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Laryngopharyngeal Reflux (LPR) and Vocal Difficulty

Your stomach produces acid to help break down food so it is easier to digest. It is prevented from backing up or refluxing into your esophagus (food pipe) and throat by a band of muscle at the top of the stomach known as the **lower esophageal sphincter**. If stomach acid comes up into the esophagus, it is termed **Gastro-Esophageal Reflux (GER)**. There is another valve at the top of the esophagus, the upper esophageal sphincter. If this band of muscle is not functioning well, you can have a backflow of acid up into the sensitive tissue at the back of the throat, larynx (voice box), and even the back of the nasal airway. This is called **laryngopharyngeal reflux (LPR)**. LPR is different than gastro-esophageal reflux (GER). Typically, individuals with GER suffer from heartburn. Although some persons with LPR do suffer from heartburn, most persons with LPR do not. LPR can also affect the lungs and may exacerbate asthma, emphysema, or bronchitis. Some vocal symptoms result from direct irritation from acidic stomach secretions, while other symptoms may result from tightening of the muscles in the larynx, and neck in response to the irritation.

The following are **symptoms** that may be consistent with acid reflux irritation:

- Frequent throat clearing
- Feeling like you are choking
- Chronic cough
- Cough that wakes you from your sleep
- Hoarseness
- Trouble swallowing
- Sensation of having “a lump in the throat”
- Thick or too much mucous
- Sour or acidic taste in mouth
- Recurrent sore throat

Treatment for LPR involves keeping stomach contents where they belong and neutralizing stomach acid. To help Manage reflux, the following diet and lifestyle changes are recommended.

- Obesity promotes reflux. **Lose weight**, if you need to.
- **Avoid tight** clothing around the midsection of the body and **avoid** bending after meals, both of which squeeze the abdomen and increases the chances of reflux.
- **Do not** exercise after meals or within two hours of bedtime.
- **Reduce stress**. Stress can create increased acid secretion.
- **Limit aspirin and ibuprofen**. They may increase stomach irritation.
- **Stop smoking** as nicotine increases reflux tendencies.
- **Elevate the head** of your bed on blocks, 4 to **6 inches**. Extra pillows are not as effective.
- **Watch when you eat:**
 - Eat dinner at least **2-3 hours before** you lie down.
 - **Do not snack** after the evening meal.
 - **Eating more frequent, smaller meals** may help reduce reflux tendencies.
- **Watch what you eat:**

- **Avoid fatty foods.** High fat foods can increase acid secretion, decrease lower esophageal Function, or slow down the emptying of the stomach.
- **Avoid** spicy foods. Some spices may irritate the esophageal lining.
- Eat **fewer** acidic foods. Some spices may irritate the esophageal lining.
- **Limit** chocolate, nuts, peppermint, alcohol, caffeine, and fizzy beverages. These affect the lower esophageal sphincter and increase the likelihood of reflux.

DIETARY PLAN

FOOD GROUPS

Group	Recommend	Avoid/Limit Consumption
Milk or milk products	Skim, 1% or 2% low-fat milk 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 fruits such as oranges, grapefruit, pineapple, kiwi
Breads & Grains	All those made with low-fat content	Any prepared with whole milk or high-fat
Meat & Meat substitutes	Low-fat meat, chicken, fish, turkey	Spicy cold cuts, sausage, bacon, fatty meat, chicken fat/skin
Fats & Oils	None or small amounts	Keep amount limited on a given day
Sweets & Desserts	All items made with no or low fat (less than or equal to 3 g fat/serving)	Chocolate, desserts made with high amounts of oils and/or fats
Beverages	Water, juices (except citrus)	Alcohol, coffee (regular or decaffeinated), carbonated beverages, tea
Spices	All other spices that do not appear to have a negative effect	Hot mustard, vinegar, hot peppers, curry

Medication for Acid Reflux

Along with diet and lifestyle changes, your doctor may prescribe medication to help treat your acid reflux. The choice of medication will be based on your symptoms and test results. As with any medication, if you experience side effects, call your doctor.

- **Reducing Stomach Acid:** Your doctor may suggest antacids that you can buy over the counter (i.e., Tums, Mylanta, Maalox), or you may be told to take a type of medication called H-2 blockers (i.e., Tagamet, Pepcid, Zantac). They block histamine 2, which signals the stomach to make acid.
- **Blocking Stomach Acid:** In more severe cases, your doctor may prescribe stronger medication (i.e., **Proton pump inhibitors (Protonix, Prevacid, Nexium)**). These inhibit acid secretion.

❖ **You hold the key to controlling reflux.** Work with your physician, take any medications as directed, and follow the diet and lifestyle changes detailed in this handout. In this way, you can help free yourself from the symptoms of laryngopharyngeal reflux (LPR).