This material is intended for use by speech-language pathologists (SLPs) for professional advocacy. Advocacy is the act of espousing and seeking support for a position. The Division 13 Professional Advocacy Committee actively espouses and strongly recommends the involvement of SLPs as the primary providers of diagnostic and treatment services for patients of all ages who have dysphagia.
DYSPHAGIA

- The American Speech-Language-Hearing Association
- Special Interest Division 13 - Swallowing and Swallowing Disorders
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What is Dysphagia?

- Difficulty with eating which may include one or more of the following
  - Chewing food
  - Swallowing solids and/or liquids
  - Coughing or choking when eating
  - Food sticking in the throat or chest

- It is estimated that more than 15 million people in the United States have Dysphagia

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What Causes Dysphagia

- Dysphagia may be associated with many medical conditions
- The following are the most common
  - Treatment for Head and Neck Cancer
  - Cerebral Palsy
  - Stroke
  - Head injury
  - Parkinson’s Disease
  - Multiple Sclerosis
  - ALS (Lou Gehrig’s Disease)
  - Spinal cord injury
  - Cancer
  - Dementia
The Four Phases of Swallowing

- These four phases are dynamic and overlapping
- In general they allow food and liquid to move from the mouth into the stomach efficiently and safely
Oral Preparatory Phase

- Eating is anticipated
- Food is brought to the mouth
  - Bitten off
  - Taken from the utensil
- Food is chewed and mixed with saliva
- Liquids are sipped or sucked through a straw
Oral Phase

- The food is collected
- Sealed between the roof of the mouth and the tongue
- The tongue moves the food back with a stripping wave into the back of the throat (pharynx)
- This begins the actual swallow

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Pharyngeal Phase

- Soft palate elevates
  - Preventing food from escaping into the nose
- Tongue base moves back to contact pharyngeal wall
- Larynx (voice box) moves up and forward
- Epiglottis (top part of larynx) is tilted down and back to guide the food past the airway

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Pharyngeal Phase

- Breathing momentarily stops
- Vocal folds come together to further protect airway
- Muscles of the pharynx contract
  - Move the food towards the esophagus (tube leading to stomach)
  - Upper esophageal sphincter relaxes
- Food passes into the esophagus
Esophageal Phase

- Peristalsis (a wave of contraction) moves the food through the esophagus
- The lower esophageal sphincter relaxes to allow the food to pass into the stomach
The Phases of Swallowing

Communication and Swallowing Management of Tracheostomized and Ventilator-Dependent Adults, P262, 2003, NY, Thomson-Delmar Learning, Inc. Reprinted by permission of Karen Dikeman
Types of Dysphagia

Oral Stage Dysphagia

- Difficulty manipulating food and liquids in and through the mouth.
- Chewing of solid food may be affected.
- Weakness and discoordination of tongue movements is commonly seen in oral stage swallowing.
- The tongue does not propel the food towards the throat efficiently.
Types of Dysphagia

Oral Stage Dysphagia

- Food may sit in the mouth and is not moved efficiently to the next phase.
- Oral stage dysphagia may be seen in individuals with head and neck cancer, or stroke and other neurological conditions.
- The individuals may have difficulty meeting their nutritional needs.
Types of Dysphagia

Pharyngeal Phase Dysphagia

- There may be decreased ability to “trigger” the actual swallow.
- The muscles of the throat may become weak.
- Foods and liquids do not move through the pharynx well and may be left behind after the swallow.
Types of Dysphagia

Pharyngeal Phase Dysphagia

- Problems closing the vocal folds, which help protect the airway, can also occur during this stage.
- When food or liquid is mis-directed into the airway during the swallow and passes the vocal folds, it is referred to as aspiration.
Types of Dysphagia

Pharyngeal Stage Dysphagia

- Aspiration may occur with food, liquids and/or saliva.
- The person may not cough when the aspiration occurs.
- Aspiration may lead to aspiration related pneumonia
Types of Dysphagia

Pharyngeal Dysphagia

- Both oral and pharyngeal stage swallowing problems can impact upon safe and efficient eating.
- Pharyngeal stage dysphagia is seen in many conditions including head and neck cancer, stroke and other neurological conditions.
Types of Dysphagia

Esophageal Stage Dysphagia

- Esophageal stage dysphagia involves the transport of food and liquids through the esophagus (tube leading to the stomach).
- Individuals with problems in the esophageal phase also frequently have pharyngeal phase complaints.
Types of Dysphagia

Esophageal Stage Dysphagia

- Typically in esophageal dysphagia food does not move well though the openings at the top and bottom of the esophagus.
- There is dysfunction of peristalsis (contraction wave) which normally squeezes food from the esophagus into the stomach.
- Individuals feel food “stuck” at some level.
Narrowing in the Esophagus

Courtesy of St. Joseph’s Regional Medical Center Paterson, NJ
Types of Dysphagia

**Esophageal Phase Dysphagia**

- Reflux – Movement of foods, liquids and stomach acids back up the esophagus, is a common complaint.
- Esophageal stage dysphagia can be related to neurological disorders, mechanical problems (obstructions such as cancer or strictures) or specific motility problems with the esophageal muscles. These may also be seen with aging.

