

# The Digestive System Teacher Guide

## Student learning outcome (SLO):

- Different food groups
- The process of digestion
- Different organs associated with the process of digestion
- .Molecules and their examples
- Disorders of the digestive system

#### Overview:

The main purpose of this lesson is to ensure the students to learn about how the food we eat breaks down into smaller pieces with the help of different organs, and how absorption of nutrients occur into the bloodstream.

#### Introduction:

Lead the students in learning about,

'How our digestive system works'.

'The digestive system'

Video of the lecture can be shown to the students as well.

https://youtu.be/Og5xAdC8EUI?si=AsxLK6CZ4p38B1N

https://youtu.be/ZBZWgrfZFbU?si=zI7vQNhIUkIbKd4F

### **Keywords:**

Digestion, alimentary canal, oral cavity, esophagus, pancreas, gall bladder, bile, rectum, anus, small intestine, large intestine, stomach

#### Material:

- Large clear plastic bottle (representing the body)
- Plastic bag (stomach)
- Plastic tubing (esophagus)
- Small containers or bags (representing organs)
- Crushed crackers or bread (food)
- Water (digestive juices)
- Scissors, tape, and markers



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#### **Activity:**

- i. Cut a hole in the bottom of the plastic bottle.
- ii. Insert the plastic bag into the hole, securing it with tape. This bag represents the stomach.
- iii. Attach the plastic tubing to the mouth of the bottle, representing the esophagus.
- iv. Place small containers or bags inside the bottle at various levels to represent organs like the liver, pancreas, and small intestine.
- v. Add crushed crackers or bread into the mouth of the bottle, symbolizing food.
- vi. Pour water into the bottle to represent digestive juices.
- vii. Have students gently shake the bottle, mimicking the churning action of the stomach.
- viii. Discuss the journey of food through the digestive system, pointing out each step and the role of different organs.

## **Essential questions:**

Before starting the lesson, ask some questions to explore the background knowledge of students:

- 1. What is digestion?
- 2. What are molecules?
- **3.** How the breakdown of food occurs?
- **4.** What is the role of tongue and teeth in the process of digestion?
- **5.** What are accessory organs?
- 6. How the breakdown of lipids occur?
- **7.** Which organ is responsible for the storage of waste?
- **8.** How waste is eliminated from the body?