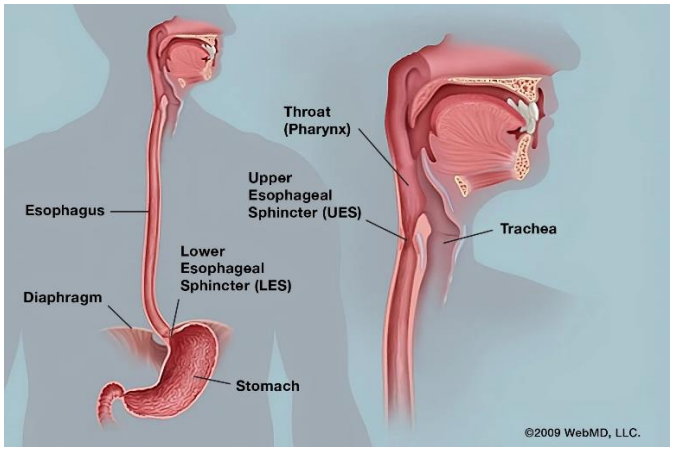
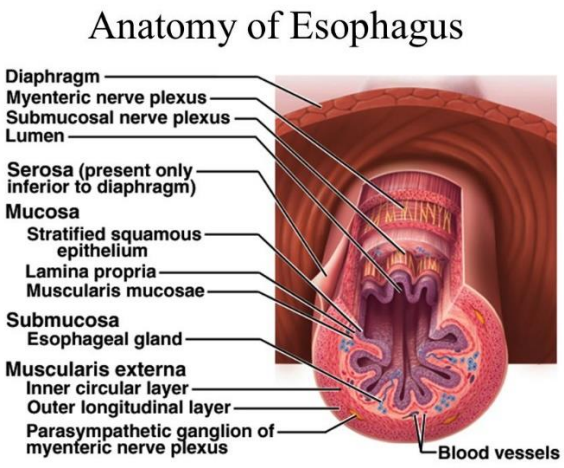
Oesophagus





1. Overview of the Oesophagus: The oesophagus, commonly known as the food pipe, is a muscular tube that plays a crucial role in the digestive system. It connects the throat to the stomach, allowing the passage of food and liquids from the mouth to the stomach for further digestion.

2. Anatomy of the Oesophagus:

- **Length and Location:** The oesophagus is approximately 25 centimetres long and extends from the lower part of the throat to the upper part of the stomach.
- **Muscular Layers:** The wall of the Oesophagus consists of several layers of muscles, including longitudinal and circular muscles, which work together to propel food downwards.

3. Swallowing Process:

- **Voluntary Phase:** The process begins with the voluntary phase in the mouth, where the tongue helps move the chewed food into a bolus.
- **Involuntary Phase:** Once the bolus reaches the back of the mouth, the involuntary phase begins. The lower esophageal sphincter (LES) relaxes, allowing the bolus to enter the Oesophagus.

4. Peristalsis:

- **Wave-Like Contractions:** Peristalsis is a coordinated, wave-like contraction of the esophageal muscles that propels the bolus towards the stomach.
- **Role of Lower Esophageal Sphincter:** The LES prevents the backflow of stomach contents into the Oesophagus.

5. Path Through the Body:

- **Throat (Pharynx):** The journey starts in the throat, where the bolus is formed during chewing.
- **Upper Esophageal Sphincter (UES):** From the throat, the bolus enters the oesophagus through the UES.

- **Peristalsis:** The coordinated contractions of peristalsis move the bolus down the Oesophagus..
- **Lower Esophageal Sphincter (LES):** Finally, the LES opens to allow the bolus into the stomach.

6. Role in Digestion: The oesophagus serves as a conduit for food, facilitating its smooth transition from the mouth to the stomach. While it doesn't participate in digestion directly, its muscular actions ensure efficient movement of food.

Disorders of Oesophagus:

1. Gastroesophageal Reflux Disease (GERD):

- **Description:** GERD occurs when stomach acid flows back into the oesophagus, causing irritation.
- **Symptoms:** Heartburn, regurgitation, and difficulty swallowing.

2. Achalasia:

- **Description:** Achalasia is a disorder where the LES fails to relax, causing difficulty in food passage.
- **Symptoms:** Chest pain, difficulty swallowing, weight loss.

3. Oesophageal Cancer:

- **Description:** Cancerous growth in the oesophagus, often linked to chronic irritation.
- **Symptoms:** Difficulty swallowing, unintentional weight loss, chest pain.

4. Barrett's Oesophagus:

- **Description:** Chronic GERD can lead to changes in the esophageal lining, increasing the risk of cancer.
- **Symptoms:** Often asymptomatic, but associated with GERD symptoms.

5. Eosinophilic Esophagitis:

- **Description:** Inflammatory condition involving an increased number of eosinophils in the oesophagus.
- **Symptoms:** Difficulty swallowing, chest pain, food impaction.

6. Treatment Options:

- **Medications:** Antacids for GERD, muscle relaxants for achalasia.
- **Surgery:** Fundoplication for GERD, myotomy for achalasia.
- **Lifestyle Changes:** Dietary modifications and weight management.

7. Importance of Regular Check-ups: Regular medical check-ups are crucial for early detection and management of esophageal disorders. Timely intervention can significantly improve outcomes and enhance the quality of life for affected individuals.