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Signs and Symptoms

- Obvious signs of **oral stage** dysphagia in adults include:
  - extra effort needed to chew/swallow
  - inability to eat specific food types
  - loss of food or liquids from the mouth
  - food sitting in the mouth long after a meal

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Signs and Symptoms

- Typical signs of **pharyngeal phase** dysphagia include:
  - Coughing, choking or gagging during or right after a meal
  - “wet” or “gurgled” voice and/or breath sounds after eating or drinking
  - sensation of food “sticking” in the throat
- Pharyngeal phase difficulties may exist without any signs or symptoms
Signs and Symptoms

- **Esophageal phase** dysphagia is often characterized by:
  - frequent episodes of regurgitation, reflux (heartburn) or spitting up after a meal
  - difficulty managing solid food
  - sensation of food sticking in the throat or chest area
  - complaints of dysphagia without overt coughing, choking

- All types of dysphagia may be associated with frequent respiratory problems or infection

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How is Dysphagia Evaluated?

- Speech-language pathologists are the professionals most appropriately trained to assess and treat dysphagia in the oral and pharyngeal stages and screen for dysphagia in the esophageal phase.
How is Dysphagia Evaluated?

- The assessment starts with taking a thorough history of the signs, symptoms and medical condition.

- Typically a **Clinical Evaluation** examines the oromotor mechanism (mouth structures) and may involve meal observation.
How is Dysphagia Evaluated?

- The function of the mouth, throat and sometimes the esophagus may then be carefully examined with instruments.

- An x-ray procedure, called a "Videofluoroscopic Swallow Study" or "Modified Barium Swallow" images the swallowing process and follows food/liquids through the mouth and throat into the esophagus.

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Modified Barium Swallow Study
Courtesy of Nancy Swigert
Modified Barium Swallow Study

Courtesy of Nancy Swigert
How is Dysphagia Evaluated?

- Problem areas can be examined, the reasons behind those swallowing problems identified and a course of treatment planned.
- A variety of foods are given during the test to help to determine the best diet for the patient.
- Therapy techniques can also be tried during the study.
- Significant esophageal problems may warrant additional x-rays and tests.
How is Dysphagia Evaluated?

- Another test (Fiberoptic Endoscopic Evaluation of Swallowing - FEES) uses a special camera on a small scope to look at the throat while swallowing foods and liquids.
- The narrow tube is inserted into the nose and positioned to view the throat.
- Pictures are taken as the foods and liquids move through the throat.
Fiberoptic Endoscopic Evaluation of Swallowing

Courtesy of Nancy Swigert
How is Dysphagia Evaluated?

- The test is performed by a speech-language pathologist. An ear, nose and throat physician may collaborate during the test.
- Recommendations for the safest diet and best therapy techniques to help identify swallowing problems are made following FEES.
How is Dysphagia Evaluated?

- The speech pathologist will recommend the best test based upon the patient’s swallowing complaints and symptoms.
- All tests are performed with a doctor's order and preferably working with a team of professionals such as a nurse and nutritionist.

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What treatments are available?

- Depending on the cause of the problem any of the following may be used to correct or improve the condition
  - Dysphagia Therapy
  - Medical intervention
  - Surgical intervention
  - Dietary modifications
Types of Treatments

- Medical Interventions
  - Medications
  - Dilation of a narrowed area
- Surgical Interventions
  - Removal of tumors
  - Relaxing muscles
  - Tightening muscles

- Dietary Modifications
  - Modifying the consistency of food so that it is easier to chew or swallow
  - Modifying the consistency of liquids so that they can be swallowed easily and safely
  - Assuring that nutritional needs are met

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Food Consistencies

- **Regular Diet**
- **Soft to Chew Diet** - Normal consistency but with low fiber content. Moderate chewing
  - Pancakes
  - Bananas
  - Pasta
  - Poached chicken, poached fish, potted beef
  - Cheese cake, pies

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Food Consistencies

- **Mechanically altered** (chopped)-All meats and vegetables are finely chopped and moistened to remain cohesive.
  - Minimal chewing required. May include fork mashed foods.

- **Puree** - All foods blended to a smooth consistency. No chewing required. Will slowly drop from a suspended spoon.
Dysphagia Therapy

- Treatment varies depending on the cause, symptoms and type of swallowing problem
- Therapy may include
  - Exercises
  - Changes in head or body position
  - Teaching strategies to improve eating
  - Heightening sensation of food

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General Suggestions for a Safe and Efficient Swallow

- Have a quiet and relaxed atmosphere at mealtime
- Be sure that dentures fit well. Use adhesives if needed
- Keep foods soft and moist if needed
- Sit upright when eating, drinking, and taking medication
- Chew well
- Swallow before taking another bite

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General Suggestions for a Safe and Efficient Swallow

- When drinking, swallow each sip before taking another one
- Chew and swallow food before talking
- If you need to be fed let the person feeding you know if
  - They are going too fast
  - Giving too large an amount
  - Not putting food in your mouth correctly
General Suggestions for a Safe and Efficient Swallow

- Sit upright for at least an hour after eating to allow food to be digested.
- If you have weakness on one side of your mouth check with your tongue or finger to be sure that no food remains on your weaker side.
- Brush your teeth after each meal.
Finding Help

- Speech-Language Pathologists are specially trained to work with individuals with feeding and swallowing problems.
- They hold a master’s or doctoral degree, a state license where required and the Certificate of Clinical Competence in Speech-Language Pathology from the American Speech-Language-Hearing Association.

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Finding Help

- American Speech-Language-Hearing Association 1-800-638-8255
  [www.asha.org](http://www.asha.org)
- Specialty Board on Swallowing and Swallowing Disorders [brss@wismed.org](mailto:brss@wismed.org)
- Your local hospital or health agency
- Your State licensing department ©ASHA
The Board will be accepting applications for regular membership as of January 2005.

For further information go to www.swallowingdisorders.org or e-mail brss@wismed.org
This program was produced by the Professional Advocacy Committee of Division 13 Swallowing and Swallowing Disorders

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