

# Taming THE Fire WITHIN

When it comes to cooling the discomfort of heartburn, reducing stomach acid may be exactly the wrong thing to do.

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It's a sensation that more than half of us experience now and then, often rising up in our chest after a day of overindulging in Grandma's favorite recipes or a night of spicy food. But for an increasing number of Americans, the hot, painful rush of heartburn has morphed from an occasional distraction into an almost daily occurrence that can impair sleep, sour breath, lead to chronic upper respiratory infections, and, if left unchecked, increase the chance of cancer of the esophagus eightfold.

According to the American College of Gastroenterology, as many as 15 million Americans suffer from gastroesophageal reflux disease (GERD), a chronic condition that results when caustic stomach juices regularly rise out of the stomach into the more sensitive esophagus, producing a chronic burning sensation.

BY LISA MARSHALL



GETTY IMAGES



# While

While the true cause is a matter of some debate (suspected culprits range from diet and lifestyle choices to genetics or structural problems in the digestive system—see “Plumbing Problems” on page 45), conventional medicine has met the disease largely with the same approach for decades, prescribing medication to either neutralize or minimize stomach acid.

First came acid neutralizers, like Tums, that offered some relief but caused diarrhea and constipation. Then came H2 antagonists, like Zantac, which only partially suppressed the acid and were recommended only for temporary relief. Then, in 1988, came proton pump inhibitors (PPIs), a potent new class of drugs that suppress stomach acid production for more than 24 hours and are commonly prescribed for long-term use.

Since their invention, the PPIs have become the second most popular class of prescription drug in the US, according to the market research firm IMS Health, bringing in more than \$12.5 billion in sales in 2004 alone. Thanks to a \$260-million-per-year advertising campaign that has made the “little purple pill” a household word, AstraZeneca’s Nexium is now the fastest growing drug in America. And because its pre-cursor, Prilosec, is now available over-the-counter, many are popping the pills without ever consulting a doctor.

That concerns David Scrimgeour, LAc, a practitioner of oriental medicine in Boulder, Colorado.

“Any time you disrupt a necessary bodily function (like acid production) you are going to have issues down the road,” says Scrimgeour.

A growing body of research has shed light on the long-term risks of using PPIs—increased susceptibility to infection and an inability to absorb nutrients being two—and many in the health care community now urge patients to steer



clear of them and try a more holistic approach instead.

“These drugs are not dealing with the root of the problem,” says Scrimgeour. “If you can get everything back into balance, get their diet right, and cut down the stress, you can cure this.”

## THE VALUE OF STOMACH ACID

Anil Minocha, MD, director of digestive diseases and nutrition at University of Mississippi Medical Center, says that PPIs have proven helpful in offering symptom relief to GERD sufferers and in giving the esophagus a chance to heal. But he fears that the constant stream of advertisements promoting them is leading to overuse—even among people who don’t have GERD.

“With all this direct-to-consumer advertising, people have become more aware of the drugs,” says Minocha, author of *Natural Stomach Care: Treating and Preventing Digestive Disorders with the Best of Eastern and Western Healing Therapies*, (Avery, 2003). “The question now is whether they are taking more pills because they are more aware of them or because they actually have the disease.”

Minocha says that most people with mild reflux should be able to quell their symptoms without medication. And while PPIs have proven relatively

Many of us need to make a shift in what, how much, and when we eat.

“benign” in the short-run, long-term suppression of stomach acid will inevitably have consequences.

“Obviously, the acid was there for some useful purpose,” he says.

One critical purpose of stomach acid is to scavenge tiny pathogens that enter the body through our food and flush them out before they can make us sick. Without it, opportunistic microbes can proliferate in the gut, sharply boosting the risk of gastrointestinal diseases like salmonella and traveler’s diarrhea and of respiratory tract infections.

One 2004 study of 364,683 people, published in the *Journal of the American Medical Association*, found that community-acquired pneumonia was more than four times more common among people who took acid-suppressing drugs than in those who didn’t.

Another, published in the journal *Pediatrics* in 2006, found that of 186 children, the prevalence of both pneumonia and acute stomach inflammation was “significantly increased” in those taking gastric-acid inhibitors.

Gastric acid also serves to break down food and make its nutrients more available to the cells. When drugs suppress stomach acid, numerous studies

have shown, the body loses some of its ability to absorb vitamin B, calcium, and iron, potentially leading to anemia.

Even more alarming, some research suggests that long-term PPI use leaves people more vulnerable to some serious antibiotic-resistant strains of staph infections, and in some people, may increase the risk of stomach cancer. (In one study conducted in the late 1980s, one in five female rats treated with PPIs long-term developed tumors.)

Ironically, despite the drugs' risks, studies have repeatedly shown that they

only partially reduce symptoms, lose their effectiveness after a few months, and prompt a rebound effect of more acid production (and subsequently, worse symptoms) when discontinued.

One study found that in half of patients, symptoms frequently returned after the initial one-to-three months of PPI therapy, prompting them to rely more heavily on the drugs and earning them a "PPI-for-life" status.

