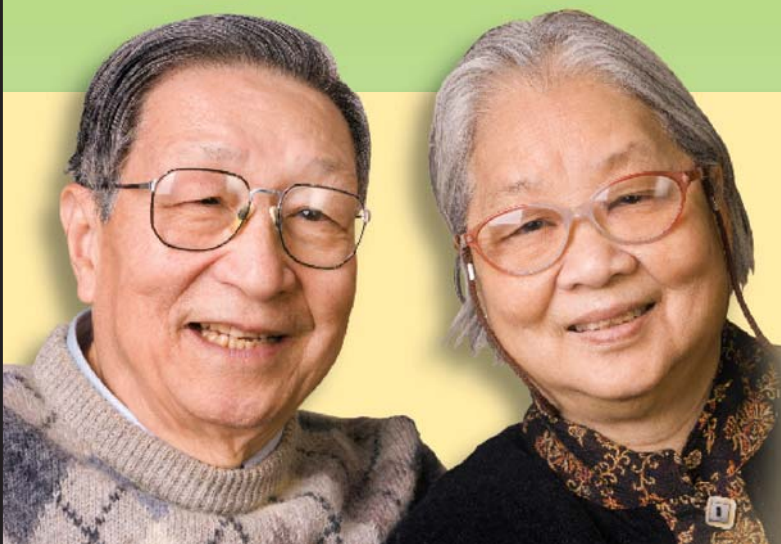


Treating
**Acid Reflux,
Heartburn, and GERD**



Which Medicines
Are Best?

Consumer Reports[®]
BEST BUY DRUGS[®]
PROVEN • EFFECTIVE • AFFORDABLE



Contents

What Is Acid Reflux?	Page 3
What Causes Acid Reflux?	Page 4
Do You Have Heartburn or GERD?	Page 5
What Are PPIs?	Page 8
Choosing a PPI	Page 10
Our Recommendations	Page 12
Working with Your Doctor	Page 14

