Lesson Three
Reading Food Labels—What’s Really in It?

Objectives

After participating in this lesson students will

- Gain a better understanding of Food Labels by reading and comparing them.
- Understand what types of foods are high in carbohydrates, proteins and fats based on Food Label information.
- Be introduced to relaxation/meditation techniques and understand their potential role in a person’s well-being.

Time

50 minutes
Prep Time: 20 minutes

Activities

3.1 Review and Plan for the Day 3 minutes
3.2 Carbohydrates, Proteins, Fats 10 minutes
3.3 What’s on a Food Label? 10 minutes
3.4 Food Label Comparison 15 minutes
3.5 Introduction to Meditation 10 minutes
3.6 Closure 2 minutes

Key Terms

- Food Label
- Percent Daily Value
- Serving Size
- Calorie
- Meditation

Materials

- Posters of nutrients (Complex Carbohydrates, Simple Carbohydrates, Proteins, Fats)
- Masking tape
- Food Model cards
- What’s on a Food Label? (Activity Sheet 3.3)
- What’s a Calorie? (Transparency 3.3)
- What’s Inside the Package? (Activity Sheet 3.4)
- Food Labels (Transparency 3.4)
- Assortment of packaged foods and beverages
- Benefits of Meditation (Transparency 3.5)
- Breathing in the Moment (Information Sheet 3.5)
Teacher Preparation

- Write Plan for the Day and Objectives on chart paper or board.
- Label 4 pieces of chart paper: Complex Carbohydrates, Simple Carbohydrates, Proteins, Fats. Tape these 4 posters to the wall.
- Make copies of What’s on a Food Label? (Activity Sheet 3.3), 1 for each student, and place in portfolios.
- Make a transparency of What’s on a Food Label? (Activity Sheet 3.3).
- Make transparency of What’s a Calorie? (Transparency 3.3).
- Make copies of What’s Inside the Package? (Activity Sheet 3.4), 1 for each student.
- Make transparency of Food Labels (Transparency 3.4).
- Gather assorted packages of food for students to do Food Label comparison. Have enough for each student to have 2 labels.
- Make transparency of Benefits of Meditation (Transparency 3.5).
- Make 1 copy of Breathing in the Moment (Information Sheet 3.5).

3.1 Review and Plan for the Day 3 minutes

Materials: Plan for the Day and Objectives

Write the Plan for the Day and Objectives on the board before class, listing all of the activities students will be doing.

Plan for the Day:
- Carbohydrates, Proteins, Fats
- What’s on a Food Label?
- Food Label Comparison
- Introduction to Meditation
- Closure

Review the previous class by asking students to name some nutrients. Remind them of what different nutrients do or ask them what they remember about nutrients.

Explain that in today’s lesson they will be learning about what foods are highest in carbohydrates, proteins and fats. They will also learn about the Food Label—what the different parts of it mean and how to use it when purchasing food. The class will end with an introduction to meditation.

Review the Objectives with students.
3.2 Carbohydrates, Proteins, Fats 10 minutes

Materials: Food Model cards, chart paper posters taped to the wall, masking tape

Begin by explaining that students will be making some decisions about foods, specifically whether the main nutrient in the food is carbohydrate, protein or fat. Ask them if they can remember from the last class what types of foods were listed under the nutrients they did their presentations on. If they are not sure, tell them to give it their best effort.

- Point out the posters hanging around the room. Note that these are labeled Simple Carbohydrates, Complex Carbohydrates, Proteins and Fats.

- Explain that students are going to tape food cards to the poster with the nutrient 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, students 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 students pair up and give each pair 4 Food Model cards and tape. Then have them tape their cards on the appropriate poster.

- After students have completed this activity, have them look at the posters to see if there are any corrections to be made. Make any appropriate corrections with the assistance of the students.

- 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.

3.3 What’s on a Food Label? 10 minutes

Materials: What’s on a Food Label? (Activity Sheet 3.3), What’s a Calorie (Transparency 3.3)

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.

- Direct students the What’s on a Food Label? activity sheet in their student portfolios. Explain that the class will now go through this activity sheet. (Note: To help students who need a visual aid, make a transparency of the What’s on a Food Label? activity sheet so students can follow along with you.)

- Point out serving sizes (this tells you the size of an individual serving and the number of total servings) and have a student read what it says in the box. As a class, have students answer the question about serving sizes.

- Next look at calories. Display the What’s a Calorie? transparency and read each of the points aloud. Then have students 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, use the following bar graph as an example. You can change the % to correspond to the Food Label on Activity Sheet 3.3 if you wish.

