



**FITNESS CURRICULUM  
LESSON PLAN 5**



## Lesson-5 Digestive System

Primary Subject: Health

Objectives:

- Students will learn how the digestive system works

Materials:

- Zip-lock freezer bags
- Lemon juice or vinegar
- Crackers
- **Signs that say mouth, esophagus, stomach, and small intestine**
- **Picture of a carrot, picture of a potato chip**
- Worksheet for digestive system

Introduction:

### 1. Anticipatory Set

- Tell the students that as part of our exploration of digestion, we're going to do two activities today.
  - First we will demonstrate the way in which food is broken down "digested" in our stomachs so that we can use the nutrients from the foods we eat.
    - (FYI for this activity you will need the zip-top freezer bags, lemon juice or vinegar, and crackers)
  - Second, four students will be asked to represent the four parts of the digestive system to show how the whole system works
    - **(FYI for this second activity you will use the signs for labeling student roles (mouth, esophagus, stomach, small intestine) as well as a picture of a carrot and a picture of a potato chip)**

Major Instructional Sequence for Model of Stomach:

- Pour some lemon juice into the plastic bag. The juice will be the "strong liquid" that breaks down the food. It is an acid that works like the acids we have in our real stomachs. You'll need enough to cover the cracker. About a half cup should do it.
- Break the cracker into a few pieces. This is sort of like chewing it.
- Put the cracker into the bag and zip it up, while pushing out excess air.
- Now shake the cracker in the lemon juice. You can use your hands to squeeze it, too. This is like the action of the muscles that cause our stomachs to squeeze food during digestion.
- Describe what's happening to the cracker as your "stomach" digests it.

Major Instructional Sequence for Role Play:

1. **Designate 4 students to play the roles of the mouth, esophagus, stomach and small intestine and line them up starting with the mouth and ending with the small intestine.**
2. **Take the picture of a carrot and have the mouth hold it; ask students what role the mouth plays in digestion (*breaks food up so we can swallow; releases enzymes that start to break down the food*)**
3. **Ask the student representing the esophagus to take the picture from the student representing the mouth indicating that food travels from the mouth to the stomach via the esophagus.**



4. Ask the student representing the stomach to take the carrot from the student representing the esophagus and then discuss the role the stomach plays (*breaks down food further with acid/enzymes*)
5. Ask the student representing the small intestine to take the carrot from the student representing the stomach. Ask students what role the small intestine plays (*it absorbs nutrients so that our body can use them for energy, growth and storage of energy*).
6. You can repeat this with a potato chip and then ask the students about the nutritional value of a carrot versus a potato chip.

Concluding Sequence:

- Have students fill in the worksheet (attached to this lesson plan) with the names of the parts of the digestive system to reinforce the roll playing of the four parts of the digestive system conducted earlier in the lesson.

Background:

Although this lesson plan doesn't necessarily teach students to be healthier, it is important that they understand how their digestive system works. This lesson will allow them to contextualize the other information they learn about nutrition in future lesson plans.

Vocabulary:

Esophagus- The tube that connects the throat to the stomach, carrying food to the stomach.

Stomach- A pear-shaped organ in which the first part of digestion occurs.

Small Intestine- A tube that connects the stomach to the large intestine, carrying food.



# The Digestive System