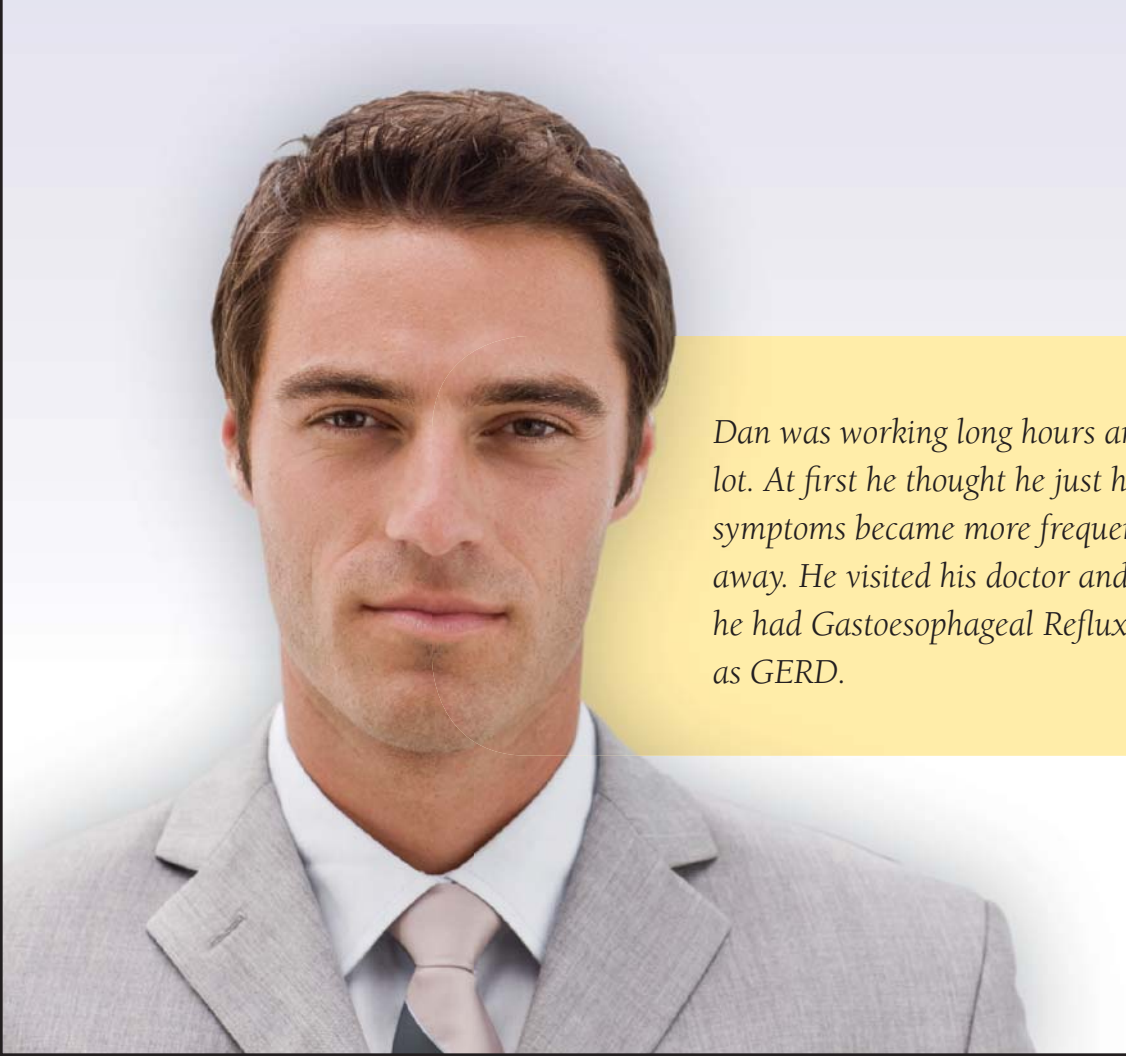
The information in this booklet is based on a report called *How to Treat Heartburn, Ulcers, and Stomach Acid Reflux: The Proton Pump Inhibitors—Comparing Effectiveness, Safety, and Price*. The full report can be found at www.ConsumerReportsHealth.org/BestBuyDrugs.

What Is Acid Reflux?

It's that burning sensation that starts under your breastbone and moves up into your throat. Maybe you get it if you eat rich, greasy, or spicy foods—especially if large portions are part of the pleasure. Or maybe it happens when you lie down or after you exercise. You may even wake up at night with your chest and throat burning.

You probably know it as acid indigestion, or heartburn. It is also called **acid reflux**.

Almost everyone has heartburn once in a while. But people who have symptoms often and for longer periods of time may have a more serious problem, called **GERD**. GERD stands for **Gastroesophageal Reflux Disease**.



