Lesson 2: Stamp Out Portion Distortion
FACILITATING THE LESSON

PROGRAM OVERVIEW

This program contains the background information, step-by-step plans and handouts you need to teach sessions and conduct activities on 10 topics. Sessions are designed for four age groups: 6-to-9-year-olds, 10-to-12-year-olds, 13-to-15-year-olds and 16-to-18-year-olds.

Generally, each lesson and activity takes about 30 minutes for 6-to-9-year-olds and about 45 minutes for older youth. You can shorten or lengthen the time frame according to the needs and interests of your group.

LESSON FORMAT

Each lesson includes tools to make it easier for you to teach youth about the topic.

- **Objectives.** Each session is designed to meet specific objectives for each age group.
- **Materials.** Materials needed to conduct the activity are listed at the start of each session.
- **Resources and Handouts.** A listing of resources and handouts details the materials you need to prepare for and facilitate the lesson (all necessary resources and handouts follow immediately after the lesson directions).
- **Advance Preparation.** Steps for preparation are detailed at the start of each lesson.
- **Key Teaching Points.** To guide you in teaching youth about the topic, each lesson summarizes key points, the important lessons youth will take away from the session. Adapt the level of detail you provide to the age and learning level of the group.
- **Leading the Activity.** Step-by-step guidelines are included for leading the activity.
  - *Warm-up Exercise* — To promote physical activity during each session, lead the kids in at least one warm-up exercise and review the benefits of physical activity. Choose an idea from the Get-Moving Exercises list (on page 16 of this Implementation Manual), come up with your own idea or ask kids to think of creative ways to get moving.
  - *Introduction* — Each lesson provides step-by-step instructions to help you prepare for and conduct the lesson. It is a good idea to read the lesson carefully a few days in advance, so you will have time to prepare.
  - *Group Learning Activity* — The group learning activity is the core of each session, the time when youth practice, develop or demonstrate what they have learned. The activities are age-appropriate and designed to be fun while reinforcing key concepts.
  - *Individual Application* — Brief application activities follow the group activity, giving youth a chance to apply learning in their own lives. They also promote small steps toward adopting healthy habits.
  - *Snack Time* — During snack time, youth share new learning and insights.
  - *Take-home Challenges* — At the end of each session, you will find suggested challenges for participants to do at home before the next meeting. These challenges reinforce what members have learned about healthy eating and physical activity.
• **Additional Resources.** Additional websites are listed at the end of each lesson for finding more information on the lesson’s topic.

**LEADING THE ACTIVITIES**

*Before an Activity.* You will have more success if you do the following before each lesson:

• **Review the Activity.** Review the activities and become familiar with the issues yourself, including key terms used.

• **Prepare Youth.** Before beginning the activities with youth, you may want to spend a few minutes telling them what they will be doing and why, asking questions to see how much they already know and introducing key terms in language they understand.

• **Gather Materials.** Be sure all materials are available before beginning each activity.

*During an Activity.* While conducting the activities/lessons, be sure to:

• **Establish Ground Rules.** Make it clear what behaviors will be acceptable and what behaviors will not be acceptable by setting ground rules and reinforcing them as necessary.

• **Be Patient.** Keep in mind that some activities will be difficult for some youth and easy for others. Encourage, challenge and support youth, but do not push them.

• **Take Advantage of Learning Opportunities.** Be ready for the “teachable moment” and use it to further understanding of the concepts.

*After an Activity.* At the end of each activity or session, it is a good idea to do the following:

• **Provide Closure.** Give youth a chance to reflect on what they have learned after each activity and discussion.

• **Evaluate the Activity.** Consider whether the objective of the activity was accomplished and try to understand why it was or was not.

**RESPONDING TO DIFFERENT AGE GROUPS**

Activities in this Resource Guide are geared specifically to youth in the targeted age group. You may, however, want to divide the group of 6- to 9-year-olds, for example, into two smaller age groups. Because there is such a difference in interest, reading level and maturity between a 6-year-old and a 9-year-old, having two groups may be more effective. With the youngest children (6-year-olds), you will have to assist with reading, simplify the language you use and eliminate terms they may not understand.

Youth in the 10- to 12-year-old group present a challenge, especially when it comes to working in groups. This is a time when youth in this age group are developing identity, so peer influences are particularly strong. They may be reluctant to share personal experiences, attitudes or feelings. Give them time to get comfortable and encourage them to speak, but do not force them if they are reluctant.

Youth in the 13-to-15 and 16-to-18-year-old group respond well to performance-based activities such as drama, dance, video, music and anything that involves use of computers.
LESSON FOR YOUTH AGES 6 TO 9 YEARS

LESSON OVERVIEW

Participants work in small teams to practice measuring the suggested portion sizes of common foods in the five food groups.

ESTIMATED TIME: 30 minutes

OBJECTIVES

1. Know how to estimate amounts of food.
2. Use visual cues for portion control.
3. Know the kinds and amounts of food to eat more or less of (and more and less often).
4. Become familiar with suggested portion sizes.
5. Understand how portion control relates to health and weight.
6. Become aware of the portion sizes they typically eat.

MATERIALS

- Measuring cups (several sets)
- Measuring spoons (several sets)
- Paper plates, cups and bowls
- Small quantities of the following foods: dry cereal, whole-wheat crackers, lettuce, raw baby carrots, mixed (canned) fruit, 100-percent fruit juice, low-fat yogurt, shredded cheese, peanut butter and dry beans
- Pens or pencils

NOTE

If your budget does not allow for the purchase of measuring utensils and food items, choose the Optional Group Learning Activity.

RESOURCES AND HANDOUTS

- How Much Do YOU Eat? Poster (page 121)
- Just Enough! Food Portions (page 122)
- Measuring Cup (for optional activity) (page 123)
- Portion Control or Portion Distortion? (page 124)
ADVANCE PREPARATION

1. Visit USDA’s ChooseMyPlate.gov to find general guidelines for portion sizes. See Choose a Food Group, click on “View Food Gallery” to see color pictures of appropriate portion sizes for each food group.
2. Set up centers for children to measure real food. Set out small food scales, measuring cups, measuring spoons, plates, cups and bowls.
3. Place food items at various centers with signs indicating the food group.
4. Copy Just Enough! Food Portions (one for each team).
5. Copy Portion Control or Portion Distortion?, one for each youth.
6. Select a snack to serve before the activity begins.

KEY TEACHING POINTS

- It is important to eat the right portion (amount and size) of foods in the different groups.
- Eating portions too large for our size, too much in relation to other foods we are eating or too big for the physical activity we do means we are taking in too many calories. This can lead to weight gain and other health problems.

LEADING THE ACTIVITY

I. GET-MOVING EXERCISES

Select a Get-Moving Exercise from the list (on page 16 in the Implementation Manual) and keep group members moving for 10 minutes. Tell the group that kids need to do some physical activity for 60 minutes every day and that this exercise is one example of what they can do.

II. SNACK TIME

1. Instruct group members to wash their hands.
2. Serve the snack you have selected for today.

TIP

This is not an eating activity, since everyone will be touching the food. Serve the snack early in the session so children will not be hungry during the activity.

III. INTRODUCTION

1. Begin by asking, “What do you know about food portions? What do you want to know about food portions?”
2. Introduce the basics of “portions” and “portion distortion.”
3. Point out that a “portion” is the amount of food we eat, a serving size.
4. Say that “portion distortion” occurs when the portions we eat are too large. There are guidelines for the amount of each food we should eat, and this is based on our body size, other foods eaten and the physical activity we do.
5. Ask youth why they think it is important to eat the recommended amount of foods and what can happen if we eat portions that are too large. Say that, over time, taking in too many calories without balancing them with enough physical activity can cause us to gain too much weight, which can lead to other health problems.

6. Invite youth to name some foods to eat less of (foods that we should eat in small amounts) and foods to eat more of (foods that make up the majority of our diets).

7. Point out that some foods can be enjoyed in smaller servings. For example, a bag of chips can be a single serving or may have more than one serving in it, so the larger size should not be eaten all at one time. As with all foods, it is important to know how much you are eating or drinking and the calories each provides.

8. Emphasize that the majority of what youth eat every day should be grains, vegetables, fruits and dairy. Ask the group what some of these foods are.

9. Remind youth that if their favorite foods are foods they should eat less of, they can still have them, but they need to make sure that they:
   - Get enough physical activity to burn up the calories these foods provide.
   - Eat nutrient-rich foods at most meals (grains, vegetables, fruits and milk).

