are getting a placebo and also told that placebos work, they still get a placebo response. In fact, open-label placebos have been used to treat cancer-related fatigue, migraine headaches, irritable bowel syndrome, chronic back pain, allergic rhinitis, and osteoarthritic knee pain with good success, according to the review published in *Pain*.

The bottom line is that the power of the placebo is within all of us. You don't need to be fooled into using it; you can just start believing in it. There is a tremendous healing power available to you when you have hope, faith, a positive attitude, and a compassionate health-care provider.

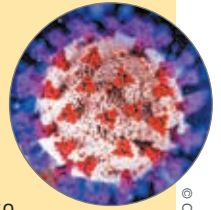
The Greek Physician Hippocrates said, “The natural healing force within each one of us is the greatest force for getting well.” Modern researchers are discovering he was right. ■

Bottom Line Health interviewed Yoni K. Ashar, PhD, doctor of psychology, neuroscientist, and a National Institutes of Health-funded researcher at Weill Medical College, Cornell University, New York City.

News ALERT

Long COVID Comes in Three Versions

There are three distinct types of long COVID, researchers from Kings College London reported after analyzing data on 1,459 people who had ongoing symptoms for longer than 84 days:



© Olga Shtetskaya/Getty Images

- **Neurological.** Long-term fatigue, brain fog, and headache are the most common subtype among people infected with the alpha and delta variants.
- **Respiratory.** Long-term chest pain and severe shortness of breath are most common in people who were infected in the wild-type period when the population was unvaccinated.

- **Diverse.** A third group of people experience a range of symptoms including heart palpitations, muscle aches and pain, and changes in skin and hair.

The three subtypes were seen in all variants, but additional symptom clusters were subtly different between variants. These differences may not be due to variants themselves, but other factors, such as time of year, social behaviors, and treatments.

Nation Faces an Oncologist Shortage

The American Society of Clinical Oncology is projecting a shortage of more than 2,200 oncologists by 2025 as 20 percent of practicing oncologists near retirement age. The areas at highest risk include Miami and North Port, Florida; New York City and Buffalo, New York; Los Angeles; Washington, DC; Detroit; Hartford, Connecticut; Las Vegas; and San Diego. The areas most likely to have a *sufficient* number of oncologists include Orlando, Florida; Columbus, Ohio; Nashville and Memphis, Tennessee; and Charlotte, North Carolina. In many areas, primary care physicians are stepping in to care for cancer patients, according to *Medscape Medical News*, but many patients are reporting gaps in that care.

adults and found that those ages 60 and older showed the sharpest rise in ultra-processed food consumption—more so than college students.

Big portions contain more calories than small portions, plus we tend to eat more food when given larger sizes. (I call this “eating with our eyes” instead of “eating with our stomachs.”) This is a major reason why 74 percent of U.S. adults are overweight or have obesity, placing them at higher risk for other diet-related conditions such as heart disease and diabetes.

Portions versus servings

One of the problems lies in the fact that our notion of a proper serving has been distorted beyond recognition by super-sized fries and 1,000-calorie smoothies. When a restaurant server brings us an enormous plate of pasta, we consider it to be an individual *serving* when, in fact, what we’ve been given is a *portion*. They’re not the same thing.

A recent International Food Information Council survey found that nearly half of Americans cannot correctly distinguish serving size—a standard unit of measure upon which nutrition labels are based, such as 1 cup or 2 tablespoons—from portion size, which is the amount of food you are served or choose to eat. Your favorite cereal may list a serving as three-quarters of a cup, but if you pour yourself two cups for breakfast, your portion is actually more than double the serving size.

Very generally speaking, most people should aim for the following serving quantities and sizes:

- **Grains:** Eat four to six servings per day. One serving is one-half cup of cooked rice, pasta, or oatmeal; one slice of bread; or one cup of ready-to-eat cereal flakes. Hint: One cup looks like the amount of space taken up by a closed fist.

- **Protein:** Aim for two to three servings per day. One serving is 3 ounces

of cooked fish, poultry, or lean meat; two eggs or four egg whites; one cup of cooked beans; one-half ounce of unsalted nuts or seeds; or one cup of tofu. Hint: Three ounces looks like the amount of space taken by an open palm (not including the fingers or thumb).

- **Dairy:** Eat or drink two to three servings per day. One serving is one cup of low-fat or fat-free milk or yogurt; or one-third cup of shredded cheese. Hint: A cup is 8 ounces, not a full drinking glass, some of which can hold 16 ounces or more.

- **Fruits and vegetables:** With fruits and vegetables, there’s really no reason to worry about serving sizes or portions. They’re packed with nutrients as well as fiber, which helps keep you fuller longer. The more produce you eat, the less room you’ll have for junk food. Note: This doesn’t include fruit juice or dried or canned fruit, all of which are somewhat processed, high in sugar, calorie-dense, and easy to overeat.

As for those tasty, addictive ultra-processed sweets and treats, there’s still room for them at the table, but be choosy and rein in the portions.

