Dysphagia

What is Dysphagia?
Dysphagia is abnormal swallowing that can lead to:

- Aspiration (getting food or liquid into the airway)
- Pneumonia (infection in the lungs)
- Malnutrition
- Dehydration
- Discomfort

What Causes Dysphagia?
There are many reasons the muscles in the mouth or throat may not work properly for swallowing. Some of the causes for dysphagia include:

- An injury to the brain (e.g. stroke, head injury).
- A brain-related disease (i.e. Parkinson’s, Lou Gehrig’s disease).
- An obstruction in the throat (e.g. laryngeal cancer).
- A paralyzed vocal cord.
- A tracheostomy tube.
- Recent removal of the breathing tube from the throat.
- Head and neck cancer.

Normal Swallow
Normal swallowing is pictured at left.

Swallowing begins as the tongue pushes food or liquid toward the back of the mouth. The “voice box” (larynx) moves up and forward and the vocal folds close off and protect the airway (trachea). This prevents food or liquid from going into the lungs. Normal swallowing is rapid (less than two seconds), and the food moves from the mouth to the food tube (esophagus) and into the stomach, as the arrows show.
Aspiration

Aspiration is when food or liquid goes below the vocal folds and down toward the lungs. There are two types of aspiration:

- **Audible Aspiration** occurs when the body feels food or liquid going the “wrong way” into the airway (trachea). Coughing and/or throat clearing while drinking and eating is the body’s way of protecting the lungs. Most people have experienced this feeling of getting choked or strangled while eating or drinking.

- **Silent Aspiration** occurs when the body does not feel food or liquid is going the “wrong way” and therefore the body cannot attempt to protect the lungs. If someone is SILENTLY aspirating, he or she may not show outward signs of swallowing difficulty. However food or liquid is still entering the lungs.

What does a Speech Pathologist Do?

**Evaluation:**
If a doctor feels a patient is having swallowing difficulty (dysphagia) they may recommend an evaluation by a Speech Pathologist. The Speech Pathologist will assess the muscles of the face, mouth and throat to judge movement and sensation, and may also observe the patient eating and drinking. Based on the results of the evaluation, further testing may be needed such as:

- **Fiberoptic Endoscopic Evaluation of Swallowing (FEES):**
  A small scope is placed through the nose and into the throat to view the passage of food and liquid during a swallow.

- **Modified Barium Swallow Study:**
  X-rays are taken as the patient swallows food and liquid mixed with barium.

**Diet Recommendations:**
Based on the results of the swallow study, the Speech Pathologist will provide recommendations/modifications to make the swallow safer and more comfortable. Some of them MAY include:

<table>
<thead>
<tr>
<th>Possible Diet Recommendations</th>
<th>Possible Liquid Recommendations</th>
<th>Possible Modifications</th>
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<tbody>
<tr>
<td>Puree: food is blended.</td>
<td>Honey-Thick: liquids thickened to a honey consistency at room temperature.</td>
<td>Tuck your chin to your chest when you swallow.</td>
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<tr>
<td>Soft-Mechanical: food is softer and easier to chew.</td>
<td>Nectar-thick: liquids thickened to the consistency of pancake syrup at room temperature.</td>
<td>Sit at 90 degrees when eating and take small bites.</td>
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<tr>
<td>Regular: no restrictions.</td>
<td>Thin: all liquids.</td>
<td>Alternate your food and liquids, and swallow two times after each bite.</td>
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Diet Monitoring and Education:
After the swallow is evaluated and recommendations are made, a Speech Pathologist will monitor your swallow for changes in function. Some considerations include:

- Difficulty with chewing.
- Coughing or throat clearing when eating or drinking.
- Ability to remember and follow recommendations.
- New lung infection or fever.

The Speech Pathologist will also provide education on the types of food and liquid recommended for your safety. For example, if thickened liquids are suggested, instructions may be given on how to use “thickener”. Thickener is a modified food starch, which comes in powder form, and can be added to all liquids or soups to attain the appropriate consistency. This can be purchased at the local pharmacy or discount stores (Wal-Mart, Kmart), and the instructions appear on the side of the container.

Swallowing Therapy and Follow-Up Evaluations:
If the patient is an appropriate candidate, the Speech Pathologist will provide exercises or therapy to improve the swallowing function. The Speech Pathologist will also determine when sufficient progress has been made in order to re-evaluate the swallowing function. The goal is to have the patient eating and drinking the most normal food and liquid that the body can safely manage.

Resources:

- Hormel Health Labs: Offers information about swallowing disorders and the ways that “Thick and Easy” products help to develop a comprehensive menu for safer swallowing for patients with dysphagia. 1-888-MENU-123 or online at: http://www.thickandeasy.com
- Non-Chew CookBook by Randy Wilson for people with difficulty chewing, swallowing and/or dry mouth disorders.
- Dysphagia Foods: Offers “phagia” a line of puree foods which helps ease the difficulty of preparing, storing and serving puree foods. There is also order information about thickeners for foods and liquids. Product information and order information provided on the web site: http://www.dysphagia-diet.com/med-diet.htm or at 1-800-633-5550.
- Dysphagia On-line: This website provides patients and professionals who have an interest in dysphagia with ‘one-stop-shop’ access to patient, professional and product information on dysphagia. http://www.dysphagiaonline.com/

Please contact your Speech Pathologist with any questions or for more information.