

DYSPHAGIA



HEALTH CARE QUALITY UNITS

Disclaimer

- The information presented to you today is intended to increase your awareness.
- The information is not intended to replace medical advice.
- If you are in need of medical advice, please contact your physician.

Objectives

■ The participant will:

- Have an increased understanding of the normal swallowing process.
- Recognize the signs and symptoms of swallowing difficulty.
- Be able to name some of the causes of Dysphagia.
- Be able to follow up if difficulty in swallowing is suspected.
- Apply safety measures that need to be utilized during mealtime.

The Joys of Eating

- For most of us, eating is pleasurable and effortless. We look forward to the flavors and taste of food. The smell of food during preparation stimulates salivation which paves the way for effective eating and digestion. Most of the time eating is also a social event.
- For an individual who has swallowing difficulties, eating a meal may feel more like work.
- As a result, this individual may take longer to eat, be easily distracted, refuse to eat, or become nutritionally compromised.

Dysphagia Definition

- Dysphagia is difficulty chewing, swallowing, or moving food or fluid from the mouth to the stomach.
- There are numerous causes, and therefore many different symptoms, of Dysphagia.
- These symptoms range from mild throat discomfort to the inability to eat solid food.

Facts and Figures

- The percentage of individuals affected by Dysphagia include:
 - Up to 30 percent of all hospitalized individuals.
 - Up to 68 percent of individuals in nursing homes.
 - Up to 60 percent of individuals in rehabilitation centers.
- The incidence of feeding and swallowing difficulty increases with the degree of disability.

