

Tone-at-Home Issue

Women's Health

Mind-Blowing Sex!

10 Best Fitness Tips Ever!

Eat, Drink & Still Shrink!

The Secret to Lasting Weight Loss

FAST YOGA FIXES

- ✓ Beat Stress
- ✓ Sculpt Muscle
- ✓ Amp Energy
- ✓ Erase Pain

A Yummy Game-Day Popcorn Idea p. 3

Giada De Laurentiis
How the Food Network Star Cooks for a Living & Stays This Trim



THE #1 HEALTH TEST

All Women Need Now

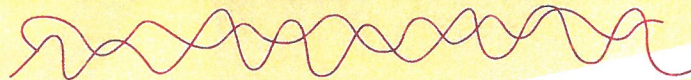
PERFECT SKIN

Quick, Easy Glow Boosters

November 2012
WomensHealthMag.com

Your body's
command center is
located inside
your abdomen,
controlling both your
physical and mental
well-being.

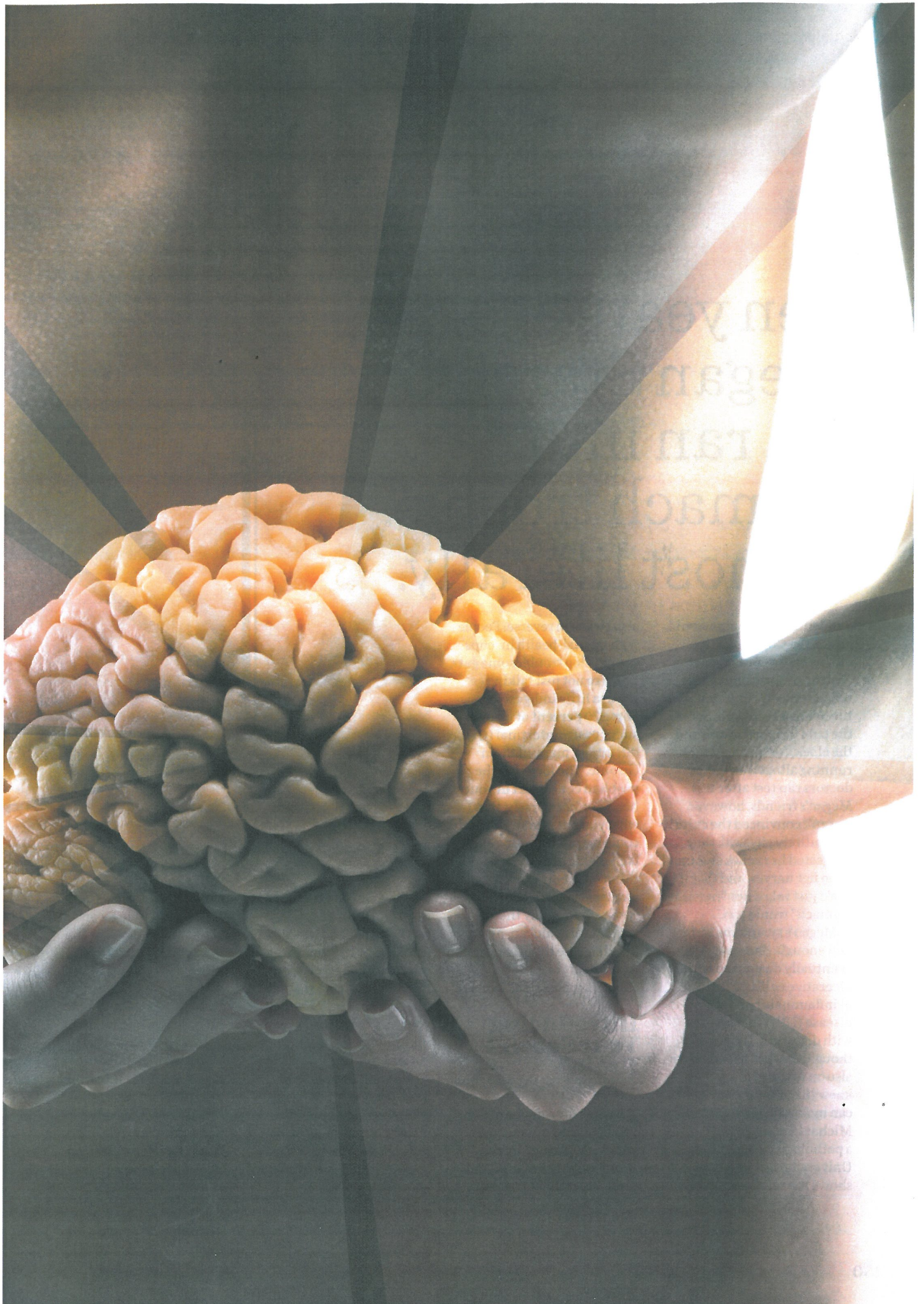
In fact, this covert
health hub
is so all-important,
scientists have
dubbed it the
second brain.



