

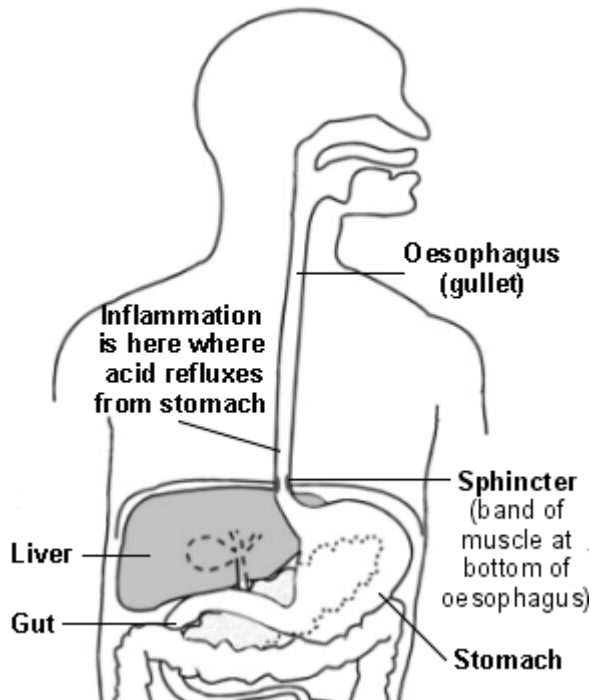
Acid Reflux and Esophagitis

When acid from the stomach leaks up into the gullet (esophagus), the condition is known as acid reflux. This may cause heartburn and other symptoms. A medicine which reduces the amount of acid made in your stomach is a common treatment and usually works well. Some people take short courses of medication when symptoms flare up. Some people need long-term daily medication to keep symptoms away.

Understanding the esophagus and stomach

When we eat, food passes down the esophagus into the stomach. Cells in the lining of the stomach make acid and other chemicals which help to digest food. Stomach cells also make mucus which protects them from damage from the acid. The cells lining the esophagus are different and have little protection from acid.

There is a circular band of muscle (a sphincter) at the junction between the esophagus and stomach. This relaxes to allow food down, but then normally tightens up and stops food and acid leaking up (refluxing) into the esophagus. In effect, the sphincter acts like a valve.



What are reflux and esophagitis?

- **Acid reflux** means that some acid leaks up (refluxes) into the esophagus.
- **Esophagitis** means inflammation of the lining of the esophagus. Most cases of esophagitis are due to reflux of stomach acid which irritates the inside lining of the esophagus.

The lining of the esophagus can cope with a certain amount of acid. However, it is more sensitive to acid in some people. Therefore, some people develop symptoms with only a small amount of reflux. However, some people have a lot of reflux without developing esophagitis or symptoms.



Gastro-esophageal reflux disease (GERD)

This is a general term which describes the range of situations - acid reflux, with or without esophagitis and symptoms.

What are the symptoms of acid reflux and esophagitis?

- **Heartburn:** this is the main symptom. This is a burning feeling which rises from the upper tummy (abdomen) or lower chest up towards the neck. (It is confusing as it has nothing to do with the heart!)
- **Other common symptoms:** these include pain in the upper abdomen and chest, feeling sick, an acid taste in the mouth, bloating, belching, **indigestion (dyspepsia)**, and a burning pain when you swallow hot drinks. Like heartburn, these symptoms tend to come and go, and tend to be worse after a meal.
- **Some uncommon symptoms:** these may occur and if they do, can make the diagnosis difficult, as these symptoms can mimic other conditions. For example:
 - A persistent cough, particularly at night sometimes occurs. This is due to the refluxed acid irritating the windpipe (trachea). Asthma symptoms of cough and wheeze can sometimes be due to acid leaking up (reflux).
 - Other mouth and throat symptoms sometimes occur such as gum problems, bad breath, sore throat, hoarseness, and a feeling of a lump in the throat.
 - Severe chest pain develops in some cases (and may be mistaken for a heart attack).

What causes acid reflux and whom does it affect?

The circular band of muscle (sphincter) at the bottom of the esophagus normally prevents acid leaking up (reflux). Problems occur if the sphincter does not work very well. This is common but in most cases it is not known why it does not work so well. In some cases the pressure in the stomach rises higher than the sphincter can withstand - for example, during pregnancy, after a large meal, or when bending forward. If you have a hiatus hernia (a condition where part of the stomach protrudes into the chest through the diaphragm), you have an increased chance of developing reflux. (See separate leaflet called **Hiatus Hernia**.)

Most people have heartburn at some time, perhaps after a large meal. However, about 1 adult in 3 has some heartburn every few days, and nearly 1 adult in 10 has heartburn at least once a day. In many cases it is mild and soon passes. However, it is quite common for symptoms to be frequent or severe enough to affect quality of life. Regular heartburn is more common in smokers, pregnant women, heavy drinkers, those who are overweight, and those aged between 35 and 64 years.

What tests might be done?

Tests are not usually necessary if you have typical symptoms. Many people experiencing acid leaking up (refluxing) into the esophagus are diagnosed with 'presumed acid reflux'. In this situation they have typical symptoms and the symptoms are eased by treatment. Tests may be advised if symptoms are severe, or do not improve with treatment, or are not typical of GORD.