10. Display the How Much Do YOU Eat? Poster and explain that common, everyday items are helpful for remembering the right portion, or serving sizes, for different foods.

11. Invite youth to identify the items — and their food counterparts — on the poster.

**IV. GROUP LEARNING ACTIVITY — JUST ENOUGH! FOOD PORTIONS**

1. Instruct group members to wash their hands.

2. Ask them to form into teams of three.

3. Tell the group that team members are going to practice measuring the right portion sizes of foods in the different food groups.

4. Give each team a copy of Just Enough! Food Portions.

5. Explain that each team will start at a different food group station and, using the measuring utensils provided, measure out the amounts shown on the handout.

6. Demonstrate measuring one food item for the group.

7. Assign teams a starting station and prompt them to move to the next center when they have completed their measurements.

8. After all teams have visited each station and checked off the items on their lists, bring them back together as a group.

9. Remind them to remember the amount and size of a food to eat, especially when eating in a restaurant or away from home.

10. End by asking, “What did you learn about food portions?”

**TIP**

Visit USDA’s ChooseMyPlate.gov to find general guidelines for portion sizes. See Choose a Food Group, click on “View Food Gallery” to see color pictures of appropriate portion sizes for each food group.
V. OPTIONAL GROUP LEARNING ACTIVITY — JUST ENOUGH! CONCENTRATION

If your budget does not allow for the purchase of utensils and food items for the measuring activity, conduct the following matching activity.

1. From the ChooseMyPlate.gov website, see Choose a Food Group, click on “View Food Gallery” to find and print photos of appropriate portion sizes of these foods: whole-wheat cereal flakes (1 cup), brown rice (1/2 cup), corn flakes (1 cup), broccoli (1/2 cup), cooked corn (1/2 cup), iceberg lettuce (1 cup), raw tomato (1/2 cup), tomato juice (1/2 cup), fruit cocktail (1/2 cup), orange juice (1/2 cup), raisins (1/4 cup), strawberries (1/2 cup), milk (1 cup), yogurt (1 cup), cheddar cheese (1/3 cup), chocolate pudding (1/2 cup), cooked black beans (1/2 cup), almonds (1/2 cup).

2. Make several copies of the food photos to actual size (measurements are included with each photo) and cut them apart.

3. Make a corresponding number of the Measuring Cup reproducible. Using a marker, color in the appropriate amount to indicate 1/4 cup, 1/3 cup, 1/2 cup and 1 cup. Cut to the approximate size of the food photos.

4. Shuffle the food photos and the copies of the measuring cups and place them face down at random on the floor or a table.

5. Invite youth to play a game of Concentration, in which they take turns turning over a piece of paper and trying to match it with the corresponding portion size. (For example, if a Club member turns over a photo of raisins, he or she must try to match it with the measuring cup that shows 1/4 cup.)

VI. INDIVIDUAL APPLICATION

1. Show the How Much Do YOU Eat? Poster.

2. Ask youth to pick two foods on the poster that they eat and decide if they eat more or less than what is pictured.

VII. TAKE-HOME CHALLENGES

Challenge group members to do one of these activities before you meet again.

1. Pick a food they eat regularly and write down the amounts they eat. (Give each youth a copy of Portion Control or Portion Distortion? and encourage them to use it to track the amounts they eat).

2. Try measuring cereals and other foods before they eat them.

ADDITIONAL RESOURCES

- For more on portion control, visit Portion Distortion and Serving Size and the Portion Distortion Interactive Quiz (provided by the U.S. Department of Health and Human Services and the National Institutes of Health).

CLEANLINESS AND FOOD ALLERGIES

Instruct group members to wash their hands with hot, soapy water for about 20 seconds to remove germs before snack time or handling food.

Before distributing food, ask whether anyone is allergic to ingredients in today’s snack. The major food allergens are milk, egg, fish, shellfish, nuts, wheat, peanuts and soybeans.
LESSON FOR YOUTH AGES 10 TO 12 YEARS

LESSON OVERVIEW
Participants compete in teams to identify recommended portion sizes for food items. Using “portion paddles” that depict everyday objects, they race each other to display the correct paddle when a particular food is named.

ESTIMATED TIME: 30 minutes

OBJECTIVES
1. Know how to estimate amounts of food.
2. Use visual cues for portion control.
3. Understand that recommended portion sizes vary by body size, other foods eaten and physical activity.
4. Know how to read the serving size on a food nutrition label.
5. Understand how portion control relates to health and weight.
6. Become aware of the portion sizes they typically eat.

MATERIALS
- Heavy card stock
- Glue stick, tape or glue
- Scissors
- Paint sticks
- Large bulletin board
- Push pins
- Pens or pencils

RESOURCES AND HANDOUTS
- Sample Food Label (page 130)
- Food Portion List (page 125)
- How Much Do YOU Eat? Poster (page 121)
- Portion Paddles (page 126)
- Portion Control or Portion Distortion? (page 124)
ADVANCE PREPARATION

1. Visit USDA’s ChooseMyPlate.gov to find general guidelines for portion sizes. See Choose a Food Group, click on “View Food Gallery” to see color pictures of appropriate portion sizes for each food group.

2. Review Nutrition Facts Label Images on the U.S. Food and Drug Administration website so you can explain the Sample Food Label to youth.

3. Copy Portion Paddles onto heavy card stock (two copies of each image for each team). Tape or glue two matching cut-outs back-to-back onto a paint stick to make a two-sided paddle. Make several paddles for each image so each team can have a set.

4. Copy Portion Control or Portion Distortion?, one for each youth.

5. Select a snack to serve during the session wrap-up.

KEY TEACHING POINTS

- It is important to eat the recommended portion (amount and size) of foods in the different groups.
- Not every person needs the same-size portion of food.
- Eating portions too large for our size, too much in relation to other foods we are eating or too big for physical activity we do means we are taking in too many calories. This can lead to weight gain and other health problems.

LEADING THE ACTIVITY

I. GET-MOVING EXERCISES

Select a Get-Moving Exercise from the list (on page 16 in the Implementation Manual) and keep group members moving for 10 minutes. Tell the group that kids need to do some physical activity for 60 minutes every day and that this exercise is one example of what they can do.

II. INTRODUCTION

1. Begin by asking, “What do you know about food portions? What do you want to know about food portions?”

2. Introduce the basics of “portions” and “portion distortion.” Point out that a “portion” is the amount of food we eat, a serving size.

3. Show the group the Sample Food Label and explain that it gives information on nutrients in the food. Remind the group that nutrients are the vitamins and other things found in foods that our bodies need to grow, have energy and stay healthy.

4. Point out the serving size on the label. State that, although serving sizes are helpful for knowing how much to eat, not every person needs the exact same portion.

5. Say that “portion distortion” occurs when portions we eat are too large. The amount of each food we eat is based on body size, other foods eaten and physical activity.

6. Ask youth why they think it is important to eat the right amount of foods and what can happen if we eat portions that are too large. Say that, over time, taking in too many calories without balancing them with enough physical activity can cause us to gain too much weight, which can lead to other health problems.

7. Invite youth to name some foods to eat less of (foods that we should eat in small amounts) and foods to eat more of (foods that make up the majority of our diets).
8. Point out that some foods can be enjoyed in smaller servings. For example, a bag of chips can be a single serving or may have more than one serving in it, so it should not be eaten all at one time. As with all foods, it is important to know how much we are eating or drinking and the calories each provides.

9. Point out that nutrient-rich foods — those that contain important nutrients — should make up a bigger part of our diets: grains, vegetables, fruits and dairy.

10. Ask youth to summarize why they think we sometimes eat larger portions than we need. Suggest that there are several reasons for eating too much of a food:
   - We consume several servings of a multi-serve package.
   - We are served too much food and feel we have to eat it.
   - We eat too much because there is a lot of food in front of us.
   - We are doing something else and not thinking about how much we are eating.
   - We feel like we are getting more for our money if we eat a lot at a meal.

11. Point out that there are things we can do to make sure our portions are the right size:
   - Order a smaller size or ask for less.
   - Split a serving with a friend or family member.
   - Check the serving size on the nutrition label. If the label says the food has more than one serving, share it with a friend or save it for another day.
   - Order a smaller-size drink or chose a no-calorie or low-calorie option.

12. Remind youth that they can have their favorite foods once in a while as long as they:
   - Get enough physical activity to burn up the calories these foods provide.
   - Eat nutrient-rich foods at most meals (grains, vegetables, fruits and milk).

**TIP**

Visit USDA’s ChooseMyPlate.gov to find general guidelines for portion sizes. See Choose a Food Group, click on “View Food Gallery” to see color pictures of appropriate portion sizes for each food group.

