



مدينة الملك فهد الطبية
King Fahad Medical City



Child Swallowing Difficulty



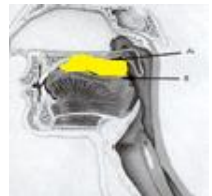
What is swallowing?

It is the ability to transit food from the mouth to the stomach.

What are the stages for the swallowing process?

1. Oral Phase:

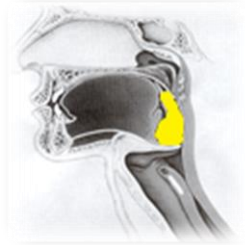
Is under our voluntary control and where the **bolus** (is a ball-like mixture of food and saliva that forms in the mouth during the process of chewing) is formed.



This requires adequate preparation and coordination between lips, tongue, jaw, teeth, soft palate, cheeks, and sucking/chewing skills.

2. Pharyngeal Phase:

Movement of the bolus from mouth into the esophagus.



The swallow is triggered when the food bolus contacts the sensory centers at the base of the tongue.

This stage is under involuntary control. At this stage closure of the naso-pharynx occurs to prevent the bolus from entering the nasal cavity. Elevation of the larynx, inversion of the epiglottis, and adduction of the vocal folds take place to prevent the bolus from entering the airway. The bolus is then pushed through the upper valve of the esophagus to travel down to the stomach.

3. Esophageal Phase:

Transfer of the bolus from the pharynx to the stomach.

What is Dysphagia?

It is any swallowing difficulty that may occur at any of the stages of swallowing.

What are the Signs and Symptoms of Pediatric Dysphagia?

Weak sucking/difficulty with breast and/or bottle feeding.

Discomfort and back arching during feeding.

Prolonged meal time (over 30-40 min/bottle feed).

Difficulty in breathing resulting in incoordination between swallowing/breathing.

Consistent coughing, gagging, choking during feeding.

Chest congestion related to feeding.

Consistent refusal to eat and/or drink.

Refusal of specific food consistencies.

Liquid or food leakage from the nose.

Chewing difficulty.

Recurrent pneumonia/chest infections.

Weight loss and developmental delay.

Who Can Help?

A Swallowing Therapist will evaluate and diagnose your child's swallowing difficulty through:

- Obtaining your child's medical history, neonatal history, developmental milestones, and feeding history.
- Examining the strength, sensation, and function of muscles involved in swallowing.
- Monitoring your child's behavior during feeding.
- Conducting instrumental evaluation if needed, such as:
 - Modified Barium Swallow study: special x-ray to assess the oropharyngeal swallowing function using barium mixed with food and liquids.
 - Fiber-optic Endoscopic Evaluation of Swallowing (FEES): from the nose, swallowing function can be viewed.

What are ways of Therapeutic Intervention of Dysphagia?

Dysphagia therapy varies greatly based on results of dysphagia evaluation and symptoms of dysphagia:

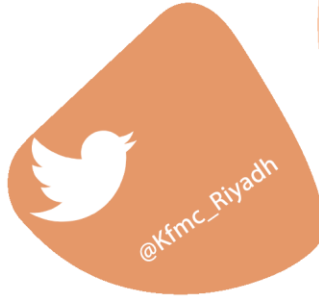
- **Medical intervention.**
- **Direct therapy (child specific):**
 - Modification of diet/food consistency.
 - Controlling the flow of bottle feeding.
 - Regulating breathing/swallowing coordination.
 - Adjusting the feeding position.
 - Facial and oral exercises to improve muscle strength/sensation.
 - Techniques to enhance sucking strength.

- **Behavioral Modification:** helping hypersensitive children to accept different food consistencies.
- **Referral to other professionals:** such as dentists, Gastroenterology, psychologists, physical therapy and occupational therapy.

لأن الوعي وقاية ..

إدارة التثقيف الصحي

Communication and
Swallowing Disorders Dept.



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