

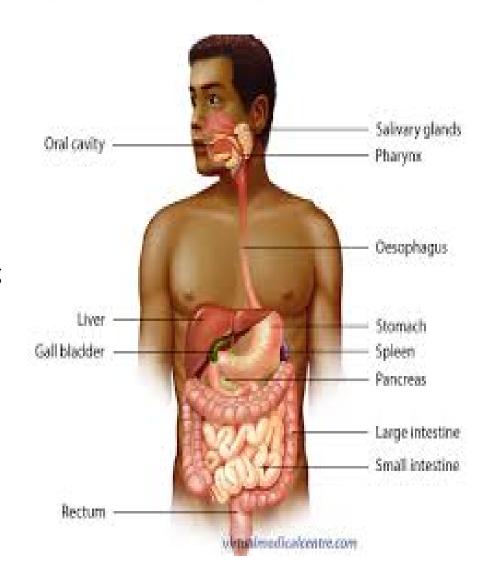
- Definition of dysphagia (swallowing disorder)
- Description of the normal swallowing process
- Causes of dysphagia
- The assessment process
- Management

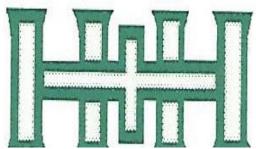


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Definition

- Dysphagia is a symptom and not a disease
- Dysphagia describes difficulty chewing and swallowing food or drinking fluid (dys= difficulty, phagia = eat)
- Difficulties can arise anywhere along the alimentary tract
- Can be temporary or permanent
- Can range from mild severity to profound severity
- Research demonstrates that the swallowing pattern alters with age, called prysbyphagia
- 1/26 people have dysphagia

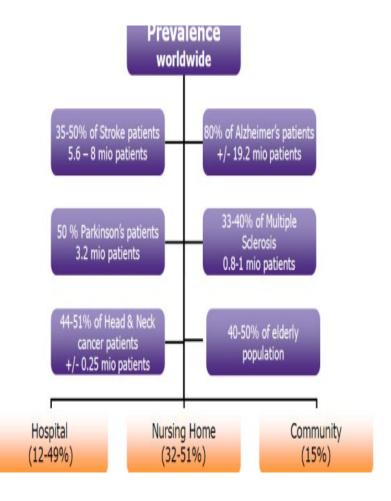




Conditions/causes associated with dysphagia

- Neurogenic
- Head and Neck Surgery
- Trauma
- Chemo and Radiotherapy
- Tracheostomy (+) artificial ventilation
- Obstructive sleep apnoea
- Medication
- Ageing

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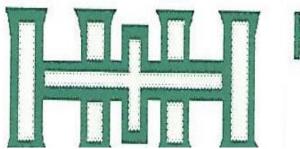


Normal swallowing

Is the coordination between neural commands and anatomic structures in order to precisely sequence physiological and respiratory events minimizing the aspiration risk/choking and integrating normal deglutition.

Consider the sensory, motor and mechanical movements taken to eat a donut



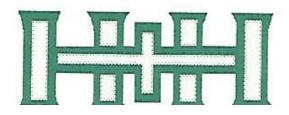


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- 1. Oral preparatory
- Oral
- Pharyngeal
- 4. Oesophageal

The swallow should be considered as one behaviour with four components acting together in an integrated manner to achieve successful swallow function"

Crary and Groher, 2003



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Normal Swallowing

Oral Preparatory Stage

- Biting and chewing food into a bolus
- Needs coordination of lips, tongue and jaw movements
- Tongue moves food onto chewing surface of teeth.
- Chewing mixes food with saliva to form a bolus