**III. GROUP LEARNING ACTIVITY — PORTION PADDLES**

1. Display the How Much Do YOU Eat? Poster and explain that common, everyday items are helpful for remembering the right portion, or serving sizes, for different foods.

2. Tell group members that they are going to do an activity that will help them remember the recommended portions of various foods.

3. Divide the large group into teams of four. Instruct teams to sit together in their groups of four, but facing toward the center where they can all see each other.

4. Give each team a set of four Portion Paddles and explain that team members will hold the paddles face down on their laps.

5. Explain that you will read the name of a food portion (chosen randomly from the Food Portion List). Teams will race to see which can be first to hold up the paddle with the corresponding everyday object. Point out that the paddles are two-sided so youth can see the image from both sides.

6. The first team to match the food item with the correct object earns a point, and the team with the most points after all rounds is the winning team.

7. End by asking, “What did you learn about food portions?”
IV. INDIVIDUAL APPLICATION

1. Show the How Much Do YOU Eat? Poster.
2. Ask youth to pick two foods on the poster that they eat and decide if they eat more or less than what is pictured.
3. Ask them to think of a food they eat a lot of and how it compares to the portion size.

V. SNACK TIME

1. Instruct group members to wash their hands.
2. Serve the snack you have selected for today.
3. While youth are snacking, ask them to share what they remember most from today’s activity.

VI. TAKE-HOME CHALLENGES

Challenge group members to do one of these activities before you meet again.

1. Pick a food they eat regularly and write down the amounts they eat. (Give each youth a copy of Portion Control or Portion Distortion? and encourage them to use it to track the amounts they eat).
2. Use the mental pictures of the everyday objects to estimate amounts of food.

ADDITIONAL RESOURCES

- For more on portion control, visit Portion Distortion and Serving Size and the Portion Distortion Interactive Quiz (provided by the U.S. Department of Health and Human Services and the National Institutes of Health).
- The Daily Food Plans Calculator figures the amount of food recommended daily based on age, gender, weight and physical activity.
- Visit USDA’s ChooseMyPlate.gov to find a listing of foods with empty calories.

CLEANLINESS AND FOOD ALLERGIES

Instruct group members to wash their hands with hot, soapy water for about 20 seconds to remove germs before snack time or handling food.

Before distributing food, ask whether anyone is allergic to ingredients in today’s snack. The major food allergens are milk, egg, fish, shellfish, nuts, wheat, peanuts and soybeans.
LESSON OVERVIEW

Club members are given profiles of youth, and they work in pairs to create nutritious meal plans for the person described — based on age, gender and activity level.

ESTIMATED TIME: 45 minutes

OBJECTIVES

1. Understand portion sizes based on age, gender and activity level.
2. Understand calorie needs based on age, gender and activity level.
3. Know how to read the serving size and calories on a food nutrition label.
4. Become familiar with the idea of appropriate or healthy weight range.
5. Understand the concept of positive body image.
6. Become aware of the portion sizes they typically eat.

MATERIALS

- Pens or pencils

RESOURCES AND HANDOUTS

- Sample Food Label (page 130)
- How Much Do YOU Eat? Poster (page 121)
- MyPlate Amounts of Food — FOR YOU (page 131)
- Portion-Ease Menu Plans (#1 - #5) (page 132)
- Portion Control or Portion Distortion? (page 124)

ADVANCE PREPARATION

1. Visit USDA’s ChooseMyPlate.gov to find general guidelines for portion sizes. See Choose a Food Group, click on “View Food Gallery” to see color pictures of appropriate portion sizes for each food group.
2. Review Nutrition Facts Label Images on the U.S. FDA website so you can explain the Sample Food Label to youth.
3. Copy MyPlate Amounts of Food — FOR YOU (one for each pair).
4. Copy the five Portion-Ease Menu Plans (one for each pair).
5. Copy Portion Control or Portion Distortion?, one for each youth.
6. Select a snack to serve during the session wrap-up.
KEY TEACHING POINTS

- Not every person needs the same-size portion of food.
- Portion sizes and calorie needs vary according to age, gender and activity level.
- Maintaining a healthy weight is important for wellness.
- Finding an appropriate weight — the weight that is right for our bodies — is individual.
- Being within a healthy weight range helps us have a positive body image.

LEADING THE ACTIVITY

I. GET-MOVING EXERCISES

Select a Get-Moving Exercise from the list (on page 16 in the Implementation Manual) and keep group members moving for 10 minutes. Tell the group that kids need to do some physical activity for 60 minutes every day and that this exercise is one example of what they can do.

II. INTRODUCTION

1. Begin by asking, “What do you know about food portions? What do you want to know about food portions?”
2. Point out that a “portion” is the amount of food we eat, a serving size.
3. Say that “portion distortion” occurs when portions we eat are too large. The amount of each food we eat is based on body size, other foods eaten and physical activity.
4. Ask youth why they think it is important to eat the recommended amount of foods and what can happen if we eat portions that are too large. Say that, over time, taking in too many calories without balancing them with enough physical activity can lead to other health problems.
5. Show the group the Sample Food Label and the information on nutrients. Remind youth that nutrients are what our bodies need to grow and stay healthy. Also point out the serving size on the label.
6. Show youth the How Much Do You Eat? Poster and how it relates to serving sizes on food labels. Discuss the common objects on the posters as useful reminders of how large a portion should be.
7. Say that portion sizes are based on the ChooseMyPlate.gov recommendations for youth their age. Invite youth to say whether they typically eat more or less than the amounts pictured.
8. State that, although serving sizes are helpful for determining how much to eat, not everyone needs the exact same portion. Explain that portion size (serving size on food labels) varies according to age, gender and activity level of an individual.
9. Point out that the nutrition label also shows calories in the food. Remind the group that a calorie is a unit of measurement for the amount of energy available in food.
10. Let the group know that, just as there are suggested portion sizes for young people, there are recommendations for the number of calories they should consume. State that the recommendation is 2,000 calories a day, because many people need about that amount. But calories, like portion sizes, vary by age, gender and activity level.
11. Remind group members that the recommendations are to help people find and maintain a healthy weight, because this is important for wellness. Stress that both portion and calorie recommendations are to help us make sure we are eating the right kinds and amounts of foods to have energy and stay healthy.

12. Point out that the recommendations do not mean that each person of a certain age or height should weigh the same. No one should go strictly by numbers, because finding our appropriate weight — the weight best for our bodies — is individual.

13. Point out that being within a healthy weight range helps us have a positive body image. Eating a wide variety of foods from the major food groups in amounts that match the recommended amounts — and being more physically active — can help us stay within a healthy range. We feel good about being healthy and strong.

**BODY IMAGE** is the way we see our bodies, the way we feel about how we look.

### III. GROUP LEARNING ACTIVITY — PORTION-EASE

1. Ask group members to form pairs.

2. Tell team members that they will work together to decide the portions an individual should consume — based on age, gender and activity level.

3. Distribute copies of *MyPlate Amounts of Food — FOR YOU*. Say that the chart shows different amounts of food for youth ages 9 to 18 years. Point out that the chart shows how these amounts vary based on age, gender and activity level.

4. Distribute copies of *Portion-Ease Menu Plans* (a different one for each pair).

5. Instruct teams to look at the amounts/portion sizes indicated for their profiled person and decide on a nutritious meal plan for that individual. Say that youth should create a meal plan for one day that includes three meals and one snack.

6. When teams have finished, invite them to share their ideas with the large group and explain why they made the decisions they did.

7. End by asking, “What did you learn about food portions?”

### IV. INDIVIDUAL APPLICATION

1. Show the *How Much Do YOU Eat?* Poster.

2. Ask youth to pick two foods on the poster they eat and decide if they typically eat more or less than what is pictured.

3. Ask them to think of a food they eat a lot of and how it compares to the portion size.

### V. SNACK TIME

1. Instruct group members to wash their hands.

2. Serve the snack you have selected for today.

3. While youth are snacking, ask them to share what they remember most from today’s activity.
VI. TAKE-HOME CHALLENGES

Challenge group members to do one of these activities before you meet again.

1. Pick a food they eat regularly and write down the amounts they eat. (Give each youth a copy of Portion Control or Portion Distortion? and encourage them to use it to track the amounts they eat).
2. Compare their usual serving sizes to the recommended portion sizes.