Read on to
understand the true
meaning
of gut feelings.

BY MALIA JACOBSON
PHOTOGRAPHS BY CRAIG CUTLER





Ten years ago, Megan Starshak, 28, ran into stomach trouble. Almost literally.

Sudden, fierce cramps would attack the Chicago native during cross-country meets. Instead of sprinting to the finish line, she'd hightail it to the nearest restroom. Soon the pain cropped up around the clock, forcing her to quit running altogether as her doctors ran test after test. Megan's friends, however, weren't convinced the culprit was entirely physical; they suggested her aches stemmed from her nerves, and that if she'd just relax, her "nervous stomach" would too.

Megan's symptoms were real enough. She was eventually diagnosed with ulcerative colitis, a form of inflammatory bowel disease (IBD) that messes with digestion. It turns out, though, that her friends were also on to something. "We knew that digestive problems can make you anxious," says Michael Gershon, M.D., a pathologist at Columbia University. But new research shows the relationship can

also evolve in reverse: People with mental-health hiccups can develop troublesome guts.

We're not just talking about a little indigestion. Some 70 percent of women suffer gastrointestinal (GI) dilemmas, many of them chronic. The idea that the problem could start in your head—or, conversely, that what you put in your stomach could mess with your mind—is changing the way doctors think about diagnosis and treatment. And while researchers study the remarkable chicken-or-egg-like link, one thing is clear: At the heart of it lies a super-complex stealth organ.

Introducing Your Second Brain



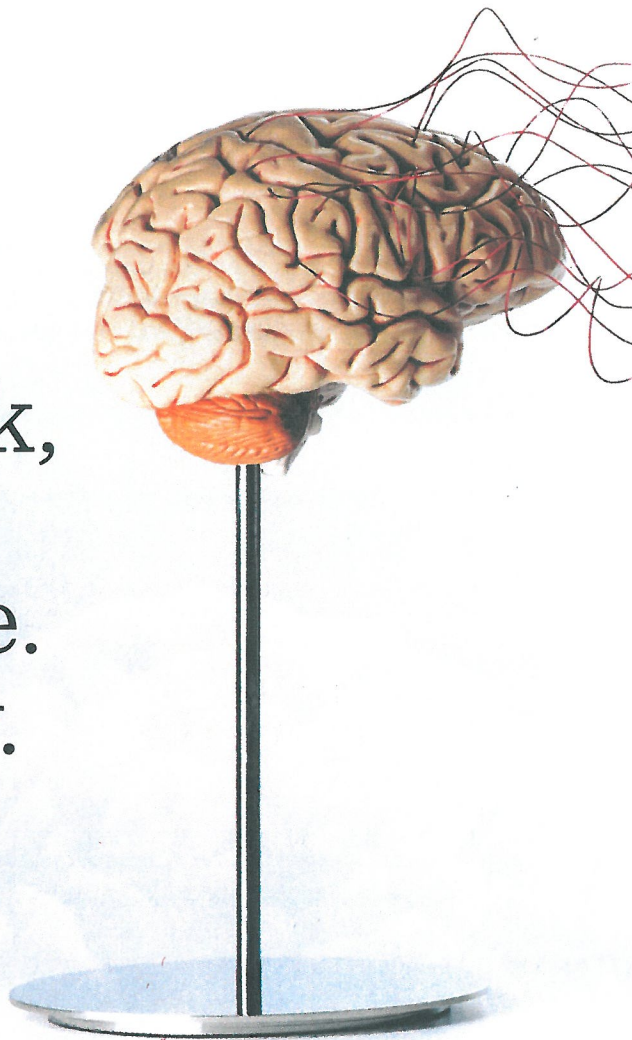
Consider for a moment what you know about your gut. Yeah, it's a network of slimy-looking innards you'd probably rather not examine

up close, but if you could peek inside it with a microscope, you just might be wowed.

