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Heartburn, Gastroesophageal Reflux Disease (GERD) & Your Health

Most of us experience occasional heartburn—the discomfort that sometimes follows a large meal or after eating certain foods. Heartburn is caused by stomach acid backing up into the esophagus (the tube that connects the mouth to the stomach). It typically goes away on its own or after taking an over-the-counter antacid. But, if you experience persistent heartburn more than two days a week, it might be a symptom of a more serious condition known as gastroesophageal reflux disease (GERD).

GERD Basics

An estimated 20 million Americans suffer from GERD. Though there is no cure, GERD symptoms usually can be managed by making lifestyle and diet changes or, if necessary, with medication.

Acid reflux occurs when the valve between the bottom of the esophagus and the stomach (lower esophageal sphincter) does not function properly or if a hiatal hernia (protrusion of part of the stomach up through the diaphragm and into the chest) is present. It may also occur after eating food or drinking a beverage that acts to relax the lower esophageal sphincter. Tea, coffee, soda, mints, fatty or

fried foods, citrus fruit, chocolate and alcohol are common GERD triggers.

Because it is easy to blame heartburn for chest-pain symptoms that may be heart-disease related, it is very important to seek medical attention if you experience heartburn regularly. Another reason why you shouldn't suffer heartburn in silence is because left untreated, GERD can lead to more serious conditions.

Typical GERD symptoms include:

- Persistent heartburn
- Sour or bitter taste in the mouth (acid regurgitation)

Almost half of all pregnant women experience GERD. The enlarged uterus puts pressure on the stomach. Also, pregnancy-related hormones can cause the digestive system to slow down, which relaxes the lower esophageal sphincter and can trigger discomfort. Fortunately, GERD symptoms usually go away after the baby is born.

Long-Term Effects of GERD

GERD can cause serious complications if it is left untreated over a long period of time. These conditions may develop:

- **Esophagitis.** Severe inflammation of the lining of the esophagus.
- **Esophageal ulcers.** Breaks in the lining of the esophagus that can bleed and cause low red blood cell counts (anemia).
- **Esophageal strictures.** Narrowing of the esophagus caused by inflammation or scar tissue.

- **Barrett's esophagus.** Development of abnormal cells, a pre-cancerous condition.
- **Respiratory complications.** Wheezing or other asthma-like symptoms.
- **Acid laryngitis.** Inflammation and irritation of the larynx (voice box).
- **Dental erosions.** Tooth decay that occurs as stomach acids wear away tooth enamel.

Diagnosing GERD

GERD is usually diagnosed based on your medical history, a physical examination and your symptoms, including:

- persistent heartburn
- sour taste in the mouth
- swallowing or throat abnormalities, excessive burping, hoarse voice
- respiratory symptoms: wheezing, pneumonia, asthma
- discomfort from common GERD-“trigger” foods

Tests that may be used to confirm GERD or rule out other conditions include:

- **Endoscopy.** An endoscope (a lighted, flexible tube) is passed through the mouth and esophagus and into the stomach. Any inflammation, bleeding, narrowing of the esophagus, or ulcers can be identified and evaluated. A biopsy (tissue sample) can be taken at the same time. The patient is mildly sedated during this procedure.
- **Esophageal manometry** measures both the muscle function during swallowing and the function of the lower esophageal sphincter. A thin tube with several pressure-sensitive openings is placed into the esophagus. As the esophagus squeezes the tube, pressure readings are transmitted to a computer analyzer and recorded on moving graph paper. Wave patterns are evaluated for abnormalities. This test may be recommended if symptoms don't improve with drug treatment.

Questions to Ask

1. How do I know if the pain I am experiencing is ordinary heartburn or something even more serious, like a heart attack or GERD?
2. What are the most common symptoms of GERD?
3. How will you be able to tell if I have GERD?
4. Can GERD be cured?
5. Is medication the only treatment for GERD?
6. Which foods and beverages can trigger GERD?
7. What happens when GERD isn't treated?
8. Can GERD cause cancer?
9. Do I need surgery for my GERD symptoms?
10. Why did I get GERD while pregnant?

- **Twenty-four hour pH monitoring** measures acid reflux over 24 hours during normal activities, including sleeping and eating. A small, thin probe at the tip of a tube is placed through the nose, to the bottom of the esophagus.

Resources

American College of Gastroenterology
PO Box 3099
Alexandria, VA 22302
703-820-7400

<http://www.acg.gi.org>

Provides online resources for people with gastrointestinal conditions; referrals to specialists.

Foundation for Digestive Health and Nutrition

4930 Del Ray Avenue
Bethesda, MD 20814-3015
1-866-337-3346 (toll free)

<http://www.fdh.org>

Provides consumer information; supports research; conducts public education initiatives.

National Digestive Diseases Information Clearinghouse

2 Information Way
Bethesda, MD 20892-3570
1-800-891-5389

<http://www.niddk.nih.gov>

Answers questions, develops reviews and sends out publications and coordinates information resources about digestive diseases.

International Foundation for Functional Gastrointestinal Disorders

PO Box 170864
Milwaukee, WI 53217-8076
1-888-964-2001 (toll free)

<http://www.iffgd.org>

Publishes articles, newsletter, quarterly journal. Useful online information and links to other resources.

