

*God be merciful to us, and bless us, and cause His face to shine upon us.
That Your way may be known on earth, Your saving health among all nations. Psalms 67:1-2*

Indigestion / Reflux

About 40% of American adults suffer from heartburn at least once a month, some suffer daily. However, an unfortunate 2% of the adult population suffers from a chronic form of heartburn that erodes the delicate lining of the esophagus. This rare form of heartburn is called gastroesophageal reflux disorder (GERD). What these conditions have in common is the presence of acid in the esophagus. If allowed to continue irritating the esophagus, gastric acids may provoke a great many problems to the teeth and the lungs.

Problems that may develop with chronic reflux

Dysphagia (difficult swallowing)	
Coughing/Wheezing	
Asthma	Aspiration pneumonia
Interstitial fibrosis	Tooth enamel decay
Gingivitis	Halitosis
Laryngitis	A globus sensation in the throat

It has long been thought by the public that the main treatment for heartburn is simply taking antacids whenever the problem arises. Some have resorted to medications that block the production of stomach acids. This may be a direct way of arresting the symptoms, but it

does not address the cause of heartburn or reflux. In fact, there is increasing evidence that LONG-term use of antacid medications can result in mineral deficiencies, carotenoid deficiencies, and a reduction in vitamin B-12 absorption. If too much gastric acid was the primary cause of reflux, then one would think that teenagers (who have considerably more gastric acid than the elderly) would be plagued by heartburn, but the truth is, the older generation (with almost 40% less acid) suffers the most frequently from reflux.

Why the difference?

Reflux is believed to be caused principally by a malfunction of a muscular door (i.e. lower esophageal sphincter or LES) between the stomach and the esophagus. The LES is responsible for keeping the acids of the stomach from entering the esophagus once the food has passed through. Anything that causes this little door to transiently affect its squeezing power can lead to reflux problems. Several lifestyle factors have been linked to reflux and can be modified with a significant reduction in reflux. Some medical conditions can also cause reflux, these include: pregnancy, hormone imbalance, and hiatal hernias. Interestingly, foods have

Lifestyle Factors linked to Reflux

Smoking	Large meals	Fatty foods
Caffeine	Obesity	Lying down after meals

been strongly implicated in reflux disease for several decades. Patients with reflux symptoms should avoid chocolate, peppermint, alcohol and coffee which decrease lower esophageal sphincter tone (LES).

Onions may also be guilty of causing reflux. In a study with 16 normal subjects and 16 heartburn patients, researchers evaluated the

Medications that cause GERD	
Alpha-agonists	Anticholinergics
Antiparkinson agents	Barbiturates
Beta-adrenergic agonists	Calcium channel blockers
Diazepam	Dopamine
Estrogens	Isoproterenol
Meperidine	Morphine
Nitrates	Phentolamine
Progesterone	Prostaglandins
Theophylline	Tricyclic anti-depressants

influence of onion consumption on the symptoms of acid reflux. The researchers found that it was only in the susceptible patients that gastric acidity changed and there was a significant increase in heartburn episodes. The authors conclude onions can be a potent and long lasting reflexogenic agent in heartburn patients. "The Effect of Raw Onions on Acid Reflux and Reflux Symptoms," Allen, Melvin, PhD, et al, *American Journal of Gastroenterology*, 1990; 85(4):377-380.

Other commonly eaten foods may cause problems for sensitive individuals. I have encountered individuals who develop reflux responses to tomatoes, milk products, sugar, tea, and even orange juice. While this may seem farfetched, such associations have been report-

ed in the medical literature. Drs. Babka and Castell, for example, reported in the *American Journal of Digestive Disorders* (1973), that they found orange juice to cause disordered motility in the lower esophageal segment in some of their test subjects. We have found that sometimes the food itself is not the problem, but rather it is a pesticide residue that can cause problems with the esophageal sphincter.

A more regular lifestyle is a great way to begin the healing process. Adequate water intake, eating at regular times without haste, avoiding dietary and respiratory irritants, and managing stress are steps that most people can try at home for a couple of weeks. In addition, at the Battle Creek Lifestyle Health Center we find it very useful to use food allergy tests to identify potential dietary problems. Once found, we then commonly supplement a meal with one or more selected enzymes for aiding digestion, add certain amino acids and natural bacteria for supporting mucosal integrity, and sauna/massage to relieve muscular and emotional stress.

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Symptoms that may indicate reflux disorder	
Heartburn	Aspiration
Asthma	Belching
Bloating	Chest pain
Hiccups	Hoarseness
Hypersalivation	Nausea
Painful swallowing	Coughing
Difficulty in swallowing	Wheezing