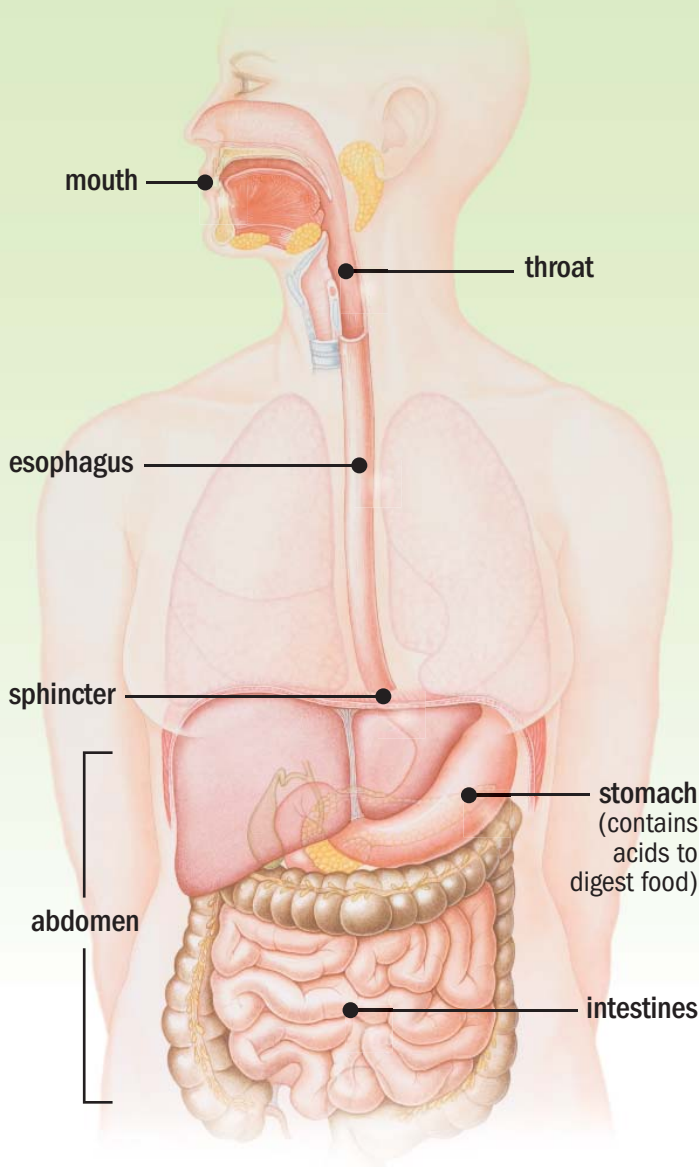
Dan was working long hours and eating fast food a lot. At first he thought he just had heartburn, but the symptoms became more frequent and were not going away. He visited his doctor and his doctor told him he had Gastroesophageal Reflux Disease, also known as GERD.

What Causes Acid Reflux?

Acid reflux happens when the stomach acid that helps digest food backs up from your stomach into your esophagus. The esophagus is the tube that connects your mouth and throat to your stomach.

When you swallow food, it travels down your esophagus. Where your esophagus and stomach meet, there is a circle of muscles, called a sphincter. This circle opens to let food pass into your stomach. As soon as the food enters the stomach, the circle of muscles closes behind it.

Special cells in the lining of the stomach, called proton pumps, let acid into the stomach. This acid starts to break down, or digest, the food before it moves into your intestines.



Acid Back-Up

Eating a big meal or something that is hard to digest can put pressure on the sphincter. Too much pressure causes the circle to open slightly. This allows stomach acid and food to back-up—or “reflux”—into the esophagus, which is not meant to hold acid.

Also, sometimes the sphincter between the esophagus and the stomach does not close tightly enough. Or it opens too often, even if you have not eaten a big meal. This also allows acid to back up into the esophagus.

When stomach acid backs up into the esophagus, it irritates the lining of the esophagus. This causes the burning sensation you feel in the middle of your abdomen. It can also cause belching, make it hard or painful to swallow, or leave a sour or bitter taste in your throat and the back of your mouth.

If stomach acid gets on the lining of the esophagus too often, it can damage the lining.

Do You Have Heartburn or GERD?

Acid reflux can cause simple heartburn or a more serious condition called GERD (Gastroesophageal Reflux Disease). The symptoms are very similar. Doctors diagnose heartburn and GERD by how often the symptoms occur and how severe they are.

Heartburn is when you have acid reflux only every once in a while, like after you eat a big, spicy, or fatty meal or drink a lot of alcohol. Heartburn is uncomfortable, but it is not dangerous. Nonprescription antacids are the best initial treatment, and they usually bring quick relief. They neutralize the acid, which relieves the burning in your esophagus. Maalox, Mylanta, Roloids, and Tums are a few of the antacids you can buy without a prescription.

If antacids do not relieve your symptoms, you can try another group of medicines, called H2 blockers. H2 blockers keep the stomach from producing as much acid. They take longer to work than antacids—30 minutes to 1 hour—but they relieve heartburn for a longer period—up to 12 hours. Tagamet, Pepcid, Axid, and Zantac are among the well-known H2 blockers. You can buy them without a prescription. Stronger H2 blockers are also available with a doctor's prescription.