![Bar graph showing % Daily Value]

- Go over “What does it mean...? at the bottom of the activity sheet. Explain the terms, then have students 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.

### 3.4 Food Label Comparison 15 minutes

**Materials:** Assorted packages of food with Food Labels, What’s Inside the Package? (Activity Sheet 3.4), Food Labels (Transparency 3.4)

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

- Hand out two food packages and a What’s Inside the Package? activity sheet to each student. 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 students 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 students their opinions on which of their food items is healthier.

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

Display the Food Labels transparency and review how the Food Label can help when they go shopping for foods. The Food Label can help them:

- 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.

3.5 Introduction to Meditation 10 minutes

Materials: Benefits of Meditation (Transparency 3.5), Breathing in the Moment (Information Sheet 3.5), chart paper or dry erase/chalkboard.

• Ask students: Why is meditation practiced? Write their responses on the board.

• Display the top half of the Benefits of Meditation transparency, which lists the following states of being or characteristics: lack of focus, anxiousness, distracted, anger, tired, sleepy, feeling sick and feeling stressed. Ask students to write down the ones they identify with or feel in their own lives.

• Explain what meditation is (continued or extended thought, reflection or spiritual contemplation) and tell students they will practice some breathing exercises. Ask what they think of when they hear the word meditation. Explain that meditation can include contemplation, insight and focused intention into relaxing the body and calming the mind, among other things. (Note: Explain that there are many different ways to meditate and they may hear of some of these ways in their lives.)

• Then explain that practicing meditation regularly can help with the states of being they identified earlier. Display the bottom half of the transparency, which lists the following benefits of meditation:
  - More energy
  - Improved quality of sleep
  - Decreased anxiety
  - Improved concentration/less distracted
  - Increased alertness
  - Heightened immunity
  - Calmness
  - Less prone to violent behavior
  - Better able to adapt to stress
  - Improvement in academic performance
• Explain that there are different ways to meditate and that students will practice different kinds of relaxation/meditation techniques such as deep breathing, guided imagery and reflective writing during the class.

• State that you would like to end class with a Deep Breathing practice. Have students find a comfortable place somewhere in the room where they will not be distracted by others. They can get comfortable in their chairs, sitting up with hands in their laps.

  o Explain that deep breathing is the foundation of meditation practice because by focusing your attention on your breath, you calm your body. If you are very focused on your breath you are able to clear your mind of thoughts and distractions.
  o Practice Deep Breathing techniques for a couple of minutes. Tell students to take a deep inhale where they feel the breath go all the way down to their belly and then exhale until they feel they have to inhale again. Tell students to focus on their breath going in and out. It may help to count to a certain number while breathing in and out. They can also look at their bellies or put a hand on the belly and feel it rise and fall with the breath.
  o Optional: While students are focusing on their breath, read them the “Breathing in the Moment” passage from Information Sheet 3.5. After reading the passage, tell students that if they have not tried it already, they can count to a specific number as they inhale and then to the same number as they exhale. For example, they can breathe in for a count of 8, and exhale for a count of 8. Demonstrate the pace of counting—not fast.

• Summarize the lesson by asking when students might use deep breathing exercises. Acknowledge them for their responses and thank them for participating.

3.6 Closure 2 minutes

Ask students to list some of the key points they learned today about carbohydrates, proteins and fats and about Food Labels (e.g., the different components of a Food Label such as serving sizes and calories per serving, foods high in the different nutrients).

Resources

• Lesson concepts and images for Activity 3.3: www.cfsan.fda.gov/~dms/foodlab.html
  The contents of the FDA Website (www.fda.gov)—both text and graphics—are not copyrighted. They are in the public domain and may be republished, reprinted and otherwise used freely by anyone without the need to obtain permission from FDA. Credit to the U.S. Food and Drug Administration as the source is appreciated but not required.
• Worksheet/lesson concepts for Activity 3.4: http://ific.org/publications/other/tnfl.cfm
  To use “ific” materials you must write on document: “Reprinted from the International Food Information Council Foundation (Year of publication)” and include any collaborating organizations, such as the Department of Health and Human Services/Public Health Service or the U.S. Food and Drug Administration.
• *HealthSmart High School: Nutrition & Physical Activity*, Lesson 1; Activity 3
  Transparencies:
  o What’s a Calorie?
  o Food Labels
• *All 4 You 2!* curriculum, Lesson 2, Activity 4: Carbohydrates, Proteins, Fats
• The Experience of Transcendental Meditation in Middle School Students: A Qualitative Report
  www.explorejournal.com/article/PIIS1550830706003302/abstract
• International Education: Meditation Helps Students
  www.iht.com/articles/2005/02/14/opinion/rmed.php
• The Benefits of Meditation: Tips and Techniques
What’s on a Food Label?

