Lesson Four
My Food Pyramid

Objectives

After participating in this lesson students will
- Identify and understand the basic concepts in the Food Pyramid.
- Understand how the nutrients relate to the Food Pyramid.
- Identify the different food groups.
- Understand the concepts of balance, variety and moderation.
- Practice resistance band exercises as a physical activity.

Time

50 minutes Prep Time: 30 minutes

Activities

4.1 Review and Plan for the Day 3 minutes
4.2 Introduction to Food Pyramid 7 minutes
4.3 Food Pyramid Groups 27 minutes
4.4 Resistance Bands 8 minutes
4.5 Closure—What Do We Know? 5 minutes

Key Terms

- Variety
- Balance
- Moderation
- Food Pyramid
- Discretionary Calories

Materials

- Post-its
- My Pyramid poster
- Carbohydrates/Proteins/Fats poster
- Food Groups (Activity Sheets 4.3a-g)
- Food Pyramid (Activity Sheet 4.3h)
- Food Model cards
- Portion Distortion tear pad
- What Do We Know? poster
- Resistance bands
Teacher Preparation

- Order Portion Distortion tear pad and My Pyramid poster.
- Write Plan for the Day and Objectives on chart paper or board.
- Draw 3 columns on the board labeled Carbohydrates, Proteins, Fats.
- Make Carbohydrates/Proteins/Fats poster that lines up with the My Pyramid poster. (See diagram in Activity 4.2.)
- Make copies of Food Groups (Activity Sheets 4.3a-g), for each Food Pyramid group.
- Make copies of Food Pyramid (Activity Sheet 4.3h), 1 for each student.
- Create food group/physical activity posters on chart paper, 1 for each part of the Food Pyramid. (See Activity 4.3 for the questions to write on each poster.)
- Create What Do We Know? poster on chart paper. (See Activity 4.5.)
- Write 3 resistance band exercises on dry erase/chalkboard or chart paper.

4.1 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:
- Introduction to Food Pyramid
- Food Pyramid Groups
- Resistance Bands
- Closure—What Do We Know?

Review the previous class by asking students what types of information we can get from the Food Label.

Explain that today they will be learning about the USDA (United States Department of Agriculture) Food Pyramid. They will be learning about the different information that the Food Pyramid provides. Then they will be looking back on what they’ve learned in this class thus far. Class will end with some resistance band exercises.

Review the Objectives with students.

4.2 Introduction to Food Pyramid 7 minutes

Materials: My Pyramid Poster, Post-its, Carbohydrates/Proteins/Fats poster, dry erase/chalkboard

Point out the three columns on the board labeled Carbohydrates, Proteins and Fats. Start by asking students to give you examples of foods in which the main nutrient is carbohydrates. Repeat the question for proteins and for fats. When students give their responses write the name of the food and Carbohydrate, Protein or Fat on a Post-it and place it under the
appropriate column. After they give a few examples for each nutrient, show them the My Pyramid poster.

- Give students a few moments to familiarize themselves with the My Pyramid poster. Then, ask where the food items they listed would go on the Food Pyramid. Give an example first, by taking one of the post-its and placing it on the food group slice where it belongs. For example, if the Post-it says “tortilla/carbohydrate” stick it on the Grains food group slice.

- Once all of the post-its are on the poster, ask the students where carbohydrates fall on the pyramid. Make the point that grains, vegetables and fruits are our main sources of carbohydrates. Repeat the question for proteins and fats. Make the point that Meat and Beans are our main sources for protein, and Dairy and Oils are our main sources for fats.

- Place the Carbohydrates/Proteins/Fats poster under the My Pyramid poster, line it up with the Pyramid as follows: Carbohydrates underneath the Grains, Vegetables and Fruits, Proteins and Fats underneath the Meats and Dairy and Minerals and Vitamins under all food groups. (See the diagram below.)

- Tell students that it’s important to balance (consume foods from all food groups on the Food Pyramid) their diet between all of the food groups. Write the word “balance” on the dry erase/chalkboard.

- Direct students’ attention to the physical activity component of the Pyramid. Explain that this is a new addition to the Pyramid. Equally as important as having a healthy diet is making physical activity a regular part of each day.

4.3 Food Pyramid Groups 27 minutes

Materials: Food group/physical activity posters, Food Model cards, Food Groups (Activity Sheets 4.3a-g), Food Pyramid (Activity Sheet 4.3h), Portion Distortion tear pad (1 tear sheet per student)

Explain that students will now be learning about the Food Pyramid (a graphic representation of human nutritional needs in the form of a pyramid) by investigating one of the food groups or the physical activity component. There will be specific information they will be asked to contribute to the class.
• Explain that they will be working in groups. There will be 7 groups because there are 7 parts to the Food Pyramid. Tell the students that they will be broken up into groups after they receive the information on what they are to do.

