# Gastroesophageal Reflux Disease (GERD) and Asthma

Studies have shown that asthma, chronic cough, and pulmonary fibrosis may be aggravated or even caused by Gastroesophageal reflux disease, or GERD

GERD occurs when the lower esophageal sphincter (LES) does not close properly and stomach contents leak back, or reflux, into the esophagus. The LES is a ring of muscle at the bottom of the esophagus that acts like a valve between the esophagus and stomach. The esophagus carries food from the mouth to the stomach.

When refluxed stomach acid touches the lining of the esophagus, it causes a burning sensation in the chest or throat called heartburn. The fluid may even be tasted in the back of the mouth, and this is called acid indigestion. Occasional heartburn is common but does not necessarily mean one has GERD. Heartburn that occurs more than twice a week may be considered GERD, and it can eventually lead to more serious health problems. Anyone, including infants, children and pregnant women, can have GERD.

## What Are the Symptoms of GERD?

The main symptoms are persistent heartburn and acid regurgitation. Some people have GERD without heartburn. Instead, they experience pain in the chest, hoarseness in the morning or trouble swallowing. You may feel like you have food stuck in your throat or like you are choking or your throat is tight. GERD can also cause a dry cough and bad breath.

#### **GERD** in Children

Studies\* show that GERD is common and may be overlooked in infants and children. It can cause repeated vomiting, coughing and other respiratory problems. Children's immature digestive systems are usually to blame, and most infants grow out of GERD by the time they are 1 year old. Still, you should talk to your child's doctor if the problem occurs regularly and causes discomfort. Your doctor may recommend simple strategies for avoiding reflux, like burping the infant several times during feeding or keeping the infant in an upright position for 30 minutes after feeding. If your child is older, the doctor may recommend avoiding:

- Sodas that contain caffeine
- Chocolate and peppermint
- Spicy foods like pizza
- Acidic foods like oranges and tomatoes
- Fried and fatty foods

Avoiding food 2 to 3 hours before bed may also help. The doctor may recommend that the child sleep with head raised. If these changes do not work, the doctor may prescribe medicine for your child. In rare cases, a child may need surgery

\* Jung AD. Gastroesophageal reflux in infants and children. American Family Physician. 2001;64(11):1853-1860.

#### What Causes GERD?

No one knows why people get GERD. A hiatal hernia may contribute. A hiatal hernia occurs when the upper part of the stomach is above the diaphragm, the muscle wall that separates the stomach from the chest. The diaphragm helps the LES keep acid from coming up into the esophagus. When a hiatal hernia is present, it is easier for the acid to come up. In this way, a hiatal hernia can cause reflux. A hiatal hernia can happen in people of any age; many otherwise healthy people over 50 have a small one. Other factors that may contribute to GERD include:

- Alcohol use
- Overweight
- Pregnancy
- Smoking

Also, certain foods can be associated with reflux events, including:

- Citrus fruits
- Chocolate
- Drinks with caffeine
- Fatty and fried foods
- Garlic and onions
- Mint flavorings
- Spicy foods
- Tomato-based foods, like spaghetti sauce, chili and pizza

#### **How Is GERD Treated?**

If you have had heartburn or any of the other symptoms for a while, you should see your doctor. Depending on how severe your GERD is, treatment may involve one or more of the following lifestyle changes and medications or surgery.

### **Lifestyle Changes**

- If you smoke, stop.
- Do not drink alcohol.
- Lose weight if needed.
- Eat small meals.
- Wear loose-fitting clothes.
- Avoid lying down for three hours after a meal.
- Raise the head of your bed 6 to 8 inches by putting blocks of wood under the bedposts just using extra pillows will not help.

#### Medications

• There are a variety of over-the-counter options. Some medications, like proton (acid) pump inhibitor, are best timed about 1 hour before the major meal of the day. Others do not require this timing for best effect. Ask your doctor which medication option to consider.

**Source:** Adapted from the National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health