

Gastroesophageal Reflux Disease

What is gastroesophageal reflux disease?

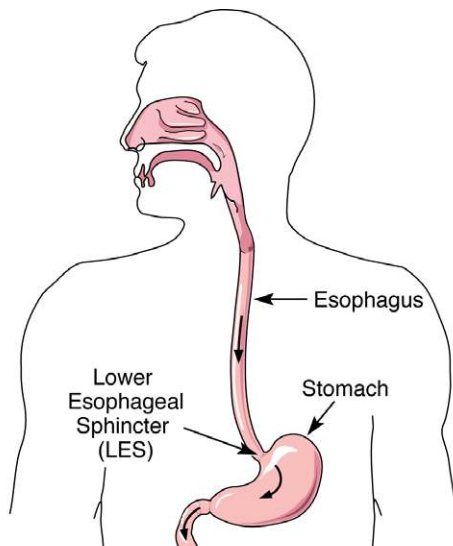
Gastroesophageal Reflux Disease (GERD) is a condition that causes frequent heartburn or damage to the lining of the esophagus (the tube that carries food between the throat and stomach). It occurs when stomach contents, including acid, which normally move forward through the body, flow back into the esophagus.

How do I know if I might have GERD?

Frequent or continuous heartburn is the major symptom of GERD. A person with GERD often feels a burning discomfort behind the breastbone.

How does a doctor diagnose GERD?

A physician usually diagnoses GERD based on the symptoms a patient reports.



What causes GERD?

The place where the esophagus joins the stomach is called the lower esophageal sphincter (LES). The LES acts like a gate between the esophagus and the stomach. It blocks stomach contents from flowing back into the esophagus. The most common cause of GERD is due to changes to the LES “gate.” The “gate” may become “loose” or relax at the wrong time.

How is GERD usually treated?

Antacid medicines, including over-the-counter antacids and prescription medicines known as H₂ receptor blockers and proton pump inhibitors, are commonly used to treat GERD. Antacids try to “wipe-out” the acid in the stomach, so that stomach contents flowing back into the esophagus no longer cause irritation or discomfort. However, this does not “fix” the problem with the LES “broken gate” and can cause other concerns if these medicines are used for a long time. For example, long-term use of medication to “wipe-out” stomach acids has been shown to interfere with digestion, increase the risk of infections, and possibly increase the risk of stomach cancer.

What approaches other than antacids can be used to help treat GERD?

There are three general approaches that can help: 1) increasing the forward movement of stomach contents, 2) reducing the amount of acid secreted by the stomach and 3) supporting the LES “gate.” These approaches are appropriate for patients who have been taking medications for a while as well as for those who are newly diagnosed with GERD.



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What approaches can increase the forward movement of stomach contents?

Three approaches--exercise, ginger and acupuncture--can help increase this forward movement.

Exercise – Regular physical activity may increase stomach emptying both during the physical activity and throughout the day. Aerobic exercise (exercise that increases the heart rate for a period of time, thereby increasing the amount of oxygen-rich blood to the muscles) is best, but even moderate exercise can help. Find an exercise that you enjoy and that you will keep doing over time. It may help to try different types of exercise (walking, water aerobics, biking, swimming, dancing, tennis, etc.) Also pick some exercises that you can do indoors when the weather doesn't allow you to get outside. Use a number system to gauge how hard to exercise. Think of the numbers 1-20. The number "1" means you are doing no exercise, and "20" means you are exercising to the point of exhaustion. Shoot for a level of 14 when you exercise. At this stage, you should be able to talk but not sing. Exercise for 25 minutes 3-4 times a week and work up to a "14" each time.

Ginger – Ginger has commonly been used as a food additive, spice, and medicine since ancient times. Ginger has a pro-kinetic action, which means it helps the stomach to move its contents forward and prevents it from flowing back. The recommended dosage of a ginger supplement is 250 mg up to 4 times per day. You can buy ginger supplements over the counter at a pharmacy or health food store.

Acupuncture – Acupuncture has been used for stomach disorders like GERD for a long time. Acupuncture seems to make the contractions of the stomach stronger and more regular. This helps move stomach contents forward. To find a local

Acupuncture practitioner, ask your health care provider or check out the National Certification

Commission for Acupuncture and Oriental Medicine at www.nccaom.org on the internet.

What approaches can reduce the amount of acid secreted by the stomach?

- A number of approaches can help reduce the amount of acid the stomach secretes. These include eating the right foods, taking an herbal remedy, reducing stress, and reducing the amount of Helicobacter Pylori (H. pylori) bacteria in the stomach.
- **Nutrition**
Fruits and vegetables are rich in compounds known as flavonoids. Flavonoids can help protect the cells of the body against disease and can curb the amount of acid made in the stomach. You should eat healthy amounts of fruits and vegetables each day. The amount you need depends on your calorie needs. Your calorie needs are determined by your age, sex, and physical activity level. Ask your doctor or a dietitian what is right for you.
Capsicum fruit, also known as chili, reduces stomach acid. Eat a diet rich in capsicum fruit in the form of chili powder, chili sauce, curry powder, and other chili-containing foods.
- **Herbal remedies**
Deglycyrrhizinated licorice, also known as "DGL" is prepared from licorice. DGL has been shown to be an effective treatment for stomach and duodenal ulcers and in a comparison trial, DGL proved to be as effective as cimetidine (Tagamet®), a common drug used to treat GERD. For best results take one to two 380 mg tablets up to three times per day before meals. You can buy DGL over the counter at a pharmacy or health food store.
- **Stress reduction**
Stress has been shown to both increase symptoms in people with GERD and increase acid production in the stomach, and the use of relaxation has been shown to



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decrease GERD symptoms. Any method of relaxation can help. You may want to visit a health psychologist to learn some specific ways to relax such as relaxation breathing, autogenic relaxation, progressive muscle relaxation, and biofeedback training. Other holistic health professionals can help you relax through the use of massage therapy/bodywork, acupuncture, and Healing Touch. Ask your health care professional to recommend a specialist.

