

# Digestion Decoded

Even the healthiest of eaters can face some tummy woes like bloating and constipation. Here's how to make sure you are eating the right things to keep your belly at peace.

By Holly Pevzner

**DIGESTIVE ISSUES ARE ONE OF THOSE THINGS YOU** don't spend a lot of time thinking about until you have no choice but to think about them, thanks to, say, an emergency bathroom run or the post-chow-down feeling of having a "food baby" in your belly. And why would you think about it when all is well? At the most basic level, good digestion is all about comfortably eating and easily absorbing all the vitamins, minerals, proteins and other essential nutrients your body needs to perform. Simple, right? Not quite.

Digestion is actually a pretty complex process that involves no fewer than seven organs and innumerable enzymes, chemicals and hormones. And the process begins before you have a bite of food. You know how your mouth waters when you think about food? That's digestive enzymes from your salivary glands getting ready to work. From start

to finish, it takes an average of 30 to 40 hours for a meal to move completely through your digestive system—which is plenty of time for things to go awry. And for 72 percent of people, it seems, awry they sometimes go. That's how many experience unpleasant digestive symptoms, like gas, bloating or stomach pains, a few times a month or more, according to a 2013 Harris Interactive poll of more than 2,000 individuals.

While a rogue burp, an occasional bout of heartburn and passing gas are all completely normal consequences of digestion, about 60 million people visit either a doctor, an emergency room or a hospital-associated clinic each year for gastrointestinal symptoms, according to a 2015 study in the journal *Gastroenterology*. "And these are people who actually sought medical care. In my experience, plenty suffer in silence," says Tamara Duker



Freuman, M.S., C.L.T., a registered dietitian in New York City and the author of *The Bloated Belly Whisperer*. By the time people end up at Freuman's office, their quality of life has taken a serious hit. "They're fed up with not being able to go out to eat with friends without worry. They're tired of canceling theater tickets or vacation plans because they're afraid they'll have diarrhea in the middle of nowhere," she says.

But there's no reason to wait until things get bad before taking control of your digestion. "The gut is what drives the health of the body," says Liz Cruz, M.D., a holistic gastroenterologist in Phoenix and the author of *Digest This Now!* "If the gut isn't digesting and absorbing nutrients properly, it can't feed the body what it needs to build healthy cells, tissue or organs." For example, a malfunctioning digestive system may increase your risk for certain nutrient deficiencies, especially iron, zinc, vitamin B<sub>12</sub> and

calcium. On the other hand, people with problem-free digestion are often at a lower risk for digestive-system cancers, like colon, stomach and esophageal. "They're also often better able to maintain a healthy weight and tend to have a lower risk for developing type 2 diabetes and heart disease," says Freuman. While it's a smart idea for everyone to take a good look at his or her diet and its impact on digestion, it's especially important

for those who experience digestive issues more than once a week. The good news? "The gut is very responsive to what we eat. And changing what and how we eat can make a big impact—and quickly," says Folasade P. May, M.D., Ph.D., the director of the Melvin and Bren Simon Gastroenterology Quality Improvement Program at the David Geffen School of Medicine at UCLA.

