

Acid Reflux May Respond Better to Foods Than Prescribed Pills

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✓ Fact Checked

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STORY AT-A-GLANCE

- › Americans spend \$13 billion a year on over-the-counter and prescription proton pump inhibitors (PPIs), the most popular anti-reflux medications on the market
- › Acid reflux, also known as gastroesophageal reflux disease (GERD), is a condition affecting about 20% of the U.S. population
- › Consuming a Mediterranean diet may be as effective as PPIs in treating acid reflux symptoms; a Mediterranean-style diet focuses on fruits, healthy fats, lean meats, nuts and vegetables
- › Often, you can restore your body's acid balance simply by avoiding processed foods and sugar, eating real food and infusing your gut microbiome with beneficial bacteria from fermented foods or a high-quality probiotic
- › A number of natural remedies, including apple cider vinegar, baking soda, ginger and slippery elm, can be useful to address occasional reflux problems and, in conjunction with diet changes, may eliminate the need for PPIs and other medications

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Americans spend a whopping \$13 billion a year on over-the-counter and prescription proton pump inhibitors (PPIs), which are the most popular anti-reflux medications on the market.¹ Because they inhibit acid production, prescription PPI drugs like Nexium,

Prevacid and Prilosec are used to treat acid reflux, also known as gastroesophageal reflux disease (GERD), a condition affecting about 20% of the U.S. population.²

Once prescribed, your doctor may keep you on a PPI drug for years, despite label warnings suggesting they be used only for short periods. If you regularly suffer from heartburn or acid reflux, you'll want to take note of research suggesting dietary changes are as or more effective than drugs in addressing acid reflux.

In many cases, you can begin to restore your body's proper gastric balance and function simply by avoiding processed foods and sugar. By eating real food and infusing your gut microbiome with beneficial bacteria – from traditionally fermented foods or a high-quality probiotic supplement – you can rebalance your digestive system and eliminate the need for PPIs and other medications. In addition, there are several natural remedies available to help you address this condition.

What Is Reflux?

Reflux, or GERD, occurs when contents from your stomach back up into your esophagus, causing stomach acid to irritate the lining of your esophagus. Other common names for this condition include:

- Acid indigestion
- Acid regurgitation
- Heartburn

If you experience acid reflux symptoms more than twice a week, you very likely have reflux disease or GERD, which involves bloating, burning pain in your chest and gut discomfort.

GERD sufferers who experience pronounced reflux symptoms concentrated in the upper throat area, including the pharynx and voice box, may have a more serious condition called laryngopharyngeal reflux (LPR). LPR occurs when pepsin, a digestive enzyme

from your stomach, damages the sensitive tissues in the back of your throat, resulting in symptoms such as:³

- A "lump" in your throat that doesn't go away
- Excessive throat clearing or throat mucus
- Hoarseness
- Persistent cough or sore throat
- Trouble breathing or swallowing

Research Shows Diet Plays a Crucial Role in Acid Reflux

A study published in the *Journal of the American Medical Association Otolaryngology – Head & Neck Surgery*⁴ involving 184 participants, suggests a Mediterranean diet – one focused on fruits, healthy fats, lean meats, nuts and vegetables – may be as effective as PPIs in treating acid reflux symptoms.

The type of reflux addressed in the research was LPR, the kind in which stomach acid affects sensitive tissues at the back of your throat. "You're not supposed to have acid up in the throat," says lead study author Dr. Craig Zalvan, chief of otolaryngology and medical director of the Phelps Institute for Voice and Swallowing Disorders at Phelps Hospital in New York. "The tissues there have poor protection against acid and pepsin."

