



## Fruitful Minds Lesson 2: Nutrition Basics

### Objectives

- Describe food nutrients (carbohydrate, fat, protein, vitamins, minerals, water) and what each does for the body
- Illustrate foods that are more rich in carbohydrate, fat, vitamins, or protein

### Materials

- Fruitful Notes poster (display AFTER survey)
- Pre-curriculum survey part II
- Whole wheat, white bread, bowls, and OJ for 'Mushy Bread' Demo Activity
- Nutrition Twister
- Fruitful Notes for lesson 2

### Prior to Class

- Distribute nametags
- Prepare for physical fitness activity
- **Before you start, please turn off your cell phones.**

### Lesson Two Overview

1. Do physical activity for lesson 2
  - Each class will start with a physical activity. A student will pick out an exercise card from the deck, and all class members will do the activity for one minute.
  - Set up: before the start of class, be familiar with areas where various physical activities can be done if chosen from the deck of cards. (Try to do the activity in the classroom to save time.)
2. Pre-curriculum survey part II  
(opportunity for make-up survey if student missed the first class)
3. Review materials from previous lesson one
  - Name the six food groups
  - Review questions: What's more nutritious: apple juice or whole apple? Why?
4. Collect any questions the students have about nutrition.
5. Present Powerpoint slides: Today, we will focus on nutrients. Fill in the "Fruitful Notes for lesson 2" worksheet as we go.

Talking points for each slide:

- Slide 2 - See slide
- Slide 3 - *What is the difference between a food group and a nutrient?* Food groups group together foods that are similar, and they allow us to come up with guidelines and recommendations of how much food we should eat from each group to achieve a balanced diet. Nutrients are small molecules contained within each food item, and they help our bodies to function normally. Each food group contains similar nutrients.
- Slide 4 - See slide
- Take out “fruitful notes – lesson 2” worksheet; for the row that says “protein,” put check marks under “meat/beans” and “dairy”
- Slide 5 - *What happens when you put food in a warm, moist place for a long time? (It becomes gross and stinky!)*
- *Fiber is great because it makes you feel full for a longer period of time. When your body has absorbed the nutrients it needs, fiber helps flush it out of your body before it becomes really gross!*
- For the row that says “carbohydrates,” check “grain,” “vegetables,” and “fruits”
- If students ask why we don’t put check marks for certain nutrients under a certain food group (eg. we don’t check carbohydrate under milk even though milk contains sugar): it is because we are checking the *major* nutrients under each food group that we want them to remember.
- Slide 6 - See slide
- **Activity: Mushy Bread (see below for instructions)**
- Slide 7 - Saturated fat and trans fats are less healthy because they help increase the fat and cholesterol in your blood, and this may eventually clog your blood vessels (and contribute to heart diseases).
- For the row that says “fats,” check “oil,” “dairy,” and “meats/beans”
- Slide 8 - Talk about vitamins A, C, D: their functions and where you can find them
- Vitamin A: vision, skin, hair (cantaloupe, green vegetables, carrots, pumpkin, squash)
- Vitamin D: healthy bones & teeth (milk, fish, eggs, fortified cereal)
- For the row that says “vitamins,” check everything except for “oil”
- Slide 9 - People usually consume too much sodium (salty food), which contributes to high blood pressure and heart diseases.
- For the row that says “minerals,” check everything except for “oil”
- Slide 10 - *Where do you find water in your body?* (in blood, sweat, cells, and urine) *Do you know how much water your water bottle holds?*
- Slide 11 - *If you are tired and need energy, what nutrient should you eat?* (carbohydrate) *What food groups have these nutrients?* (grains, fruits, vegetables)
- *If your muscles are tired after a soccer game, what nutrient should you eat to repair your muscles?* (protein) *What food groups have*



*these nutrients?* (dairy, meats/beans)

- *If you want shiny hair, good skin, and good vision, what nutrient do you need?* (vitamin A) *What food should you eat?* (mainly vegetables and fruits)
- *True or False: Some fats are good for you.* (True, because they give us energy, and they also serve many other important functions in the body; good sources include oils from vegetables, fish, or seeds, which contain unsaturated fat)

6. Nutrition Twister Activity (see below for instruction)

7. Collect Fruitful Notes, surveys, and nametags.

### **Activities**

- Mushy Bread Activity
  - Demonstrates the difference between refined white bread and whole wheat bread.
  - Place a slice of white and whole wheat bread in two separate bowls of orange juice. Soak and time for 2 minutes. Ask class to guess which bread will be in better shape – then check by pulling out of bowl.
  - The wheat bread should remain intact, while the white bread breaks apart more easily. This activity demonstrates that wheat bread contains more fiber that holds the bread together. After you eat wheat bread, the fiber will not only (1.) help with your digestion (helps food move along more smoothly your intestine), but will also (2.) make you feel full longer.
  - Fill in the blanks in “Fruitful Notes for Lesson 2”
- Nutrition Twister Activity
  - Pick five students to participate in this activity; ask students to remove their shoes
  - List food groups and corresponding colors on the board.
  - Distribute food cards to the remaining class members
  - Each color on the twister represents a food group.
  - Randomly call on a student to announce their food card.
  - Food card = food group = color
  - Ambassador spins the dial to determine hand/foot right/left.
  - Students who fall or put their knee on the ground are eliminated.