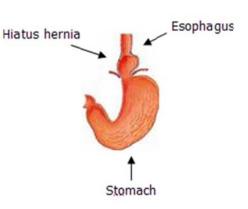
Acid Reflux and Heartburn

Potential factors involved in Gastro-Esophageal Reflux Disease (GERD)

- 1. Lower esophageal sphincter muscle malfunction (Note: this sphincter is a circular muscle at the base of the esophagus that normally stays closed except when food needs to pass. It normally has occasional intermittent muscular relaxations): Problems can include:
 - 1. Excessive intermittent muscular relaxations
 - 2. Temporary muscular weakness from food or medications
 - 3. Permanent muscular weakness
- 2. Hiatus Hernia defined as the upper part of the stomach that goes up into the chest cavity because of an enlarged hole in the diaphragm. This can weaken the sphincter area by taking away the cinching effect of the diaphragm ring.
- 3. Abnormally slow emptying of the stomach
- 4. Weak esophageal muscles
- 5.

Dietary and behavioral modifications to reduce acid reflux and heartburn

- 1. Food, beverages, and medicines to "avoid":
 - 1. Caffeine coffee, tea, chocolate, soda
 - 2. Carbonated beverages
 - 3. High fat diet
 - 4. Onions and garlic
 - 5. Peppermint
 - 6. Calcium channel blocker blood pressure medicines
 - 7. Alcohol and citrus fruits (when only reflux is active)



- 2. Do not eat with in two hour of lying down; do not eat large meals or eat quickly
- 3. Stop smoking nicotine prevents healing of acid induced damage.

If the above fails to help and/or if medicine fails to help:

Elevate the head of the bed: important when there is heartburn or regurgitation lying down. A foam wedge can be used (\$40 from Bed, Bath and Beyond). Pillows are not effective. Another option is to place 4 to 6 inch blocks under the legs at the head of the bed.

Options to treat acid reflux

- 1. Antacids Gaviscon, Maalox or Mylanta are useful for intermittent treatment.
- 2. H2 blockers Axid, Pepcid, Tagament and Zantac are useful for mild cases or for intermittent use.
- 3. Proton pump inhibitor Aciphex, Kapadex, Nexium, Prevacid, Protonix, Prilosec (Omeprazole), Zegrid.
- 4. Motility medicine Reglan,