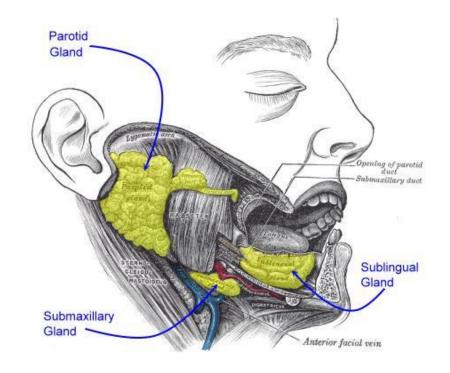




Salivary Glands

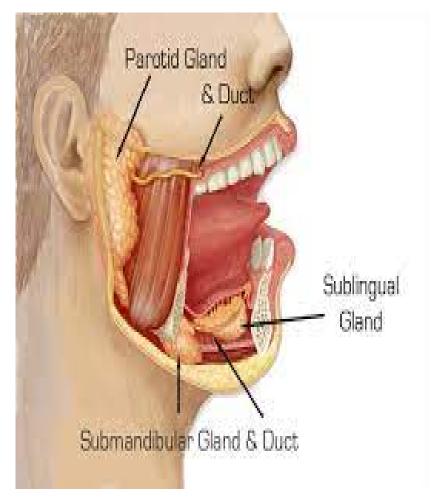


- You need saliva to swallow
- If unable to swallow, saliva drools from the mouth or inhale them, causing chest infections or aspiration pneumonia
- Meds to dry up saliva or replace it



Saliva is Part of the Big Picture

- Protection
- Buffering
- Tooth integrity
- Antimicrobial action
- Tissue repair
- Taste sensation
- Digestion





Swallowing Disorders Normal Swallowing

- An awake adult swallows once per minute (1000 times daily) irrespective of eating.
- High rate is required because 1000 -1500ml of saliva is produced daily.
- Normal rate of secretion is 0.3-0.4ml per minute
- Rises to 2ml/min, during chewing



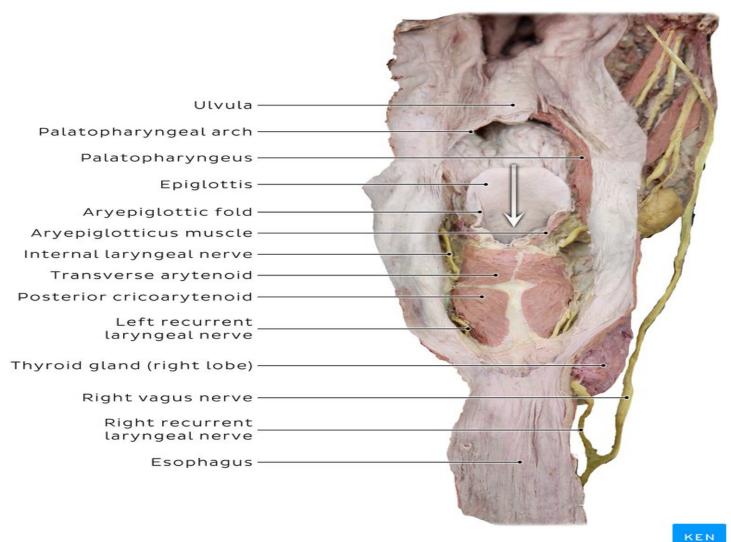
Swallowing Disorders Normal Swallowing



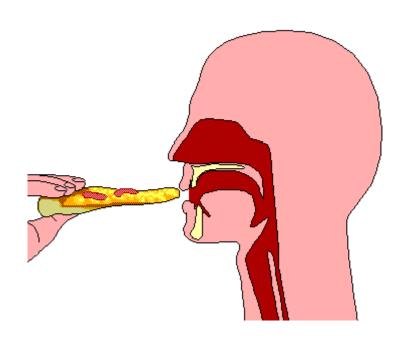
Pharyngeal Stage

- phase of swallowing is under involuntary neuromuscular control.
 - Larynx rises/breathing stops
 - Epiglottis folds down over airway
 - False and true vocal cords close
 - Food or fluid passes into oesophagus





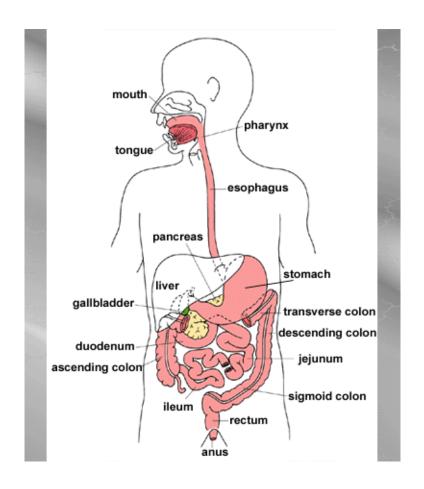
Normal Swallow



Swallowing Disorders

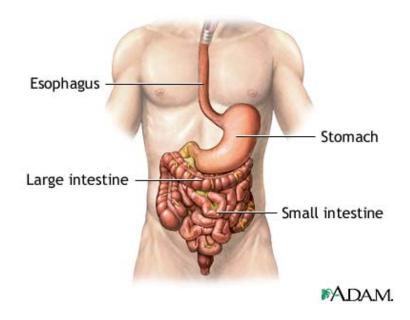
Oesophageal

- The oesophageal phase of swallowing is under involuntary neuromuscular control.
- The upper oesophageal sphincter relaxes to let food pass into the lumen of the tube to lower oesophageal sphincter and then into the stomach