All the study participants were advised to avoid reflux triggers such as alcohol, chocolate, coffee, greasy and fatty foods, spicy foods and tea. The research compared outcomes involving two groups:

- 85 LPR sufferers who were treated with PPIs
- 99 LPR sufferers who were put on a Mediterranean diet and told to drink alkaline water

After six weeks, outcomes were measured using a standardized reflux scale. Notably, those who changed their diet and those who used PPI medications both reported a

similar lessening of reflux symptoms, with the diet group indicating a slightly higher level of improvement. Given the outcomes, Zalvan believes diet is the better of the two options for addressing LPR symptoms. He states:

"These results really show you can treat people with a diet-based approach using a plant-based diet. If you take all patients with LPR and put them on a plant-based diet ... the majority do get better. And they stop their drugs, which overall leads to much better health."

The Benefits of a Mediterranean Diet on Reflux

Even though it was not clear from the research why this particular choice of diet evidently helped relieve reflux symptoms, a number of studies have confirmed the overall health benefits of a Mediterranean-style diet. As you may imagine, eating a healthy diet will naturally contribute to your body's proper acid balance.

Even if you do not have reflux issues, a Mediterranean-style diet is a good choice if you are interested in optimizing your health, since it's low in sugar, moderate in protein and high in fresh fruits and vegetables, as well as healthy fats. The Mediterranean-style of eating has been shown to improve cardiovascular health and significantly reduce your risk of stroke. It has also been shown to lower your risk of Alzheimer's disease,^{5,6} cancer, Parkinson's and rheumatoid arthritis.

Overall, the Mediterranean diet is one of the best conventional diets to support your brain and heart health. Research indicates diets rich in healthy fats from [avocados](#), nuts and olive oil may boost memory and cognition in older adults.^{7,8} About the research, Samantha Heller, certified dietitian/nutritionist at New York University's Langone Orthopedic Center, stated:

"These healthy fats have been shown to improve cognitive function and brain health. Conversely, research suggests eating unhealthy fats like trans fats found in processed foods, and saturated fats in animal foods accelerated

cognitive decline and poor memory, and is linked to an increased risk of dementia."

While I agree with most of what Heller said, I disagree with her assertion that saturated fats from animal foods are bad for you. Saturated fat found in meats and other animal products is actually quite good for you, but only if you choose high-quality sources such as [grass fed beef](#) and pastured chicken or healthy fish such as [wild Alaskan salmon](#), anchovies or sardines.

Alkaline Water Is a Short-Term Fix, Not a Long-Term Solution

While there's no doubt you need water to survive, the type of water you drink will have a significant impact on your well-being. Because alkaline water was paired with a Mediterranean-style diet in the featured reflux study, I want to address it.

Most importantly, if you suffer from GERD or another serious reflux disease, I want to dispel any notions you may have about consuming alkaline water on a regular basis. Your body simply will not be able to handle the pH change that will come about if you make that switch.

For occasional relief from burning reflux symptoms, alkaline water, due to its higher pH level than regular drinking water, may deliver soothing relief by neutralizing the acid in your body.

Whereas normal drinking water has a neutral pH of 7, alkaline water's pH is about 8 or 9. On those "emergency" occasions, you can make alkaline water easily and quickly at home simply by adding a squeeze of lemon or lime juice, or one-half to 1 teaspoon of baking soda, to a glass of filtered water. Authors of a 2012 study indicating the beneficial effects of alkaline water on reflux disease noted:⁹

"Unlike conventional drinking water, pH 8.8 alkaline water instantly denatures pepsin, rendering it permanently inactive. In addition, it has good acid-buffering capacity. Thus, the consumption of alkaline water may have therapeutic benefits for patients with reflux disease."

Again, I would underscore the importance of alkaline water as a temporary solution – and only if your reflux is actually caused by excess stomach acid. More often than not, heartburn is the cause of insufficient amounts of acid.

Your body is naturally designed to achieve balance and it needs acid to digest food. If you have low stomach acid and your digestion is impaired, you will not only absorb less nutrients from your food, but also open the door for potential bacterial infections. (More on that below.)

The bottom line is daily consumption of water that is either too acidic or too alkaline will be problematic. What you want is pure water – water that is clean and balanced. Ideally, the pH of your water should be somewhere between 6 and 8.