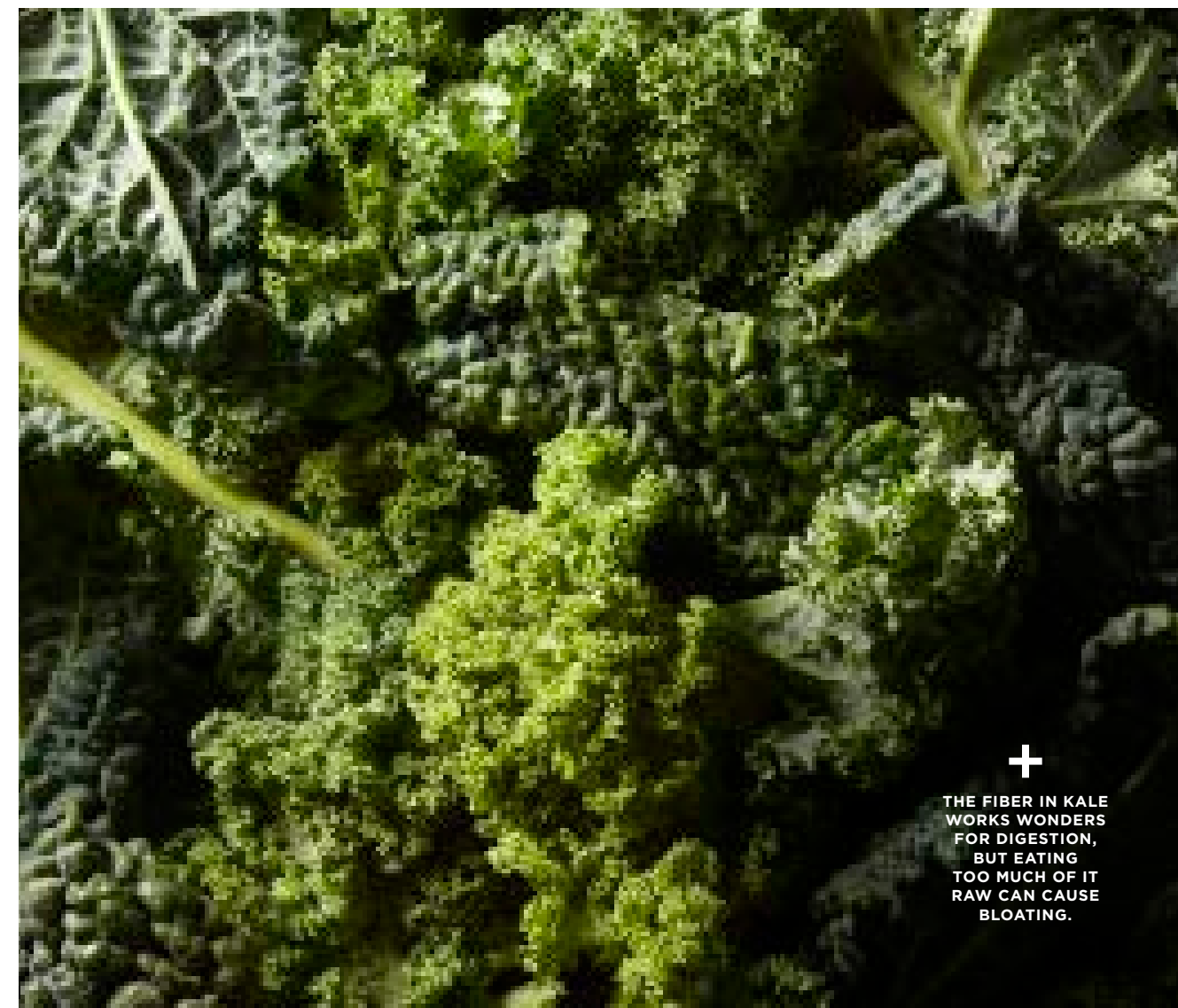
**ALTHOUGH EVERYONE'S DIGESTIVE QUIRKS** are a little different, upping your fiber intake is often the best first move to improve digestion. It's recommended that women under age 50 consume 25 grams of fiber daily, while men should shoot for

38. (For women and men over 50, that recommendation lowers to 21 and 30 grams a day, respectively.) However, the average dietary fiber intake is just 16 grams a day. "Fiber is the single most lacking nutrient in the American diet," says Freuman. "And not just the amount of it, but the diversity of it too."

There are two types of fiber: soluble and insoluble—and both are important. "Soluble fiber creates a gel-like substance that adds bulk to bowel movements. It also slows digestion, making it harder for your body to break down carbohydrates and fat," says Colleen D. Webb, M.S., R.D.N., a clinical nutritionist at Weill Cornell Medical Center for Inflammatory Bowel Disease in New York City. That absorption slowdown makes soluble fiber a boon of blood sugar control and helps you feel fuller longer. You can find soluble fiber in beans, oats, citrus fruit, Brussels sprouts, flaxseeds and more.