ADDITIONAL RESOURCES

- For more on portion control, visit Portion Distortion and Serving Size and the Portion Distortion Interactive Quiz (provided by the U.S. Department of Health and Human Services and the National Institutes of Health).
- The Daily Food Plans Calculator figures the amount of food recommended daily based on age, gender, weight and physical activity
- Visit USDA’s ChooseMyPlate.gov to find a listing of foods with empty calories.

CLEANLINESS AND FOOD ALLERGIES

Instruct group members to wash their hands with hot, soapy water for about 20 seconds to remove germs before snack time or handling food.

Before distributing food, ask whether anyone is allergic to ingredients in today’s snack. The major food allergens are milk, egg, fish, shellfish, nuts, wheat, peanuts and soybeans.
LESSON FOR YOUTH AGES 16 TO 18 YEARS

LESLSSON OVERVIEW

Participants play a matching card game that helps them become familiar with the idea of balancing food portions (energy intake) with physical activity (energy output).

ESTIMATED TIME: 45 minutes

OBJECTIVES

1. Know that portion sizes and calorie needs vary based on age, gender and activity level.
2. Know how to read the serving size and calories on a food nutrition label.
3. Understand the need to balance portion size/calories (energy intake) with physical activity (energy output).
4. Become familiar with basic eating disorders.
5. Explore ways to maintain healthy weight.
6. Become aware of the portion sizes they typically eat.

MATERIALS

- Heavy card stock (in various colors)
- Scissors
- Pens or pencils

RESOURCES AND HANDOUTS

- How Much Do YOU Eat? Poster (page 121)
- Sample Food Label (page 130)
- Portion Control or Portion Distortion? (page 124)
- Finding Food Fuel Cards (page 137)

ADVANCE PREPARATION

1. Visit USDA’s ChooseMyPlate.gov to find general guidelines for portion sizes. See Choose a Food Group, click on “View Food Gallery” to see color pictures of appropriate portion sizes for each food group.
2. Review Nutrition Facts Label Images on the U.S. FDA website so you can explain the Sample Food Label to youth.
3. Copy Finding Food Fuel Cards onto heavy card stock (copy the first three pages on one color and the second three pages on another color). Cut the cards apart and shuffle. Make one deck per small team.
4. Copy Portion Control or Portion Distortion? one for each youth.
5. Select a snack to serve during the session wrap-up.
**KEY TEACHING POINTS**

- Eating a balanced diet with sensible portions helps us grow, have energy and stay healthy.
- Portion sizes and calorie needs vary according to age, gender and physical activity.
- Maintaining a healthy weight is important for wellness.
- Being too overweight or too underweight can lead to health problems.
- Finding a healthy weight involves balancing calories we take in (energy intake) with physical activity to burn the calories (energy output).
- Being within a healthy weight range helps us have a positive body image.

**LEADING THE ACTIVITY**

**I. GET-MOVING EXERCISES**

Select a Get-Moving Exercise from the list (on page 16 in the Implementation Manual) and keep group members moving for 10 minutes. Tell the group that kids need to do some physical activity for 60 minutes every day and that this exercise is one example of what they can do.

**II. INTRODUCTION**

1. Begin by asking, “What do you know about food portions? What do you want to know about food portions?”
2. Show youth the *How Much Do YOU Eat?* Poster. Discuss the common objects on the posters as useful reminders of how large a portion should be. Say that these portion sizes are based on the ChooseMyPlate.gov recommendations for youth their age.
3. Invite youth to discuss whether they eat more or less than the amounts pictured.
4. Say that “portion distortion” occurs when portions we eat are too large. The amount of each food we eat is based on body size, other foods eaten and physical activity.
5. Stress that taking in too many calories without balancing them with enough physical activity can cause us to gain too much weight, which can lead to health problems.
6. Show the group the *Sample Food Label* and the information on serving size. Discuss how this relates to the common objects on the *How Much Do YOU Eat?* Poster.
7. State that, although serving sizes are helpful for determining how much to eat, not every person needs the exact same portion. Explain that portion size (serving size on the nutrition label) varies according to age, gender and activity level of an individual.
8. Point out that the label also shows calories, the measure of energy the food supplies. Let the group know that, just as there are suggested portion sizes for young people, there are recommendations for the number of calories they should consume.
9. State that the recommendation is 2,000 calories a day, because many people need about that amount. Calories, like portion sizes, vary by age, gender and activity level.
10. Stress that both portion and calorie recommendations are to help us make sure we are eating the right kinds and amounts of foods to have energy and stay healthy.
11. Remind youth that the recommendations are to help us find and maintain a *healthy* weight, because this is important for wellness. They do not mean that all people at a certain age should weigh the same. There is no one right body shape or size.

12. Point out that each of us needs to find the weight that is best for our bodies — by eating the right kinds and amounts of foods and being physically active. Maintaining a healthy weight makes us feel better and helps us avoid serious health problems. Being underweight can be just as dangerous as being overweight.

13. Ask youth what they know about eating disorders. Say that eating disorders are extreme eating behaviors that can lead to serious illness or death. Two of the most common eating disorders are “anorexia nervosa” — in which a person starves him or herself out of fear of gaining weight — and “bulimia nervosa” — in which a person repeatedly eats large amounts of food and then purges. Both are very dangerous.

14. Say that there are ways to maintain a healthy weight safely: choose nutritious foods and stay physically active. Balancing the calories taken in (energy *intake*) with the calories used (energy *output*) is the way to stay within a healthy weight range.

15. Point out that being within a healthy weight range also helps us have a positive body image. We feel good about being healthy and strong.

**BODY IMAGE** is the way we see our bodies, the way we feel about how we look.

### III. GROUP LEARNING ACTIVITY — FINDING FOOD FUEL

1. Divide the large group into several smaller teams of four players each.
2. Give each team a set of **Finding Food Fuel** cards.
3. Tell them that they will play a card game that will help them become familiar with the idea of balancing food portions (energy *intake*) with physical activity (energy *output*).
4. Explain the rules of the game:
   - Each player is dealt eight cards at the start.
   - Players then take turns drawing from the deck in the center (face down) and discarding one card in the discard pile in the center (face up).
   - There are two types of cards: food portion cards (with calorie *intake*) and physical activity cards (with calorie *output*).
   - The goal is to match a food portion card with a physical activity card that has the same amount of calories.
   - As each player finds a match, the matching pair is placed on the table and the remaining cards stay in the player’s hand. Stress that a pair cannot have two of the same type of card — there must be a food portion card and an activity card.
   - The first player to match up all his or her cards and have no discard is the winner.
5. End by asking, “What did you learn about food portions?”

### IV. INDIVIDUAL APPLICATION

1. Show the **How Much Do YOU Eat?** Poster.
2. Ask youth to pick two foods on the poster that they typically eat and decide if they eat more or less than what is pictured.
3. Ask them to think of a food they eat a lot of and how it compares to the portion size.
V. SNACK TIME

1. Instruct group members to wash their hands.
2. Serve the snack you have selected for today.
3. While youth are snacking, ask them to share what they remember most from today’s activity.

VI. TAKE-HOME CHALLENGES

Challenge group members to do one of these activities before you meet again.

1. Pick a food they eat regularly and write down the amounts they eat. (Give each youth a copy of Portion Control or Portion Distortion? and encourage them to use it to track the amounts they eat).
2. Compare their usual serving sizes to the recommended portion sizes.

ADDITIONAL RESOURCES

- For more on portion control, visit Portion Distortion and Serving Size and the Portion Distortion Interactive Quiz (provided by the U.S. Department of Health and Human Services and the National Institutes of Health).
- The Daily Food Plans Calculator figures the amount of food recommended daily based on age, gender, weight and physical activity.
- Visit USDA’s ChooseMyPlate.gov to find a listing of foods with empty calories.

YOUTH MOST AT RISK FOR OBESITY

Findings from the National Health and Nutrition Examination Survey (NHANES) indicate that an estimated 17 percent of children in the U.S. between the ages of 2 and 19 years are obese, and this number has been increasing since the mid-1970s. The rate among Hispanic adolescent boys, which has risen steadily over the past several decades, continues to be alarmingly high (at nearly 27 percent). And, for African-American and American-Indian girls, obesity continues to be a serious problem that is growing worse. These girls are twice as likely as white and Asian girls to be severely obese. It is important not only to be sensitive to issues of weight, particularly with adolescents who struggle with obesity, but also to help the most at-risk youth understand the various factors related to overweight and obesity.1

CLEANLINESS AND FOOD ALLERGIES

Instruct group members to wash their hands with hot, soapy water for about 20 seconds to remove germs before snack time or handling food.