You'd see trillions of microscopic bacteria, or microbiota, many shaped like tiny hot dogs. The day you were born, they began multiplying inside your gut and splitting into infinite strains until, a year or so later, they became a living, ever-evolving organ—the intestinal microbiome. All told, the bacterial mass clocks in at around three pounds, about the weight of a

Chihuahua, and is as unique to you as your fingerprint. (Experts are discovering microbiomes in other places—including your genitalia—and suspect that your bacteria outnumber your human cells by 10 to one.)

Now, before you jump into a vat of hand sanitizer, know that your intestinal microbiome is essential to life. It helps the body extract nutrients from food, regulate tissue development, and kill off germ invaders. It's supervised by your gut's





Direct Message
The lines of communication between your belly and your brain are so strong, what you put in one majorly affects the other.

independent police squad, the enteric nervous system, which can operate outside the jurisdiction of your noggin. Put together, the intestinal microbiome and enteric nervous system constitute what Gershon calls a “second brain,” which boasts something amazingly akin to, well, brainpower.

For example, the hormones and neurotransmitters typically associated with your primary brain (think

dopamine and serotonin) can also be churned out by your second brain. In fact, your gut produces more hormones than any other part of your body, and it’s responsible for 95 percent of your supply of mood-stabilizing serotonin. Which means that when your gut isn’t functioning properly, you could be in a boatload of emotional distress.

As evidenced by Megan’s story, it goes both ways: When brain chemistry is off balance, the bowels suffer big-time. Think of your second brain as

the force behind an “internal face that reflexively reflects your state of mind,” explains Emeran Mayer, M.D., director of the UCLA Center for Neurobiology of Stress.

The strength of the connection is startling: Up to 90 percent of people with irritable bowel syndrome (IBS), for instance, also suffer from mental-health hitches. And one study found that when depressed people took certain gut aids—whether or not they had stomach issues—their mental health improved.

Power Up Your Gut

First, the bad news: Most microbiota have not evolved to withstand modern diets (read: junk food), says internist Steven Lamm, M.D., author of *No Guts, No Glory*. Things like processed foods can kill off healthy bacteria, leaving room for their unhealthy brethren to move in and wreak havoc. Copious amounts of stress, alcohol, and antibiotic meds can also destroy beneficial bacteria, ironically leaving you more vulnerable to infection.

But it is easy to get your GI system back in balance, says *WH* advisor Frank Lipman, M.D., author of *Revive: Stop Feeling Spent and Start Living Again*. His gut-friendly four-R plan—remove, replace, reinoculate, repair—involves swapping the junk for microflora-nourishing foods and supplements. (Fiber, in particular, fortifies microflora.)

Even easier: Get outside. Spending too much time indoors can cut off the body’s access to new strains of helpful bacteria. Or do some yoga or any stress-reduction practice that calms *all* of your nervous systems, says Lamm.

For her part, Megan Starshak is back to running. With the help of IBD meds and a gut-boosting diet, she just finished a half-Ironman. Once torturous, exercise now blasts her brain with endorphins that improve her mental state *and* her digestive health—via the unbreakable mind-gut bond. ▶

Take This, Not That

Pharmacy shelves are practically buckling under the weight of scores of new digestive aids. Too bad some deliver more hype than help. Here, which to snag and which to walk past.*

For long-term health

► Take this: **Probiotics**

The one gut supplement every woman must take, daily probiotics are composed of healthy bacteria. Sounds gross, but the stuff fortifies your existing microflora (a.k.a. that second brain) and softens the damage done by a high-octane, eat-and-run lifestyle, says Frank Lipman, M.D. Opt for live, refrigerated

versions that include at least a few bacterial strains, including lactobacilli and bifidobacteria. And always follow the directions on the package.

Not that: **Prebiotics**

Unlike probiotics, prebiotics aren't bacteria—they are food for bacteria. Yes, these supplements feed microflora, but you can get plenty of the same nourishment from plant-based foods

such as nuts and leafy greens. Plus, many probiotic supplements already come preloaded with prebiotics.