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The tube is attached to a portable recorder. The patient presses a button on the recorder when reflux-type symptoms are felt; acidity levels are recorded and evaluated.

- **Upper gastrointestinal x-ray series.** The patient drinks a liquid contrast solution. As the liquid is swallowed, x-rays are taken. This test does not diagnose GERD, but it can diagnose a hiatal hernia, narrowing of the esophagus or tumors obstructing the esophagus.

Managing GERD

Although GERD can't be cured, its symptoms usually are treatable by making lifestyle changes and with prescription medication; surgery may be recommended for severe GERD symptoms.

Lifestyle Approaches

- **Lose weight.**
- **Eat smaller portions.** Avoid lying down for four hours after eating and avoid foods and beverages that may trigger GERD symptoms.
- **Cut back on or eliminate alcohol.**
- **Stop smoking.**
- **Don't wear tight-fitting clothing** around your waist.
- **Elevate the head** of your bed by six to eight inches.
- **Review your medications.** Some medications can increase or trigger GERD symptoms. If you take any of the following medications, discuss them with your physician. They could be triggering symptoms and there may be alternatives:
 - asthma, emphysema and heart-disease medications

- over-the-counter cold remedies
- birth control pills
- hormone-containing menopause medication
- nervous system medications such as anticholinergics, used to treat Parkinson's disease; narcotic pain relievers; most sedatives; and anesthetics

Medication

- **Over-the-counter antacids** work well for mild and infrequent symptoms. Examples include those made from either calcium carbonate (TUMS, Mylanta and Roloids, among others) or magnesium hydroxide (Phillips Milk of Magnesia).
- **Proton pump inhibitors (PPIs)** block acid production in the cells that line the stomach, and can significantly reduce acid production. Nexium (esomeprazole magnesium), Prevacid (lansoprazole) and Prilosec (omeprazole) are a few examples of PPIs.
- **Coating agents** provide a protective coating to the esophageal lining; helpful for pregnant patients, who find it hard to tolerate acid reducers. Sucralfate and Carafate are examples of coating agents.

Surgery

- **Fundoplication** wraps the top of the stomach around the bottom of the esophagus, reinforcing the lower esophageal sphincter.

Remember. . .

If you develop chest pain of any type, contact your health care professional right away to determine its cause. If you think you might be experiencing heart attack symptoms, call 911.

References

"Barrett's Esophagus." The National Digestive Diseases Information Clearinghouse. National Institute of Diabetes and Digestive and Kidney Diseases. Publication #02-4546. June 2002. <http://www.niddk.nih.gov>

DeVault KR, et al. "Updated guidelines for the diagnosis and treatment of gastroesophageal reflux disease." The American Journal of Gastroenterology, 1999, Vol. 94(6), p.1434-1442.

"Digestive Insight." Newsletter of the American Gastroenterological Association. May 2003. <http://www.gastro.org>

"Gastroesophageal Reflux, Barrett's Esophagus, and Esophageal Cancer: Scientific Review." Journal of the American Medical Association. 2002;287:1972.

"Gastroesophageal Reflux Disease (GERD): GERD, Hiatal Hernia, and Heartburn"; "Long-Term Complications of GERD"; "Non-cardiac chest pain"; "24-Hour Esophageal pH Test". Cleveland Clinic Health Info. <http://www.cchs.net/info>. Last updated: June 2003.

"Gastroesophageal Reflux Disease (GERD)." American College of Gastroenterology, <http://www.acg.gi.org>

"GERD and Pregnancy." The Cleveland Clinic Health Information Home. <http://www.cchs.net>. Last reviewed: November 15, 2001.

"Have You Heard of GERD?" Healthfinder. <http://www.healthfinder.gov>. Last updated: October 1, 2003.

"Heartburn, Hiatal Hernia, and Gastroesophageal Reflux Disease (GERD)." The National Digestive Diseases Information Clearinghouse. Institute of Diabetes and Digestive and Kidney Diseases. NIH publication 03-0882. <http://www.niddk.nih.gov>. Last updated: June 2003.

"Heartburn: Hints on Dealing with the Discomfort." American Academy of

Family Physicians. <http://www.familydoctor.org>

"Heartburn: How to Get it off Your Chest." American Gastroenterological Association. <http://www.gastro.org>. 2002.

"Learning to live with chronic heartburn" MayoClinic.com. <http://www.mayoclinic.com>. Last updated: June 2003.

Locke GR III, Talley NJ, Fett SR, et al. Prevalence and clinical spectrum of gastroesophageal reflux: A population based study in Olmsted County, Minnesota. Gastroenterology 1997;112:1448-56.

Hinz CA. "New Options for Persistent Heartburn." Foundation for Digestive

Health and Nutrition. http://www.dhn_online.org

"Nighttime Heartburn: The Difference Between Night and Day." American Gastroenterological Association, <http://www.gastro.org>

Richter JE, Katz PO, Waring JP. "Gastroesophageal reflux disease." International Foundation for Functional Gastrointestinal Disorders. <http://www.aboutGERD.org>. Last updated: February, 2003.

"What is Heartburn?" MayoClinic.com. <http://www.mayoclinic.com>. Updated June 2003.