ACID REFLUX

What is acid reflux?

Acid reflux occurs when acidic stomach juices back up from the stomach into the esophagus. This acid sometimes spills into the larynx. There are two different kinds of acid reflux: gastroesophageal reflux (GERD) and laryngopharyngeal reflux (LPR). A person can have one or both kinds of reflux.

GERD occurs when stomach acid flows up from the stomach into the esophagus. It usually occurs at night when people are laying down. Symptoms may include: heartburn, belching, regurgitation of stomach contents and swallowing difficulties.

LPR occurs when stomach acid travels up through the esophagus and spills into the larynx or pharynx (voice box). It can occur during the day or night. The acid irritates the vocal folds and surrounding tissues. As the acid moves quickly up through the esophagus into the larynx, patients with LPR often do not experience heartburn. Symptoms may include: hoarseness, excessive mucus (throat clearing), post-nasal drip, coughing, throat soreness or burning, choking episodes (can wake person up out of a sound sleep), difficulty swallowing or feeling of a lump in the throat.

How is acid reflux treated?

Reflux can be treated through dietary and lifestyle modifications, medications—usually proton pump inhibitors (PPIs), and in some cases surgery. Certain foods are more likely to cause acid reflux. By removing or limiting these foods from your diet, you can reduce incidences of acid reflux.

Lifestyle modifications: Do not lie down or exercise directly after eating or wear clothing that is tight around the waist. Eat 3-4 small meals a day instead of 2-3 large ones. If you are overweight, try to lose weight. Tobacco can cause reflux, so reducing or stopping smoking can be helpful. Do not eat anything 2-3 hours before going to bed. If reflux is occurring at night, elevate the head of your bed 4-6 inches by putting phone books under the front legs or by buying a wedge pillow. Using 2 or more regular pillows can make reflux worse as it causes the body to curl.

How to take reflux medication: If you are taking one PPI a day, take it in the morning on an empty stomach 30 minutes to an hour before eating breakfast. If you take two PPIs a day, take one in the morning and the other one on an empty stomach 30 minutes to an hour before dinner.

How long before I see an improvement?

It can take 4-6 weeks for acid burns in the esophagus and larynx to heal, so do not stop medication or dietary/lifestyle modifications without consulting your doctor. It can take 3-4 months for full resolution.

What problems can acid reflux cause? Long-term reflux in can cause laryngeal ulcers or granulomas, vocal fold scarring, pneumonia, Barrett’s esophagus, and in some cases esophageal or throat cancer.
<table>
<thead>
<tr>
<th>Food Group</th>
<th>Foods Allowed</th>
<th>Foods to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy Products</td>
<td>Skim mild, low-fat buttermilk, low-fat cottage cheese (1% milk fat), and cheeses made with part skim milk.</td>
<td>Whole milk, 2% milk, chocolate milk, cream, half and half, whole milk cheeses, and hot cocoa.</td>
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<tr>
<td>Meats and Protein Alternatives</td>
<td>Baked, boiled, broiled, stewed or roasted: beef, lamb, veal, fish, poultry; dried beans, peas or lentils (if tolerated).</td>
<td>Fried or fatty meats: pork, bacon, sausage, meat or fish packed in oil, luncheon meats, peanut butter, and frankfurters.</td>
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<tr>
<td>Eggs</td>
<td>Prepared any way without added fat. Egg whites as desired. Limit to one whole egg a day.</td>
<td>Fried eggs.</td>
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<tr>
<td>Vegetables</td>
<td>All prepared without added fat. Avoid vegetables which may cause gastrointestinal discomfort.</td>
<td>Avoid tomato sauce.</td>
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<td>Fruit</td>
<td>Avoid fruits which may cause gastrointestinal discomfort.</td>
<td>Avoid citrus.</td>
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<tr>
<td>Breads</td>
<td>Commercial whole grain or enriched bread, French bread, hamburger buns, hard or plain rolls, saltines,</td>
<td>Commercial sweet rolls, donuts, croissants, pastries.</td>
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<tr>
<td>Cereals (continued)</td>
<td>graham crackers, melba toast, English muffins and bagels. Homemade biscuits, muffins, waffles and pancakes.</td>
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<tr>
<td>Cereals</td>
<td>All cereals, hot or cold.</td>
<td>None.</td>
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<tr>
<td>Potatoes and Substitutes</td>
<td>Potatoes, rice, noodles, spaghetti and macaroni.</td>
<td>Fried potatoes or rice. Anything prepared with cheese or white sauces.</td>
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<td>Fats</td>
<td>Butter, margarine, vegetable oils, mayonnaise, brown gravy and reduced calorie/mildly seasoned salad dressing.</td>
<td>Lard, bacon drippings, salt pork, meat drippings, regular gravies and salad dressing.</td>
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<td>Beverages</td>
<td>Water, flavored water, decaffeinated coffee or tea and herbal tea.</td>
<td>Caffeinated coffee or tea, citrus juice (orange, grapefruit, lemonade, cranberry), caffeinated beverages, milkshakes, carbonated beverages and alcohol.</td>
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<td>Soups</td>
<td>Consommé, fat-free broth, bouillon, packaged/dehydrated soup and soups made with skim milk.</td>
<td>Commercial cream soups, those made with whole milk, cream or added fat.</td>
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<td>Desserts/ Sweets</td>
<td>Fruit, gelatin, fruit whips prepared with skim milk, sherbet, fruit ices, merengues, angel food cake, jelly, jam, preserves, sugar, syrup, and honey.</td>
<td>Ice cream, commercial pies, cakes, cookies and puddings made with whole milk. Any dessert containing chocolate, nuts, cream, coconut or whole milk.</td>
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<td>Seasonings and cough drops</td>
<td>Mild seasonings. Hard glycerine based candies.</td>
<td>Hot or spicy seasonings. Cough drops that contain menthol or are mint/peppermint flavor.</td>
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ACID REFLUX
IT'S MORE COMMON THAN YOU MIGHT THINK