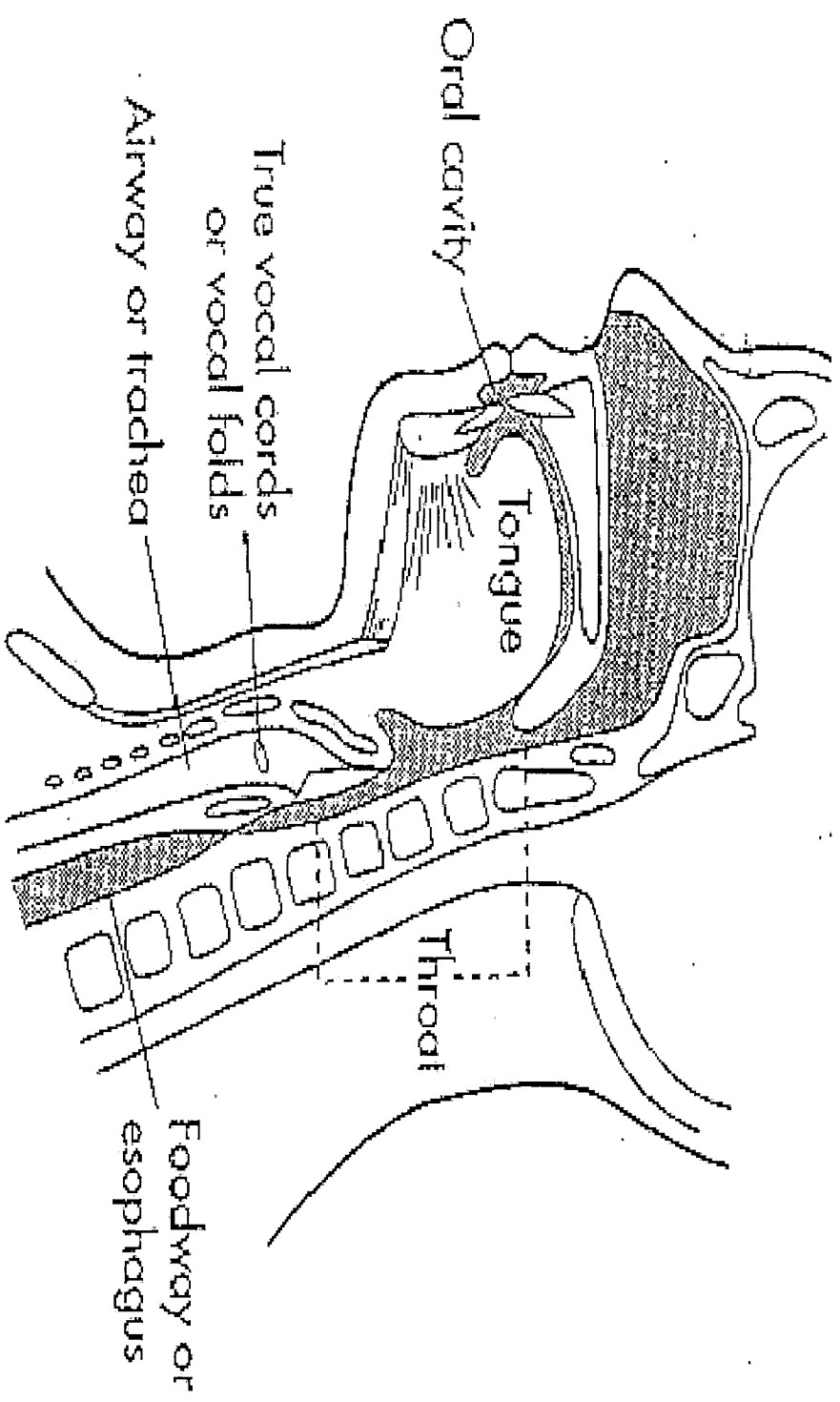
Anatomy

- Pharynx – throat.
- Esophagus – the tube that carries food from the back of the mouth to the stomach.
- Stomach – food storage tank.
- Trachea – airway tube.
- Aspiration – the taking of food, liquid, or a foreign substance into the lungs through the airway.

Types of Aspiration

- **Silent Aspiration** – when a foreign substance enters the lungs without signs or symptoms of aspiration.
- **Aspiration Pneumonia** – an infection of the lungs caused by food, liquid, or a foreign substance entering the airway.

Throat Anatomy



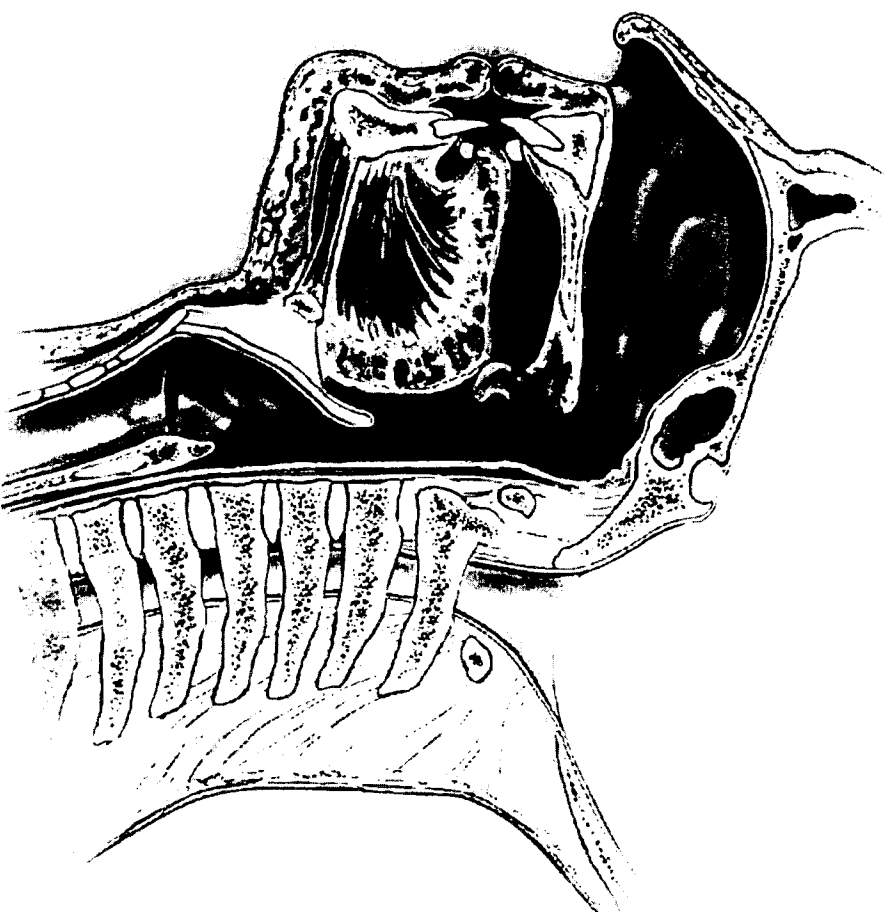
Swallowing Process

- One hundred muscles of the head and neck are used for chewing and swallowing.
- People swallow 600-1000 times a day.
- Both voluntary and involuntary action is involved.