"Their dependence on the drug becomes greater and greater and the true issue is never dealt with," says

Amy Taylor, LAc, who practices traditional Chinese medicine (TCM) in Berkeley, California.

That's where natural alternatives come in.

## COOLING THE "STOMACH FIRE"

In the orient, where health providers have used acupuncture and herbal medicine to treat gastrointestinal diseases for more than 1,000 years, experts would describe GERD not in terms of excess acid, but rather, in terms of excess heat and misdirected qi, or energy.

## HERBAL SOLUTIONS FOR GERD

**ALOE VERA** Drink a half-cup twice a day between meals. The juice coats the esophagus, keeping rising stomach acids under control. (Caution: Aloe vera may cause diarrhea in some people and shouldn't be used during pregnancy).

**BITTERS** Bitter herbs, such as devil's claw, dandelion greens, and wormwood, boost enzyme production, which aids digestion and gently neutralizes stomach acid.

**CORIANDER SEEDS** One ayurvedic remedy calls for crushing an ounce of coriander seeds and mixing the pulp with two or three teaspoons of sugar. Add a cup of water, bring to a boil, let simmer, and drink before bed.

**CHEWING GUM** Increases saliva flow and neutralizes acid.

**CUMIN SEEDS** Soak an ounce of the seeds in water, and eat a spoonful of them three times a day to neutralize acid.

**DEGLYCYRRHIZINATED LICORICE** DGL has anti-inflammatory properties and leaves a protective coating on the esophagus.

**LEMON BALM** Two to three teaspoons of lemon balm leaves steeped in a tea and taken three times a day can reduce gas and neutralize acid. Add honey for taste.

**MUSTARD** During an acid reflux attack, try eating a half-teaspoon of any yellow or gray commercial mustard. Proponents say it essentially "chases" the acid back down into the stomach.

**TURMERIC POWDER** In India, turmeric powder is a highly regarded remedy for heartburn, because it breaks down fatty foods and reduces acidity. Fill gelatin capsules with the powder and take two capsules each day after breakfast. —LM

SOURCE: *NATURAL STOMACH CARE: TREATING AND PREVENTING DIGESTIVE DISORDERS WITH THE BEST OF EASTERN AND WESTERN HEALING THERAPIES*, BY ANIL MINOCHA, MD (AVERY, 2003)



# Taming The Fire

Often the root of the problem lies with the neighboring liver, which TCM associates with the processing of emotions. When someone is under stress, their liver qi rebels, flowing erratically and spilling over into the stomach where it causes things to heat up and rise.

The solution, both in the acute phase and in the long run, is to bring the energy down, often using acupuncture, to cool the “stomach fire” with moist nourishing food and Chinese herbs, and to balance the liver energy by getting a handle on stress.

While the number of studies is limited, one review published in the *Journal of Gastroenterology* in May, 2006, found

ample evidence that acupuncture alters acid secretion and quiets visceral pain. Taylor has watched it happen.

“I have seen amazing results with acute situations where someone comes in, he can’t lie down, and he is in so much pain in the chest and esophagus,” says Taylor, who uses a four-point combination of acupuncture points called the Four Doors in her GERD patients.

Scrimgeour, who has seen the incidence of GERD rise significantly in his practice during the last 17 years, says he believes the drug-makers have been approaching the issue all wrong. The problem, he says, is not that people have too much stomach acid, but that

instead they don’t often have enough of a certain kind.

“Hydrochloric acid is necessary for the digestion of proteins. If this is missing, proteins putrefy, and the digestive system has to work extra hard to make up for it,” rebounding with excess production of other acids.

A lack of hydrochloric acid, and the resulting inefficient digestion can also prompt food to back up in the system, putting pressure on the lower esophageal sphincter (the flap that serves as a gateway between the stomach and esophagus—see illustration opposite) and sending stomach acids where they shouldn’t go, says Evan Fleischmann, a naturopathic doctor in New Jersey. If someone takes medication to suppress the acid, the destructive cycle continues.

Fleischmann tells his patients to take a simple, tell-tale test: “Next-time they have that feeling of acid reflux, I tell them to take a tablespoon of lemon juice or apple cider vinegar (which are both very acidic). If the acid reflux sensation goes away, that confirms that it is too *little* stomach acid causing the problem.”

## LIFESTYLE CHANGES

For some, that trick alone can have a huge impact. But many of us also have to make a shift in what, how much, and when we eat.

“The stomach can only empty so fast, and as food stays in the stomach longer, there is more propensity for it to go upstream, rather than downstream,” says Minocha.

Experts recommend eating several light meals throughout the day, refraining from food in the three hours before bedtime, chewing slowly, and avoiding quick meals on the run or under stress, when the body is not primed to digest foods.