• Show students the Food Groups activity sheets. Explain that each group will receive one of these sheets. The activity sheet is specific to their food group. They are to fill it out using the information provided on the top of the page.

• Explain that once they are finished with the activity sheet they are going to transfer the information to the poster for their food group.

• Direct their attention to the chart paper posters around the room. Tell them that they are to find the poster that has their food group or physical activity on it and record their answers on it. (Prepare the chart paper before class with the questions they are to answer. See below.)

  • Questions for the 4 posters on Grains, Vegetables, Fruits and Milk groups:
    ▪ 1 cup/ounce of “food group” is equal to: (students list 4 examples)
    ▪ Daily Amount of “food group” for 2,000 calorie diet: __________
    ▪ Benefits of eating foods from this food group: (students list 2 benefits)
  • Questions for the Oils group:
    ▪ Amount of Oil in Common Foods: (students list 2 examples)
    ▪ Daily Amount of oil for 2,000 calorie diet: __________
    ▪ Discretionary calorie allowance for 2,000 calorie diet: __________
    ▪ Types of food that are discretionary: (students list examples)
  • Questions for the Meat and Beans group:
    ▪ Common sizes of Meat and Bean portions: (students list 4 examples)
    ▪ Daily Amount of Meat/Beans for 2,000 calorie diet: __________
    ▪ Two ways to eat healthy from this food group: (students list 2 examples)
  • Questions for the Physical Activity group:
    ▪ Physical Activity should add up to at least ______ minutes/day
    ▪ Physical Activity should be moderate to vigorous. (students list 3 examples of moderate and vigorous activities)
    ▪ Benefits of Physical Activity: (students list examples)

• Give groups access to the Food Model cards, and allow enough time for them to fill out the Food Groups activity sheets and to complete transferring the information to the food group posters.

• Once all of the information is added to the food group posters, have students return to their seats. Give each student a copy of the Food Pyramid activity sheet and ask them to fill it out using the answers on the food group posters they just completed. The intention is for students to get a big picture of how much and what kind of food should be consumed in a day in regards to the USDA Food Pyramid.

• After students have filled out the Food Pyramid activity sheet, tell them that this is all the food they should eat in a day if they have a 2,000 calorie diet. Reiterate the word “balance,” stating that it’s important to get foods from all of the food groups.
• Explain that there are two other words to learn. One is variety (eat different foods within each food group). Draw their attention to the Grains food group poster and show them that it is important to eat several different types of grains within the food group. Write “variety” under “balance.”

• Finally, tell the students it’s important to eat foods in moderation (consuming foods within reasonable limits, not excessive eating). Using the Grains food group poster, direct their attention to the Daily Amount box and tell them it’s important to eat the amount in the box in a day, but not more. Write the word “moderation” under “variety.”

• Hand out a Portion Distortion tear pad sheet to each student. Review it and answer any questions they may have. Show the “Measure up” section so they can see portion sizes. Tell them they can keep these forms to use in the future.

• Finish this activity by emphasizing the three words: balance, variety and moderation. They are key parts to following the Food Pyramid.

4.4 Resistance Band Exercises  8 minutes

Materials: Resistance Bands

Explain that class will end with resistance band exercises.

• Remind students that resistance bands develop muscular strength/endurance and flexibility. They can determine the intensity of the exercise by grabbing the resistance band closer to the center of the band.

• Show the resistance band and demonstrate how to use it. Let students know that it is not for playing with, only for doing the specific exercises. Emphasize being safe while doing the exercises, so they won’t hurt themselves. It’s possible to injure a muscle by doing the exercises incorrectly. Show students the Resistance Band Workout (Activity Sheet 1.1) in their portfolios to follow along with.

• Explain that when choosing a band, the thicker the band the more resistance it has.

Perform the Resistance Band Workout with students. Have them find a space away from each other facing toward you. Demonstrate each exercise and then go around and help students with the individual exercises, as needed. Before class, choose 3 of the exercises to do and have them written on a piece of chart paper or the board.
Exercises:

- **Bent Over Row**
  Center tube under feet and bend forward at the waist, back flat and abs in. Grab tube close to the feet and bend the elbows to pull the arms up to the torso, squeezing the back.

- **Overhead Press**
  Place both feet on tube and grasp ends or handles, bringing hands up just over shoulders with elbows bent and palms in. Press arms up over head and then lower.

