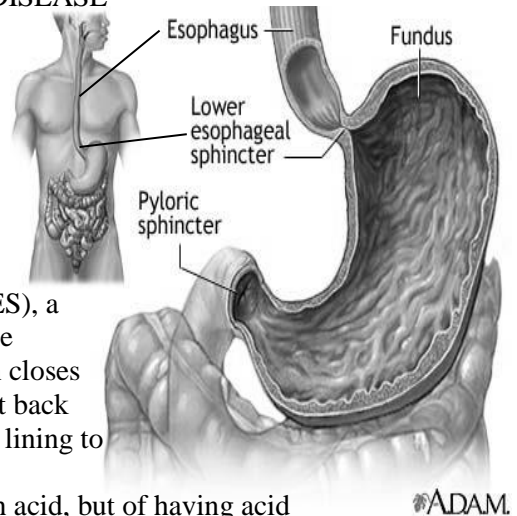


GASTROESOPHAGEAL REFLUX DISEASE (HEARTBURN)

Heartburn, or “acid indigestion,” is a heat or pain in the upper stomach or chest that commonly comes on after meals. It is caused by the stomach’s acid and digestive juices refluxing, or sloshing back up into the lowest part of the esophagus (the tube from the mouth to the stomach). Sometimes this can also cause coughing, sore throat, or hoarseness when the stomach juices spill over into the lungs.

Normally, this is prevented by the lower esophageal sphincter (LES), a small ring of muscle that acts like a valve to separate the stomach from the esophagus. This opens to let food to pass down into the stomach but then closes again to prevent it from backwashing. When this fails, stomach juices get back up and irritate the lining of the esophagus, which does not have the tough lining to handle acid like the stomach does.

Keep in mind, for most people reflux is not a problem of having too much acid, but of having acid in the wrong place. The cause is too full a stomach and problems with the muscle action in the esophagus.



If you have problems with heartburn, there are many options for treatment.

A. Medication: People often choose strong acid-blocking medications, like the “purple pill” – omeprazole, aciphex, nexium, and others. This is a quick fix for symptoms, but unfortunately these medicines have many risks. We need stomach acid to digest protein, absorb minerals like iron and calcium, and kill germs in what we eat. Scientific studies show that taking strong acid blockers increases the risk of:

Pneumonia

Osteoporosis

Vitamin B12 deficiency

Food allergies

Diarrhea, including the dangerous C. diff

Bacterial overgrowth in the small intestine - causes bloating, discomfort, and poor digestion of foods

See the other side of this page if you are on these medications and having trouble getting off them.

Since medications have so many risks, the preferred treatment for many people is lifestyle changes – i.e. get rid of the things that cause reflux. This often involves changing what people eat as well as the timing of meals, clothing, and other things.

B. Non-medication approaches:

First steps:

1. **Stop drugs** that make it worse.
 - Stop smoking or using tobacco in other forms.
 - Talk to your provider about any other drugs that might be contributing, such as antidepressants, calcium channel blockers, or antihistamines.
2. **Limit pressure** in the belly pushing stomach contents back up.
 - Eat small meals. Stop eating before you are full and be careful not to overeat.
 - Limit liquids with meals.
 - Avoid tight waistbands.
 - Lose weight if you are overweight; losing just 10 or 15 pounds can relieve symptoms
 - Avoid eating for 2-3 hours before lying down. Sleep on your left side, and elevate the head of your bed.
3. **Improve motility** in the esophagus:
 - Relax while eating – make meal times a quiet time to focus on eating, and chew well.
 - Learn techniques for managing stress if symptoms occur when you worry.
 - *Use a **chewable or liquid calcium supplement** before meals (calcium citrate is best, calcium carbonate or TUMS usually work) – this actually stimulates the muscle of the esophagus and LES as it goes down.

Next steps:

1. *Try taking **digestive enzyme supplements** with meals.
2. Talk to your provider about supplementing acid with betaine HCl, or even with apple cider vinegar or lemon juice.
3. Try a **fiber supplement** with meals. Pectin is the one that was studied.
4. If symptoms still occur after the above changes, you may need to **cut out specific foods**. The foods most likely to cause reflux are:
 - Coffee
 - Alcohol
 - Chocolate
 - Mint
 - Fried, greasy foods
 - Foods with hot sauce or chili peppers
4. If you have been on acid-lowering foods for a long time, you may have an overgrowth of bacteria or yeast in your stomach or small intestines; if that is the case, decreasing **sugar and starch** intake may relieve symptoms. If this makes a difference for you, talk to your provider about SIBO (small intestinal bacterial overgrowth.)
5. For some people, there may even be a **food allergy** causing reflux – in children, it is most often related to a cow milk allergy. Reflux can also be a sign of celiac disease. If avoiding the foods above does not resolve your symptoms, ask your provider about an elimination diet to figure out what other food might be causing you problems.

And some other alternatives:

Melatonin- A supplement containing Melatonin (6 mg), tryptophan (200 mg), vitamin B12 (50 µg), methionine (100 mg), vitamin B6 (25 mg), betaine (100 mg) & folic acid (10 mg) worked better than omeprazole in one study

There are a number of **herbal remedies** that have been studied and can be helpful:

DGL – deglycyrrhized licorice

Iberogast

Rikkunshito (TJ-43)

Pinellia decoction for draining the heart

Atractylodes & immature bitter orange – Zhi Zhu



Acupuncture has been proven to be effective – there is a spot on the hand in the webspace of the thumb as well as one on the wrist where acupressure may also help. See the points above.

Surgery may also be appropriate for some people with heartburn. It can often be done laparoscopically (with smaller incisions and faster recovery than traditional surgery).

Getting off the meds:

If you are already on a PPI (“proton pump inhibitor”) medicine for reflux like aciphex, protonix, nexium, or prevacid, you may find that your symptoms flare when you try to stop it. These medicines are actually habit-forming because they cause “rebound acid hypersecretion.” When you block stomach acid production, the body notices what is missing and ramps up its systems for making stomach acid, like stepping on the gas when the car is in neutral. When you take your foot off the brakes, yikes!

To stop one of these medicines:

1. Follow steps above to control your reflux naturally.
2. Switch first to omeprazole for a couple weeks.
3. Then decrease to a weaker medicine, like pepcid or zantac for a few weeks. (You may need to use omeprazole every other day at first.)
4. Then stop, and take back your digestion!