

## Heartburn

### Gastroesophageal Reflux in the College Student

Heartburn is characterized by a burning sensation in the middle of the chest, most commonly after eating. It may radiate higher or actually burn lower in the stomach. Some people don't have a burning sensation at all but have a dull ache or vague pain in the chest, belching and bloating, hoarseness in the morning, chronic cough or the sensation of food sticking in the throat.

#### CAUSES OF FREQUENT HEARTBURN

Heartburn occurs when stomach acid moves back up into your esophagus. A valve between the esophagus and the stomach called the lower esophageal sphincter (LES) opens and closes to allow food and liquid into the stomach. In people with frequent heartburn, the LES weakens and doesn't close properly. This allows the stomach's contents, including acid, to move back into the esophagus. The walls of the esophagus are not designed to withstand these acidic contents. Uncommonly, structural problems with the stomach (e.g. a hiatal hernia) may cause it.

#### COMPLICATIONS OF LONG-TERM HEARTBURN

Frequent heartburn can cause inflammation of the esophagus (esophagitis), leading to worsening pain, narrowing or blockage of the esophagus, a choking sensation, bleeding (vomiting blood or passing digested blood as black or tarry stools), or unwanted weight loss. Untreated chronic heartburn can lead to a pre-cancerous condition called Barrett's esophagus.

#### CAUSES OF HEARTBURN IN THE COLLEGE STUDENT

Lifestyle behaviors can weaken the LES and lead to heartburn. Alcohol and nicotine are the most common causes. The effects may not necessarily be limited to extreme use or abuse such as binge-drinking. Increased abdominal pressure from being overweight can cause heartburn. Certain types of food and drink can increase the acid content of the stomach. Among the culprits are all alcoholic drinks, coffee, tea, most sodas, energy drinks, acidic foods (all citrus and tomatoes), tomato-based foods like chili and pizza, fatty or fried foods, garlic, onions, chocolate, and mint flavoring.

#### TREATMENT

Lifestyle modifications are critical to any successful treatment and should be consistently practiced with any medication.

##### A. Lifestyle

- ◆ Identify and avoid foods and drinks that aggravate your symptoms. Keeping a food diary can help you do this.
- ◆ Avoid over-eating, especially at night. Eat smaller meals, more frequently.
- ◆ Avoid lying down for 2-3 hours after eating.
- ◆ If you smoke, seek help on trying to quit from a Health Educator in the Hokie Wellness office, at 231-2233.
- ◆ Avoid alcohol and caffeinated beverages.
- ◆ Avoid taking ibuprofen (Motrin<sup>®</sup>, Advil<sup>®</sup>), Aleve<sup>®</sup>, or Aspirin<sup>®</sup> on a regular daily basis for more than 5 days. Consider acetaminophen (Tylenol<sup>®</sup>) for pain problems.
- ◆ Try to maintain a healthy body weight.
- ◆ Raise the head of your bed up 2-4" with foam inserts under the mattress or blocks under the head of the bed. Gravity helps to keep the acid in your stomach rather than moving up into esophagus when you are lying flat.
- ◆ Do not exercise right after eating.

##### B. Medications

For some people, self-treating with over-the-counter (OTC) medications is a reasonable and safe first step. Often patients seen at SHC have tried them prior to their first visit for heartburn. It must be stressed, that if your symptoms are not helped by OTC medication or last for more than 2 weeks on medications, you should be seen by a clinician to discuss your problem and guide your long-term treatment.

The following are the most common types of medications used for the treatment of frequent heartburn:

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- ◆ Antacids neutralize the acid in your stomach. They relieve symptoms but studies show they don't heal or prevent the condition. There are many OTC brands of antacids on the market such as Maalox<sup>®</sup>, Mylanta<sup>®</sup>, Roloids<sup>®</sup>, and Tums<sup>®</sup>.
- ◆ Histamine2-receptor antagonists, commonly called H2 blockers, are available as OTC products and by prescription. They work by reducing the amount of acid the stomach produces. They should not be used more than a few weeks at a time without consulting a clinician. They can interact with some medications and patients may suddenly become resistant to beneficial effects of the medications. OTC brands include cimetidine (Tagamet HB<sup>®</sup>), famotidine (Pepcid AC<sup>®</sup>), nizatidine (Axid AR<sup>®</sup>), and ranitidine (Zantac<sup>®</sup>).
- ◆ Proton pump inhibitor medications have been found to be more effective than H2 blockers for treating frequent heartburn. These medications work by shutting down many of the acid pumps in the stomach. Prilosec<sup>®</sup>, and Prevacid are OTC. If you are still having heartburn symptoms after 14 days of OTC omeprazole (Prilosec<sup>®</sup>), make an appointment at Schiffert Health. Long-term use of PPIs can cause significant problems.

If lifestyle changes and medication do not relieve symptoms, referral to a gastroenterologist for further evaluation may be necessary.

### For more information:

[www.uptodate.com/patients/info](http://www.uptodate.com/patients/info)