Before distributing food, ask whether anyone is allergic to ingredients in today’s snack. The major food allergens are milk, egg, fish, shellfish, nuts, wheat, peanuts and soybeans.
RESOURCES AND HANDOUTS

HOW MUCH DO YOU EAT? POSTER

**How Much Do YOU Eat?**

*Use these everyday items to estimate the amount you eat.*

- ½ cup of fruit juice = size of a small computer mouse
- 1 small apple = 1 cup = size of a baseball
- ½ cup of sliced fruit = size of a small computer mouse
- ½ cup of carrots or other vegetables = size of a small computer mouse
- 10 medium fries counts as ½ cup = size of a deck of cards
- 1 cup of raw vegetables = size of a deck of cards
- 1 cup of milk = an 8 oz carton of milk
- 1 cup of yogurt = size of a baseball
- ½ cup of sliced fruit = size of a small computer mouse
- 1 cup of dry cereal = 1 oz
- 1 slice of bread counts as 1 oz
- ½ cup of cooked pasta = 1 oz
- ½ cup of beans counts as 2 oz
- 1 tablespoon of peanut butter counts as 1 oz = size of one 9-volt battery
- 2-3 oz. of meat, poultry or fish = size of a deck of cards
- 1 slice of low-fat natural cheese* = size of two 9-volt batteries
- 2 cups or equivalent
  - Fruit Group
- 2 1/2 cups
  - Vegetable Group
- 3 cups or equivalent
  - Milk Group
- 5 1/2 ounces or equivalent
  - Meat & Beans Group
- 6 ounces or equivalent
  - Grains Group

*Counts as one cup

**Amounts of foods For 2,000 calories**

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat &amp; Beans Group</td>
<td>5 1/2</td>
</tr>
<tr>
<td>Grains Group</td>
<td>6</td>
</tr>
<tr>
<td>Vegetable Group</td>
<td>2 1/2</td>
</tr>
<tr>
<td>Milk Group</td>
<td>3</td>
</tr>
<tr>
<td>Fruit Group</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>13 1/2</td>
</tr>
</tbody>
</table>

*About the thickness of 10 CDs (1/2 inch)

United States Department of Agriculture Food and Nutrition Service. USDA is an equal opportunity provider and employer.

For more information, check out: teamnutrition.usda.gov

November 2006

Source: USDA’s MyPyramid resources (2010).
## Lesson 2: Stamp Out Portion Distortion

### Just Enough! Food Portions

#### Grains Food Group
- Cereal – One cup
- Whole-wheat crackers – Five crackers

#### Vegetables Food Group
- Lettuce – One cup
- Baby carrots – ½ cup

#### Fruits Food Group
- Mixed fruit – ½ cup
- 100-percent fruit juice – 1 cup

#### Milk Food Group
- Yogurt – One cup
- Shredded cheese – 1/3 cup

#### Meat and Beans Food Group
- Peanut butter – One tablespoon
- Dry beans – ¼ cup
### Portion Control or Portion Distortion?

Pay attention to foods you have on a daily basis and record the amounts you eat. Think about the visual cues for food portions and decide if you are eating more or less of these foods than the recommended portion.

<table>
<thead>
<tr>
<th>List foods and beverages you consume throughout the day</th>
<th>Amount you ate</th>
<th>More or less than the recommended portion?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast:</td>
<td></td>
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<tr>
<td>Before lunch:</td>
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</tr>
<tr>
<td>Lunch:</td>
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</tr>
<tr>
<td>Afternoon:</td>
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</tr>
<tr>
<td>Dinner:</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
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<td>After dinner:</td>
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<td></td>
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<td></td>
</tr>
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</table>
## FOOD PORTION LIST

<table>
<thead>
<tr>
<th>FOOD PORTION</th>
<th>EVERYDAY ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>small baked potato (1 cup)</td>
<td>computer mouse</td>
</tr>
<tr>
<td>½ cup cooked carrots</td>
<td>computer mouse</td>
</tr>
<tr>
<td>½ cup cooked beans</td>
<td>computer mouse</td>
</tr>
<tr>
<td>½ cup cooked pasta</td>
<td>computer mouse</td>
</tr>
<tr>
<td>½ cup cooked corn</td>
<td>computer mouse</td>
</tr>
<tr>
<td>½ cup cooked rice</td>
<td>computer mouse</td>
</tr>
<tr>
<td>½ cup oatmeal</td>
<td>computer mouse</td>
</tr>
<tr>
<td>1 cup raw broccoli</td>
<td>baseball</td>
</tr>
<tr>
<td>1 small apple</td>
<td>baseball</td>
</tr>
<tr>
<td>1 cup yogurt</td>
<td>baseball</td>
</tr>
<tr>
<td>1 cup ready-to-eat cereal</td>
<td>baseball</td>
</tr>
<tr>
<td>1 medium pear</td>
<td>baseball</td>
</tr>
<tr>
<td>1 cup popcorn</td>
<td>baseball</td>
</tr>
<tr>
<td>1 medium orange</td>
<td>baseball</td>
</tr>
<tr>
<td>1 cup cooked rice</td>
<td>baseball</td>
</tr>
<tr>
<td>1 cup cooked beans</td>
<td>baseball</td>
</tr>
<tr>
<td>1 cup ice cream</td>
<td>baseball</td>
</tr>
<tr>
<td>1 chicken breast</td>
<td>deck of cards</td>
</tr>
<tr>
<td>10 medium French fries (1/2 cup)</td>
<td>deck of cards</td>
</tr>
<tr>
<td>¼ pound hamburger patty</td>
<td>deck of cards</td>
</tr>
<tr>
<td>1 medium pork chop</td>
<td>deck of cards</td>
</tr>
<tr>
<td>6 thin slices of sandwich ham</td>
<td>deck of cards</td>
</tr>
<tr>
<td>1-ounce slice of bread</td>
<td>CD</td>
</tr>
<tr>
<td>1 pancake</td>
<td>CD</td>
</tr>
<tr>
<td>1 waffle</td>
<td>CD</td>
</tr>
</tbody>
</table>
PORTION PADDLES

BASEBALL
PORTION PADDLES

COMPUTER MOUSE
PORTION PADDLES

DECK OF CARDS
PORTION PADDLES

CD
### Nutrition Facts

**Serving Size 1 cup (228g)**  
**Servings Per Container about 2**

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>Calories 250</th>
<th>Calories from Fat 110</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>% Daily Value</strong></td>
<td><strong>18%</strong></td>
<td><strong>10%</strong></td>
</tr>
<tr>
<td><strong>Total Fat</strong></td>
<td>12g</td>
<td></td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>3g</td>
<td><strong>15%</strong></td>
</tr>
<tr>
<td>Trans Fat</td>
<td>3g</td>
<td><strong>10%</strong></td>
</tr>
<tr>
<td><strong>Cholesterol</strong></td>
<td>30mg</td>
<td><strong>10%</strong></td>
</tr>
<tr>
<td><strong>Sodium</strong></td>
<td>470mg</td>
<td><strong>20%</strong></td>
</tr>
<tr>
<td><strong>Total Carbohydrate</strong></td>
<td>31g</td>
<td><strong>10%</strong></td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>0g</td>
<td><strong>0%</strong></td>
</tr>
<tr>
<td>Sugars</td>
<td>5g</td>
<td><strong>0%</strong></td>
</tr>
<tr>
<td><strong>Proteins</strong></td>
<td>5g</td>
<td><strong>4%</strong></td>
</tr>
</tbody>
</table>

**Vitamin A**  
4%

**Vitamin C**  
2%

**Calcium**  
20%

**Iron**  
4%

<table>
<thead>
<tr>
<th>Calories:</th>
<th>2,000</th>
<th>2,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat</td>
<td>Less than 65g</td>
<td>80g</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>Less than 20g</td>
<td>25g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>Less than 300mg</td>
<td>300mg</td>
</tr>
<tr>
<td>Sodium</td>
<td>Less than 2,400mg</td>
<td>2,400mg</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>300g</td>
<td>375g</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>25g</td>
<td>30g</td>
</tr>
</tbody>
</table>

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.*

For educational purposes only. This label does not meet the labeling requirements described in 21 CFR 101.9.

Source: U.S. Food and Drug Administration, [http://www.fda.gov/Food/LabelingNutrition/PrintInformationMaterials/ucm114155.htm](http://www.fda.gov/Food/LabelingNutrition/PrintInformationMaterials/ucm114155.htm).
### MYPLATE — AMOUNTS OF FOOD FOR YOU

The amounts shown below are estimated amounts based on gender, age and physical activity. To make your own personalized plan, see Daily Food Plan on ChooseMyPlate.gov.