Other Things You Can Do to Relieve Your Symptoms

Making a few small changes in your diet and lifestyle can also help relieve the symptoms of acid reflux, whether you have heartburn or GERD.

- Eat smaller meals.
- Avoid spicy, fried, and fatty foods.
- Avoid drinking too much alcohol or too many carbonated sodas.
- Do not lie down for 3 hours after eating. And avoid bending over.
- Lose weight if you are overweight.
- Stop smoking.
- Raise the head of your bed 6–9 inches. You can do this by putting phone books or blocks under the bedposts. (Using extra pillows to prop yourself up does not work as well.)

A dietician can help you figure out how to eat to reduce acid reflux. For example, chocolate, peppermint, garlic, onions, coffee, citrus fruit, and tomato sauce can make acid reflux worse. Ask your doctor if you can get a referral to a dietician.

Some medicines can also cause GERD. Make sure your doctor knows all the medicines and supplements you take.

Your doctor may order a test called an **upper endoscopy**. During an endoscopy, a flexible tube with a light at the tip is threaded through your throat into the esophagus. The light allows the doctor to see if acid reflux has caused any damage to the lining of your esophagus.

If you have GERD, your doctor will most likely recommend that you take a medicine called a **proton pump inhibitor**, or **PPI**. PPIs do not cure GERD, but they can help prevent and relieve symptoms and help your esophagus heal if it has been damaged. See page 8 for more information about PPIs.



Isabel was having heartburn a few times a week for about a month. After trying antacids and getting no relief, she went to her doctor. Dr. Miller recommended that Isabel get an upper endoscopy. This is a test that allows the doctor to see if acid reflux has caused any damage to the lining of the esophagus. After the results came back, Dr. Miller recommended a proton pump inhibitor to Isabel.

What Are PPIs?

Proton pump inhibitors (PPIs) are a group of medicines that reduce—or inhibit—the amount of acid your stomach produces. This reduces acid reflux, relieves burning and belching, and allows the lining of the esophagus to heal if it has been damaged.

There are 5 PPIs. Three are available only as prescription brand-name medicines: Aciphex, Prevacid and Nexium. Two are available as both prescription brand-name and generic drugs: omeprazole (Prilosec) and pantoprazole (Protonix). One combination prescription drug, called Zegerid, also contains omeprazole, along with sodium bicarbonate.

In addition, omeprazole is available as a nonprescription over-the-counter medicine. It is sold in stores as Omeprazole OTC and as Prilosec OTC.

Are PPIs Safe?

PPIs appear to be quite safe. Few studies have followed people who have taken PPIs for a year or longer. But doctors have not reported any serious side effects, and many people have been using PPIs for years.

PPIs can cause minor side effects, however. These include headache and diarrhea. Out of 100 people who try PPIs, 1–3 people cannot take them.

PPIs and Ulcers

PPIs are also used to treat ulcers. An ulcer is a wound in the lining of the stomach. Bacteria cause ulcers, so they must be treated with an antibiotic to kill the bacteria. Taking a PPIs at the same time to reduce stomach acid helps the lining of the stomach to heal.

PPIs and NSAIDs

A very commonly used type of pain medicine can cause stomach bleeding and ulcers. They are known as non-steroidal anti-inflammatory drugs, or NSAIDs. NSAIDs include aspirin, ibuprofen (Advil) and naproxen (Aleve). Studies now conclusively show that PPIs can help prevent the damage NSAIDs cause to the lining of the stomach. If you take any NSAID on a regular basis (for example, to ease arthritis pain), we recommend that you talk with your doctor about taking a PPI, too.

Recent studies also suggest that PPIs may increase the risk of certain bacterial infections, including pneumonia. Acid in the stomach kills bacteria. By decreasing the amount of acid in the stomach, PPIs may reduce resistance to these infections. However, it is not known how big a risk this is.

One study found that people who take PPIs every day for a year or more have a higher risk of breaking a hip. This risk is not well understood either, and there are currently more studies looking into this.