Portion hack #1: Buy big bags, and then portion them out at home.

It’s human nature to eat more out of a large bag than a single-serving one. But single-serving packages of food, whether it’s ultra-processed (like chips or candy) or healthy (almonds or baby carrots) cost more, so people tend to go for the bulk sizes.

That’s fine, just portion the snacks out once you get home, keeping serving sizes in mind. Check the nutrition label and make sure it lists a single serving size. Most candies and chips will specify how many pieces per serving (for example, 12 peanut M&Ms or 17 pretzel twists.) If you’re still hungry, supplement your snack with a fruit or veggie.



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Portion hack #2: Scoop cereal

It can be all too easy to pour out several cups of cereal for breakfast, especially if you’re in a rush and aren’t being mindful. What you assume is one cup is usually closer to three. In a Consumer Reports test, people were asked to pour out the amount of cereal they’d typically eat for breakfast. Ninety-two percent of participants poured themselves more than the recommended serving size.

Some cereals, like granola and muesli, are quite dense and high in calories. They can easily contain close to 300 calories for a two-thirds-cup serving. Two cups of your favorite granola could easily have more calories and sugar than a chocolate-covered ice-cream bar.

Keep measuring cups and scoops handy and aim for one cup of cereal flakes or two-thirds of a cup of chunkier cereal.



© Grace Cary | Getty Images

Portion hack #3: Use small bowls

In that same Consumer Reports test, people were given bowls in three different sizes: 12, 18, and 28 ounces. When using a 12-ounce bowl, study participants tended to pour themselves 24 to 92 percent more cereal than would be in a single serving. When using an 18-ounce bowl, it was 43 to 114 percent more.

Larger dishes make portions seem smaller. Select smaller bowls and dishes and whatever you’re eating will appear to be more plentiful, which helps make you feel more satisfied.

You can also use this to your advantage to load up on vegetables and salad. In a 2019 study at Australia’s Deakin University, people were given either a small or a large bag of baby carrots. Those presented with the bigger bag ate more carrots. Large portions of veggies will encourage you to eat more: the best-case portion distortion scenario.



© Isabel Pavia | Getty Images

Bottom Line Health interviewed nutrition consultant Lisa R. Young, PhD, RDN, adjunct professor of nutrition at New York University and author of *The Portion Teller Plan* and *Finally Full, Finally Slim*.



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Viruses and Alzheimer's Disease

The varicella zoster virus (VZV), which causes chickenpox and shingles, can activate the herpes simplex virus (HSV) and play a role in the development of Alzheimer's disease, new research suggests. HSV-1 normally lies dormant in the brain's neurons, but when it's activated, it leads to the accumulation of tau and amyloid beta proteins and the loss of neuronal function. Repeated cycles of activation can lead to more brain inflammation, plaques, and cognitive damage. COVID infection can also awaken dormant VZV and HSV, which may explain why some people experience long-term neurological effects after infection. The shingles vaccine considerably reduces the risk of dementia, possibly because it stops the cycle of viral reactivation.

Source: Tufts University



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Early Physical Therapy Beneficial for Back Pain

People who start physical therapy (PT) within two weeks of developing lower-back pain use fewer health-care resources, such as advanced imaging, specialty appointments, epidural steroid injections, and emergency room visits, in the first month and first year after their symptoms begin. Less use of these services suggests that PT successfully reduces pain.

Johns Hopkins University

Beware For-Profit Hospice



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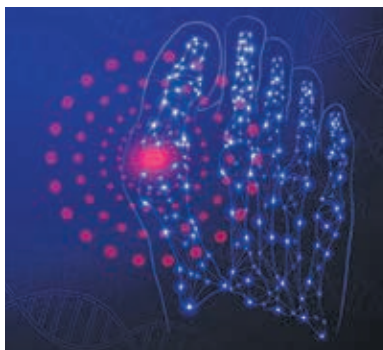
Private-equity firms are buying up hospice agencies, and that could have a negative effect on patients as the firms cut back on care to maximize profits. Researchers reported in *JAMA Internal Medicine* that for-profit hospices hire fewer employees

than nonprofits and rely more on lower-cost licensed practical nurses and nursing aides than registered nurses. Further, the U.S. Government Accountability Office reported that patients in for-profit hospices are less likely to receive any hospice visits in the last three days of life—when their needs are highest. A report in the *Journal of Palliative Care* noted that for-profit hospices have more deficiencies and complaints, and send patients to emergency rooms and hospitals more often. To find a nonprofit hospice, visit <https://www.hospiceinnovations.org/find-a-not-for-profit-hospice-care-provider/>.

Clinical Advisor

Gout, Heart Attack, and Stroke

People with gout have a higher risk of heart attacks and strokes in the four months after a gout flare. In an analysis of data on more than 62,000 people, researchers found that gout patients who suffered a heart attack or stroke were twice as likely to have had a gout flare in the 60 days prior to the event, and one-and-a-half times more likely to have a gout flare in the preceding 61 to 120 days. If you have recurrent gout flares, consider long-term treatment with a urate-lowering medication, such as allopurinol, treatment with an anti-inflammatory medication, such as colchicine, and the adoption of a healthy lifestyle.



