Health and Nutrition

Food and the Body
Youth will understand that bodies are affected by the types and amount of nutrients taken in through food and drink.
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Food and the Body

**Age Range** 14+

**Skill Focus** After participating in this lesson, youth will
- Be able to identify key nutrients the body needs and describe their function and importance.
- Understand that bodies are affected by the types of nutrients taken in through food and drink.

**Group Size** Up to 20 youth

**Time Required** 80 minutes

**Purpose** At the conclusion of this workshop youth will have a better understanding of how nutrients (water, protein, carbohydrates, minerals, fats, and vitamins) interact with and affect the body.

**Materials Needed**
- Nutrition Template
- Nutrient Information Sheets
- Pens or pencils
- What’s on a Food Label?
- Printed cards with various foods
- Tape
- Assorted packages of food with labels
- What’s Inside the Package?

**Adapted From** Come and Get It!: Nutrition and Physical Activity for Lifelong Health

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Introduction to Nutrients (10 minutes)

Materials: Flip chart/whiteboard and markers

Explain that in this lesson youth will be learning some basic nutritional information for making healthy food choices. Begin by providing some information about the importance of nutrients (substances that provide nourishment for the body's growth or metabolism) in the diet.

- Explain that the body is just like a car. Cars need fuel to run, and so do our bodies. Food is the fuel our bodies use to function. Explaining that our stomach is our fuel tank. Hand out a few food cards to youth and have them each select two foods that they eat or like. Note: leader will need to prepare these cards ahead of time. Find pictures of different foods and paste them onto index cards.

- Explain that it’s important to consume different types of fuel. While our bodies can utilize many kinds of fuel, they are affected over time by the type of fuel, or food, that we take in. So it’s important to know what types of “fuel” we’re putting into our bodies. Explain that the most basic element of “fuel” is the nutrient.

- Share with youth that there are six basic Nutrients:
  - Carbohydrates (nutrient that gives us high amounts of quick energy)
  - Fats (nutrient that gives us stored energy)
  - Proteins (nutrient that builds muscle and bones)
  - Vitamins (nutrient that helps regulate body processes)
  - Minerals (nutrient essential to growth and metabolism)
  - Water (essential for digestion, respiration, carrying nutrients and oxygen)

  Explain that all of these nutrients are needed to maintain a healthy body.

- Write the six nutrients on the flipchart or on the board.

- Explain that youth will be working in groups to learn more about the individual nutrients by answering some specific questions.
Carbohydrates, Proteins, Fats (10 minutes)

Prior to the workshop, the leader will need to print and cut out pictures of various foods (i.e. chicken, pasta, fruit, ice cream, French fries, etc.)

Explain that now that they have learned about nutrients on their own and from their peers they will use that knowledge to make some decisions about foods, specifically whether the main nutrient in the food is carbohydrates, protein, or fat.

- Explain that youth are going to tape food cards around the nutrient sheet they think best applies to the food. For example, if they have a chicken card, they have to decide where it goes. Explain that you would put it on the Protein poster, because the main nutrient in chicken is protein. If, at the beginning of this activity, youth are unable to recognize which types of foods are high in the different nutrients, place examples from each nutrient group on the correct poster. For example: eggs (protein), meat (protein), bread (complex carbohydrate), fruit (complex carbohydrate), vegetable (complex carbohydrate), soda or chocolate bar (simple carbohydrate) and ice cream (fat).

- Have youth pair up and give each pair tape and a set of index cards with food pictures. Then have them tape their cards around the appropriate nutrient sheet.

- After youth have completed this activity, have them look to see if there are any corrections to be made. Make any appropriate corrections with the assistance of the youth. If there are still some errors discuss with the youth what goes where and why.

- Explain the functions of the three nutrients:
  - Both simple and complex carbohydrates provide quick energy.
  - Protein provides muscle building.
  - Fats are our energy reserve.

Ask: When you go to the grocery store how do you find foods that are high in the nutrients you need? Explain that they can choose fruits and vegetables and other whole or unprocessed items that have no food labels, or look at the food labels to see the nutrients in the food.
What’s on a Food Label? (15 minutes)

Materials: What’s on a Food Label? Activity Sheet

Explain that the food label (a label placed on food containers that provides nutritional information for that product) is a tool that can help people make healthier food choices and that food labels are required by law to be displayed on packaged food items. They know it’s important to get all of the nutrients in their diet, and the food label is a good tool to help them know what nutrients are in the foods they buy.

• Handout the What’s on a Food Label? activity sheet and explain that they will now go through the sheet.

• Point out serving sizes (this tells you the size of an individual serving and the number of total servings) and have a youth read what it says in the box. Have the group answer the question about serving sizes.

• Next look at calories. Discuss the following points about calories:
  o A calorie is the amount of energy in a food.
  o The average number of calories people need each day depends on their age, gender, height, and activity level.
  o Teens need between 1600 and 2700 calories each day.

Then have youth answer the questions about total calories (the amount of energy in a food) and fat calories on the activity sheet.

• The next question is about the % Daily Value (This helps you determine if a serving of food is high or low in a particular nutrient. The percentage is based on the daily value recommendations for nutrients.). When explaining the % Daily Value, draw the following bar graph as an example.

![Bar graph showing % fat allowance utilized and remaining]

• Go over “What does it mean...? at the bottom of the activity sheet. Explain the terms, then have youth answer the questions.
• Explain that now that they know more about the food label and what’s on it, they’re going to compare foods using food labels.

Food Label Comparison (15 minutes)


Explain that youth will be comparing the nutrient content on two different food items.

• Have youth select two packages of food from a pile. Hand out the What’s Inside the Package? activity sheet to each youth. Explain that they are to fill out the two labels on the activity sheet based on the information they find on the actual food labels. (Make sure they write the names of the food items above the labels on the activity sheet.)

• Then ask youth to decide if one of the food items is more nutritious than the other. They can base this on whole grains vs. white flour, less sodium, less sugar, less fat or more protein. Walk around the room and ask individual youth their opinions on which of their food items are healthier.

• Have youth present which food is more nutritious and explain why.

Discuss with the youth what they should look for when examining food labels to choose which foods to purchase.

• Choose foods that are low in fats, sugar and salt.
• Compare the nutrient content of different foods.
• Identify recommended serving sizes.
• Identify calories per serving.

Final Thoughts (5 minutes)

Ask youth to list some of the key points they learned today about carbohydrates, proteins and fats and about food labels. Leave a few minutes to answer any questions or go over any final thoughts.