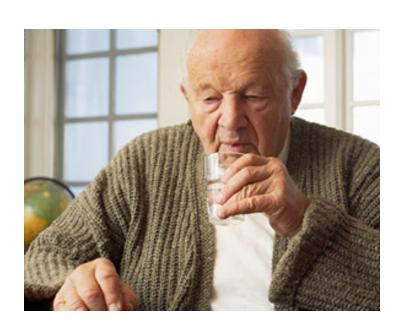


Swallowing Disorders Normal Swallowing

- Oesophageal Stage
 - From throat to stomach

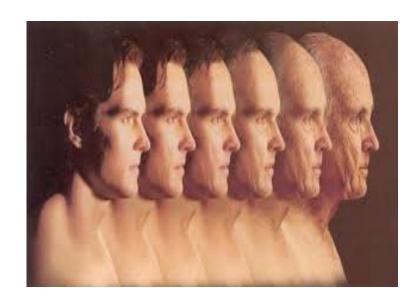


Swallowing Disorders Main Causes of neurogenic dysphagia



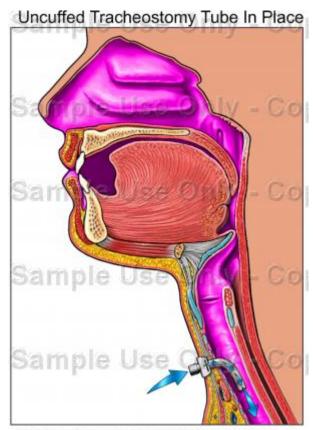
- 50% all stroke patients will have dysphagia during acute phase of disease
- 95% PD patients will have swallowing problems
- 70% of severe acquired brain Injury will have dysphagia
- 80% of patients with dementia will have swallowing problems.

Deterioration in Swallowing Function (ageing)



- Ageing 65+ has a considerable impact on altering the swallowing pattern
- Anatomical
- Physiological
- Modest changes occur slowly and insidiously but may significantly reduce functional reserve, capacity and endurance, increasing vulnerability to dysphagia and airway invasion secondary to disease

Swallowing in Patients with tracheostomy. Nasogastric tubes and orogastic tubes



MID-SAGITTAL (CUT-AWAY) VIEW OF UPPER RESPIRATORY PATHWAY

- Placement of tube <u>may</u> affect some of the normal sequences of swallowing such as
 - Laryngeal elevation
 - · Cricopharyngeus opening
 - Compress oesophagus
 - Disrupt airflow
 - -impair sensation and taste
 - Olfactory senses dulled
 - Recent research suggests main causes due to premorbid dysphagia and aging the more likely causes.
 Leder and Suiter 2013

Overview of dysphagia assessment

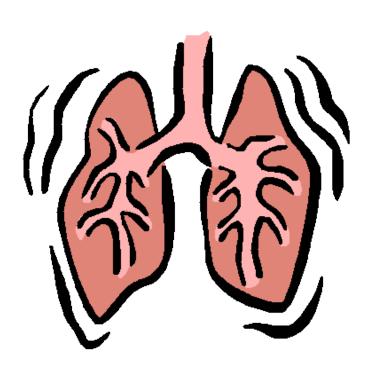
Four main elements involved in the swallowing examination

- 1. Medical history including MUST Score
- 2. The Patient's description of symptoms
- 3. Cognitive abilities and awareness levels
- Oro-motor examination
- 5. Oral trials as indicated- called a swallowing challenge



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Swallowing Disord Why Important?