Insoluble fiber, on the other hand, speeds things up. "It's what we call roughage. It's the skins, the nuts, the seeds, the parts of the fruit that's tough to chew," says Webb. (Whole grains, fruits and vegetables are rich in this type of fiber as well, and many fiber-rich foods contain both types of fiber.) And insoluble fiber can't be digested. "So these larger, undigested particles of food move through your system, attracting water as they go, which makes stools softer and easier to move, which prevents constipation," says Webb. Avoiding constipation is about more than avoiding being uncomfortable. When you're constipated, your body is holding on to waste that should have been expelled. "Bacteria continues to feed on stool, and some can get re-absorbed into the colon and your body and cause side effects like headaches," says Webb.

**SO, YES, FIBER HELPS ALL OF THE ABOVE. HOWEVER,** if you favor one type of fiber over the other—or if you eat the same foods day in and day out—you're nourishing only a very narrow number of gut microbiota, which are the bacteria taking up residence in your intestines that, among other things, help process and digest food. "A diet that contains the same amount of fiber but from a wide variety of sources produces a far greater abundance of bacterial diversity, which has been associated with the best health and best digestion," says Freuman.



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THE FIBER IN KALE WORKS WONDERS FOR DIGESTION, BUT EATING TOO MUCH OF IT RAW CAN CAUSE BLOATING.

Gut bacteria feed on the food that your intestines have not digested, like fiber. However, gut bacteria will feed off any undigested food, like artificial sweeteners, for instance. (These are designed not to be absorbed in your intestines—that's why they're calorie-free.) On the other hand, "animal protein, sugar and refined carbs are the easiest things for your small intestine to break down, leaving nothing left over to feed your gut bacteria," says Freuman. So while your microbiota are spared junk, they're also starving. "When the good bacteria are starved, they can't fight the bad bacteria in your colon," says Cruz. "And that means they're less able to break down your food in a way that the body can absorb nutrients properly."

The goal: keep your good bacteria well fed. While fiber, as a whole, is a great way to do that, if you shy away from high-fiber foods such as onions,

garlic, leeks, artichokes and beans, you're depriving your beneficial bacteria of one of their favorite foods: prebiotic fiber. Prebiotics are especially good at nourishing bifidobacteria and lactobacilli, beneficial bacteria (a.k.a. probiotics) that reside in your gut. (Prebiotics also improve gut-barrier function, enhance the bioavailability of minerals like calcium and magnesium and promote satiety, according to a 2013 study in the journal *Nutrients*.) In short, prebiotics are food for probiotics.

"People often take probiotic supplements—or eat yogurt—containing bifidobacteria and lactobacilli to fortify the probiotic ranks within their gut," says Freuman. "But you may actually get better results by simply eating a diet high in prebiotic fiber." Translation: feeding the probiotics you already have in your gut may be a better idea than simply adding more probiotics to the party. That's not to say eat-





ing probiotic-rich food is pointless. Not at all. “It’s important to eat foods that contain a variety of live, active probiotic cultures on a regular basis. They all work to diversify your microbiota,” says Freuman. In addition to probiotic-laden cultured dairy (plain yogurt containing live, active cultures; kefir; kom-bucha), consider shoehorning some probiotics of the naturally fermented variety into your diet too—like sauerkraut, kimchi and miso. “They’ll all add to the diversity, plus many fermented foods with live, active cultures also contain prebiotics for a double whammy of gut help,” says Webb.

In addition, a 2015 report in the journal *Molecular Metabolism* noted that an overall nutritionally varied diet is key to maintaining a good mix of bacteria in your gut and sustaining digestive health. “We all have our grocery go-tos and the same meals we rotate, but for the sake of expanding gut microbiota, break out of the rut,” says Freuman. Think seasonal eating, introducing a new meatless meal each week and making sure a lot of plant species are represented in your menu planning.

**SKIMPING ON FIBER AND PROBIOTICS MUCKS UP** digestion, but so does what you’re eating in their place. While we already know that diets high in processed foods create an imbalance of microbiota di-

versity, such diets are also just plain taxing on your digestive system. “We naturally have the resources to digest whole and natural foods. That’s how we’re designed,” says Webb. “When we eat an abundance of processed foods, we can exhaust those resources and cause oxidative stress, which hinders the body’s ability to detoxify.”

Oxidative stress is normal and controllable with a healthy supply of antioxidants, but processed foods lack antioxidants. Worse, “they contain compounds that aggravate oxidative stress,” says Webb. At the same time, a diet high in added sugar and processed foods can weaken your gut lining, which is there to protect your gastrointestinal system from potentially harmful invaders, including bacteria and toxins. “Whether you call it a

leaky gut or ‘increased intestinal permeability,’ it’s the same thing, and it ups the risk of developing chronic illness,” says Webb.

