

with about four carbohydrates and proteins. Fats are necessary for your body to function properly. A healthy diet should limit fat to 30% of its total caloric intake.

During digestion, fats are broken down into smaller parts called fatty acids by “fat-splitting enzymes.” In certain diseases, these enzymes are missing and fat cannot be totally digested causing unpleasant side effects such as diarrhea, cramping and gas. Diseases of the liver, gallbladder and pancreas slow down fat digestion and absorption. Gastric acid input is also stimulated by fat intake. Therefore the amount of fat in the diet must be controlled to avoid stimulation of excess gastric acid. Dietary modification may be used in concert with pharmacologic regimen to give the best possible outcome.

### Guidelines for Fats

- Avoid saturated fats such as lard, bacon drippings, butter and fatback
- Avoid gravy and rich sauces unless made from a low-fat recipe
- Regardless of how “good” the oil is, it is important to reduce the total fat in your diet
- If you do eat fats, make the best choices possible; use nonstick spray instead of oil and vegetable oils instead of solid shortening
- Avoid palm oil, palm kernel oil and coconut oil
- Use margarine in small amounts and look for one that lists a liquid oil as the first ingredient

Portions of this patient information were reprinted with permission from  
*Silent Reflux: Laryngopharyngeal Reflux (LPR)* by J.A. Koufman, MD.

# GBMC

GBMC includes Greater Baltimore Medical Center,  
Gilchrist Hospice Care and GBMC Foundation.

## Directions to GBMC

1 Physicians Pavilion West  
D Daffodil Park  
R Rose Park  
2 Hospital Main Entrance  
3 GBMC Oncology Center Entrance  
4 Physicians Pavilion East  
I Iris Park

From I-695, take Exit 25 onto North Charles Street. Go approximately two miles and make a left into the main entrance of GBMC. Bear right after passing through the guard gate. Follow signs to Daffodil Park. Proceed to Physicians Pavilion West, Suite 401.

*Parking fees may vary.*

### The Milton J. Dance, Jr., Head & Neck Center

Greater Baltimore Medical Center  
6569 N. Charles Street  
Physicians Pavilion West, Suite 401  
Baltimore, MD 21204

**443-849-2087**

[www.gbmc.org/mjdanceheadandneck](http://www.gbmc.org/mjdanceheadandneck)  
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## The Milton J. Dance, Jr., Head & Neck Center

### LARYNGOPHARYNGEAL GASTROESOPHAGEAL REFLUX

# GBMC

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## **What is Gastroesophageal Reflux Disease (GERD)?**

The term *reflux* comes from a Greek word that means “backflow,” and it refers to “the backflow of stomach contents.” Normally, once food reaches the stomach, digestion begins without the contents of the stomach coming back up.

Understanding how acid reflux occurs is crucial in understanding how to avoid it. At the end of the esophagus is a tight muscle, known as the “lower esophageal sphincter,” or LES. This muscle should relax only as food passes from the esophagus into the stomach. Reflux can occur when the pressure or tightness of this muscle is decreased, allowing acid to flow back into the esophagus.

### **Symptoms of GERD**

- Heartburn
- Indigestion
- Chest pain
- Frequent belching
- Dysphagia (difficulty swallowing)

## **What is Laryngopharyngeal Reflux (LPR)?**

Laryngopharyngeal reflux refers to the backflow of food or stomach acid into the larynx (the voice box) or the pharynx (the throat). LPR can occur at any time during the day or night, even on an empty stomach.

### **Symptoms of LPR**

- Laryngitis
- Hoarseness
- Sensation of something in the throat
- Chronic throat clearing
- Excessive throat mucous/post-nasal drip
- Persistent sore throat
- Bad/metallic taste in mouth
- Annoying cough
- Breathing problems
- Heartburn\*

*\* Stomach acid in the esophagus may cause heartburn, but not all individuals will experience heartburn as the esophagus is capable of withstanding a certain amount*

*of acid exposure. The throat and voice box are not meant to withstand any exposure to acid. Even a small amount of acid reflux into the voicebox and throat can cause injury and irritation.*

## **What should I do if I think I have GERD or LPR?**

If you have any of the symptoms described, ask your doctor about the possibility of GERD or LPR.

If your doctor suspects that you may have LPR, he or she will likely refer you to an otolaryngologist (Ear, Nose and Throat doctor) for additional tests and appropriate treatment.

If your doctor suspects that you may have GERD, he or she will likely refer you to a gastroenterologist (physician who specializes in digestive diseases) for additional tests and appropriate treatment.

## **How are GERD and LPR treated?**

Your doctor will suggest the best treatment for you. Treatment strategies include one or more of the following:

### **Diet and Lifestyle Modifications**

- Do not eat or drink three hours prior to bedtime or lying down. If you must eat late, the lighter and lower in fat the food, the quicker the stomach will empty into the intestinal tract.
- Avoid overeating. Overfilling the stomach increases the likelihood of reflux. It is better to eat several small meals each day than to eat one or two big meals.
- Avoid tight-fitting clothing, bending over or straining after eating (especially working out and lifting weights).
- Reduce your intake of foods that increase stomach acid production. These include fatty, fried, spicy or acidic foods, meats, chocolate, caffeine, carbonated beverages, peppermint/spearmint and alcohol.
- Elevate the head of your bed. Place cinder blocks under the legs at the head of your bed. This will put the bed at an incline of at least five inches. Do not simply prop yourself up on multiple pillows. This can make reflux worse by putting pressure on gastric contents.

- Lose weight if you are overweight. Excess weight puts pressure on gastric contents.
- Stop the use of any tobacco products. Smoking worsens reflux.

### **Medication**

If your doctor has prescribed medication for your acid reflux, it is important to take these medicines as instructed. Generally, it has been shown that the medications most commonly prescribed for acid reflux, called proton pump inhibitors, are most effective if taken 30 - 60 minutes prior to your most substantial meal (usually dinner).

### **Surgery**

More than 44% of all adults in the United States (61 million people) experience acid reflux at one time or another. For individuals whose symptoms cannot be successfully controlled with diet and lifestyle changes and/or medication, surgery may be recommended. The most common surgical procedure is called *fundoplication*. Alternatively, your physician may recommend an endoscopic intervention to manage your acid reflux disease.

## **Will my LPR ever resolve?**

Most individuals with LPR require ongoing treatment. Treatment may include diet and lifestyle changes, medication and/or surgery. Some individuals may be asymptomatic for months or years but will always remain at risk for acid reflux and related complications.

## **What are the consequences of untreated LPR?**

LPR, left untreated, can lead to more serious medical conditions, such as:

- Choking episodes
- Breathing problems such as asthma or bronchitis
- Pneumonia
- In severe cases, cancer of the esophagus, lung, throat, or voice box.

## **Why limit fat?**

Fats are insoluble substances that circulate in your blood. They are a good source of energy, yielding approximately nine calories per gram as compared