- **Gastroscopy (endoscopy)** is the common test. A thin, flexible telescope is passed down the esophagus into the stomach. This allows a doctor or nurse to look inside. With inflammation of the lining of the esophagus (esophagitis), the lower part of the esophagus looks red and inflamed. However, if it looks normal it does not rule out acid reflux. Some people are very sensitive to small amounts of acid, and can have symptoms with little or no inflammation to see. Two terms that are often used after an endoscopy are:
 - Esophagitis. This term is used when the esophagus can be seen to be inflamed.
 - Endoscopy-negative reflux disease. This term is used when someone has typical symptoms of reflux but endoscopy is normal.
- A test to check the acidity inside the esophagus may be done if the diagnosis is not clear.
- Other tests such as heart tracings, chest X-ray, etc may be done to rule out other conditions if the symptoms are not typical.



What can I do to help with symptoms?

The following are commonly advised. However, there has been little research to prove how well these lifestyle changes help to ease reflux:

- **Smoking.** The chemicals from cigarettes relax the circular band of muscle (sphincter) at the bottom of the gullet esophagus and make acid leaking up (refluxing) more likely. Symptoms may ease if you are a smoker and **stop smoking**.
- **Some foods and drinks** may make reflux worse in some people. It is thought that some foods may relax the sphincter and allow more acid to reflux. It is difficult to be certain how much foods contribute. Let common sense be your guide. If it seems that a food is causing symptoms, then try avoiding it for a while to see if symptoms improve. Foods and drinks that have been suspected of making symptoms worse in some people include peppermint, tomatoes, chocolate, spicy foods, hot drinks, coffee, and alcoholic drinks. Also, avoiding large-volume meals may help.
- **Some medicines** may make symptoms worse. They may irritate the esophagus or relax the sphincter muscle and make acid reflux more likely. The most common culprits are anti-inflammatory painkillers (such as ibuprofen or aspirin). Others include diazepam, theophylline, nitrates, and calcium-channel blockers such as nifedipine. But this is not a complete (exhaustive) list. Tell a doctor if you suspect that a medicine is causing the symptoms, or making symptoms worse.
- **Weight.** If you are overweight it puts extra pressure on the stomach and encourages acid reflux. **Losing some weight** may ease the symptoms.
- **Posture.** Lying down or bending forward a lot during the day encourages reflux. Sitting hunched or wearing tight belts may put extra pressure on the stomach which may make any reflux worse.
- **Bedtime.** If symptoms recur most nights, the following may help:
 - Go to bed with an empty, dry stomach. To do this, don't eat in the last three hours before bedtime, and don't drink in the last two hours before bedtime.
 - If you are able, try raising the head of the bed by 10-20 cms (for example, with books or bricks under the bed's legs). This helps gravity to keep acid from refluxing into the esophagus. If you do this, do not use additional pillows, because this may increase tummy (abdominal) pressure.

What are the treatments for acid reflux and esophagitis?

Antacids

Antacids are alkaline liquids or tablets that reduce the amount of acid. A dose usually gives quick relief. There are many brands which you can buy. You can also get some on prescription. You can use antacids 'as required' for mild or infrequent bouts of heartburn.

Acid-suppressing medicines

If you get symptoms frequently then see a doctor. An acid-suppressing medicine will usually be advised. Two groups of acid-suppressing medicines are available - **proton pump inhibitors (PPIs)** and **histamine receptor blockers (H2 blockers)**. They work in different ways but both reduce (suppress) the amount of acid that the stomach makes. PPIs include **omeprazole, lansoprazole, pantoprazole, rabeprazole, and esomeprazole**. H2 blockers include **cimetidine, famotidine, nizatidine, and ranitidine**.

In general, a PPI is used first, as these medicines tend to work better than H2 blockers. A common initial plan is to take a full-dose course of a PPI for a month or so. This often settles symptoms down and allows any inflammation in the esophagus to clear. After this, all that you may need is to go back to antacids 'as required' or to take a short course of an acid-suppressing medicine 'as required'.

However, some people need long-term daily acid-suppressing treatment. Without medication, their symptoms return quickly. Long-term treatment with an acid-suppressing medicine is thought to be safe, and side-effects are uncommon. The aim is to take a full-dose course for a month or so to settle symptoms. After this, it is common to 'step down' the dose to the lowest dose that prevents symptoms. However, the maximum full dose taken each day is needed by some people.



Prokinetic medicines

These are medicines that speed up the passage of food through the stomach. They include **domperidone** and **metoclopramide**. They are not commonly used but help in some cases, particularly if you have marked bloating or belching symptoms.

Surgery

An operation can 'tighten' the lower esophagus to prevent acid leaking up from the stomach. It can be done by 'keyhole' surgery. In general, the success of surgery is no better than acid-suppressing medication. However, surgery may be an option for some people whose quality of life remains significantly affected by their condition and where treatment with medicines is not working well or not wanted long-term.

Are there any complications from oesophagitis?

- **Scarring and narrowing (stricture)**. If you have severe and long-standing inflammation it can cause a stricture of the lower esophagus. This is uncommon.
- **Barrett's esophagus**. In this condition the cells that line the lower esophagus become changed. The changed cells are more prone than usual to becoming cancerous. (About 1 or 2 people in 100 with Barrett's esophagus develop cancer of the esophagus).
- **Cancer**. Your risk of developing **cancer of the esophagus** is slightly increased compared to the normal risk if you have long-term acid reflux.

It has to be stressed that most people with reflux do not develop any of these complications. Tell your doctor if you have pain or difficulty (food 'sticking') when you swallow, which may be the first symptom of a complication