

## Gastroesophageal reflux disease

### Definition

Gastroesophageal reflux disease (GERD) is a condition in which the stomach contents leak backward from the stomach into the esophagus (food pipe). Food travels from your mouth to the stomach through your esophagus. GERD can irritate the food pipe and cause heartburn and other symptoms.

### Alternative Names

Peptic esophagitis; Reflux esophagitis; GERD; Heartburn - chronic; Dyspepsia - GERD

### Causes

When you eat, food passes from the throat to the stomach through the esophagus. A ring of muscle fibers in the lower esophagus prevents swallowed food from moving back up. These muscle fibers are called the lower esophageal sphincter (LES).

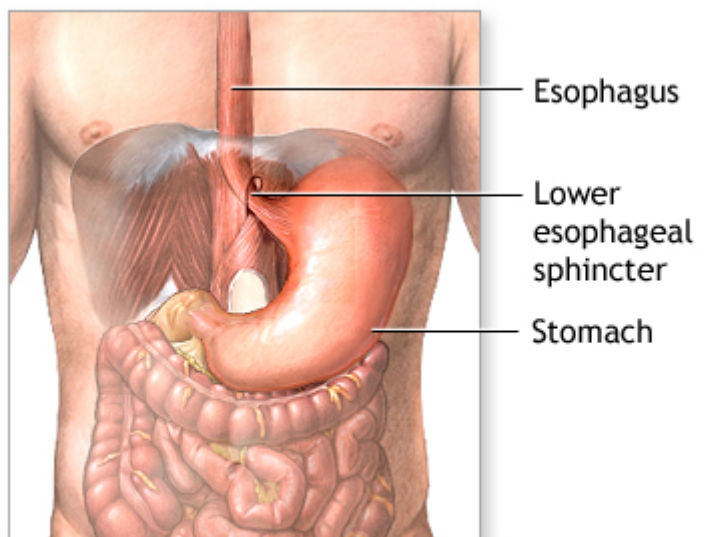
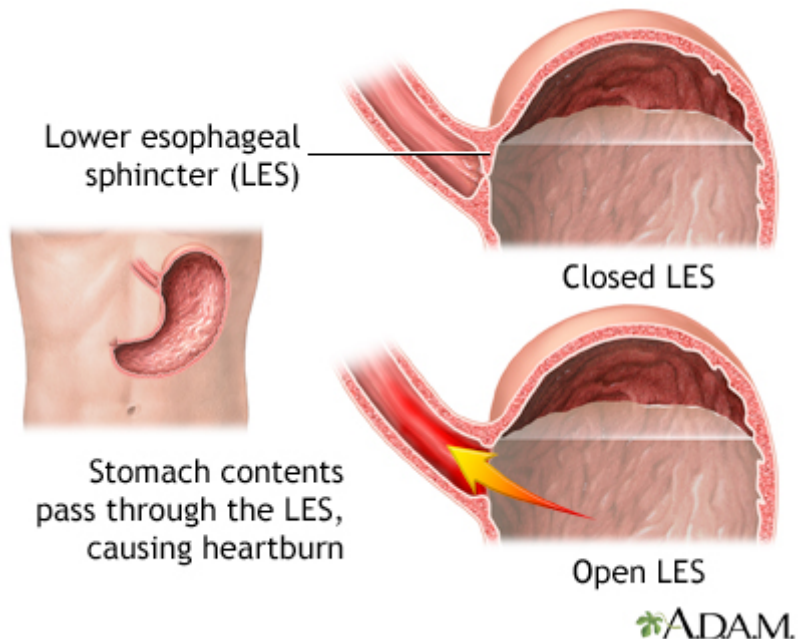
When this ring of muscle does not close all the way, stomach contents can leak back into the esophagus. This is called reflux or gastroesophageal reflux. Reflux may cause symptoms. Harsh stomach acids can also damage the lining of the esophagus.