- **Helicobacter Pylori (H. pylori)**

H. pylori is a bacteria that is in the stomachs of many people in the United States. H. pylori may be harmless to many who have it. But it has been shown that people with H. pylori in their stomachs make more acid than people without H. pylori. Thus, interventions that curb or get rid of H. pylori in persons with known infection are likely to be helpful for people with GERD.

–**Flavonoids found in fruits and vegetables** have been shown to curb H. pylori growth. Try to eat the amount of fruits and vegetables each day that is right for you.

–**Probiotics (Lactobacillus)** are the “good” bacteria that live in our colons (large intestine). They produce lactic acid and hydrogen peroxide that keep the growth of “bad” bacteria in check. Probiotics control the growth of H. pylori. The recommended dose is Lactobacillus (acidophilus or GG) capsule containing at least 1 billion (1×10^9) to 10 billion (1×10^{10}) organisms taken daily or twice daily for 4 to 8 weeks. You can find probiotics over the counter at a pharmacy or health food store.

–**Mastic gum** comes from the stem and leaves of the mastic tree (*pistacia lentiscus*) native to Mediterranean countries. It is used as a food ingredient in the Mediterranean region and also to make chewing gum. It has been shown to destroy H. Pylori. The recommended use is 500 mg three times a day or 1000 mg twice a day to be taken for

2-4 weeks. You can buy mastic gum over the counter at a pharmacy or health food store.

–**Sulforaphane** works well against H. pylori. Broccoli and broccoli sprouts contain a lot of Sulforaphane. So eating broccoli regularly is likely to help reduce H. pylori. A study also found that H. pylori could be greatly reduced by eating 7 to 28 grams of broccoli sprouts twice a day for one week.

–**Vitamin C**, low vitamin C levels have been found to increase the risk of H. pylori infection. On the other hand, high doses of Vitamin C can get rid of H. pylori. To prevent H. pylori infection, you should eat more foods rich in Vitamin C each day. To reduce H. pylori, you can take up to 500 mg of Vitamin C as many as five times a day for 2 to 4 weeks. Note that if you take more than 500 mg of Vitamin C at a time, your body won't absorb as much. You can get Vitamin C over the counter at a pharmacy or health food store.

–**Polyunsaturated Fatty Acids (Fish Oil & Black Currant Seed Oil)** have been shown to help rid the stomach of H. pylori. Recommendations come from a study in which people took one gram of fish oil per day plus one gram of black currant oil per day for eight weeks. You can buy these over the counter at a pharmacy or health food store.

What can be done to help support the LES and can help keep the “gate” closed so stomach contents won't flow back into the esophagus?

There are a number of things that you can do to help this LES “gate” work the right way. You can avoid certain lifestyle habits, change other habits, and pay close attention to the types of food you eat.

- **Avoid the following lifestyle habits:**
 - Avoid eating for 2 hours before bedtime.
 - Avoid lying on your back after meals.
 - Avoid tight fitting garments.
 - Avoid tobacco.



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- **Consider the following lifestyle changes:**
 - Eat smaller meals more often, which will result in less food in the stomach at any one time.
 - Raise the head of bed at least 6 to 8 inches.
 - Increase saliva by chewing gum or sucking on lozenges especially after meals to help clear acid from the esophagus.
 - Lose weight if over-weight.
- **Nutrition (foods to avoid):**

Fatty foods, chocolate, coffee & caffeine, peppermint, alcohol, beverages containing acid (e.g., colas, red wine, orange juice), citrus fruits, and tomato- based foods.

Is there another cause of GERD that would involve a different type of treatment?

Another cause of GERD symptoms is not enough stomach acid, a condition called hypochlorhydria. The LES and the valve that empties the stomach into the intestines are affected by how much acid is in the stomach. If there is not enough acid in the stomach, these valves do not work correctly. Then the stomach contents are churned up into the esophagus. However, there is still enough acidity to cause irritation to the esophagus. A physician may have looked at your esophagus and stomach through endoscopy, a procedure that uses a

thin, tube-like instrument with a light to look inside the body. If this has been done and if you have normal tissue without irritation or raw areas, then you may want to consider treating GERD by adding more acid at mealtime. You should do this with the guidance of a professional who is familiar with acid supplementation for GERD. Ask your health care provider or contact a Naturopathic physician to help you. To find a local Naturopathic practitioner you can check the American Association of Naturopathic Physicians website at www.naturopathic.org.

The information in this handout is for general education. It is not meant to be used by a patient alone. Please work with your health care practitioner to use the information in the best way possible to promote your health.

This handout was created by Rian Podein, MD, Integrative Medicine Fellow, Dept. of Family Medicine, University of Wisconsin-Madison.

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