

## Diet and lifestyle changes for reducing reflux and LPR

- **Cut out caffeine and alcohol**, especially in the late evening and before bedtime as these allow reflux to occur more easily.
- **Avoid carbonated drinks or acidic foods** like juice, especially before bedtime.
- **Eliminate fatty, fried, or spicy foods** especially at the last meal of the day.
- **Stop eating at least 3 hours before going to bed or laying down.**
- **Evaluate if you might have sleep apnea.** Symptoms include loud snoring, non-restful sleep, daytime fatigue.
- **Elevate the head of your bed by 4-6 inches.**
- **Lose weight** if you are overweight.
- **If you smoke tobacco, quit!** Smoking worsens reflux and makes your larynx more sensitive to damage.

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## LPRD

### Laryngopharyngeal Reflux Disease

Chronic cough

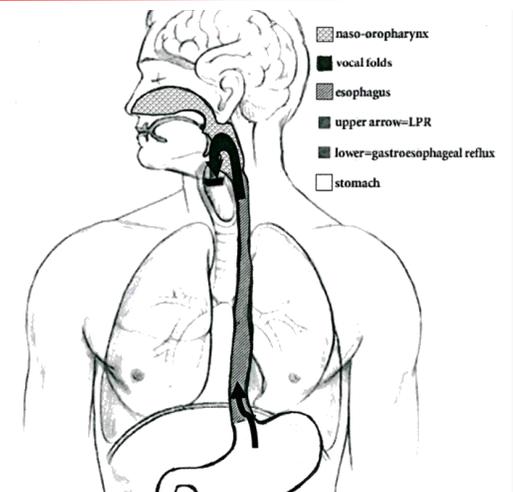
Frequent throat clearing

Excessive mucous in the throat

Intermittent hoarseness

Post nasal drip sensation

Sensation of lump in throat



## What is LPR?

Laryngopharyngeal reflux (LPR), also called laryngopharyngeal reflux disease (LPRD), extraesophageal reflux, reflux laryngitis, and posterior laryngitis, is a common diagnosis hypothesized to be caused by the backflow of stomach contents into the throat and back of your nose.

Adults with LPR may experience a sour taste in their throat, excess mucous, post nasal drip, intermittent hoarseness, a sore throat, or a feeling of something stuck in your throat.

### How does it differ from gastric reflux?

LPR and gastric reflux (GERD/heartburn) do not always occur together. While both GERD and LPR involve reflux from the stomach, it is thought that the throat is more sensitive to irritation or damage by acid. Less than 30% of people with LPR experience heartburn and similarly not all patients with heartburn will experience LPR symptoms. Furthermore, LPR is thought to frequently occur at night when you are sleeping, when you are less likely to feel the symptoms of reflux.

Fortunately, studies suggest that patients with LPR do not frequently show the acid damage in the esophagus that GERD patients are prone to.

### Who gets LPR?

Women, men, infants, and children of all ages can experience LPR. Our experience suggests being overweight, having sleep apnea or certain dietary and lifestyle habits can increase your likelihood of having LPR.

## How do I know if I have LPR?

If you experience symptoms such as throat clearing, chronic hoarseness, difficulty swallowing, a feeling of a lump in the throat or a cough, for several weeks you might have LPR.

Some people with LPR have acute episodes of heartburn, or a sensation of increased post-nasal drainage associated with mucous or phlegm.

### Diagnosis of LPR

If you have symptoms of LPR, your Otolaryngologist (Ear, Nose, and Throat Physician) will first examine your throat and vocal cords with a rigid or flexible endoscope. This examination will ensure you don't have a more worrisome condition causing your symptoms. LPR causes your voice box to appear red and/or inflamed and frequently LPR is diagnosed in this manner. Depending on your symptoms, your doctor may also recommend some other tests to diagnose LPR.

### Other tests to diagnose LPR

Your doctor may recommend you see a GI doctor or get a barium swallow test if there are concerning features about your symptoms or findings.

In select patients, 24 hour pH-metry or a pH probe test can be helpful. This test involves placing a flexible probe (about the width of cooked spaghetti) through the nose into the back of your throat to measure acidity. This usually is reserved for patients who have failed medical treatment for LPR.

## How is LPR treated?

There are two main ways to treat LPR: medications and changes to your behavior. In very rare cases, surgery may be recommended to help prevent acid reflux.

### Medical Treatment

LPR treatment has been best studied with PPI(Proton Pump Inhibitors) medications. These medications prevent the production of acid in your stomach. Side effects with these medicines are rare but include headache, upset stomach or diarrhea. If you develop side effects, talk to your doctor about switching to a different PPI. These medications are to be taken once or twice daily and should be taken at least 30 minutes before your largest meal. **They should be taken regularly for about a 6 week period** to assess if they are effective. Examples of PPI medications include:

- Aciphex (rabeprazole)
- Nexium (esomeprazole)
- Prevacid (lansoprazole)
- Prilosec (omeprazole)

### Will I need treatment forever?

LPR symptoms may resolve with diet/lifestyle changes, medications, or both. If symptoms resolve, continue taking the medication until the symptoms have resolved completely before trying to stop the medications. If the symptoms recur, you should restart the medication. Some patients do have to take the medication forever. If you are taking the medications for more than 6 months, consider taking a multivitamin with calcium. If your symptoms do not resolve, return to see your doctor as you may need further evaluation.