**Next time you have that feeling of acid reflux take a tablespoon of lemon juice or apple cider vinegar. If the acid reflux sensation goes away, too *little* stomach acid is causing the problem.**



## PLUMBING PROBLEMS

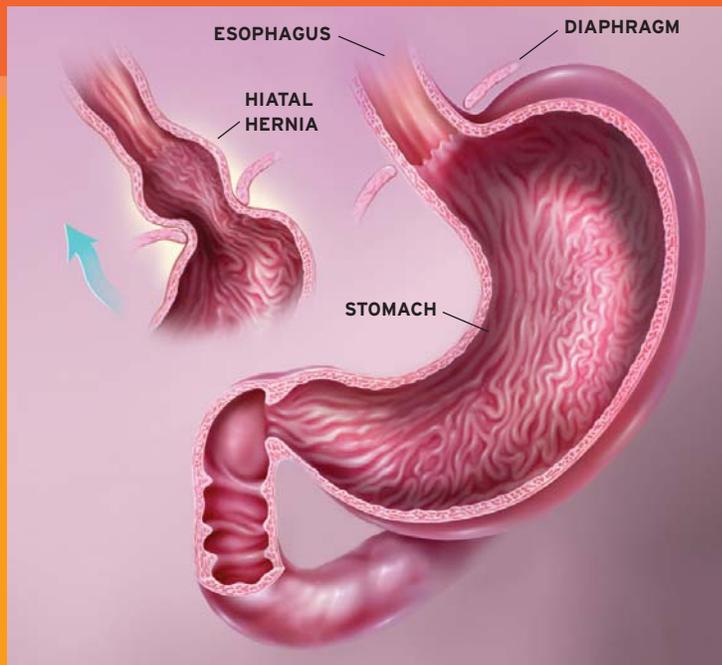
In some cases, gastroesophageal reflux disease (GERD), may be related to a common anatomical problem called a hiatal hernia. Also known as a diaphragmatic hernia, a hiatal hernia occurs when the upper part of the stomach squeezes through the small opening in the diaphragm where the esophagus and stomach come together, pushing the lower esophageal sphincter (the flap that keeps acid out of the esophagus) out of alignment, and allowing stomach contents to rise. (See illustration.) Health experts point out that not everyone who has a hiatal hernia experiences heartburn, and many people who have GERD do not have a hiatal hernia, so there are often other aggravating factors, such as diet and lifestyle, at play.

"Hiatal hernias affect anywhere from 1 to 20 percent of the population. Of these, 9 percent, are symptomatic," says Anil Minocha, MD, director of the Division of Digestive Diseases at the University of Mississippi Medical Center.

Doctors can diagnose the condition with an X-ray or an endoscopy, a test in which a fiber-optic light and video camera are passed down the throat. In some extreme cases, where the stomach gets twisted and blood flow is restricted, surgery may be recommended. But typically, the problem resolves with natural solutions, says Evan Fleischmann, ND.

Fleischmann advises patients who suspect they have a hiatal hernia to find a naturopathic doctor who does visceral manipulation, a bodywork technique designed to move organs into their proper position. He also recommends an at-home technique called the "heel-drop."

First thing in the morning, on an empty stomach, drink a full glass of water and go to the bottom of the stairs. Stand with your feet a few inches apart, the balls of your feet on the bottom stair and your heels hanging off. Hold on to the



A hiatal hernia can allow stomach acid to back up into the esophagus, where it creates the burning sensation associated with heartburn.

railing, and let your heels drop down below the edge of the step. Repeat three to five times daily for one week.

"That sudden drop of just a few inches, with the weight of the water in your stomach, causes your stomach to drop," says Fleischmann.

Because chronic constipation can lead to upward pressure in the digestive system, either causing or aggravating a hernia, experts stress the importance of a high-fiber diet. And as with any case of GERD, Fleischmann recommends lifestyle changes and enzyme supplements to normalize digestion.

"Most of the time, between visceral manipulation, heel drops, a supplement, and stress management, this condition is completely treatable and goes away." —LM

Also, avoid mint, caffeine, and nicotine, all of which weaken the esophageal sphincter and open the gates for rising stomach acid.

Scrimgeour urges people to avoid trying a bunch of different remedies at once. After ushering patients through a two-week dietary detox, to rest the digestive system and allow the esophagus to heal, he encourages them to take both hydrochloric acid and supplemental enzymes to help them digest food more efficiently. If the hydrochloric acid burns at first, he has them take

Deglycyrrhizinated licorice (DGL) instead, to reduce inflammation and coat the esophagus. Then he has them try the acid supplements "again a few weeks later.

He also recommends an array of herbal combinations, including a 1,000-year-old gastrointestinal tonic called *An Zhong San*, also known as "calm the middle powder," which consists of fennel, cardamom, and other herbs aimed at mobilizing stagnant qi and treating pain. "I give that to anyone and everyone who has any type of acid or reflux situation," he

says. "It works extremely well."

Minocha cautions that, despite its seemingly benign nature, chronic heartburn is nothing for people to take lightly. "It affects their sleep. It affects their social life. It affects their physical functioning," he says.

And although the ads say otherwise, the solution most often lies within and not with a purple pill. **NS**

*Lisa Marshall is a freelance writer and mother of four who lives in Lyons, Colorado. She writes about health, outdoor recreation, and sustainable living.*