Four Phases of Swallowing

1. Oral Preparatory – Food is chewed, mixed with saliva, and forms a food bolus. Lip closure creates a negative pressure.
2. Oral Propulsive – Food is propelled backward through the mouth with a front to back squeezing motion.

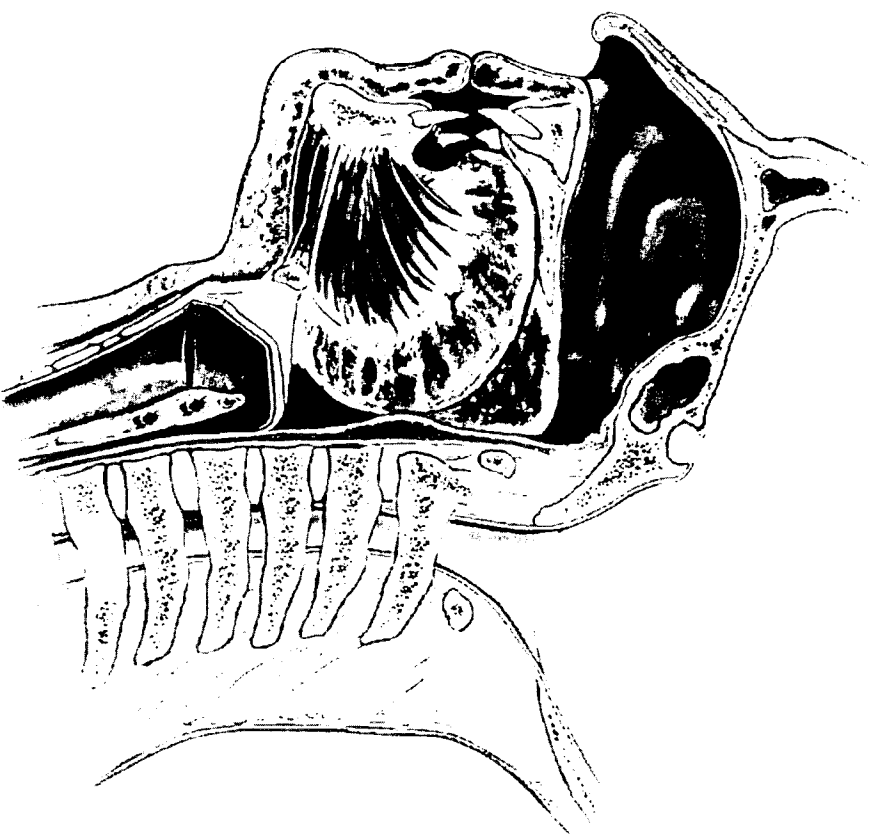
Picture of Oral Phase of Swallowing



Four Phases of Swallowing

3. Pharyngeal – This is where the food moves from the oropharynx to the esophagus, bypassing the trachea or windpipe. The epiglottis, larynx, and vocal cords have a mechanism intact, which helps protect the airway during a swallow.

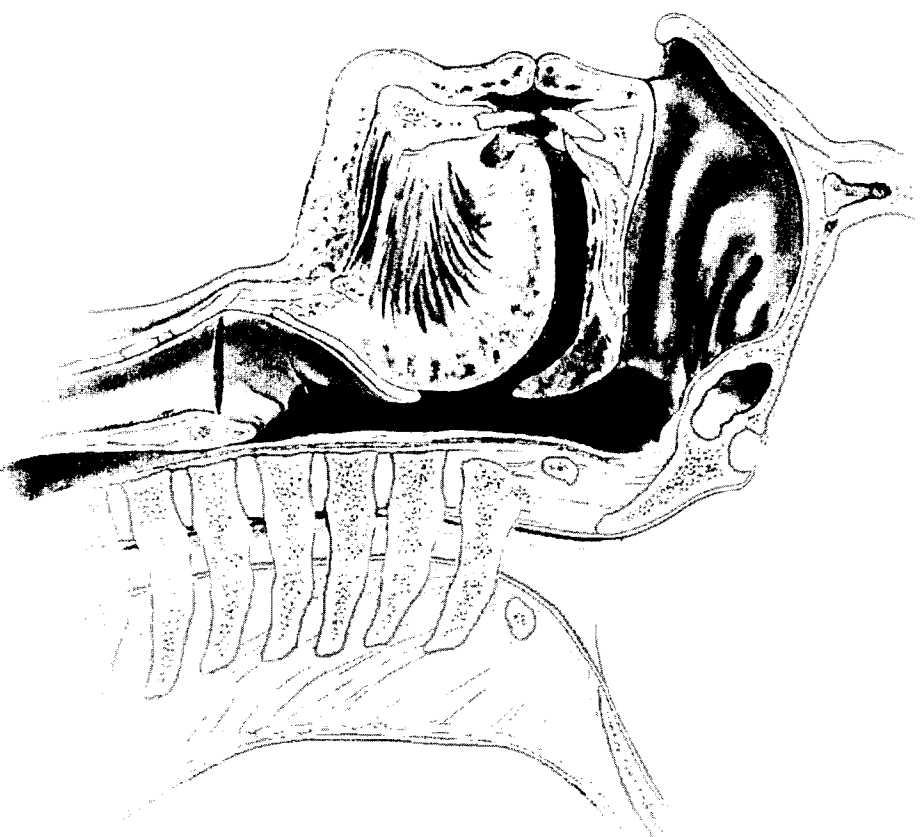
Picture of Pharyngeal Phase of Swallowing