For an easy lift

► Take this: **Kefir**

It packs around 120 calories, but a serving of this fermented dairy drink can include up to 50 different probiotic strains. It's also chock-full of potassium, calcium, protein, and

vitamins A, C, and D. A study found regularly swilling the tangy brew reduced people's gastric distress by 70 percent. Slurping it down for breakfast gives you a quick gut-friendly infusion.

Not that: **Sugary Yogurts**

Don't be fooled by "Probiotic!" label claims—any bacterial benefits these yogurts have might be negated by their other ingredients. Some types contain up to 31 grams of gut-irritating sugar, which "destroys healthy bacteria and allows pathogens to grow," says internist Fred Pescatore, M.D., author of *Boost Your Health with Bacteria*.

For gas and bloating

► Take this: **Enzymes**

Digestive enzymes such as amylase, lipase, and protease may ward off bloat and gas by speeding up the breakdown of carbs, proteins, and fatty acids. Since they also occur naturally in your body and you flush whatever you don't use, enzyme supplements can be effective and low risk, says Pescatore.

Not that: **Psyllium**

Because it helps sweep food through the GI tract, psyllium, a fibrous plant husk, is widely used to battle bloat. But beware: Swallowing this stuff can spark allergic reactions, especially in

those who have problems with pollen (in other words, millions of women). And though it's way counterintuitive, overloading on fiber can aggravate IBD and IBS symptoms.

For pain relief

► Take this: **Turmeric**

The spice is quickly becoming a gut-health superstar. Studies show that its active compound, curcumin, has major anti-inflammatory properties and might even slow the growth of colon-cancer cells. It's also an ace at reducing painful cramping and bladder-control issues. Check with a pharmacist before sprinkling it—or any other supplement—into your food to make sure it doesn't interact with your medications. (See "Taking a Bite Out of Crime," page 128, for important info about this spice.)

Not that: **Licorice Extract**

Used for centuries as a salve for stomachaches and ulcer pain, licorice-root extract might have some ugly side effects. The supplement contains a compound called glycyrrhizin that has been linked to headaches, high blood pressure, and heart problems.

* *Supplements are not regulated by the FDA, so use common sense and caution, and check with your doctor if you're pregnant or taking other medications.*

GUT GLOSSARY

Nearly 60 million people suffer from digestive drama. Their most common woes are...

Gastritis It's an inflamed stomach lining that can lead to nausea, vomiting, or pain, and it affects 25 percent of Americans. Overuse of meds like ibuprofen is a risk factor; so is heavy boozing. The illness can be chronic or short-term, and all sufferers are advised to lay off the above triggers.

Gastroesophageal Reflux Disease (GERD) Otherwise known as good old heartburn, GERD rates have skyrocketed 50 percent in the past decade. It now affects more than 20 percent of adults. Fatty and acidic foods are GERD no-nos (sadly, so is coffee); fixes include weight loss and prescription meds.

Irritable Bowel Syndrome (IBS) It's a chronic disorder that causes digestion to move too quickly (um, diarrhea) or too slowly (ugh, constipation). Up to 20 percent of adults have it, the majority of them young women. Symptoms include frequent belly cramping, gas, bloating, constipation, or diarrhea. IBS has been linked to depression, post-traumatic stress disorder, and bacterial infections, and can be treated with exercise, diet adjustments, and psychotherapy.

Inflammatory Bowel Disease (IBD) IBD is an umbrella term for myriad chronic conditions, including Crohn's disease and ulcerative colitis, that involve inflammation and immunity problems. It is rising fast among women and currently affects some 1.4 million people. Symptoms include bloody diarrhea, fever, and pain. Genetics may play a role, as do smoking and a poor diet. There's no easy cure, but lifestyle changes and prescription meds can help.

THE INSIDE TRACT

Surprise! Your gut is way more than just your stomach. All told, it encompasses some 30 feet of tissues, muscles, and organs—everything from your mouth to your, um, *other* end. Consider this next time you eat:

1

As you chew, salivary enzymes help your teeth and tongue mash each bite of food into a small blob called a bolus. Then, it's down the hatch.



2

But swallowing isn't as simple as it seems. Just getting one bolus through your esophagus involves about 50 pairs of muscles and nerves, some reflexive (they work automatically), some volitional (you consciously control them)—all of them super-tough. The esophagus is strong enough to push food into your stomach even if you eat upside down.