To that end, the most economical and environmentally sound choice you can make is to purchase and install a water filter for your home. Even better, you may be able to obtain your drinking water from a natural gravity-fed spring – check out FindaSpring.com¹⁰ to see if there is one near your home. Not only will spring water tend to be naturally filtered and pH balanced, it is "alive," or "structured," meaning it is believed to have significant health benefits beyond mere hydration.

PPIs Interfere With Your Body's Natural Acid Processes

Even if your doctor tells you they are perfectly safe, PPI drugs have been linked to serious health problems and early death. Zalvan asserts PPI medications are not necessarily effective in treating all reflux conditions, noting some studies find the drugs inappropriate for as many as 40% to 80% of the people taking them.¹¹

The main problem is PPIs inhibit the proton pump in your body that produces hydrochloric acid. Contrary to popular belief, excess stomach acid is rarely the primary trigger of heartburn and indigestion. In fact, heartburn is typically an indicator you have too little hydrochloric acid, which means if you add a PPI medication, you are only going to exacerbate the problem by decreasing your acid level even further.

Because hydrochloric acid (and pepsin) are necessary to break down protein in your intestinal tract, reduced acid levels affect your body's ability to absorb nutrients. Without adequate protein breakdown, you also increase your risk of dysbiosis,¹² an imbalance in gut microbiome between harmful and friendly bacteria. As these undigested protein molecules ferment in your intestines, they become food for pathogens such as Candida, C. difficile and Helicobacter pylori (H. pylori).

Use of PPIs May Put You at Risk for Bacterial Infections

A study published in the British Journal of Clinical Pharmacology^{13,14} indicates the use of PPIs, as well as H2 blockers like Pepcid, Tagamet and Zantac, may put you at increased risk for gut infections. The study, which involved about 565,000 adults, discovered participants taking certain heartburn drugs had a 1.7 to 3.7 times increased risk of developing C. difficile and Campylobacter bacterial infections due to the suppression of stomach-acid production.

Both bacteria are potentially serious and cause inflammation in your intestines and stomach. Some of the symptoms associated with these infections include diarrhea, severe abdominal cramps and vomiting. Both bugs can become even more serious and potentially life threatening – especially C. difficile.

According to the U.S. Centers for Disease Control and Prevention, nearly 500,000 Americans were sickened by the infection in 2011, and 29,000 of them died less than a month after the initial diagnosis of C. difficile.¹⁵

Clearly, there are grave risks to getting hooked on PPIs. It seems the ready availability and popularity of PPIs has given us the false sense they are "100% safe," says Dr. F. Paul Buckley, surgical director of the Heartburn and Acid Reflux Center at the Baylor Scott & White Clinic in Round Rock, Texas. "There's still a myth that these drugs are benign. It's not true."¹⁶

PPIs Also Associated With Increased Dementia Risk

Beyond infections, research has linked PPIs to dementia, and even short-term use of them can contribute to cognitive changes. One study involving 60 participants suggested PPIs caused clinically and statistically significant impairments in attention, executive functions, visual memory and working and planning functions after just one week of use.¹⁷

According to research published in the JAMA Neurology,^{18,19,20} seniors over the age of 75 who use PPIs on a regular basis had a 44% increased risk of dementia compared to nonusers. Men using PPIs were at greater risk, raising their dementia risk on average by 52%, compared to 42% for women.

One characteristic of dementia is the accumulation of beta-amyloid plaques in the brain that provoke inflammation and ultimately kill brain cells. There is now strong scientific evidence suggesting PPIs not only increase production of beta-amyloid plaques in the brain, but also slow your body's ability to eliminate them.^{21,22}

PPIs Indicated for Heart Attacks and Other Serious Conditions

Long-term use of PPIs has been linked to heart attacks and other serious health conditions. If you have been taking PPIs for any length of time, you will want to ask your doctor about your potential risk related to the following serious health conditions:

