

What is GERD?

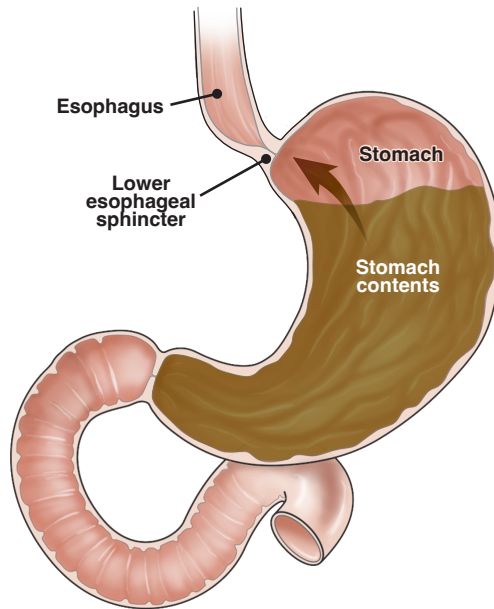
Gastroesophageal reflux

...occurs when stomach contents back up into the esophagus. Occasional reflux is normal and commonly occurs after eating a meal.

What is the esophagus?

When you eat, food moves from your mouth to your stomach through the esophagus, a tube-like structure that is approximately 10 inches long and 1 inch wide in adults. The esophagus is made of tissue and muscle layers that expand and contract to propel food to your stomach through a series of wave-like movements called peristalsis.

At the lower end of the esophagus, where it connects to the stomach, there is a circular ring of muscle called the lower esophageal sphincter (LES). After you swallow, the LES relaxes to allow food to enter your stomach, where food mixes with acids that help with digestion. The LES then contracts to prevent the food and acid from backing up into your esophagus.



What is gastroesophageal reflux disease (GERD)?

However, sometimes the LES relaxes inappropriately; this allows stomach contents to wash back into the esophagus. This happens occasionally to everyone. Most of these episodes occur shortly after meals, are brief, and do not cause symptoms. Normally, reflux should rarely occur during sleep.

In some people, acid reflux causes bothersome symptoms or injury to the esophagus over time; when this happens, GERD is a consideration. The most common symptoms of GERD are heartburn (a burning sensation in the center of the chest) or regurgitation (when stomach contents flow back into your mouth or throat). Other symptoms of GERD may include chest pain, sore throat, voice hoarseness, cough, or a sense of a lump in the throat.

What are the risk factors for GERD?

Weak esophageal muscles

...can impair the ability to push the refluxed content in the esophagus back into the stomach.

Nerve sensitivity

There are multiple nerve endings in the esophagus, and the sensitivity of these nerve endings differs among individuals. In some people even normal amounts of reflux can stimulate symptoms.

Hiatus hernia

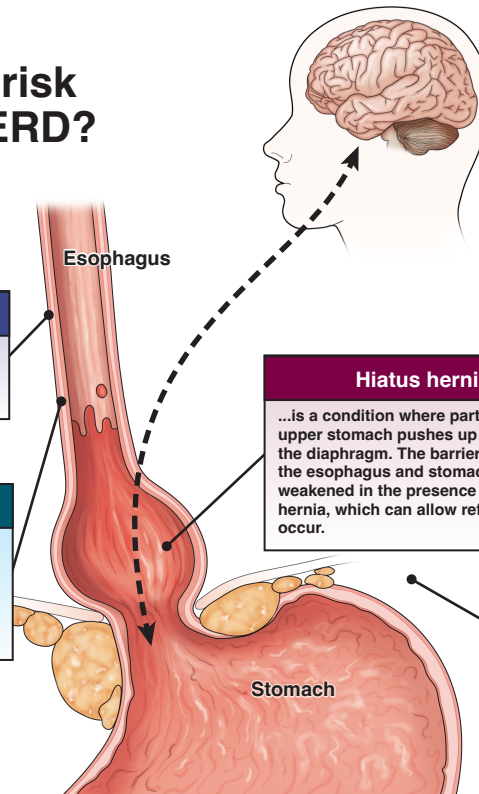
...is a condition where part of the upper stomach pushes up through the diaphragm. The barrier between the esophagus and stomach is weakened in the presence of a hiatus hernia, which can allow reflux to occur.