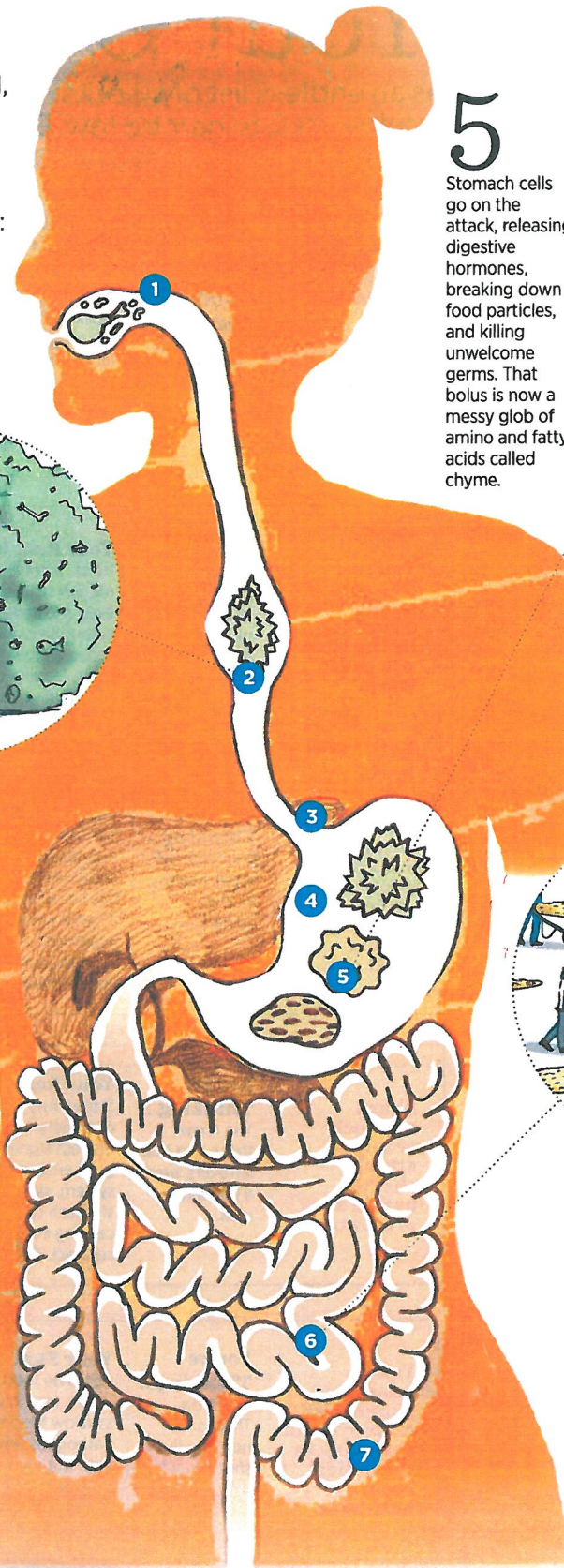


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The bolus triggers the lower esophageal sphincter (LES), a trapdoor-like valve to the stomach. The LES opens and closes every single time you swallow—hundreds of times a day.

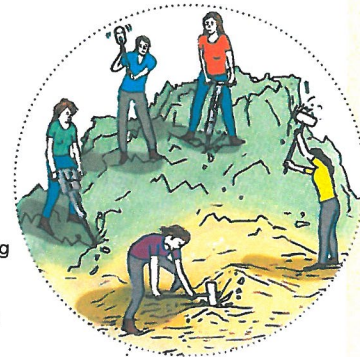
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Even if you've skipped your situps, your stomach is ripped—the organ is almost all muscle, and it's working out all the time. Case in point: Those audible growls it makes when you're famished? Churning stomach muscles, reverberating in an empty echo chamber.



5

Stomach cells go on the attack, releasing digestive hormones, breaking down food particles, and killing unwelcome germs. That bolus is now a messy glob of amino and fatty acids called chyme.



6

Chyme enters the 20-foot-long small intestine, where trillions of bacteria—i.e., your microflora—shuttle nutrients into the blood stream. Only one can't be broken down: Fiber is impervious to digestion and, along with tiny fingerlike columns called villi, helps push chyme along.