Serving Sizes
Serving sizes help people understand how much they're eating and how many servings are contained in that package of food.

Fat Calories
This is the number of calories that come from fat. People check this because it's good to limit fat intake.

Total Calories
This number tells you the amount of energy in the food, per serving.

How many total cups are in this package of food? ________

% Daily Value
The percentage means you are getting a certain percentage out of 100% for the day.

How many calories are in this whole package of food? ________

Which nutrient are you getting 5% of the Daily Value? ________

If you ate two servings from this package of food, how many calories from fat would you get? ___________

What does it mean...?

Free: “Calorie-free” means fewer than 5 calories per serving.

Low Fat: 3 grams or less per serving. Is this food “low fat”? YES or NO

Low Sodium: 140 mg or less per serving. Is this food “low sodium”? YES or NO

Low Calorie: 40 calories or less per serving. Is this food “low calorie”? YES or NO

High: This term can be used if the food contains 20% or more of the Daily Value for a particular nutrient in a serving.
What's a Calorie?

- A calorie is the amount of energy in a food.

- The average number of calories people need each day depends on their age, gender, height and activity level.

- Teens need between 1,600 and 2,700 calories each day.
### What's Inside the Package?

The great thing about a food label is that it tells you what's inside!
- On one blank food label, write down the Nutrition Facts about one food.
- Then find a similar food for comparison. Write in the Nutrition Facts about that food on the other blank label.
- When you're done, compare them:

#### FOOD PRODUCT I

- How are these foods similar?
- How are these foods different?

#### FOOD PRODUCT II

Reprinted from the International Food Information Council Foundation, Department of Health & Human Services and U.S. Food & Drug Administration (July 1994).
Food Labels can help you:

- 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.
States of Being or Characteristics

- Lack of focus
- Anxiousness
- Distracted
- Anger
- Tired
- Sleepy
- Feeling sick
- Feeling stressed

Benefits of Meditation

- More energy
- Improved quality of sleep
- Decreased anxiety
- Improved concentration/less distracted
- Increased alertness
- Heightened immunity
- Calmer
- Less prone to violent behavior
- Better able to adapt to stress
- Improvement in academic performance
Breathing in the Moment  
Written by Jason Murphy

For teachers or instructors to read. It’s helpful if the lights are low. Students should be able to sit in chairs with their backs straight but not rigid, or lie on the floor on their backs with knees up. Instructions should be read in a slow but clear natural voice. A bell is helpful for transition into and out of meditation time. Find a rhythm of instruction which allows silence. This should take anywhere from 10 to 15 minutes total.

Take a moment to check in with your body. Feel the body sitting on the chair or lying on the floor.

(Pause for 2 or 3 breaths.)

Begin to notice the breath in the body, the rise and fall of the chest, the expansion and contraction of the belly, connecting with the breath in the body.

(Pause for 2 or 3 breaths.)

Just notice the breath in the body, not trying to change it or make it different than it normally is.

Just notice the natural breath.

(Pause for 2 or 3 breaths.)

Begin to aim your attention at the tip of the nose. See if you can notice the sensation of breath at the tip of the nose. Feel the coolness of the in-breath and warmth of the out-breath.

It’s helpful to use the word “in” on the in-breath and “out” on the out-breath, silently in your mind.

This helps to focus the mind on the breath and the experience of breathing.

(Pause for 2 or 3 breaths.)

Breathing in I know that I am breathing in, breathing out I know that I am breathing out.

(Pause for 2 or 3 breaths.)

The mind may wander away from the breath. When you notice this has happened, just acknowledge where the mind has gone and then aim the attention back, reconnect at the tip of the nose with the next in-breath, and begin again. Breathing in I know that I’m breathing in. Breathing out I know that I’m breathing out.

(Pause for 2 or 3 breaths.)

Each mindful breath connects us to the moment. We only live one moment at a time, one breath at a time.

This practice is about breathing in each moment of life.

(Pause for 2 or 3 breaths.)

Using the breath as an anchor to keep us present in the moment, breathing in I calm my mind, breathing out I relax my body. Breathing in Calm. Breathing out Relax.

(Pause for 2 or 3 breaths.)

When you notice the mind has wandered off just acknowledge where the mind has gone and then aim the attention back on the breath.

(Pause for 2 or 3 breaths.)

Moment after moment, breath after breath, we always have the ability to connect with this calm and relaxation of the breath.

(Pause for 2 or 3 breaths. Then ring a bell.)

Gently allow your eyes to open and move your body slowly. Maybe take a stretch for a moment.