- **One-Armed Reverse Fly**
  With front foot standing on one end of the band, hold other end in one hand and lean over, abs in, torso at 45 degrees. Keeping elbow slightly bent and in a fixed position, raise arm out to shoulder level, squeezing shoulder blades.

- **One-Armed Lateral Raise**
  Stand with one end of tube under foot and the other end in one hand. Keeping elbow slightly bent and fixed, lift arm out to the side, to shoulder level.

- **Bicep Curl**
  Place both feet on tube and grasp handles (the wider the feet, the harder the exercise). Bend the elbows and curl hands up toward shoulder. Lower and repeat.

- **Cross-Body Bicep**
  Place left foot on band and hold the handle or end in right hand. Begin the move with palm facing in and bend the elbow, curling hand up towards the shoulder, going across the body.

### 4.5 Closure — What Do We Know? 5 minutes

Create a poster before class titled “What Do We Know?” Underneath the title write the following points:

- Eat foods from all food groups.
- Eat a variety of foods from each food group to get all the nutrients.
- Monitor the size of a portion of food.

Review the poster with students, covering the 3 points they’ve learned. Make the comparison to the Food Pyramid concepts of balance, variety and moderation.

State that in the next class they will figure out how much to eat from each food group and how much they should eat in a day, in terms of calories. Have students share one thing they learned today about the Food Pyramid.
Resources

Portion Distortion tear pad
www.ncescatalog.com
Product code: 3700

My Pyramid large poster
www.enasco.com
Product code: WA24221H

www.mypyramid.gov

www.exercise.about.com
Grains Food Group
Make half your grains whole.

1 ounce of grains is equal to:
1 slice of bread
1 cup of ready-to-eat cereal
½ cup of cooked rice, cooked pasta or cooked cereal
1 mini bagel
3 cups popcorn
1 small flour tortilla

Daily Amount of Grains for 2,000 calorie diet:
6 ounces

Benefits of eating Grains:
Eating grains provides lasting energy.
Eating at least 3 ounce equivalents a day of whole grains may help with weight management.
Eating grains fortified with folate before and during pregnancy helps prevent neural tube defects during fetal development.

1 ounce of grains is equal to:
1.) ____________  3.) ____________
2.) ____________  4.) ____________

Using the Food Model cards, select a combination of food items that will fulfill a daily amount for a person consuming 2,000 calories a day.
_____________________________________

What are 2 benefits of eating foods from this food group?
1. _____________________________________
2. _____________________________________

U.S. Department of Agriculture
Vegetables Food Group
Vary your veggies.

1 cup of vegetables is equal to:

Dark-Green Vegetables:
- 1 cup chopped broccoli
- 1 cup cooked spinach
- 2 cups raw leafy green lettuce

Orange Vegetables:
- 1 cup raw or cooked carrots
- 1 large baked sweet potato

Dry Beans and Peas:
- 1 cup tofu
- 1 cup cooked beans

Starchy vegetables:
- 1 large ear of corn
- 1 medium baked potato

Benefits of eating Vegetables:
- More energy
- Less likely to get colds and flu
- Healthier skin/clearer skin
- Healthy weight

Daily Amount of Vegetables for 2,000 calorie diet:
2-1/2 cups

1 cup of vegetables is equal to:
1.) ___________ 3.) ___________
2.) ___________ 4.) ___________

Using the Food Model cards, select a combination of food items that will fulfill a daily allowance for a person consuming 2,000 calories a day.

What are 2 benefits of eating foods from this food group?
1. __________________________
2. __________________________
Fruits Food Group
Focus on fruits.

1 cup of fruit is equal to:
1 small apple
1 large banana
1 cup diced cantaloupe
1 medium grapefruit
1 large peach
1 cup chunked pineapple
8 large strawberries
½ cup dried fruit
1 cup 100% fruit juice

Benefits of eating Fruits:
More energy
Less likely to get colds and flu
Healthy skin/clearer skin
Healthy weight

Daily Amount of Fruits for 2,000 calorie diet:
2 cups

1 cup of fruit is equal to:
1.) ___________  3.) ___________
2.) ___________  4.) ___________

Using the food model cards, select a combination of food items that will fulfill a daily allowance for a person consuming 2,000 calories a day.

What are 2 benefits of eating foods from this food group?
1. ____________________________
2. ____________________________

U.S. Department of Agriculture
Oils, Sugars and Salt
Know your limits.