- **Chronic kidney disease** — More than 10,000 participants were tracked in a nearly 12-year study²³ that concluded PPI use is associated with higher risk of chronic kidney disease.
- **Death from any cause** — Research involving nearly 350,000 U.S. veterans over six years indicated PPI users were nearly 20% more likely than nonusers to suffer death from any cause; the longer you use them, the greater your risk of premature death.^{24,25,26,27}
- **Heart disease and heart attacks** — Research gathered through a data-mining study²⁸ including nearly 3 million people linked long-term PPI use to an increased risk for heart disease and heart attacks — even if you have no prior history of

cardiovascular disease.^{29,30} In one study, patients with GERD who took PPIs had a 16% increased risk of heart attack, and a twofold increased risk of cardiovascular mortality.³¹

The reason for this effect is thought to be due to the drug-reducing nitric oxide in the walls of your blood vessel. Nitric oxide relaxes your blood vessels, so by reducing the amount of nitric oxide, PPIs may thereby raise your risk of a heart attack.

- **Increased risk of bone fractures**³² — A multiyear study that tracked nearly 80,000 postmenopausal women noted the risk of hip fracture among those who regularly used PPIs for at least two years, as compared to nonusers, was 35% higher. Longer use of PPIs was associated with increasing risk of hip fractures.
- **Vitamin B12 deficiency** — According to a 2011 study published in the Journal of the American Medical Association,³³ use of acid-inhibiting medications for two or more years may lead to vitamin B12 deficiency, particularly among women and younger individuals who take stronger doses. When left untreated, the study authors indicated a vitamin B12 deficiency can lead to "dementia, neurologic damage, anemia and other complications, which may be irreversible."³⁴

10 Natural Remedies for Treating Occasional Reflux Problems

Because PPIs can have serious damaging effects on your health, you would be wise to consider nondrug alternatives first. Below are 10 natural remedies that may help you manage occasional bouts of heartburn, indigestion and other minor reflux symptoms:^{35,36}

Aloe juice — The juice of the aloe plant naturally helps reduce inflammation, which may ease symptoms of acid reflux. Drink about one-half cup of aloe juice before meals. To avoid its laxative effect, look for a brand in which the laxative component has been removed.

Apple cider vinegar (raw, unfiltered) — Acid reflux typically results from having too little acid in your stomach. You can easily improve the acid content of your stomach by consuming 1 tablespoon of raw unfiltered apple cider vinegar in a large glass of water.

Astaxanthin — When compared to a placebo, this potent antioxidant was found to reduce symptoms of acid reflux, especially for individuals with pronounced H. pylori infection.³⁷ Researchers concluded a daily dose of 40 mg of **astaxanthin** was effective for reflux reduction.

Baking soda — One-half to 1 teaspoon of baking soda (sodium bicarbonate) in an 8-ounce glass of water will help neutralize your stomach acid and ease the burn of acid reflux. While I do not advise this as an ongoing remedy, it is effective on an "emergency" basis when you are in excruciating pain.

Deglycyrrhizinated licorice root — Deglycyrrhizinated licorice (DGL) may also be helpful because it helps block inflammatory prostaglandins. Licorice must be approached cautiously, however, because it contains the active metabolite glycyrrhiza, which at high doses can affect your adrenal glands, cause muscle weakness or numbness and raise your blood pressure.

Licorice is contraindicated if you're on diuretics or stimulant laxatives. Women on hormone therapy, who have estrogen-dependent cancers or reproductive conditions like endometriosis should also avoid it.

Ginger root — **Ginger** has been found to have a gastroprotective effect by suppressing H. pylori. Add two or three slices of fresh ginger root to 2 cups of hot water and let it steep for several minutes. Drink it about 20 minutes prior to eating a meal.

Glutamine — The amino acid glutamine has been shown to address gastrointestinal damage caused by H. pylori. Glutamine is found in many foods, including beef,

chicken, dairy products, eggs, fish and selected fruits and vegetables. L-glutamine is widely available as a supplement.

Papaya (papain supplement) or Pineapple (bromelain supplement) – Papaya contains papain, an enzyme useful for breaking down both protein and carbohydrates. Bromelain is a proteolytic enzyme found in pineapple, and like papain, helps digest proteins. Bromelain also promotes anti-inflammatory activity and helps you maintain regular bowel movements.