- Inadequate hydration and nutrition
- Unable to take medication
- Food and fluid enters lungs
- Chest infection
- Pneumonia
- Airway obstruction
- Increase likelihood of death
- Increase likelihood of secondary disease

Swallowing Disorders

Prevention

Early identification

- Coughs while eating or drinking
- Leaves food
- Food left in mouthsquirreling
- Wet gurgly voice
- Choking
- Chest pain
- Chest infection



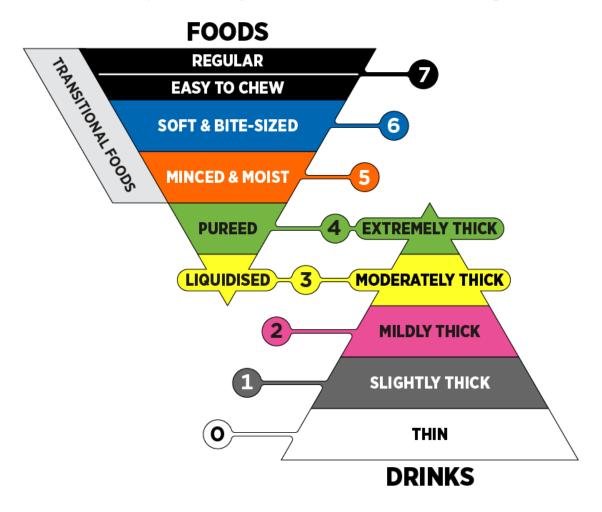
Swallowing Disorders Management



- High risk patients need to be screened with functional swallow assessment as described
- Modified diet
 - Pureed
 - Soft
 - Normal
 - Thickened fluids
 - Enteral feeding –NGT, PEG, IV fluids, sc fluids
 - A combination of both oral and enteral

The IDDSI Framework

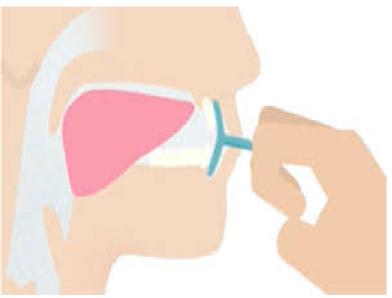
Providing a common terminology for describing food textures and drink thicknesses to improve safety for individuals with swallowing difficulties.



[©] The International Dysphagia Diet Standardisation Initiative 2019 @ https://iddsi.org/framework/

Swallowing devices





Personal Place Mat

Date: July 26th 2021

Mat completed by: Jane Whitaker MRCSLT



Swallow.

Christopher recently experienced a serious choking incident while eating meat. He required emergency procedures by paramedics to clear airway obstruction



Food.

Level 6 Soft and Bite Sized, Please ensure food is cut into bite size pieces, the size of a thumb nail.



Drink.

Level 0 thin fluids



Routine, where and when

• Regular meal and drink times



Position

Chris needs to be seated in an upright position He will need to remain in an upright sitting position for at least ½ hour after meals to help prevent reflux an regurgitation of food or fluids



Equipment and protection.

Standard equipment



Camanauniaatia

Please tell Christopher what he is about to



Supervision

1.1 supervision with spoon feeding, encourage Barbara to hold her cup so she can drink with a little more independence



Risks and help I need.

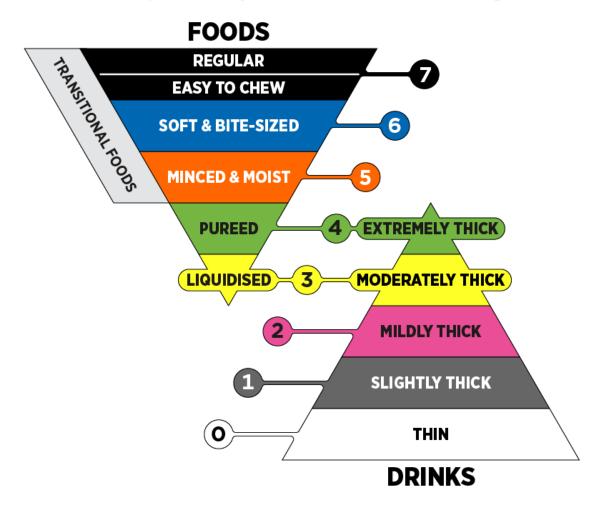
Chris needs an eye kept on him at mealtimes

Weight loss

If there are any concerns or changes to swallowing withdraw PPM immediately and refer to SLT. Some of the clinical signs that can indicate a swallowing difficulty include coughing/choking on food or drink, wet gargly voice, recurrent chest infections, weight loss. It is the responsibility of direct support staff to review the PPM. Carla Bryson & Jane Whitaker, MRCSLT.

The IDDSI Framework

Providing a common terminology for describing food textures and drink thicknesses to improve safety for individuals with swallowing difficulties.



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Choking consequences

- 'David died because he ate his sandwich too quickly, it went down the wrong way and obstructed his airway. That was an unintended, unwanted and unforeseen event.'
- Ian Wade QC