Amount of oil in common foods:
1 Tbs. Vegetable oils (such as canola, corn, cottonseed, olive, peanut, safflower, soybean, and sunflower) = 3 tsp. of oil
1 Tbs. Mayonnaise = 2½ tsp. of oil
2 Tbs. Italian Dressing = 2 tsp. of oil
1 oz. Peanuts = 3 tsp. of oil
2 Tbs. Peanut Butter = 4 tsp. of oil
1 oz. Sunflower Seeds = 3 tsp. of oil
½ med. Avocado = 3 tsp. of oil

Daily Amount of Oils for 2,000 calorie diet: 6 teaspoons

Discretionary Calories from sugar and salt:
The discretionary calorie allowance from sugar and salt for a 2,000 calorie a day diet is 267 calories.

Discretionary calorie allowance is the remaining amount of calories in food intake after accounting for the calories needed for all food groups.

Types of foods that fall under discretionary calories: candy bars, potato chips, higher fat meat, sweetened cereal, whole milk and sweetened yogurt.

Amount of oil in common foods:
1.) ____________ 3.) ____________
2.) ____________ 4.) ____________

Daily Amount of Oil for a 2,000 calorie diet: ________

What is the discretionary calorie allowance from sugar and salt for a 2,000 calorie diet?
_____________

Types of food that fall under discretionary calorie allowance:

________________________________________

U.S. Department of Agriculture
Milk Group
Get your calcium-rich foods.

1 cup of milk is equal to:

1 cup of milk
1 cup of yogurt
1½ ounce of natural cheese
2 ounces of processed cheese
1 cup pudding made with milk
1 cup frozen yogurt
2 cups cottage cheese

Benefits of Milk

The intake of milk products is especially important to bone health during childhood and adolescence, when bone mass is being built.

Healthy teeth
Healthy, strong bones
Healthy muscles (no muscle cramping)

Daily Amount of Milk for 2,000 calorie diet: 3 cups

1 cup of milk is equal to:

1.) ____________  3.) ____________
2.) ____________  4.) ____________

Using the Food Model cards, select a combination of food items that will fulfill a daily allowance for a person consuming 2,000 calories a day.

____________________________________

What are 2 benefits of eating foods from this food group?

1. __________________________________
2. __________________________________

U.S. Department of Agriculture
# Meat and Beans Group

**Go lean with protein.**

## Common Sizes of Meat & Beans:

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<td>1 small steak = 3½ to 4 ounces</td>
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<td>1 small chicken breast half = 3 ounces</td>
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<td>1 can of tuna, drained = 3 to 4 ounces</td>
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<td>1 egg = 1 ounce</td>
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<td>1 soy or bean burger patty = 2 oz</td>
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<td>1 cup bean soup = 2 oz</td>
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<td>1 ounce of nuts or seeds = 2 oz</td>
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## Ways to eat healthy from the meat/beans group:

- The leanest beef cuts include round steaks and roasts (round eye, top round, bottom round, round tip), top loin, top sirloin, and chuck shoulder and arm roasts.
- Buy skinless chicken parts, or take off the skin before cooking.
- Choose lean turkey, roast beef, ham, or low-fat luncheon meats for sandwiches instead of luncheon meats with more fat, such as regular bologna or salami.
- Choose nuts as a snack, on salads, or in main dishes.
- Choose dry beans or peas as a main dish or part of a meal often.

## Daily Amount of Meat/Beans for 2,000 calorie diet:

- **5-1/2 ounces**

Using the Food Model cards, select a combination of food items that will fulfill a daily allowance for a person consuming 2,000 calories a day.

What are 2 ways to eat healthy from this food group?

1. _____________________________________________________________
2. _____________________________________________________________

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U.S. Department of Agriculture
Physical Activity
Find Your Balance between Food and Physical Activity.

Physical Activity should add up to at least 30 minutes a day.

Benefits of Physical Activity
- Having more energy and stamina
- Improving flexibility, strength and endurance
- Reducing the risk of future disease
- Sleeping more soundly
- Being able to concentrate better
- Managing your weight
- Feeling better about your body

Moderate physical activities:
- Walking briskly (3½ miles/hour)
- Hiking
- Dancing
- Bicycling (less than 10 miles/hour)
- Weight training (general light workout)
- Skateboarding

Vigorous physical activities:
- Running/jogging (5 miles/hour)
- Bicycling (more than 10 miles/hour)
- Swimming (freestyle laps)
- Aerobics
- Walking very fast (4½ miles/hour)
- Weight lifting (vigorous effort)
- Basketball (competitive)

What is the recommended amount of time you should spend on moderate and/or vigorous exercise per day?

What types of activities can you perform to meet the moderate and vigorous intensity levels?

What are 2 benefits of being physically active?
1. ____________________________________________
2. ____________________________________________

U.S. Department of Agriculture
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**Food Pyramid**