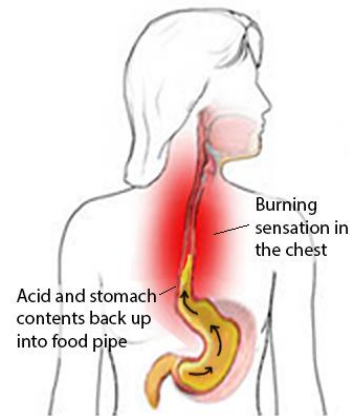


Patient Handout: Acid Reflux (GERD)

WHAT IS ACID REFLUX?

Acid reflux, or gastroesophageal reflux disease (GERD) is a chronic digestive problem where stomach acid and contents flows back into the food pipe (esophagus).

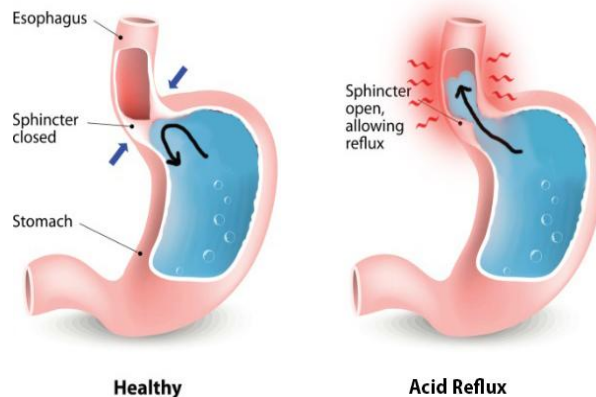
The backwash (reflux) irritates the lining of the food pipe, causing heartburn and chest discomfort. If it refluxes up to the throat, it can cause sore throat, cough, and an acid taste in the mouth. Some people may also experience stomach pain, burping and belching.



WHAT CAUSES ACID REFLUX?

At the point where the foodpipe (esophagus) opens into the stomach, there is a ring of muscle around the esophagus called the **lower esophageal sphincter**.

This ring of muscle acts like a valve, allowing food to go forward and preventing it from going backward. When we swallow, this valve relaxes momentarily to allow food and liquids to pass through into the stomach. It then closes up again, to prevent stomach contents from backing up into the food pipe.



However, if this valve relaxes abnormally or weakens, stomach acid can flow back up into your food pipe, causing acid reflux symptoms.

HOW IS ACID REFLUX DIAGNOSED?

Acid reflux is usually diagnosed based on symptoms and response to treatment. In people who have symptoms of acid reflux but no evidence of complications, a trial of treatment with lifestyle changes and in some cases, a medication, are often recommended, without testing.

Specific testing is required when the diagnosis is unclear or if there are more serious signs or symptoms (see next page).

HOW CAN I IMPROVE MY REFLUX SYMPTOMS?

1. AVOIDING FOOD AND DRINK THAT TRIGGER REFLUX:

High fat foods and **acidic foods** (citrus fruits, tomatoes or tomato-based sauces) are common culprits. So are caffeine, chocolate, onions, peppermint, fizzy drinks, and **alcohol**.

Use the table below as a guide for which foods can improve reflux or make it worse:

Group	Recommend	Avoid
Milk / milk products	Skim, 1% or 2% low-fat milk; low-fat or fat-free yogurt	Whole milk (4%), chocolate milk
Vegetables	All other vegetables	Fried or creamy style vegetables*, tomatoes
Fruits	Apples, berries, melons, bananas, peaches, pears	Citrus*: such as oranges, grapefruit, pineapple
Breads & grains	All those made with low-fat content	Any prepared with whole milk or high-fat items
Meat, meat substitutes	Low-fat meat, chicken, fish, turkey	Cold cuts, sausage, bacon, fatty meat, chicken fat/skin
Fat, oils	None or small amounts	All animal or vegetable oils
Sweets & desserts	All items made with no or low fat (<3 g fat/serving)	Chocolate, desserts made with oils and/or fats
Beverages	Decaffeinated, non-mint herbal tea; juices (except citrus); water	Alcohol, coffee (regular or decaf), carbonated beverages, tea, mint tea
Soups	Fat-free or low-fat based	Chicken, beef, milk, or cream-based soups

