General characteristics of GERD
Gastroesophageal reflux disease or GERD, is a very common disorder and occurs when stomach acid refluxes into the lower esophagus through the lower esophageal sphincter (LES). The LES is a band of muscles that act as a protective barrier against reflux material by contracting and relaxing. If this barrier is relaxed at inappropriate times or otherwise compromised, reflux occurs. Chronic or reoccurring reflux allows prolonged contact of stomach contents with the lower esophagus, leading to the symptoms of GERD. In general four underlying conditions are associated with GERD:

1. Decreased lower esophageal sphincter pressure.
2. Irritation of the lining of the esophagus by the stomach contents.
3. Abnormal clearance of esophageal acid.
4. Delayed stomach emptying.

Symptoms associated with GERD
GERD is characterized by symptoms and/or tissue damage that result from repeated or prolonged exposure of the lining of the esophagus to the acidic contents of the stomach. The primary symptom of GERD is persistent heartburn, a burning discomfort felt in the upper chest or abdomen. Symptoms of GERD, however, vary from person to person and at times there may be no symptoms at all. The majority of people with GERD have mild symptoms, with no visible evidence of tissue damage and little risk of developing complications.

The purpose of the GERD Diet
The diet for gastroesophageal reflux disease (GERD) is designed to decrease symptoms associated with the reflux of gastric (stomach) fluid into the esophagus.

Uses of the diet
This diet is appropriate for individuals who have GERD or its complications, such as esophageal ulcers or esophagitis, and is useful for those who experience heartburn. It is important to remember, however, that the treatment of GERD requires a multi-factorial approach aimed at dietary and lifestyle modifications, and drug therapy. Talk to your primary care provider to discuss medications that may be appropriate for you.

Dietary modifications
Dietary modifications are recommended to lessen the likelihood of reflux and to avoid irritation of sensitive or inflamed esophageal tissue. Listed below are several recommendations that may help to manage GERD:

- **Decrease total fat intake** - High fat meals and fried foods tend to decrease LES pressure and delay stomach emptying thereby increasing the risk of reflux.
- **Avoid large meals** - Large meals increase the likelihood of increased gastric (stomach) pressure and reflux.
- **Decrease total caloric intake if weight loss is desired** - Since obesity may promote reflux, weight loss may be suggested by your healthcare provider to control reflux. Reducing both total fat and caloric intake will aid in weight loss.
- **Avoid chocolate** - Chocolate contains methylxanthine, which has been shown to reduce LES pressure by causing relaxation of smooth muscle.
- **Avoid coffee depending on individual tolerance** - Coffee, with or without caffeine, may promote gastroesophageal reflux. Coffee may be consumed if it is well tolerated.
- **Avoid other known irritants** - Alcohol, mint, carbonated beverages, citrus juices, and tomato products all may aggravate GERD. These products may be consumed depending on individual tolerance.

Other modifications for treating GERD
- Maintain upright posture during and after eating.
- Stop smoking.
- Avoid clothing that is tight in the abdominal area.
- Avoid eating within 3 hours before bedtime.
• Lose weight if you are overweight.
• Sleep on your left side.
• Chew non-mint gum which will increase saliva production and decrease acid in the esophagus.
• Elevate the head of your bed 4-6 inches by placing bricks under the headboard.

Sample menu for GERD Diet

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Dinner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple juice (1/2 cup)</td>
<td>Vegetable soup (1 cup)</td>
<td>Green salad (4oz)</td>
</tr>
<tr>
<td>Whole-grain cereal (3/4 cup)</td>
<td>Saltine crackers (4)</td>
<td>Vinegar and oil dressing (1 tbsp)</td>
</tr>
<tr>
<td>Banana (1/2)</td>
<td>Lean beef patty (3oz)</td>
<td>Broiled skinless chicken breast (3 oz)</td>
</tr>
<tr>
<td>Whole-wheat toast (2 slices)</td>
<td>Hamburger bun (1)</td>
<td>Herbed brown rice (1/2 cup)</td>
</tr>
<tr>
<td>Margarine (1 tsp)</td>
<td>Reduced calorie mayonnaise (1 tbsp)</td>
<td>Steamed broccoli (1/2 cup)</td>
</tr>
<tr>
<td>Jelly or jam (2 tbsp)</td>
<td>Mustard (1 tbsp)</td>
<td>Whole grain roll (1)</td>
</tr>
<tr>
<td>Skim milk (1 cup)</td>
<td>Lettuce</td>
<td>Margarine (1 tsp)</td>
</tr>
<tr>
<td>Coffee (if tolerated)/tea</td>
<td>Fresh fruit salad, no citrus (1/2 cup)</td>
<td>Low-fat frozen yogurt (1/2 cup)</td>
</tr>
</tbody>
</table>

Snack
Graham crackers (4)
Skim milk (1 cup)

Journaling

There is no one specific diet that will prevent all symptoms of GERD. The only way to design a meal plan appropriate for you is to discover which foods you tolerate well and which foods aggravate your reflux. One way to identify these “trigger” foods is through journaling. Try to keep a detailed food record for one week. Your food record may have three categories: food, time of day and symptoms. Be sure to list all of the foods and beverages that you drink each day. Below is a sample food journal entry. Once you have identified those “trigger” foods you can modify your diet to help alleviate any symptoms.

<table>
<thead>
<tr>
<th>Food</th>
<th>Time of Day</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange juice - 1 cup</td>
<td>8:30 breakfast</td>
<td>Severe heartburn</td>
</tr>
<tr>
<td>Cereal - large bowl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk - ½ cup on cereal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee - 2 cups</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary

The diagnosis of GERD is usually suggested by symptoms reported to your physician. If you have symptoms of GERD, please make an appointment with your primary care provider.

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: Dial-A-Nurse at 333-2700

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: http://www.mckinley.uiuc.edu