Four Phases of Swallowing

4. Esophageal – Food moves from the upper esophageal sphincter through the esophagus, through the lower esophageal sphincter, into the stomach.

Picture of Esophageal Phase of Swallowing



Symptoms of Dysphagia

- Frequent episodes of gagging, coughing, or choking.
- Coughing or choking during, or after, eating or drinking.
- Gargly (wet) voice during or after eating or drinking.
- Frequent upper respiratory infections or pneumonia.
- Increased temperature of unknown cause.
- Eating rapidly.
- Swallowing food whole.
- Extra effort, or difficulty, with chewing or swallowing.

Symptoms of Dysphagia

- Vomiting
- Weight Loss
- Storing food or drink in the mouth
- Frequent, repetitive swallowing
- Frequent throat clearing, hoarseness, or sore throat
- Hesitation, or inability, to swallow
- Food sticking in the throat
- Facial grimacing

Symptoms of Dysphagia

- Symptoms of Dysphagia can range from mild to severe. In some cases, the individual may not exhibit any visible signs.
- Labored breathing, wheezing, and shortness of breath are a few of the symptoms that can result if the consumer has developed a respiratory problem as a result of the swallowing difficulty.

Causes

- Neurological disorders – This may include stroke, head injury, cervical spinal cord injury, etc.
- Congenital/progressive neurological conditions – Alzheimer’s disease, Cerebral Palsy, and Parkinson’s disease are a few examples.
- Structural defects – This category may include tumors of the head or neck, and facial trauma.

Causes (continued)

- Medical problems or complications resulting from a medical intervention – may include difficulty swallowing due to severe infections of the throat, an injury to a muscle or nerve post surgery.
- Certain medications
- Psychogenic – e.g., fast eating syndrome, lack of interest in eating, or swallowing food whole.

Complications

- There are serious problems that can develop if a person has Dysphagia that is not identified, and not treated.
- Possible complications:
 - Poor nutrition or dehydration
 - Aspiration pneumonia
 - Chronic lung problems
 - Lack of enjoyment when eating or drinking
 - Isolation at social events that involve eating

Swallowing and Safety

- As soon as the staff or a family member sees that the individual has one or more of the symptoms of Dysphagia, or a complication of it, the information needs to be reported to the house supervisor or the house nurse.
- Next, the information needs to be reported in a timely manner to the family physician.
- It may be helpful to keep a record of the individual's symptoms, when they occur, what the individual was eating or drinking, and any other conditions surrounding the event.

Swallowing and Safety (continued)

Remember

In an emergency situation, follow your agency protocol and call 911 if indicated.

Diagnosing Dysphagia

- The Primary Care Physician:
 - Takes a thorough medical history.
 - Does a physical exam.
 - Checks cough and gag reflexes.
 - Discusses findings with consumer and staff.
 - Orders blood work, diagnostic studies, or consultation with other health professionals as indicated.

Diagnostic Tools

- Speech Therapy Evaluation
- Tableside Feeding Evaluation
- A Videofluoroscopic Swallow Study (modified barium swallow) may be done. A video x-ray is taken to view the mouth, throat, and esophagus as the individual swallows a variety of liquids and foods.
- Fiber optic Endoscopic Evaluation
- CT scan

Diagnostic Tools

- Esophagram (Barium Swallow) – This x-ray with video capabilities views the esophagus highlighted by the barium.
- Endoscopy – A flexible, narrow tube, is passed into the esophagus, and projects images of the pharynx and esophagus.
- Esophageal manometry, pH probe, and biopsy can be done if needed.
- For further information on diagnosing Dysphagia.