<table>
<thead>
<tr>
<th></th>
<th>GIRLS</th>
<th></th>
<th></th>
<th>Amounts You Need</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 to 13 years</td>
<td>14 to 18 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOOD GROUP</td>
<td>Inactive</td>
<td>Somewhat Active</td>
<td>Active</td>
<td>Inactive</td>
</tr>
<tr>
<td>Fruits</td>
<td>1½ cups</td>
<td>2 cups</td>
<td>1½ cups</td>
<td>2 cups</td>
</tr>
<tr>
<td>Vegetables</td>
<td>2 cups</td>
<td>2½ cups</td>
<td>3 cups</td>
<td></td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td>3 cups</td>
<td>cups or equivalent</td>
<td></td>
</tr>
<tr>
<td>Proteins</td>
<td>5 ounces</td>
<td>5½ ounces</td>
<td>5 ounces</td>
<td>5½ ounces</td>
</tr>
<tr>
<td>Grains</td>
<td>5 ounces</td>
<td>6 ounces</td>
<td>8 ounces</td>
<td>cups or equivalent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>BOYS</th>
<th></th>
<th></th>
<th>Amounts You Need</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 to 13 years</td>
<td>14 to 18 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOOD GROUP</td>
<td>Inactive</td>
<td>Somewhat Active</td>
<td>Active</td>
<td>Inactive</td>
</tr>
<tr>
<td>Fruits</td>
<td>1½ cups</td>
<td></td>
<td>2 cups</td>
<td>2½ cups</td>
</tr>
<tr>
<td>Vegetables</td>
<td>2½ cups</td>
<td>3 cups</td>
<td>3½ cups</td>
<td>4 cups</td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td>3 cups</td>
<td>cups or equivalent</td>
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</tr>
<tr>
<td>Proteins</td>
<td>5 ounces</td>
<td>5½ ounces</td>
<td>6½ ounces</td>
<td>6½ ounces</td>
</tr>
<tr>
<td>Grains</td>
<td>6 ounces</td>
<td>8 ounces</td>
<td>7 ounces</td>
<td>9 ounces</td>
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</tbody>
</table>

PORTION-EASE MENU PLAN #1

Luis is 14 years old. He is physically active. Each day, he needs to eat:

<table>
<thead>
<tr>
<th>Grains</th>
<th>Vegetables</th>
<th>Fruit</th>
<th>Milk</th>
<th>Meat and Beans</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 ounces</td>
<td>4 cups</td>
<td>2 ½ cups</td>
<td>3 cups</td>
<td>7 ounces</td>
</tr>
</tbody>
</table>

Help Luis decide what to eat today. Plan breakfast, lunch, dinner and a snack. Be sure he gets all the food he needs from each group. (Food items may be selected more than once.)

**Grains**
- 1 slice whole-wheat toast* (1 oz eq.)
- 5 whole-wheat crackers* (1 oz eq.)
- 1 slice white bread (1 oz eq.)
- 1 slice whole-wheat bread* (1 oz eq.)
- 1 cup whole-grain ready-to-eat breakfast cereal* (1 oz eq.)
- ½ cup cooked brown rice* (1 oz eq.)
- 1 cup cooked pasta (2 oz eq.)
- 1 hamburger bun (2 oz eq.)
- 3 cups low-fat popcorn* (1 oz eq.)

*Items marked with a * are whole-grain

**Vegetables**
- 6 baby carrots* (½ cup eq.)
- 1 large ear of corn (1 cup eq.)
- 1 medium baked potato (1 cup eq.)
- 1 cup cooked greens* (1 cup eq.)
- 1 large baked sweet potato* (1 cup eq.)
- 3 spears broccoli* (1 cup eq.)
- ½ cup tomato juice (½ cup eq.)
- 1 cup chopped lettuce (½ cup eq.)

*Items marked with a * are dark green or orange vegetables

**Fruits**
- 1 small apple or ½ large apple (1 cup eq.)
- 1 large orange (1 cup eq.)
- 1 container of peaches (½ cup eq.)
- 1 large plum (½ cup eq.)
- 1 small box raisins (½ cup eq.)
- 1 cup 100% orange juice (1 cup eq.)
- 1 medium wedge cantaloupe (½ cup eq.)
- 1 small wedge watermelon (1 cup eq.)

**Milk**
- ½ cup low-fat cottage cheese (¼ cup eq.)
- 1 cup fat-free milk (1 cup eq.)
- 1 low-fat yogurt (½ cup eq.)
- 1 half-pint 1% or 2% milk (1 cup eq.)
- 2 ounces of American cheese (1 cup eq.)
- 1½ ounces of cheddar cheese (1 cup eq.)
- 1½ cups light ice cream (1 cup eq.)

**Meat and Beans**
- 1 ounce of nuts (2 oz eq.)
- 1 cup split pea soup (2 oz eq.)
- 1 small chicken breast half (3 oz eq.)
- 1 small lean hamburger (3 oz eq.)
- 1 hard-boiled egg (1 oz eq.)
- 1 tablespoon peanut butter (1 oz eq.)
- ¼ cup of pinto beans (1 oz eq.)
- 1 slice of turkey (1 oz eq.)

Key: (1 oz eq.) means (equals 1 ounce equivalent)

PORTION-EASE MENU PLAN #2

Angela is 13 years old. She is somewhat active. Each day, she needs to eat:

<table>
<thead>
<tr>
<th>Grains</th>
<th>Vegetables</th>
<th>Fruit</th>
<th>Milk</th>
<th>Meat and Beans</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 ounces</td>
<td>2 ½ cups</td>
<td>1 ½ cups</td>
<td>3 cups</td>
<td>5 ounces</td>
</tr>
</tbody>
</table>

Help Angela decide what to eat today. Plan breakfast, lunch, dinner and a snack. Be sure she gets all the food she needs from each group. (Food items may be selected more than once.)

**Grains**
- ___ 1 slice whole-wheat toast* (1 oz eq.)
- ___ 5 whole-wheat crackers* (1 oz eq.)
- ___ 1 slice white bread (1 oz eq.)
- ___ 1 slice whole-wheat bread* (1 oz eq.)
- ___ 1 cup whole-grain ready-to-eat
  breakfast cereal* (1 oz eq.)
- ___ ½ cup cooked brown rice* (1 oz eq.)
- ___ 1 cup cooked pasta (2 oz eq.)
- ___ 1 hamburger bun (2 oz eq.)
- ___ 3 cups low-fat popcorn* (1 oz eq.)

*Items marked with a * are whole-grain

**Vegetables**
- ___ 6 baby carrots* (½ cup eq.)
- ___ 1 large ear of corn (1 cup eq.)
- ___ 1 medium baked potato (1 cup eq.)
- ___ 1 cup cooked greens* (1 cup eq.)
- ___ 1 large baked sweet potato* (1 cup eq.)
- ___ 3 spears broccoli* (1 cup eq.)
- ___ ½ cup tomato juice (½ cup eq.)
- ___ 1 cup chopped lettuce (½ cup eq.)

*Items marked with a * are dark green or orange vegetables

**Fruits**
- ___ 1 small apple or ½ large apple (1 cup eq.)
- ___ 1 large orange (1 cup eq.)
- ___ 1 container of peaches (½ cup eq.)
- ___ 1 large plum (½ cup eq.)
- ___ 1 small box raisins (½ cup eq.)
- ___ 1 cup 100% orange juice (1 cup eq.)
- ___ 1 medium wedge cantaloupe (¼ cup eq.)
- ___ 1 small wedge watermelon (1 cup eq.)

**Milk**
- ___ ½ cup low-fat cottage cheese (¼ cup eq.)
- ___ 1 cup fat-free milk (1 cup eq.)
- ___ 1 low-fat yogurt (½ cup eq.)
- ___ 1 half-pint 1% or 2% milk (1 cup eq.)
- ___ 2 ounces of American cheese (1 cup eq.)
- ___ 1½ ounces of cheddar cheese (1 cup eq.)
- ___ 1½ cups light ice cream (1 cup eq.)

**Meat and Beans**
- ___ 1 ounce of nuts (2 oz eq.)
- ___ 1 cup split pea soup (2 oz eq.)
- ___ 1 small chicken breast half (3 oz eq.)
- ___ 1 small lean hamburger (3 oz eq.)
- ___ 1 hard-boiled egg (1 oz eq.)
- ___ 1 tablespoon peanut butter (1 oz eq.)
- ___ ¼ cup of pinto beans (1 oz eq.)
- ___ 1 slice of turkey (1 oz eq.)

