

Gastroesophageal Reflux Disease

Gastroesophageal Reflux Disease (GERD) is a term that refers to the problem which is often called “heartburn”. It occurs when acidic material (material with a low pH) in the stomach flows back, or “refluxes”, into the esophagus. The esophagus is the swallowing tube which runs from the throat through the chest and into the stomach. When reflux occurs, the lining of the esophagus may become irritated leading to chest pain. *It is very important to realize that not all chest pain is from heartburn and that it can be a sign of **heart attack**. Please consult your primary care physician for questions about the connection between chest pain and heart disease. If You get chest pain your first thought should be to go to an Emergency Room to make sure you are not having a heart attack.*

GERD does not always cause chest pain because the lining of the esophagus has some resistance to damage from reflux. There is evidence in medical literature showing that the lining of the esophagus is usually not damaged until the pH reaches 3.0. The lining of the throat (pharynx) and voice box (larynx), however, does not have much resistance to reflux and can be damaged by reflux with a pH of 5. For this reason, if the reflux passes all the way through the esophagus and enters the throat or larynx, then *you can get throat pain, hoarseness, or choking episodes **without having any heartburn**.*

When reflux reaches the throat and larynx, it is called **laryngopharyngeal reflux** or **LPR**.

There are several things you can do to try to decrease GERD or LPR, and they all have to do with decreasing the amount of acidic material from the stomach (gastric contents) that contacts the lining of the esophagus, pharynx or larynx. Certain medications can decrease the amount of stomach acid that is produced, so that there is less acid present to cause problems. There are also several habits that can be developed that can decrease the tendency of gastric contents to move from the stomach and into the esophagus. The body has a natural protection against GERD. It consists of a group of muscle fibers that surround the connection between the esophagus and the stomach. This group of muscles is called the gastroesophageal sphincter (GES). When the GES *contracts*, the connection between the esophagus and the stomach narrows. This helps to keep gastric contents from refluxing into the esophagus. If a large amount of food is eaten in a single meal, the GES may not be able to keep the food in the stomach, and reflux may occur. For this reason, it is better to eat six small meals each day rather than 3 larger meals.

There are some foods, however, that can make the muscle fibers in the GES **relax even when they are eaten in small amounts**. The relaxation of the GES makes reflux more likely to happen. Foods that promote reflux in this way include licorice, mint, alcohol, and foods high in fat or caffeine (**coffee**, some teas, **chocolate**, and many soft drinks). Tobacco has the same effect. In many cases, avoiding these foods and tobacco can dramatically decrease GERD and LPR.

You may notice that your reflux symptoms (whether you get chest pain or throat pain or experience coughing or choking episodes) are worse when you lie flat. When you are standing, your esophagus is above your stomach and gravity helps to hold the gastric contents in the stomach. When you lie down, the esophagus and the stomach are on the same level and the gastric contents don't have to travel “up hill” to enter the esophagus. Putting a two-by-four beam under the legs of the head of your bed elevates the head of the bed and lifts the esophagus so that it is slightly above the stomach. This brings gravity back into play, and may decrease reflux. Pillows will not help much because they only elevate the head and neck and don't help prevent gastric contents from entering the esophagus. Being overweight can promote GERD and LPR. If there is extra weight over the stomach, then there will be pressure on the stomach when lying down. This pressure can push gastric contents back into the esophagus. If an overweight person loses his or her extra weight, reflux may diminish. Tight pants can also exert pressure on the stomach, even when standing, and can promote reflux.

Finally, the timing of your eating and sleeping can effect GERD and LPR. If you eat right before bed, then your stomach will still be full of food when you lie down. This makes reflux more likely to occur because there are more gastric contents present to flow back into the esophagus. To avoid this, wait 2 hours before lying down after eating or drinking. This allows enough time for food to move past the stomach so that the volume of gastric contents, and the possibility of reflux occurring, is smaller.

Reflux Precautions

Things you can do that may reduce or eliminate reflux.

Foods and Beverages to Avoid

- ◆ Chocolate
- ◆ Caffeine containing foods
 - Coffee and some teas
 - Chocolate
 - Carbonated Beverages
- ◆ Licorice
- ◆ Mint
- ◆ Alcohol
- ◆ Foods high in fat

◆ Habits to Avoid

- ◆ Tobacco
- ◆ Eating large meals
- ◆ Wearing tight clothes

Habits that may diminish GERD and LPR

1. Place a two-by-four under the legs at the head of your bed.
2. After eating or drinking wait 2 hours before going to bed.
3. Eat multiple 6 small meals per day in stead of 3 larger meals.
3. Maintain your optimum wait with a healthy diet and regular exercise.

GASTROESOPHAGEAL REFLUX DISEASE

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