Methods of Treatment

- After an individual has received the diagnosis of Dysphagia, there are many things that can be done.
- The PCP will determine a treatment plan that will include the type of diet the individual can eat, precautions to be followed when the person is eating, and an order for continued speech therapy if indicated.
- Speech Therapy sessions
- Vital Stim Therapy (if indicated)

Vital Stim Therapy

- It is a patented therapy process and equipment system developed specifically to treat dysphagia.
- It is approved by the Food and Drug Administration.
- External stimulation is done to re-educate the muscles for pharyngeal contraction.
- Done in conjunction with other swallowing-related exercises.
- Additional Information- VitalStim Dysphagia

Treatment for Difficulty Swallowing

Interventions

- Oral care
- Dietary Modifications
- Assisting the individual with positioning and eating
- Treatment sessions with a Speech Therapist
- Swallowing precautions

Interventions – Oral Care

- Ensure good oral care before and after mealtime.
- Ensure that dentures, or partial plates, fit properly and are in good condition.

Interventions – Dietary Modifications

- A Dysphagia diet is a diet of different textures of foods and liquids.
 - It is used with people who have swallowing difficulty.
 - It reduces the risk of food getting into the trachea which leads to the lungs.
 - This diet makes it easier for the person to chew and move food around in their mouth.

Interventions – Dietary Modifications

- Chopped – Food is cut into small pieces but maintains some of the original texture.
- Ground – Food is put in a food processor and has a slightly coarse texture and contains lumps.
- Pureed – Food is put through a blender or food processor until perfectly smooth, requiring no chewing.

Interventions – Dietary Modifications

- Thickened Liquid (~~cornstarch~~ ~~liquid~~ ~~cornstarch~~) ~~cornstarch~~ (see ~~hyperlink~~ ~~hyperlink~~ ~~hyperlink~~) special thickeners or cornstarch) can be added to liquids that are “thin”.
- Consistency of liquids needs to be specified.
 - Nectar
 - Honey
 - Pudding
- For more information on commercial products related to the Dysphagia diet, see hyperlink:

[Dysphagia Diet title page](#)

Interventions – Assisting the Person with Positioning and Eating

- Position at 90 degree angle, or as upright as possible.
- Do not eat while lying down or leaning back.
- Avoid tilting head back.
- Tilt head/chin slightly forward (45 degrees).
- Eliminate distractions.

Interventions- Assisting the Person with Positioning and Eating (continued)

- Allow enough time for meals.
- Follow prescribed diet.
- Offer small amounts (1/2 to 1 teaspoon at a time).
- Feed each spoonful slowly.
- Sit next to the individual and make sure you are within their visual field.

Interventions - Assisting the Person with Positioning and Eating (continued)

- Let the individual catch their breath between spoonfuls and sips (at least 10 seconds).
- Encourage the person to stay upright for at least 30 minutes following their meal to promote digestion and prevent reflux.

Interventions – Speech Therapy

- The Speech Therapist will work with the individual in some cases.
- The focus will be on strengthening the muscles involved in swallowing, and working to insure that the consumer is safe when eating.
- In some cases, the Speech Therapist will assign exercises for the individual to do between therapy visits. Doing these exercises as instructed will help the individual see improvement.

Safety When Swallowing

- Be sure to follow your agency's policy regarding safe eating practices.
- One-to-one staff supervision may be indicated.
- Record symptoms of swallowing difficulty to the doctor.
- **Always follow the prescribed Dysphagia diet.**
- All staff need to be educated on the safe swallowing procedures that are in place.

References

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3426263/>
- <http://www.asha.org/public/speech/swallowing/Swallowing-Disorders-in-Adults.htm>
- <https://www.stonybrookmedicine.edu/patientcare/speech-hearing/swallowing/feeding/evaluation>
- <http://www.uwmedicine.org/health-library/Pages/esophagram.aspx>
- <http://www.webmd.com/digestive-disorders/digestive-diseases-endoscopy#2>
- <https://my.clevelandclinic.org/health/articles/esophageal-manometry-test>