Building a Better Body

Introduction: Proper nutrition is essential to growing bodies. In this lesson, students learn about the six essential nutrients to make sure they choose healthy foods. They will also “build” a sandwich that provides all six nutrients.

Grade Level and Subject: Fourth Grade Health

TEKS: 1a, 1f, 2a

Materials:
Plastic knife
Enough of the following ingredients to provide one sandwich per two students:
- Whole wheat bread
- Sliced lean ham or turkey
- Lettuce and tomato
- Mayonnaise or salad dressing
- Sliced cheese
- Paper plates
- Plastic spoons
- Napkins

Resources: Health textbook, Six Essential Nutrients Information Sheet (attached)

Activity: Write the six nutrients on the board. For each nutrient, ask the following questions and list students’ responses next to nutrient.

- Why do you think this nutrient is important?
- What are some foods you think may contain this nutrient?

Divide the class into pairs. Distribute copies of the Six Essential Nutrients Information Sheet. As you read aloud from the sheet, ask students if their responses to the nutrient questions were correct. Allow for corrections on the board. Distribute one paper plate to each pair of students. Instruct students not to begin until all food has been distributed. Distribute 2 slices of bread, 1 slice of tomato, 1 leaf of lettuce, 1 slice of cheese, 1 slice of ham or turkey, and 1 plastic spoon of mayonnaise or salad dressing. When all pairs of students have their food, ask students where each food belongs on the nutrient list on the board. Students should notice that the ingredients for the sandwich fall into all six nutrient groups. As students “build” their sandwiches, cut each one in half with the plastic knife, and allow students to enjoy their healthy snack.

Evaluation: Evaluate students based on participation.
Six Essential Nutrients Information Sheet

1. **Water** – Approximately 60 percent of our body weight is water. We need to keep it replenished to prevent dehydration. Drink water or water-based drinks. Many fruits and vegetables also have a high water content.

2. **Carbohydrates** – Provide energy. Found in breads, cereals, potatoes, pasta, rice, natural and refined sugars.

3. **Fats** – Good for cells. Found in butter, oils, and spreads. Meat and meat products are high-fat foods.

4. **Proteins** – Good for muscles. Found in animal foods (meats, chicken, eggs, cheese, milk), peas, beans, and lentils.

5. **Vitamins** – There are many vitamins found in a variety of foods. The following is a list of some major vitamins:
   - Vitamin A – Good for the eyes. Found in dairy products, butter, liver and some oily fish, broccoli, carrots, tomatoes, spinach, and peppers.
   - Vitamins B1, B2 – Good for energy. Found in fortified breakfast cereals, bread, meats, dairy products, and vegetables (including potatoes).
   - Vitamin B12 – Good for the blood and nervous system. Found only in animal products like meats, eggs, cheese, and milk.
   - Vitamin C – Good for bones, gums, joints, and muscles. Found in fresh fruit (especially oranges and grapefruit), fruit juices, and vegetables (including potatoes).
   - Vitamin D – Helps build strong bones. Found in sun, fish oils, fortified breakfast cereals, milk, some margarines and dairy spreads.
   - Vitamin E – Protects cells. Found in vegetable oils (especially sunflower oil), spreads, green leafy vegetables, and whole-grain cereals.
   - Folic Acid – Used to make healthy, new cells. Found in fresh vegetables—especially green leafy vegetables (particularly broccoli), oranges, whole-meal breads, breakfast cereals, and liver.

6. **Minerals**
   - Iron – Helps transport oxygen in red blood cells. Found in beef, lamb, green leafy vegetables, whole-meal breads, and fortified breakfast cereals
   - Calcium – Builds strong bones. Found in milk, cheese and yogurt. Smaller amounts are found in white bread, nuts, green leafy vegetables, and tinned fish.