

Heartburn—Overview

(Gastroesophageal Reflux Disease; Gastro-oesophageal Reflux Disease [GORD]; GERD; Reflux, Heartburn)

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[More In-Depth Information on This Condition](#)

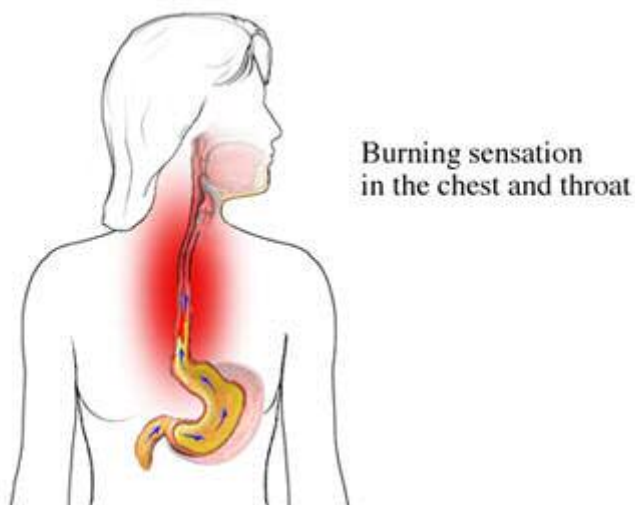
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- [Heartburn—Adolescent](#)
- [Heartburn—Child](#)
- [Heartburn—Infant](#)
- [Heartburn—Children With Disabilities](#)

Definition

Heartburn is a burning sensation in the lower chest. It is the main symptom of gastroesophageal reflux disease (GERD).

Heartburn



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Causes

When you eat, food travels down the esophagus to the stomach. The muscle between the esophagus and stomach lets food enter the stomach. When this muscle weakens, stomach acid flows into the esophagus. This causes a burning sensation, called heartburn.

Other causes of GERD include:

- Condition that:
 - Interferes with food passing through the esophagus

- Cause excess acid production
- Possible genetic factor

Risk Factors

These factors increase your chance of developing GERD. Tell your doctor if you have any of these risk factors:

- Being obese
- Being pregnant
- Having a hiatal hernia—a weakening in the diaphragm (large muscle separating the thorax and the abdomen) causing the stomach to partially slip into the chest cavity
- Exercising immediately after eating (especially jogging or running)
- Smoking
- Using alcohol
- Eating chocolate (can worsen symptoms)
- Drinking caffeinated beverages
- Eating a high-fat diet
- Taking certain medications, including:
 - Anticholinergics
 - Calcium channel blocking agents
 - Theophylline
 - Nonsteroidal anti-inflammatory drugs (NSAIDs)
 - Quinidine
 - Tetracycline
 - Potassium and iron supplements
 - Anti-osteoporosis agent alendronate
 - Hormone replacement therapy *1
- Having prior surgery for heartburn, including gastric reflux surgery and vagotomy
- Having asthma and using asthma medications
- Having and treating a peptic ulcer
- Having certain diseases, including diabetes, cancer, scoliosis, cystic fibrosis, and nervous system diseases
- Having defects in the respiratory system or gastrointestinal system
- Having food allergies

Symptoms

Heartburn symptoms usually occur after overeating or lying down after a big meal. The symptoms may last for a few minutes or a few hours.

The severity of symptoms depends on the:

- Reason the muscle is weakened
- Amount of acid entering the esophagus
- Amount of saliva to neutralize the acid

Symptoms include:

- Burning feeling that starts in the lower chest and moves up the throat
- Feeling that food is coming backup
- Sour or bitter taste in the throat
- Pain that increases when bending over, lying down, exercising, or lifting heavy objects

Other symptoms and complications of reflux include:

- Sorethroat
- Hoarseness
- Chroniccough
- Feelingofalumpinthethroat
- Asthma
- Hoarsevoice(laryngitis)
- Wakingupwithasensationofchoking

Ifrefluxpersists,theacidcandamagetheesophagus.Symptomsofesophagealdamageinclude:

- Bleedingandulcersintheesophagus
- Difficultyswallowing
- Vomitingblood
- Blackortarrystools
- Inflammationandscarringoftheesophagus
- Barrett'sesophagus—Thisisaprecancerousconditionoftheesophagusathasno uniquesymptoms,but canbediagnosedbyendoscopicexams.
- Dentalproblems(duetotheeffectofthestomachacidonthetooth'senamel)

Diagnosis

Heartburncanfeellike heartattack pain.Ifyoufeelthispain,call911rightaway.