*Individual-based

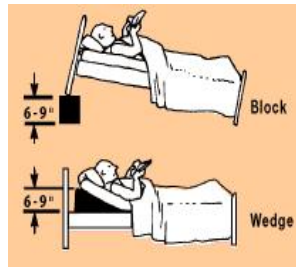
Source: Frank W. Jackson, M.D. (gicare.com/diets/gerd)

Continued on **the next page**

2. LIFESTYLE CHANGES:

Source: Mayo Clinic

- **Eat smaller meals.** Avoid overeating by eating smaller meals.
- **Don't lie down after a meal.** Wait at least three hours after eating before lying down or going to bed.
- **Don't smoke.** Nicotine relaxes the lower esophageal sphincter abnormally.
- **Avoid tight-fitting clothing.** Clothes that fit tightly around your waist put pressure on your abdomen and the lower esophageal sphincter.
- **Maintain a healthy weight.** Excess pounds put pressure on your stomach, causing acid to back up into your esophagus. If you are overweight, work to slowly lose weight — no more than 1 or 2 pounds (0.5 to 1 kilogram) a week.
- **Elevate the head of your bed.** If you regularly have heartburn while trying to sleep, raise the head of the bed 6-9 inches by placing wood or cement blocks under the feet of your bed, or by inserting a foam wedge (found at drugstores and medical supply stores) under your mattress. **Raising your head with more pillows is not effective.**



3. MEDICATIONS:

(A) Antacids that neutralise stomach acid:

Over-the-counter antacids like Tums®, Roloids®, and Maalox® provide quick relief within 5-15 min. But antacids alone won't heal an inflamed esophagus damaged by stomach acid. **See your doctor if you need to take antacids for longer than 2-3 wks or your symptoms are not relieved.**

! Things to note on antacids:

1. Research shows all antacids have the same effect and no antacid works better than another. Pick one you're comfortable with based on cost and dosage form.
2. Overuse of some antacids can cause side effects, such as diarrhea or constipation.

(B) H2-receptor blockers that reduce stomach acid production:

These can be bought over the counter or prescribed in stronger versions. Examples include ranitidine (Zantac), famotidine (Pepcid), nizatidine (Axid), or cimetidine (Tagamet). H2 receptor blockers don't act as quickly as antacids do, but they provide longer relief and may decrease acid production from the stomach for up to 12 hours.

Sources: Mayo clinic, Uptodate, gicare.com, Canada Drug Guide user survey

(C) Proton-pump inhibitors that block acid production and heal the esophagus:

If the above medications aren't enough to relieve symptoms, your doctor may prescribe proton pump inhibitors. These are stronger blockers of acid production than are H-2-receptor blockers, and allow time for damaged esophageal tissue to heal. Examples include pantoprazole (Tecta, Pantoloc), rabeprazole (Pariet), esomeprazole (Nexium), or lansoprazole (Prevacid).

These medications are generally well-tolerated, but should be used with caution in patients with kidney problems.

! Some medications may worsen acid reflux symptoms:

- Aspirin
- Medications used for pain such as **ibuprofen** (Advil®, Motrin®) and **naproxen**
- Iron supplements
- Antibiotics called tetracyclines
- Tricyclic antidepressants (amitriptyline, doxepin, others)
- Sedatives including benzodiazepines such as diazepam (Valium) and lorazepam
- Calcium channel blocking drugs used for heart disease and blood pressure control
- Anticholinergics, such as oxybutynin (Ditropan XL), prescribed for overactive bladder and irritable bowel syndrome

* Talk to your doctor about how to help your symptoms while taking these medications. Do not stop taking ANY medications without first talking with your doctor.

WHEN SHOULD I SEE MY DOCTOR?

See your doctor **right away** if you have any of the following symptoms as they may indicate a more serious problem:

- **Difficulty or pain with swallowing (feeling that food gets "stuck")**
- **Unexplained weight loss**
- **Chest pain**
- **Choking**
- **Vomiting blood, or vomit that looks like coffee grounds**
- **Black or tar-like stools**

For more information, visit:

1. Canadian Digestive Health Foundation cdhf.ca/en/disorders/gerd/section/overview
2. Uptodate: Acid Reflux in Adults www.uptodate.com/contents/acid-reflux-gastroesophageal-reflux-disease-in-adults-beyond-the-basics