7

Next stop: the five-foot-long colon, which squeezes out water and any last nutrients. That bite you swallowed some 24 hours ago is now a compact mass known as—yup—feces, made up of mostly dead bacteria and fiber. It proceeds into the rectum. Pass the TP.

Settle Your Stomach

Tummy trauma has an endless list of culprits: hangovers, spoiled food, and holiday overindulgences, to name a few. But it's possible to tame a temporarily disgruntled gut—fast—with the right course of action.

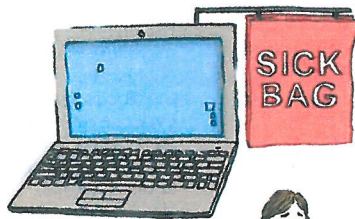


White-hot pain scorches through your torso during happy hour.

You're Thinking...
Help! Something's wrong with my lungs.

Your Real Issue...
You likely have heartburn. Alcohol can weaken your esophageal sphincter and let caustic stomach acid creep into your upper GI tract. Certain postures can exacerbate heartburn, so stop slouching.

Your Gut Rx...
Stomach acid is tricky—you want to keep it in its place, not eradicate it. Beat the heat with sodium bicarbonate, a.k.a. baking soda. Mix half a teaspoon into four ounces of water and swallow (repeat in two hours, if needed).



You feel like you need a barf bag by the time you get to work.

You're Thinking...
OMG, do I have morning sickness?

Your Real Issue...
Relax, it could just be *motion* sickness. Yes, even a jostling train or car commute can scramble sensory input to your brain, leading to nausea or vomiting.

Your Gut Rx...
Well, you could walk everywhere. Or you could stash some ginger (in any form) in your handbag. The herbal remedy has been used for centuries to quell roiled tummies.

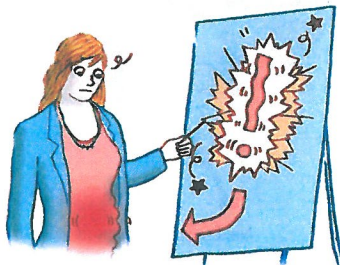


Uh-oh—major below-the-belt rumblings hit you in the middle of a big night out.

You're Thinking...
But I ordered super-healthy food at dinner!

Your Real Issue...
Certain legumes and veggies (beans, broccoli) get an A+ in nutrition but can give your colon a fierce workout, the byproduct of which can be...gas. (Eating too quickly makes it worse.)

Your Gut Rx...
Try some enzymes (see "Take This, Not That," page 152). Better yet, pop one *before* digging into a new-to-you meal, just in case. Take small bites, avoid soda, and don't use a straw—it only ups the amount of air you swallow.

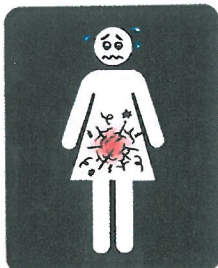


Sharp stomach cramps attack shortly before a big presentation.

You're Thinking...
You *knew* those pad thai leftovers were a bad lunch idea.

Your Real Issue...
Stress. Any kind of anxiety can send distress signals to your gut's enteric nervous system, slowing down stomach digestion while causing intestines to contract. Ouch.

Your Gut Rx...
Put down the double espresso. Loads of stimulating caffeine can heighten cramps. Instead, sip plain water (or chamomile tea, a calming digestive aid) to aid a churning stomach and calm your bellyache.



You're miserable, clammy, and crampy—and sprinting to the ladies' room every half-hour.

You're Thinking...
Influenza. Thanks for nothing, flu shot.

Your Real Issue...
Could be food poisoning. When you unwittingly swallow food that contains pathogens (ew, *E. coli*), your gut revolts with a slew of flu-like symptoms, including diarrhea, fever, headache, and chills.

Your Gut Rx...
There's no quick fix; you can only hydrate and wait it out. On the bright side, the ailment—which can show up within six hours of eating the bad food—runs its course much faster than the flu. You should feel better tomorrow.

Q&A

DIGESTIVE DOWNLOAD

If everything you know about digestion came from your mother—“That gum will sit in your stomach for seven years!”—allow our panel of experts to bust a few belly-related myths (and prove Mom was right about some stuff).

Does dieting shrink your stomach? Barring surgery, you can't change the actual size of this organ—that's influenced by genetics, not diet, says gastroenterologist Ira Breite, M.D. When you lose weight, you're really shedding surrounding abdominal fat.