We recommend that you talk to your doctor about your risk of having side effects, especially if you:

- Have asthma or lung disease.
- Are 65 or over.
- Have immune system problems or HIV/AIDS.

PPIs and Other Medicines

PPIs interact with some other medicines and dietary supplements. These interactions can be dangerous. Some of the drugs PPIs can interact with are:

- Blood thinners, such as warfarin (Coumadin).
- Anti-anxiety drugs known as benzodiazepines (such as Tranzene and Valium).
- Antibiotics.
- Phenytoin (Dilantin), a drug used to treat epilepsy.
- Disulfuram (Antabuse), a drug used to treat alcoholism.

To avoid interactions, be sure to tell your doctor all the medicines and supplements you take. Your doctor may recommend one PPI over another because it is less likely to interact with another drug you take.

Harry has anxiety and was worried about taking a PPI. He had heard about certain risks and negative side effects between PPIs and anti-anxiety drugs. His doctor explained everything and recommended a PPI that was less likely to interact with the other medications he was taking.



Choosing a PPI

All PPIs reduce the symptoms of GERD. And none appear to be more effective or safer than others. For most people, the only real difference is cost.

Brand Name	Generic Name	Available as a:	
		Generic Prescription Drug	Over-the-Counter Drug
Nexium	Esomeprazole	No	No
Prevacid	Lansoprazole	No	No
Prilosec	Omeprazole	Yes	Yes
Protonix	Pantoprazole	Yes	No
Aciphex	Rabeprazole	No	No
Zegerid	Omeprazole/Sodium Bicarbonate	No	No

How Well Do PPIs Work?

For most people, PPIs relieve symptoms and help heal damage to the esophagus within 4–8 weeks. If GERD recurs, taking a PPI after the symptoms are gone can help prevent their coming back. But questions remain about how long you should continue to take a PPI.

Brand Name	Generic Name and Dose Each Day	Average Number of People Whose:		
		Symptoms Were Relieved After 4 weeks	Esophagus Healed After 8 weeks	GERD Did Not Return
Nexium	Esomeprazole 20mg	Not available	87 out of 100 Range: 84 to 91*	87 out of 100
Nexium	Esomeprazole 40mg	73 out of 100 Range: 65 to 82*	90 out of 100 Range: 88 to 92*	93 out of 100
Prevacid	Lansoprazole 30mg	70 out of 100 Range: 61 to 80*	86 out of 100 Range: 83 to 90*	91 out of 100
Prilosec	Omeprazole 20mg	65 out of 100 Range: 54 to 76*	85 out of 100 Range: 81 to 88*	86 to 92 out of 100
Protonix	Pantoprazole 20mg	77 out of 100 Range: 70 to 84*	77 out of 100 Range: 65 to 88*	55 to 86 out of 100
Protonix	Pantoprazole 40mg	72 out of 100 Range: 62 to 83*	89 out of 100 Range: 86 to 92*	78 out of 100
Aciphex	Rabeprazole 20mg	69 out of 100 Range: 52 to 86*	82 out of 100 Range: 76 to 89*	89 out of 100

* These averages come from studies of each drug and not from one study that compared all of the drugs. The differences do not mean that one drug is stronger or weaker or better or worse than another drug.

It is important to remember that not everyone responds to the same PPI in the same way. Your doctor has no way of knowing whether one PPI will work better than another for you. Your doctor may start you on one and then, if it doesn't work well, recommend that you try another one. Or, he may have you try a higher dose of the same PPI if it is not working well enough after 4–8 weeks.

Do All PPIs Cost the Same?

No. Some PPIs cost much more than others. The average cost for a month's supply ranges from \$12 for an over-the-counter PPI (a PPI you get without a prescription) to more than \$200 for a brand-name prescription PPI.

