

The Normal Swallow

There are processes that enable us to swallow safely.

Disruption to any of the following may result in a swallowing difficulty, referred to as **dysphagia**.

Hunger

This is the brain receiving messages, which can be caused by:

- An empty stomach
- The smell of food

This sensation causes saliva to be made, which helps prepare food for swallowing.

Chewing

When food enters the mouth, it is chewed to break it up and form a ball of food (bolus). It is helped by:

- A good lip seal
- Good cheek muscle tone
- Well-functioning teeth
- Well-functioning tongue

Initiation of the Swallow

When the food has been sufficiently chewed, the tongue pushes the food to the back of the mouth.

When the food reaches the throat area, a swallow is initiated. Once this occurs, the process cannot be stopped as it is a reflex.

Throat Elevation

When the swallow reflex occurs:

- The soft palate lifts up to ensure no food enters the nasal cavity (back of the nose)
- The throat elevates and tilts forwards
- Breathing stops momentarily.

Airway Closure

When the throat elevates and tilts forwards:

- A flap of cartilage known as the epiglottis moves to cover the airway and prevent food 'going down the wrong way'
- The food pipe (oesophagus) opens

Rest

The food has now moved into the food pipe (oesophagus). Then:

- The muscles of the throat go back to a resting state

If something stimulates this area at this stage, a cough reflex usually occurs.

The sequence of a swallow happens in less than a second and requires many nerves and muscles working together with precision to perform the complex task of swallowing.