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JAMA

ICU Stays Increase Dementia Risk



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Spending time in an intensive care unit increases the risk of developing dementia, researchers reported at this year's Alzheimer's Association International Conference. In their analysis, ICU hospitalization was associated

with a 63 percent higher risk of Alzheimer's dementia and a 71 percent higher risk of all-type dementia. When researchers adjusted for vascular risk factors and disease, the risk of Alzheimer's disease and dementia doubled.

Medscape Medical News

Health **WIRE**

■ **Taste and smell changes can persist long after COVID.** Up to half of people with COVID-19 experience changes in taste and smell. In most cases, the senses return to normal, but about 4 to 5 percent of people still experience taste and smell dysfunction six months or more after the initial infection. Women, people with greater initial taste and smell dysfunction, and patients with nasal congestion appear to be less likely to recover their sense of smell.

Source: *BMJ*

■ **HIV cure may be in sight.** A 66-year-old man appears to have complete clearance of the human immunodeficiency virus (HIV) after being treated for leukemia with a stem cell transplantation from an HIV-resistant donor, researchers reported at the 24th International AIDS Conference. The man discontinued antiretroviral therapy more than 20 months ago and has no detectable HIV-1 DNA. He is the fourth person to have complete clearance of the virus and the oldest person to do so. While the researchers are using the term remission, they say this suggests that an HIV cure is possible or even likely. Stem cell transplant procedures are complicated, however, and not suitable for all people with HIV.

Source: *Medscape Medical News*

■ **Vitamin B₆ beats depression.** High-dose vitamin B₆ could reduce anxiety, a new study suggests. Volunteers who took 100 milligrams of B₆ (pyridoxine hydrochloride) once daily for a month reported a “highly significant” reduction in generalized anxiety disorder and social anxiety. Vitamin B₆ deficiency affects 16 percent of men and 32 percent of women. Supplementation should not exceed 100 mg per day. Higher doses can cause potentially irreversible sensory neuropathy.

■ Source: *Pharmacy Times*

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Letters to the Editor**Buckwheat Basics**

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My subscription to *Bottom Line Health* has just begun. I am increasingly impressed with the integrity of the writing, but I am also concerned that no one has expressed the fact that buckwheat is not a grain, as it is a member of the rhubarb family. Anish Seth, MD, has come the closest to mentioning the benefits of the rhubarb family in his “Ask the Expert” column in the July 2022 issue on page 8, where he mentions: “If you don’t like prunes, consider trying rhubarb, artichokes, and/or peaches, all of which promote regular bowel movements.” I have made many gifts of buckwheat, including to my senior complex manager who had been having a severe problem keeping food down. She tried it and it worked for her: No more nausea, vomiting, etc. . . . Since then, I have made gifts to my doctors . . . in hopes that they might share the good news with their patients if the subject would come up. My hematologist was thrilled with the introduction and she declared it a “healthy food.” My earlier internal medicine specialist sent me a handwritten note to express thanks and expressed that he is fond of buckwheat pancakes. He prefers them made with banana and pecans, which certainly sounds delicious. If you can’t find buckwheat at your local buck market, visit [The Birkett Mills](http://TheBirkettMills.com) at www.thebirkettmills.com to purchase organic or nonorganic buckwheat as a cereal, kasha (toasted), groats (untoasted), or flour.

—Helen Winton

Editor's Note: Read more about buckwheat in Dr. Janet Brill's column on page 7.

Aspartame Debate

I am surprised that your publication claimed that aspartame has a poor safety record [New Research Reveals Why You Must Cut Back on Sugar, August 2022]. That is true only for those with a rare genetic disease called phenylketonuria, which prevents its breakdown in the body. Aspartame is merely a dipeptide joined by the same acid-amide linkage as any other produced during the digestive process, and it follows the same metabolic pathways as its components found in virtually all proteins. Sadly, sucralose is showing up in more products. Sucralose is not natural and is not metabolized, so it actually turns up in sewage treatment plants. There is some indication of heart [disease] and even weight gain, not found in aspartame, so your warning is valid. Truvia, which I do use, is highly processed, and it is not safe for everyone.

—Daryl Biser

Response from Jacob Teitelbaum, MD, the expert interviewed for the article:

In addition to directly being toxic to brain tissue in some people, safety issues associated with the use of aspartame also include the risk of toxicity from aspartame metabolites, including methanol and formaldehyde. I prefer stevia or even saccharin. Despite this, it is still OK to use aspartame occasionally (I do so myself), when other non-sugar options are not available. In most people, I consider it safer than large amounts of sugar. (*Editor's note: All commercially prepared stevia is processed, and some brands contain additives. For the purest product, you can grow the plant, dry the leaves, and grind them in a coffee grinder to make a powder*)