



**Department of Otolaryngology-Head and Neck Surgery**  
**University Voice and Swallowing Center**  
**Sunil P. Verma, M.D.**  
**Assistant Professor**

Appointments: (714) 456-7017

<http://ent.uci.edu/clinical-specialties/university-voice-and-swallowing-center>

## Laryngopharyngeal reflux

Laryngopharyngeal reflux, also known as “LPR” is a condition in which acid travels from the stomach upwards into the throat. Normally acid is present within the stomach and works to digest food. In this condition acid “refluxes” or travels backwards from the stomach to the throat. The acid irritates the throat.

This condition is similar to gastroesophageal reflux disease or “GERD”, except individuals often do not experience the heartburn and indigestion that GERD causes. For this reason LPR is often called “silent reflux”

Symptoms associated with LPR include:

Feeling of lump in the throat	Excess mucus
Throat clearing	Difficulty swallowing
Cough	Throat pain
Voice changes	Post nasal drip

Treatment of LPR.

The first line treatment for LPR is behavioral changes which is centered around avoiding acidic foods and removing behaviors that promote acid reflux.

Foods to avoid include:

Coffee	Caffeine
Chocolate / Mints	Alcohol
Carbonated beverages	Citrus including tomatoes, oranges and grapefruits
Spicy foods	Garlic & onions
Deep fried foods	Fattening foods with butter or oil
Teas except for chamomile tea	

Overeating causes the stomach to bloat and increases pressure on the stomach. This makes it easier for food to reflux towards the throat.

Another important rule to follow is not to eat three hours before meals. Lying down within three hours of a meal can promote stomach contents to reflux.

For individuals in which lifestyle changes do not reduce symptoms medication may be indicated.

A proton pump inhibitor decreases the amount of acid produced by the stomach. Proton pump inhibitors should be taken on an empty stomach. Patients should wait thirty minutes and then eat food to activate the medication. It is important to follow these instructions.

PPIs have been used for many years and are considered safe. However, they may carry risk of osteoporosis and hip fracture in older individuals. They also can interact with clopidogrel (Plavix). Proton pump inhibitors may be associated with increased risk of developing *c. difficile*, a type of bacterial infection.