Slippery elm – Slippery elm coats and soothes your mouth, throat, stomach and intestines, and contains antioxidants that may help address inflammatory bowel conditions. Because it stimulates nerve endings in your gastrointestinal tract, it is useful for increasing mucus secretion, which has a protective effect against ulcers and excess acidity.

Vitamin D – **Vitamin D** is critically important for your gut health. Once your vitamin D levels are optimized, you will benefit from your body's production of about 200 antimicrobial peptides that will help eradicate gut infections.

Talk to Your Doctor About Getting Off PPIs

If you are currently taking a PPI for reflux, this article should be a wake-up call for you to consider the damage it may be doing to your body and your health. The risks are real, especially if you plan on taking PPIs for the long term. At the very least, I hope this information has given you encouragement to consider making changes to your diet to heal your gut and restore your body's natural acid balance.

Beyond helping yourself, you may want to share this article with friends or family members who also suffer from reflux problems. Once you commit to making changes, talk to your doctor about weaning off your PPI medication. Because your body has very likely become dependent on the drug, you will need to back down from it very carefully.

Quitting cold turkey can result in severe rebound effects known as rebound acid hypersecretion. To avoid it, you must wean yourself off the PPI gradually. Start by lowering the dose you're taking while simultaneously implementing the recommended lifestyle modifications suggested.

Once you get down to the lowest dose of the PPI, you can start substituting with an over-the-counter H2 blocker like Tagamet, Cimetidine, Zantac or Ranitidine. Then gradually wean off the H2 blocker over the next several weeks.

Sources and References

- ^{1, 11} Time September 7, 2017
- ² The Surgical Clinic. What Is GERD?
- ³ Boston Medical Center. Laryngopharyngeal Reflux
- ⁴ Journal of the American Medical Association Otolaryngology – Head & Neck Surgery September 7, 2017; doi:10.1001/jamaoto.2017.1454
- ⁵ Journal of the American Medical Association Internal Medicine July 2015; 175(7): 1094-1103
- ⁶ Reuters May 11, 2015
- ⁷ Scientific American May 11, 2015
- ⁸ Market Watch May 12, 2015
- ⁹ Annals of Otolaryngology Rhinology and Laryngology July 2012; 121(7): 431-4
- ¹⁰ FindaSpring.com
- ¹² Atlas Blog. What Is Gut Dysbiosis
- ¹³ British Journal of Clinical Pharmacology January 5, 2017; 83: 1298–1308
- ^{14, 16} HealthDay, January 5, 2017
- ¹⁵ U.S. Centers for Disease Control and Prevention February 25, 2015
- ¹⁷ Alzheimer's Research & Therapy December 27, 2015; 7: 79
- ¹⁸ JAMA Neurology April 2016; 4(73): 410-416
- ¹⁹ New York Times February 17, 2016
- ²⁰ Time February 16, 2016
- ²¹ PLOS One March 8, 2013; 8(3): e58837
- ²² Frontiers in Aging Neuroscience February 12, 2016; 8:18
- ²³ The Journal of the American Medical Association February 2016; 176(2): 238-246
- ²⁴ BMJ Open July 2017; 7(6): e015735
- ²⁵ Medical News Today July 4, 2017
- ²⁶ New York Times July 5, 2017
- ²⁷ Time July 5, 2017
- ²⁸ PLOS ONE December 27, 2013; 8(12): e84890
- ²⁹ PLOS One June 10, 2015; 10(6): e0124653

- ³⁰ New York Times June 10, 2015
- ³¹ Scientific American June 10, 2015
- ³² BMJ January 31, 2012; 344: e372
- ^{33, 34} Journal of the American Medical Association December 11, 2013; 310(22): 2435-2442
- ³⁵ Health January 25, 2016
- ³⁶ Everyday Roots, 15 Natural Remedies for Heartburn & Severe Acid Reflux
- ³⁷ Phytomedicine June 2008; 15(6-7): 391-9