I pop antacids like candy. They're harmless, right? Wrong. Your stomach needs acid to break down food, so these meds can disrupt the natural digestive process, says gastroenterologist Jacqueline Wolf, M.D. Proton-pump inhibitors (PPIs), which are in a related category, are riskiest, but use all antacids sparingly.

I've heard meat takes days to digest. “Meat is out of your stomach in six hours or less, and typically out of your body within a day or two,” says Breite. Certain macronutrients like carbohydrates tend to sprint through your gut, but most food moves out within 48 hours—including chewing gum.

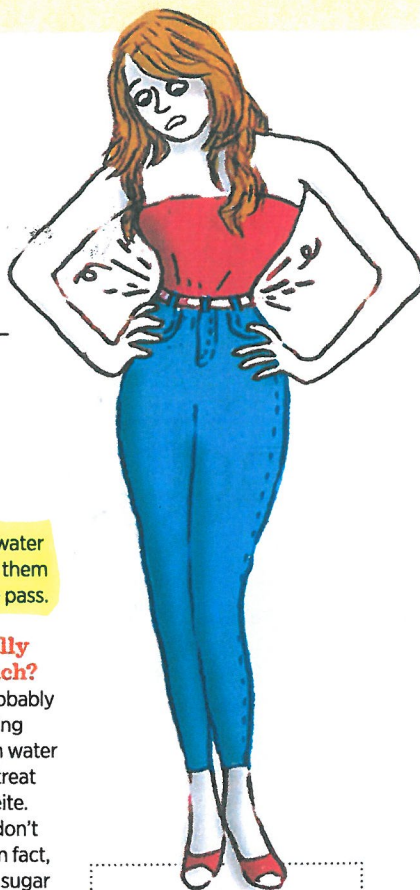
How often should I “go”? Up to three times a day is normal, says Frank Lipman, M.D. Fewer than three per week is a sign that something's amiss and could put you at risk for GI distress. Whatever you do, don't ignore the urge; “holding it” lets the

colon extract more water from stools, making them hard—and harder to pass.

Does soda actually settle the stomach? Nope. “This myth probably originated with baking soda, which fizzes in water and can be used to treat heartburn,” says Breite. Carbonated drinks don't do the same thing; in fact, their often sky-high sugar content can exaggerate a tummy ache. Plain H₂O is a better stomach soother.

What's the deal with colon flushes? The jury is still out, says neuroscientist and gastroenterologist Emeran Mayer, M.D. But any type of colonic could deprive your microflora of vital nutrition. The best route to a healthy intestine is a diet full of plant-based fiber, which helps push food through the upper GI tract before nourishing healthy gut bacteria.

The don't-work-out-for-30-minutes rule: True or false? Exercising with a full stomach won't kill you, but it can lead to a world of hurt, says Steven Lamm, M.D. The problem is exercise-related reflux caused by escaped stomach acid. It typically occurs after a big meal, so limit your pre-workout fuel to small portions of easy-to-digest foods like bananas.



Can tight jeans mess with my gut?

A too-snug waistband can compress organs, but it shouldn't hurt the digestive process itself. Though it can sure feel like it, since when you eat, your stomach expands outward, making the situation even more uncomfortable. Give yourself a break and don't clothes roomy enough to accommodate your meals.

Colon Watch

Thanks to increased screenings, colon-cancer rates are dropping among older Americans—but the picture is surprisingly bleaker for the younger set.

Diagnoses among young women have risen nearly 6 percent per year over the past two decades, and some 25,000 women die from the disease each year.

Though the exact cause is unknown, one culprit seems obvious: a Western diet lacking in nutrients and full of processed grains, sugars, and toxins, says Frank Lipman, M.D. Such fare can lead to gut dysbiosis, in which intestinal microflora become so out of whack that the body's immune system is compromised. Smoking and eating loads of processed meat can also be bad for your colon: Each activity raises your risk by 20 percent.

Before you go sprinting for a colonoscopy, remember that despite the recent bump, young women's risk is still fairly low. The crucial thing is to keep your chances close to zero by taking care of your gut, starting right now. Be on red alert for warning signs like bloody stools; keep your weight in check; and never, ever smoke. Nosh on gut-saving eats like brown rice and lentils, and consider taking a multivitamin if you can't pack ample nutrients onto your plate. ■