Key: (1 oz eq.) means (equals 1 ounce equivalent)

PORTION-EASE MENU PLAN #3

Donald is 16 years old. He is physically inactive. Each day, he needs to eat:

<table>
<thead>
<tr>
<th>Grains</th>
<th>Vegetables</th>
<th>Fruit</th>
<th>Milk</th>
<th>Meat and Beans</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 ounces</td>
<td>3 cups</td>
<td>2 cups</td>
<td>3 cups</td>
<td>6 ounces</td>
</tr>
</tbody>
</table>

Help Donald decide what to eat today. Plan breakfast, lunch, dinner and a snack. Be sure he gets all the food he needs from each group. (Food items may be selected more than once.)

**Grains**
- ___ 1 slice whole-wheat toast* (1 oz eq.)
- ___ 5 whole-wheat crackers* (1 oz eq.)
- ___ 1 slice white bread (1 oz eq.)
- ___ 1 slice whole-wheat bread* (1 oz eq.)
- ___ 1 cup whole-grain ready-to-eat
  - breakfast cereal* (1 oz eq.)
- ___ ½ cup cooked brown rice* (1 oz eq.)
- ___ 1 cup cooked pasta (2 oz eq.)
- ___ 1 hamburger bun (2 oz eq.)
- ___ 3 cups low-fat popcorn* (1 oz eq.)

*Items marked with a * are whole-grain

**Vegetables**
- ___ 6 baby carrots* (½ cup eq.)
- ___ 1 large ear of corn (1 cup eq.)
- ___ 1 medium baked potato (1 cup eq.)
- ___ 1 cup cooked greens* (1 cup eq.)
- ___ 1 large baked sweet potato* (1 cup eq.)
- ___ 3 spears broccoli* (1 cup eq.)
- ___ ½ cup tomato juice (½ cup eq.)
- ___ 1 cup chopped lettuce (½ cup eq.)

*Items marked with a * are dark green or orange vegetables

**Fruits**
- ___ 1 small apple or ½ large apple (1 cup eq.)
- ___ 1 large orange (1 cup eq.)
- ___ 1 container of peaches (½ cup eq.)
- ___ 1 large plum (½ cup eq.)
- ___ 1 small box raisins (½ cup eq.)
- ___ 1 cup 100% orange juice (1 cup eq.)
- ___ 1 medium wedge cantaloupe (½ cup eq.)
- ___ 1 small wedge watermelon (1 cup eq.)

**Milk**
- ___ ½ cup low-fat cottage cheese (¼ cup eq.)
- ___ 1 cup fat-free milk (1 cup eq.)
- ___ 1 low-fat yogurt (¼ cup eq.)
- ___ 1 half-pint 1% or 2% milk (1 cup eq.)
- ___ 2 ounces of American cheese (1 cup eq.)
- ___ 1½ ounces of cheddar cheese (1 cup eq.)
- ___ 1½ cups light ice cream (1 cup eq.)

**Meat and Beans**
- ___ 1 ounce of nuts (2 oz eq.)
- ___ 1 cup split pea soup (2 oz eq.)
- ___ 1 small chicken breast half (3 oz eq.)
- ___ 1 small lean hamburger (3 oz eq.)
- ___ 1 hard-boiled egg (1 oz eq.)
- ___ 1 tablespoon peanut butter (1 oz eq.)
- ___ ¼ cup of pinto beans (1 oz eq.)
- ___ 1 slice of turkey (1 oz eq.)

Key: (1 oz eq.) means (equals 1 ounce equivalent)

PORTION-EASE MENU PLAN #4

Kentina is 18 years old. She is physically very active. Each day, she needs to eat:

<table>
<thead>
<tr>
<th>Grains</th>
<th>Vegetables</th>
<th>Fruit</th>
<th>Milk</th>
<th>Meat and Beans</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 ounces</td>
<td>3 cups</td>
<td>2 cups</td>
<td>3 cups</td>
<td>6 ½ ounces</td>
</tr>
</tbody>
</table>

Help Kentina decide what to eat today. Plan breakfast, lunch, dinner and a snack. Be sure she gets all the food she needs from each group. (Food items may be selected more than once.)

**Grains**
- 1 slice whole-wheat toast* (1 oz eq.)
- 5 whole-wheat crackers* (1 oz eq.)
- 1 slice white bread (1 oz eq.)
- 1 slice whole-wheat bread* (1 oz eq.)
- 1 cup whole-grain ready-to-eat breakfast cereal* (1 oz eq.)
- ½ cup cooked brown rice* (1 oz eq.)
- 1 cup cooked pasta (2 oz eq.)
- 1 hamburger bun (2 oz eq.)
- 3 cups low-fat popcorn* (1 oz eq.)

*Items marked with a * are whole-grain

**Vegetables**
- 6 baby carrots* (½ cup eq.)
- 1 large ear of corn (1 cup eq.)
- 1 medium baked potato (1 cup eq.)
- 1 cup cooked greens* (1 cup eq.)
- 1 large baked sweet potato* (1 cup eq.)
- 3 spears broccoli* (1 cup eq.)
- ½ cup tomato juice (½ cup eq.)
- 1 cup chopped lettuce (½ cup eq.)

*Items marked with a * are dark green or orange vegetables

**Fruits**
- 1 small apple or ½ large apple (1 cup eq.)
- 1 large orange (1 cup eq.)
- 1 container of peaches (½ cup eq.)
- 1 large plum (½ cup eq.)
- 1 small box raisins (½ cup eq.)
- 1 cup 100% orange juice (1 cup eq.)
- 1 medium wedge cantaloupe (½ cup eq.)
- 1 small wedge watermelon (1 cup eq.)

**Milk**
- ½ cup low-fat cottage cheese (¼ cup eq.)
- 1 cup fat-free milk (1 cup eq.)
- 1 low-fat yogurt (¼ cup eq.)
- 1 half-pint 1% or 2% milk (1 cup eq.)
- 2 ounces of American cheese (1 cup eq.)
- 1¼ ounces of cheddar cheese (1 cup eq.)
- 1½ cups light ice cream (1 cup eq.)

**Meat and Beans**
- 1 ounce of nuts (2 oz eq.)
- 1 cup split pea soup (2 oz eq.)
- 1 small chicken breast half (3 oz eq.)
- 1 small lean hamburger (3 oz eq.)
- 1 hard-boiled egg (1 oz eq.)
- 1 tablespoon peanut butter (1 oz eq.)
- ¼ cup of pinto beans (1 oz eq.)
- 1 slice of turkey (1 oz eq.)

**Key:** (1 oz eq.) means (equals 1 ounce equivalent)

PORTION-EASE MENU PLAN #5

Emily is 12 years old. She is somewhat active. Each day, she needs to eat:

<table>
<thead>
<tr>
<th>Grains</th>
<th>Vegetables</th>
<th>Fruit</th>
<th>Milk</th>
<th>Meat and Beans</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 ounces</td>
<td>2 ½ cups</td>
<td>1 ½ cups</td>
<td>3 cups</td>
<td>5 ounces</td>
</tr>
</tbody>
</table>

Help Emily decide what to eat today. Plan breakfast, lunch, dinner and a snack. Be sure she gets all the food she needs from each group. (Food items may be selected more than once.)

**Grains**

- 1 slice whole-wheat toast* (1 oz eq.)
- 5 whole-wheat crackers* (1 oz eq.)
- 1 slice white bread (1 oz eq.)
- 1 slice whole-wheat bread* (1 oz eq.)
- 1 cup whole-grain ready-to-eat breakfast cereal* (1 oz eq.)
- ½ cup cooked brown rice* (1 oz eq.)
- 1 cup cooked pasta (2 oz eq.)
- 1 hamburger bun (2 oz eq.)
- 3 cups low-fat popcorn* (1 oz eq.)

*Items marked with a * are whole-grain

**Vegetables**

- 6 baby carrots* (½ cup eq.)
- 1 large ear of corn (1 cup eq.)
- 1 medium baked potato (1 cup eq.)
- 1 cup cooked greens* (1 cup eq.)
- 1 large baked sweet potato* (1 cup eq.)
- 3 spears broccoli* (1 cup eq.)
- ½ cup tomato juice (½ cup eq.)
- 1 cup chopped lettuce (½ cup eq.)