The risk factors for reflux include:

- Use of alcohol (possibly)
- Hiatal hernia (a condition in which part of the stomach moves above the diaphragm, which is the muscle that separates the chest and abdominal cavities)
- Obesity
- Pregnancy
- Scleroderma
- Smoking
- Reclining within 3 hours after eating

Heartburn and gastroesophageal reflux can be brought on or made worse by pregnancy. Symptoms can also be caused by certain medicines, such as:

- Anticholinergics (for example, sea sickness medicine)
- Bronchodilators for asthma
- Calcium channel blockers for high blood pressure
- Dopamine-active drugs for Parkinson disease
- Progestin for abnormal menstrual bleeding or birth control



- Sedatives for insomnia or anxiety
- Tricyclic antidepressants

Talk to your health care provider if you think one of your medicines may be causing heartburn. Never change or stop taking a medicine without first talking to your provider.

## Symptoms

Common symptoms of GERD include:

- Feeling that food is stuck behind the breastbone
- Heartburn or a burning pain in the chest
- Nausea after eating

Less common symptoms are:

- Bringing food back up (regurgitation)
- Cough or wheezing
- Difficulty swallowing
- Hiccups
- Hoarseness or change in voice
- Sore throat

Symptoms may get worse when you bend over or lie down, or after you eat. Symptoms may also be worse at night.

## Exams and Tests

You may not need any tests if your symptoms are mild.

If your symptoms are severe or they come back after you have been treated, your doctor may perform a test called an upper endoscopy (EGD).

- This is a test to examine the lining of the esophagus, stomach, and first part of the small intestine.
- It is done with a small camera (flexible endoscope) that is inserted down the throat.

You may also need one or more of the following tests:

- A test that measures how often stomach acid enters the tube that leads from the mouth to the stomach (called the esophagus)
- A test to measure the pressure inside the lower part of the esophagus (esophageal manometry)

A positive stool occult blood test may diagnose bleeding that is coming from the irritation in the esophagus, stomach, or intestines.

## Treatment

You can make many lifestyle changes to help treat your symptoms.

Other tips include:

- If you are overweight or obese, in many cases, losing weight can help.
- Raise the head of the bed if your symptoms get worse at night.
- Have your dinner 2 to 3 hours before going to sleep.
- Avoid drugs such as aspirin, ibuprofen (Advil, Motrin), or naproxen (Aleve, Naprosyn). Take acetaminophen (Tylenol) to relieve pain.
- Take all of your medicines with plenty of water. When your provider gives you a new medicine, ask whether it will make your heartburn worse.

You may use over-the-counter antacids after meals and at bedtime, although the relief may not last very long. Common side effects of antacids include diarrhea or constipation.

Other over-the-counter and prescription medicines can treat GERD. They work more slowly than antacids, but give you longer relief. Your pharmacist, doctor, or nurse can tell you how to take these medicines.

- Proton pump inhibitors (PPIs) decrease the amount of acid produced in your stomach.
- H2 blockers also lower the amount of acid released in the stomach.

Anti-reflux surgery may be an option for people whose symptoms do not go away with lifestyle changes and medicines. Heartburn and other symptoms should improve after surgery. But you may still need to take medicines for your heartburn.

There are also new therapies for reflux that can be performed through an endoscope (a flexible tube passed through the mouth into the stomach).

### **Outlook (Prognosis)**

Most people respond to lifestyle changes and medicines. However, many people need to continue taking medicines to control their symptoms.

### **Possible Complications**

Complications may include:

- Worsening of asthma
- A change in the lining of the esophagus that can increase the risk of cancer (Barrett esophagus)
- Bronchospasm (irritation and spasm of the airways due to acid)
- Long-term (chronic) cough or hoarseness
- Dental problems
- Ulcer in the esophagus
- Stricture (a narrowing of the esophagus due to scarring)

### **When to Contact a Medical Professional**

Call your provider if symptoms do not improve with lifestyle changes or medicine.

Also call if you have:

- Bleeding
- Choking (coughing, shortness of breath)
- Feeling filled up quickly when eating
- Frequent vomiting
- Hoarseness
- Loss of appetite
- Trouble swallowing (dysphagia) or pain with swallowing (odynophagia)
- Weight loss
- Feeling like food or pills are sticking behind the breast bone

### **Prevention**

Avoiding factors that cause heartburn may help prevent symptoms. Obesity is linked to GERD. Maintaining a healthy body weight may help prevent the condition.

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Reviewed By: Michael M. Phillips, MD, Clinical Professor of Medicine, The George Washington University School of Medicine, Washington, DC. Internal review and update on 01/19/2019 by David Zieve, MD, MHA, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.