THERE ARE MORE THAN 3 MILLION US CASES OF ACID REFLUX EACH YEAR.

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Fruits Allowed: Bananas, blueberries, raspberries, strawberries, pineapple.
Foods to Avoid: Orange, grapefruit, lemon, pineapple, melon.

MEATS AND PROTEIN ALTERNATIVES
Foods Allowed: Chicken, turkey, fish, tofu, beans, lentils.
Foods to Avoid: Sausage, bacon, hot dogs, ham, processed meats.

CEREALS
Foods Allowed: Oatmeal, quinoa, brown rice, whole grain breads.
Foods to Avoid: White rice, pasta, white bread.

DAIRY PRODUCTS
Foods Allowed: Fat-free, low-fat, lactose-free, non-dairy alternatives.
Foods to Avoid: Whole milk, full-fat cheese, yogurt, ice cream.

VEGETABLES
Foods Allowed: All vegetables, especially leafy greens, tomatoes, bell peppers, avocados.
Foods to Avoid: French fries, fried foods, spicy foods.

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DAIRY PRODUCTS
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Foods to Avoid: Whole milk, full-fat cheese, yogurt, ice cream.

BREADS
Foods Allowed: Whole wheat, whole grain, sprouted grains.
Foods to Avoid: White bread, white rice, sugary snacks.

DESSERTS/SWEETS
Foods to Avoid: Cake, cookies, chocolate.

BEVERAGES
Foods Allowed: Water, tea, low-fat or non-fat milk.
Foods to Avoid: Caffeinated drinks, alcohol.

SOUPS
Foods Allowed: Vegetable, chicken, beef soup.
Foods to Avoid: Cream of mushroom soup, cream of chicken soup.

SEASONINGS AND COUGH DROPS
Foods Allowed: Salt, pepper.
Foods to Avoid: Cough drops, spicy foods.

FAT
Foods Allowed: Olive oil, canola oil, avocado.
Foods to Avoid: Butter, margarine, mayonnaise.

KNOW WHAT FOODS TO AVOID?

USC VOICE CENTER
Keck Medical Center
(323) 461-6460
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 Foods to Avoid: None.

DAIRY PRODUCTS
 Foods Allowed: Skim milk, low-fat buttermilk, low-fat cottage cheese, low-fat yogurt, low-fat milk, and other dairy products with plain skin milk.
 Foods to Avoid: Whole milk, full-fat cheese, cream, half and half, whole milk cheeses, and hard cheeses.

MEATS AND PROTEIN ALTERNATIVES
 Foods Allowed: Chicken, turkey, fish, eggs, beans, peas, lentils, tofu, and plant-based protein.
 Foods to Avoid: None.

VEGETABLES
 Foods Allowed: All vegetables which may cause gastrointestinal discomfort.
 Foods to Avoid: None.

CEREALS
 Foods Allowed: All cereals, hot or cold.
 Foods to Avoid: None.

EGGS
 Foods Allowed: Precooked any way without added fat. Egg whites are allowed.
 Foods to Avoid: Fried eggs.

BREADS
 Foods Allowed: Commercial bread, gluten-free bread, and gluten-free products.
 Foods to Avoid: None.

DESSERTS/SWEETS
 Foods Allowed: Fruits, gels, fruit snacks, and fruit drinks prepared with skin milk.
 Foods to Avoid: None.

BEVERAGES
 Foods Allowed: Water, coffee, tea, decaffeinated coffee or tea, and herbal tea.
 Foods to Avoid: None.

SOUPS
 Foods Allowed: Consommé, fat-free soups, and soups made with skin milk.
 Foods to Avoid: None.

SEASONINGS AND COUGH DROPS
 Foods Allowed: Salt, seasonings, and cough drops.
 Foods to Avoid: None.