Thedoctorwillaskaboutyoursymptomsandmedicalhistory,andperformaphysicalexam.Testsmayinclude:

- UpperGIseries —aseriesofx-raysoftheupperdigestivesystemtakenafterdrinkingabariumsolution
- 24-hourpHmonitoring—aprobeplacedintheesophagustracksforthellevelofacidityinthelower esophagus
- Manometry—a testthatmeasuresmusclepressureintheloweresophagus
- Endoscopy—athin,lightedtubeispasseddownthethroatto lookattheesophagusandstomach,atissue samplemaybetaken
- Biopsy—asmallsampleofesophagealtissueisremovedtomeasuretheamountofacidorpressureinthe esophagus

Treatment

Treatmentaimstodecreasethenumberofepisodesofheartburnanditscomplications.Thisfocuseson:

- Stoppingtheflowofacidbackintotheesophagus
- Decreasingproductionofstomachacid

Treatmentmayinclude:

LifestyleChanges

Lifestylechangesmayinclude:

- Keepafooddiaryofwhatyoueatandwhatthereactionis.Makegradualchangestoyourdietandrecordthe results.
- Avoidfoodsthatmaycausesymptoms,suchas:
 - High-fatfoods

- Friedfoods
- Spicyfoods
- Onionsandgarlic
- Chocolate
- Peppermint
- Citrusfruits
- Tomatoes
- Peppers
- Alcohol
- Coffee
- Carbonateddrinks
- Eat smaller portions.
- Allow at least 2-3 hours between meals and lying down.
- Loose weight.
- If you smoke, quit.
- Avoid belts and clothing that are too tight. This may increase pressure on the abdomen.
- Elevate head of bed 6-8 inches.

Medication

Medications may include:

- Over-the-counter antacids—to neutralize stomach acid; works quickly, but can cause problems with long-term use (eg, Maalox, Tums, Rolaids, Mylanta)
- Over-the-counter H₂-blocker drugs—to stop the stomach from producing as much acid (eg, Tagamet, Pepcid, Zantac)
- Proton-pump inhibitors—to suppress acid production or reduce the chance of acid entering the esophagus (eg, omeprazole, lansoprazole)
- Medications that coat and protect the lining of the stomach (eg, sucralfate)
- Medications that improve muscle tone in the lower esophageal sphincter (eg, metoclopramide)

Procedures

If symptoms are severe and you can't tolerate the medications, surgery may be an option.

The most common surgery for heartburn is fundoplication. The doctor wraps the stomach around the esophagus. This creates pressure on the muscle at the opening to the stomach. If you have a hiatal hernia, it can also be repaired at this time.

In some cases, the surgery can be done with smaller incisions, called laparoscopy.

Endoscopic Antireflux Procedures

An advantage of endoscopic techniques is that they do not involve incisions in the skin. Instead, the doctor inserts a lighted device called an endoscope through the mouth and down the esophagus to reach the first part of the stomach. Through the endoscope, the doctor can perform one of a variety of procedures that decrease the backward flow of stomach acid into the esophagus, including transoral incisionless fundoplication.

If surgery or endoscopy is successful, you may not need to take heartburn medications anymore. Talk to your doctor about the best treatment for you.

Prevention

Lifestyle changes can help prevent heartburn, including:

- Avoidovereating.
- Situpfor2-3hoursaftereating.
- Avoidwearingtightclothing.
- Elevatetheheadofthebed.
- Donotsmoke.
- Avoiddrinkingbeveragesthatcontainalcoholorcafeine.
- Changeyourdiettoavoidcertainfoods.
- Chewsugarlessgumforabout30minutesafterameal.Thiswillincreasesalivaflow,whichcannutralize stomachacidsintheesophagus.
- Maintainahhealthyweight.
- Managestress .

RESOURCES:

AmericanCollegeofGastroenterology
<http://www.acg.gi.org/>

AmericanGastroenterologicalAssociation
<http://www.gastro.org/>

NationalInstituteofDiabetesandDigestiveandKidneyDiseases
<http://www.niddk.nih.gov/>

CANADIANRESOURCES:

CanadianInstituteforHealthInformation
<http://www.cihi.ca/>

HealthCanada
<http://www.hc-sc.gc.ca/>

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