

**Gastroesophageal reflux disease (GERD) occurs when stomach acid repeatedly flows back into the tube connecting your mouth and stomach (esophagus).** This backwash (acid reflux) can irritate the lining of your esophagus. A digestive disease in which stomach acid or bile irritates the food pipe lining.

This is a chronic disease that occurs when stomach acid or bile flows into the food pipe and irritates the lining. Acid reflux and heartburn more than twice a week may indicate GERD. Symptoms include burning pain in the chest that usually occurs after eating and worsens when lying down.

### **Symptoms of GERD (chronic acid reflux)**

- Heartburn.
- Regurgitation (food comes back into your mouth from the esophagus).
- The feeling of food caught in your throat.
- Coughing.
- Chest pain.
- Problem swallowing.
- Vomiting.
- Sore throat and hoarseness.
  - Regurgitation (food comes back into your mouth from the esophagus).
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  - Chest pain.
  - Problem swallowing.
  - Vomiting.
  - Sore throat and hoarseness.

Infants and children can experience similar symptoms of GERD, as well as:

- Frequent small vomiting episodes.
- Excessive crying, not wanting to eat (in babies and infants).
- Other respiratory (breathing) difficulties.
- Frequent sour taste of acid, especially when lying down.
- Hoarse throat.
- Feeling of choking that may wake the child up.
- Bad breath.
- Difficulty sleeping after eating, especially in infants.

- GERD (gastroesophageal reflux disease, or chronic acid reflux) is a condition in which acid-containing contents in your stomach persistently leak back up into your esophagus, the tube from your throat to your stomach.
- Acid reflux happens because a valve at the end of your esophagus, the lower esophageal sphincter, doesn't close properly when food arrives at your stomach. Acid backwash then flows back up through your esophagus into your throat and mouth, giving you a sour taste.

### **Diagnosis**

- **Upper gastrointestinal GI endoscopy and biopsy:** Your provider feeds an endoscope (a long tube with a light attached) through your mouth and throat to look at the lining of your upper GI tract (esophagus and stomach and duodenum). The provider also cuts out a small bit of tissue (biopsy) to examine for GERD or other problems.
- **Upper GI series:** X-rays of your upper GI tract show any problems related to GERD. You drink barium, a liquid that moves through your tract as the X-ray tech takes pictures.
- **Esophageal pH and impedance monitoring and Bravo wireless esophageal pH monitoring:** These tests both measure the pH levels in your esophagus. Your provider inserts a thin tube through your nose or mouth into your stomach. Then you are sent home with a monitor that measures and records your pH as you go about your normal eating and sleeping. You'll wear the esophageal pH and impedance monitor for 24 hours while the Bravo system is worn for 48 hours.
- **Esophageal manometry:** A manometry tests the functionality of lower esophageal sphincter and esophageal muscles to move food normally from the esophagus to the stomach. Your provider inserts a small flexible tube with sensors into your nose. These sensors measure the strength of your sphincter, muscles and spasms swallow.

### **Non-Pharmacological management**

- Achieve and maintain a healthy weight.
- Eat small, frequent meals rather than huge amounts a few times a day.
- Reduce fat by decreasing the amount of butter, oils, salad dressings, gravy, fatty meats and full-fat dairy products such as sour cream, cheese and whole milk.
- Sit upright while eating and stay upright (sitting or standing) for 45 to 60 minutes afterward.
- Avoid eating before bedtime. Wait at least three hours after eating to go to bed.
- Try not to wear clothes that are tight in the belly area. They can squeeze your stomach and push acid up into the esophagus.
- When sleeping, raise the head of the bed 6 to 8 inches, using wooden blocks under the bedposts. Extra pillows don't work.
- Stop smoking.

- Your healthcare provider may prescribe acid-reducing medications. Be sure to take them as directed.
- Cut out possible trigger foods.
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### **Pharmacological Management**

- **Antacids** (provide quick relief by neutralizing stomach acids) include Tums®, Roloids®, Mylanta®, Riopan® and Maalox®.
- **H-2 receptor blockers** (which decrease acid production) include Tagamet®, Pepcid AC®, Axid AR® and Zantac®.
- **Proton pump inhibitors** (stronger acid blockers that also help heal damaged esophagus tissue) include Prevacid®, Prilosec®, Zegerid®, Nexium®, Protonix®, AcipHex® and Dexilant®.
- **Baclofen** is a prescription drug used to reduce the relaxation of the lower esophageal sphincter which allows acid backwash.