Brand Name	Generic Name	Average Cost For One Month
Nexium	Esomeprazole 20mg	\$215
Nexium	Esomeprazole 40mg	\$203
Prevacid	Lansoprazole 15mg—delayed release lingual tablets	\$191
Prevacid	Lansoprazole 30mg—delayed release lingual tablets	\$180
Prevacid	Lansoprazole 15mg—enteric coated tablets	\$219
Prevacid	Lansoprazole 30mg—enteric coated tablets	\$209
Prilosec OTC	Omeprazole 20mg	\$18–\$25
CR BEST BUY Omeprazole OTC	Omeprazole 20mg	\$12–\$15
(Generic)	Omeprazole 20mg—sustained release capsules	\$81
Prilosec	Omeprazole 20mg—sustained release capsules	\$188
Zegerid	Omeprazole/Sodium Bicarbonate—20mg/1100mg capsules	\$180
Zegerid	Omeprazole/Sodium Bicarbonate—20mg/1680mg internal powder	\$198
Protonix	Pantoprazole 20mg	\$157
Protonix	Pantoprazole 40mg	\$158
Aciphex	Rabeprazole 20mg	\$206

Our Recommendations


Omeprazole OTC is our choice as a *Consumer Reports Best Buy Drug* when your doctor recommends taking a PPI. It is available without a prescription at most pharmacies and grocery stores. And it costs from \$12 to \$15 for a month's supply. Many drug stores carry their own brand of Omeprazole OTC. This same medicine is also available as Prilosec OTC, which costs from \$18 to \$25 for a month's supply.

For most people, Omeprazole OTC works just as well as one of the more expensive prescription PPIs. Taking Omeprazole OTC could save you \$200 a month or more if your doctor has prescribed one of the prescription PPIs. Talk with your doctor about switching to Omeprazole OTC, unless you have already tried omeprazole and it has not worked for you.

If you have prescription drug coverage, find out if it pays for Omeprazole OTC. If not, talk to your doctor about a prescription for generic omeprazole. It costs more than Omeprazole OTC or Prilosec OTC, but if your co-payment or co-insurance is only \$5 or \$10, prescription omeprazole may save you money.

If you do not have prescription drug coverage, ask your doctor about Omeprazole OTC.

Many people think that brand-name drugs are better than generic drugs because they are newer. (A drug becomes generic when the drug company's patent on the drug runs out, usually 12–15 years after the drug is introduced.) Studies show over and over that this is not true for most medicines. Generic drugs have the same ingredients as brand-name drugs. And since they have been around for 10–15 years, more is known about their safety. The only real difference is that they cost less.



Dr. Jones explains to each of her patients that generic drugs are the same as brand-name drugs. Generic drugs cost less and have been around for a long time. This means that more is known about their safety.

Working with Your Doctor

We offer the information in this booklet to help you work with your doctor to choose the PPI that is best for you and that gives you the best value for your money. Our recommendations are not meant to replace your doctor's judgment about what medicine is best for you.

Talk to Your Doctor About Cost

Many people are afraid to ask their doctor about the cost of medicines. But unless you bring it up, your doctor may think that cost is not important to you.

If you have drug coverage, ask your doctor to check which PPIs are covered by your health plan and what your cost will be.

If you do not have prescription drug coverage, ask about Omeprazole OTC. Compare the cost at several drug stores and online. Many drug stores also have their own brand of Omeprazole OTC, which is the same as Prilosec OTC, but usually costs less.

Talk About How Long to Take a PPI

After a few months, you may be able to stop taking a PPI. Some people need to take a PPI every day for years, but many people have GERD off and on, and for some GERD goes away on its own. If your symptoms come back, you can start taking the PPI again. Ask your doctor what you should do.

Keep a List of All the Medicines You Take

Some prescription drugs, over-the-counter drugs, and supplements, can interact with PPIs. Drug interactions change the ways one or both drugs work. This can be dangerous.

Your doctor needs to know all the medicines and supplements you take and the doses you take. Your pharmacist also needs to know.

Victoria worked with her doctor to choose the right PPI for her. They talked about cost, side effects, and for how long she needed to take the PPI. Together they found the right PPI for her symptoms and her budget.



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