Increased abdominal pressure

...such as with obesity or in pregnancy, can reverse the flow gradient from stomach to esophagus.

Overstimulated gut-brain connection

The gut-brain axis is a communication network that connects your gut and brain through the nervous system. The gut-brain axis can be overstimulated during times of stress and anxiety, leading to increased focus and worry about esophageal health and symptoms.



Routine modifications to improve esophageal health if you have symptoms:

Stress reduction

Integrate methods to reduce stress in your life to disrupt the overstimulated gut-brain connection. These include mindfulness, meditation, and massage therapy.

Belly breathing

Belly breathing or diaphragmatic breathing can help strengthen the diaphragm and reduce esophageal disease and reflux. A video on diaphragmatic breathing can be found here:

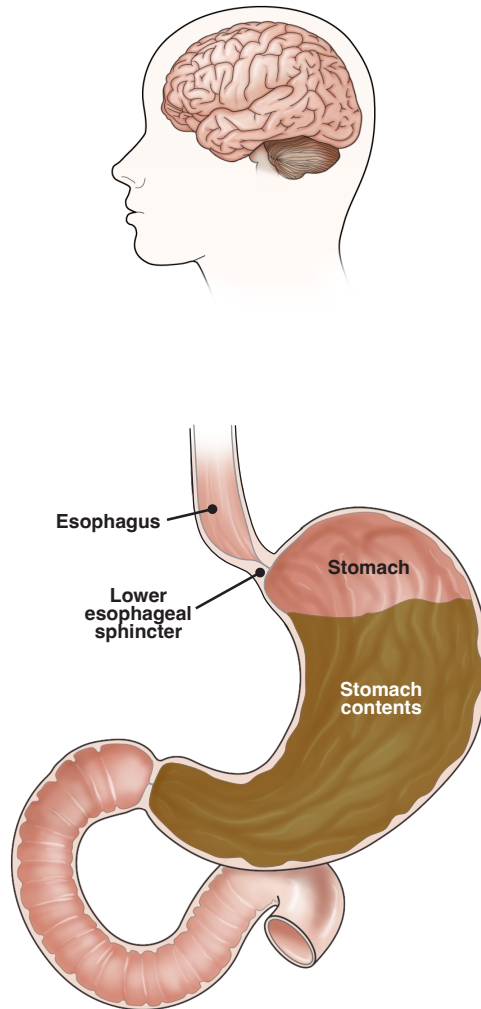
<https://www.youtube.com/watch?v=UB3tSaiEbNY>

Avoid late meals

Lying down with a full stomach may increase the risk of acid reflux. By avoiding eating within three hours before bedtime and avoiding late night snacks, nighttime reflux may be reduced.

If you have nighttime symptoms, raise the head of your bed

Raising the head of your bed by 6 to 8 inches raises the head and shoulders higher than the stomach, allowing gravity to prevent acid from refluxing. Raising the head of the bed can be done with blocks of wood/bricks under the legs of the bed or a foam wedge under the mattress. Several manufacturers have developed commercial products for this purpose. However, it is not helpful to use additional pillows; this can cause an unnatural bend in the body that increases pressure on the stomach, which can worsen acid reflux.



Avoid trigger foods

If you have noticed that certain food items trigger your symptoms, it will be useful to avoid these items, as some foods may relax the lower esophageal sphincter and promote acid reflux. However, not all patients have the same trigger foods.

Quit smoking

Saliva helps to neutralize refluxed acid, and smoking reduces the amount of saliva in the mouth and throat. Smoking also lowers the pressure in the lower esophageal sphincter and provokes coughing, causing frequent episodes of acid reflux in the esophagus. Quitting smoking can reduce or eliminate symptoms of mild reflux.

Chew gum or use oral lozenges

Chewing gum or using lozenges can increase saliva production, which may help to neutralize and clear stomach acid that has entered the esophagus.

Weight management

Losing weight, particularly weight around the abdomen, is a powerful tool to improve GERD symptoms for patients that are overweight. Maintaining a healthy weight is important to control GERD in patients with a normal weight.

Avoid tight fitting clothing

Tight-fitting clothing can increase discomfort, and may also increase pressure in the abdomen, forcing stomach contents into the esophagus.