It’s pretty clear that diets high in sugar, processed foods and animal fat negatively impact digestive health, but a couple of foods often fall under the bad-for-your-gut umbrella that really shouldn’t—namely, gluten and dairy. “I have no doubt people can feel better after going on a gluten-free diet,” says Freuman. “The thing is, for most people, the positive result is not because of the lack of gluten but the lack of refined carbohydrates. Also, they’ve likely replaced gluten-containing foods with healthier foods that are far easier on the digestive system.” The exceptions, of course, are the estimated 1 in 100 people in the U.S. who have celiac disease, a gluten-related disorder. (The prevalence of gluten sensitivity outside of celiac patients is currently unknown.)

Having a hard time digesting dairy is far more common than gluten issues, but dairy is still not a food group that’s universally bad for digestion. “Dairy products are tolerated very well by certain people and don’t need to be condemned,” says May. While it’s true that approximately 65 percent of the world’s population is unable to break down lactose, a sugar in dairy products, that shakes out

to only about 15 percent of Americans. (People of Asian, African, Native American and Hispanic descent are most susceptible.) Of course, if you experience a reaction, like bloating or new digestive discomfort, to a type of food, you should ask your health care provider to test for food sensitivities. “As we get older, our gut enzymes change and sometimes alter our ability to digest certain things,” says May.

**IF YOU SUSPECT THAT DAIRY (OR GLUTEN OR anything else) is harming your digestion, take a pause before you start swearing off particular food groups.** “So many people do this and wind up with, like, six foods they eat, which is not healthy,” says Freuman. A better idea is to start a food diary, keeping track of all you eat and drink for a month. “You can often count backward 24 hours, 48 hours, and start to notice a dietary and digestive issue pattern,” says May. (Consulting a registered dietitian or gastroenterologist can help you connect the dots.) Plus, you’ll get a better sense of the variety in your diet, how much fiber you’re consuming—and your water intake. “You should be drinking way more water than any other beverage,” says Cruz. “We tend to be a very dehydrated society, which leads to lots of digestive issues.”

Water and foods that contain a lot of it, like melon, oranges, cucumbers and strawberries, help break down food so that your body can absorb nutrients; water softens and moves stool, helping prevent constipation. “And, yes, it’s fine to drink water with meals,” says Webb. “There’s a lot of nonsense on the Internet claiming that drinking water with meals flushes out your digestive enzymes. That’s untrue.” Just don’t save all of your daily water intake for mealtime. “Drinking large quantities while eating adds a lot of volume to the stomach and GI tract at once, which can lead to bloating,” says Webb.

Feeling overwhelmed? Don’t. While there are food-specific diet tweaks for common digestive woes, “it’s really about eating a wide variety of real, whole foods, making sure there’s a good amount of fiber in the mix,” says Webb. “And water. Drink a lot of it.” And remember: poor digestion and its burpy, bloaty and otherwise icky side effects don’t have to be a given. “There’s a lot you can do,” says Webb. ●

## 4 Helpful Habits

Here are some easy ways to improve your internal health, courtesy of Folasade P. May, M.D., Ph.D., the director of the Melvin and Bren Simon Gastroenterology Quality Improvement Program at the David Geffen School of Medicine at UCLA.

### CHEW LONGER

Swallowing big pieces of food makes your gastrointestinal tract and digestive enzymes work harder to break down food, which leads to bloating and discomfort.

### EAT SLOWER

Eating fast has the same issues as not chewing enough. You’ll also eat more and take in more air when swallowing, bringing on bloating and gas.

### HAVE BREAKFAST

Those who skip breakfast often have a light lunch and are starving by 3 p.m. This means they end up eating 70 percent of their daily food intake in a very short window, which is digestively taxing and bad for metabolic health and cholesterol.

### EAT DINNER EARLIER

Our stomachs naturally empty more slowly at night, so it takes far longer for a meal to get out of our system when consumed late. This leads to reflux and discomfort. Instead, eat no later than 3 hours before bed.