*Items marked with a * are dark green or orange vegetables

**Fruits**

- 1 small apple or ½ large apple (1 cup eq.)
- 1 large orange (1 cup eq.)
- 1 container of peaches (½ cup eq.)
- 1 large plum (½ cup eq.)
- 1 small box raisins (½ cup eq.)
- 1 cup 100% orange juice (1 cup eq.)
- 1 medium wedge cantaloupe (½ cup eq.)
- 1 small wedge watermelon (1 cup eq.)

**Milk**

- ½ cup low-fat cottage cheese (¼ cup eq.)
- 1 cup fat-free milk (1 cup eq.)
- 1 low-fat yogurt (½ cup eq.)
- 1 half-pint 1% or 2% milk (1 cup eq.)
- 2 ounces of American cheese (1 cup eq.)
- 1½ ounces of cheddar cheese (1 cup eq.)
- 1½ cups light ice cream (1 cup eq.)

**Meat and Beans**

- 1 ounce of nuts (2 oz eq.)
- 1 cup split pea soup (2 oz eq.)
- 1 small chicken breast half (3 oz eq.)
- 1 small lean hamburger (3 oz eq.)
- 1 hard-boiled egg (1 oz eq.)
- 1 tablespoon peanut butter (1 oz eq.)
- ¼ cup of pinto beans (1 oz eq.)
- 1 slice of turkey (1 oz eq.)

Key: (1 oz eq.) means (equals 1 ounce equivalent)

### FINDING FOOD FUEL CARDS

<table>
<thead>
<tr>
<th>Food Item</th>
<th>Serving Size</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spaghetti</td>
<td>(one cup, plain)</td>
<td>200</td>
</tr>
<tr>
<td>Low-fat Yogurt</td>
<td>(one cup, flavored)</td>
<td>200</td>
</tr>
<tr>
<td>Cake Donut</td>
<td>(one medium, plain)</td>
<td>200</td>
</tr>
<tr>
<td>Peanut Butter</td>
<td>(one tablespoon)</td>
<td>100</td>
</tr>
<tr>
<td>Banana</td>
<td>(one medium)</td>
<td>100</td>
</tr>
<tr>
<td>Corn Flakes</td>
<td>(one cup)</td>
<td>100</td>
</tr>
<tr>
<td>Fruit Juice</td>
<td>(one cup, 100%)</td>
<td>125</td>
</tr>
<tr>
<td>Pita Bread</td>
<td>(one piece)</td>
<td>125</td>
</tr>
<tr>
<td>Sweet Potato</td>
<td>(medium, plain)</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Calorie counts were determined using the FitWatch Free Online Calorie Counter, [http://www.fitwatch.com/caloriecounter.html](http://www.fitwatch.com/caloriecounter.html)
### FINDING FOOD FUEL CARDS

<table>
<thead>
<tr>
<th>Food Item</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicken Breast (baked)</td>
<td>200 calories</td>
</tr>
<tr>
<td>Double Hamburger (on a bun)</td>
<td>350 calories</td>
</tr>
<tr>
<td>Chicken Breast (battered and fried)</td>
<td>350 calories</td>
</tr>
<tr>
<td>Bran Muffin (medium)</td>
<td>350 calories</td>
</tr>
<tr>
<td>Bagel (one-half, whole-wheat)</td>
<td>125 calories</td>
</tr>
<tr>
<td>Chili (one-half cup, with beans)</td>
<td>125 calories</td>
</tr>
<tr>
<td>Corn (one-half cup)</td>
<td>85 calories</td>
</tr>
<tr>
<td>Mozzarella Cheese (one slice)</td>
<td>85 calories</td>
</tr>
<tr>
<td>Almonds (1/2 ounce, 10 to 11)</td>
<td>85 calories</td>
</tr>
</tbody>
</table>

Source: Calorie counts were determined using the FitWatch Free Online Calorie Counter, [http://www.fitwatch.com/caloriecounter.html](http://www.fitwatch.com/caloriecounter.html)
# Finding Food Fuel Cards

<table>
<thead>
<tr>
<th>Item</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Dog (on a bun)</td>
<td>250</td>
</tr>
<tr>
<td>Fried Fish (one piece)</td>
<td>250</td>
</tr>
<tr>
<td>Meat Pizza (one slice, thick crust)</td>
<td>250</td>
</tr>
<tr>
<td>French Fries (one medium order)</td>
<td>450</td>
</tr>
<tr>
<td>Double Cheeseburger (with special sauce)</td>
<td>450</td>
</tr>
<tr>
<td>Medium Taco (with meat, cheese, lettuce and tomato)</td>
<td>450</td>
</tr>
<tr>
<td>Crispy Chicken Sandwich (on a bun)</td>
<td>400</td>
</tr>
<tr>
<td>Cinnamon Rolls (three pieces, fast-food order)</td>
<td>400</td>
</tr>
<tr>
<td>Crispy Chicken Strips (five pieces)</td>
<td>400</td>
</tr>
</tbody>
</table>

Source: Calorie counts were determined using the FitWatch Free Online Calorie Counter, [http://www.fitwatch.com/caloriecounter.html](http://www.fitwatch.com/caloriecounter.html)
## Finding Food Fuel Cards

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playing Soccer</td>
<td>30 min</td>
<td>200</td>
</tr>
<tr>
<td>Playing Baseball</td>
<td>45 min</td>
<td>200</td>
</tr>
<tr>
<td>Picking up Litter</td>
<td>45 min</td>
<td>200</td>
</tr>
<tr>
<td>Stretching</td>
<td>40 min</td>
<td>100</td>
</tr>
<tr>
<td>Mowing Lawns</td>
<td>20 min</td>
<td>100</td>
</tr>
<tr>
<td>Dancing</td>
<td>25 min</td>
<td>100</td>
</tr>
<tr>
<td>Walking the Dog</td>
<td>45 min</td>
<td>125</td>
</tr>
<tr>
<td>Raking Leaves</td>
<td>30 min</td>
<td>125</td>
</tr>
<tr>
<td>Ballet Dancing</td>
<td>25 min</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Calorie counts were determined using the Health Status Calorie Burn Calculator, [http://healthstatus.com/calculate/cbc](http://healthstatus.com/calculate/cbc)
# Lesson 2: Stamp Out Portion Distortion

## Finding Food Fuel Cards

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicing Yoga</td>
<td>1 hour, 30 minutes</td>
<td>200</td>
</tr>
<tr>
<td>Lifting Weights</td>
<td>2 hours</td>
<td>350</td>
</tr>
<tr>
<td>Playing Volleyball</td>
<td>2 hours</td>
<td>350</td>
</tr>
<tr>
<td>Aerobic Dancing</td>
<td>1 hour</td>
<td>350</td>
</tr>
<tr>
<td>Bicycling</td>
<td>20 minutes</td>
<td>125</td>
</tr>
<tr>
<td>Running</td>
<td>15 minutes</td>
<td>125</td>
</tr>
<tr>
<td>Carrying Groceries Upstairs</td>
<td>10 minutes</td>
<td>85</td>
</tr>
<tr>
<td>Playing Frisbee</td>
<td>30 minutes</td>
<td>85</td>
</tr>
<tr>
<td>Walking</td>
<td>30 minutes</td>
<td>85</td>
</tr>
</tbody>
</table>

Source: Calorie counts were determined using the Health Status Calorie Burn Calculator, [http://healthstatus.com/calculate/cbc](http://healthstatus.com/calculate/cbc)
## FINDING FOOD FUEL CARDS

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playing Basketball</td>
<td>(45 minutes)</td>
<td>250</td>
</tr>
<tr>
<td>Playing Football</td>
<td>(35 minutes)</td>
<td>250</td>
</tr>
<tr>
<td>Doing Aerobics</td>
<td>(45 minutes)</td>
<td>250</td>
</tr>
<tr>
<td>Bicycling</td>
<td>(1 hour, 20 min)</td>
<td>450</td>
</tr>
<tr>
<td>Swimming</td>
<td>(1 hour, 20 min)</td>
<td>450</td>
</tr>
<tr>
<td>Running</td>
<td>(1 hour)</td>
<td>450</td>
</tr>
<tr>
<td>Playing Tennis</td>
<td>(1 hour)</td>
<td>400</td>
</tr>
<tr>
<td>Jumping Rope</td>
<td>(45 minutes)</td>
<td>400</td>
</tr>
<tr>
<td>Skating</td>
<td>(1 hour)</td>
<td>400</td>
</tr>
</tbody>
</table>

Source: Calorie counts were determined using the Health Status Calorie Burn Calculator, [http://healthstatus.com/calculate/cbc](http://healthstatus.com/calculate/cbc)