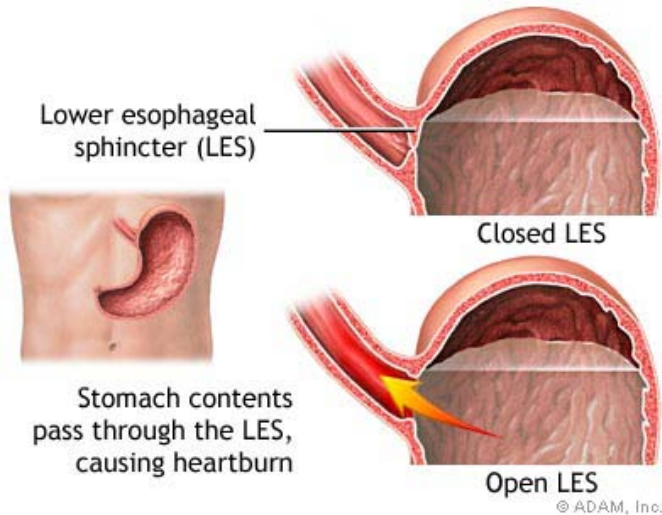


NISCHITA MERLA, M.D., M.P.H.
GASTROENTEROLOGY, HEPATOLOGY & THERAPEUTIC ENDOSCOPY

Office Phone: (909)833-7556

Office Hours: Mon - Thurs: 8:30am – 5:00pm
Friday: 8:30am - 12:00pm

GASTROESOPHAGEAL REFLUX (GERD)



The esophagus is the tube that carries food from the throat to the stomach. The lower end of the esophagus has a specialized muscle around it that usually stays tightly closed, opening only to allow food and liquid into the stomach. It acts to prevent the reflux of stomach acid into the esophagus.

Symptoms occur when this specialized muscle weakens and allows stomach acid to splash up into the esophagus. GERD is a chronic relapsing disease. It is usually symptomatic by day but greater damage is done by night. It usually manifests with the following symptoms:

- Heartburn
- Acid Regurgitation
- Chronic cough
- Asthma
- Difficulty or pain when swallowing
- Sudden excess of saliva
- Chronic sore throat or hoarseness of voice
- Inflammation of the gums and bad breath
- Cavities
- Chest pain mimicking a heart attack (seek immediate medical help)
- Frequent pneumonias

Treatment

Therapy for GERD is based on attempts to decrease the volume of acid that refluxes from the stomach into the esophagus, and/or to make the refluxed material less irritating to the esophageal lining. Patients with longstanding untreated or incompletely treated GERD can develop complications including peptic stricture or narrowing, pulmonary fibrosis, Barretts esophagus or esophageal cancer. Therapy for GERD falls broadly into three broad categories: lifestyle modifications, oral medications and surgery. In many patients long-term maintenance, possibly life-long therapy is the key. Maintenance therapy will vary in individuals ranging from mere lifestyle modifications to prescription medication as treatment.

The lower esophageal muscle can be weakened by many factors. The following recommendations may be helpful in reducing symptoms:

1. Stop using tobacco in all forms. Nicotine weakens the lower esophageal muscle.
2. Avoid alcohol
3. Avoid chewing gum, mint and hard candy. They increase the amount of swallowed air which, in turn, leads to belching and reflux.
4. Do not lie down immediately after eating. Wait at least 2-3 hours before.
5. Avoid tight clothing and bending over after eating.
6. Eat small, frequent portions of food and snack if needed. Avoid heavy evening meals.
7. Lose weight if overweight. Obesity leads to increased reflux. Regular exercise helps tremendously.
8. Elevate the head of the bed six to eight inches to prevent reflux when sleeping. Extra pillows, by themselves, are not very helpful.
9. The following foods aggravate acid reflux, and should be avoided:
 - fatty or fried foods; most fast foods
 - peppermint and spearmint
 - whole milk
 - oils
 - chocolate
 - creamed foods or soups

NISCHITA MERLA, M.D., M.P.H.
GASTROENTEROLOGY, HEPATOLOGY & THERAPEUTIC ENDOSCOPY

Office Phone: (909)833-7556

Office Hours: Mon - Thurs: 8:30am – 5:00pm
Friday: 8:30am - 12:00pm

10. The following foods irritate an inflamed lower esophagus and may need to be limited or avoided:

- citrus fruits and juices (grapefruit, orange, pineapple, tomato)
- coffee (regular and decaffeinated)
- caffeinated soft drinks and other caffeinated beverages
- tea
- Spicy or acidic foods may not be tolerated by some individuals.

11. Avoid heavy weight lifting activities

12. Do not lie down within two to three hours of eating

NUTRITIONAL CHANGES: A diet designed to prevent or reduce acid reflux is usually easy to follow. The basic food groups of cereals, vegetables, fruits, dairy products, and meats can be eaten with only a few limitations.

Group	Recommended	Avoid
Milk or 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 l
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

Group	Recommended	Avoid
Sweets & desserts	made with no or low fat (less than or equal to 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 decaffeinated), carbonated beverages, tea, mint tea
Soups	fat-free or low-fat based	chicken, beef, milk, or cream-based soups

***Individually determined**

- If the above are not effective, regular or as needed use of Proton **Pump Inhibitors (PPI)** can block acid production. Commonly used PPIs are Nexium, Protonix, Prevacid, Aciphex, Omeprazole, etc.
- In severe and medication intolerant cases, **surgery (fundoplication)** may be recommended where any herniation of the stomach is reduced into the abdomen and a wrap is created around the end of the esophagus. This is recommended in severe cases after a thorough workup including endoscopy, manometry and pH monitoring.