

Lesson 4: MyPlate – Foods for Life



Lesson 4: MyPlate – Foods for Life

Background information

MyPlate is an illustration developed by the U. S. Department of Agriculture (USDA) to represent suggested food groupings for a healthy diet in terms of a place setting for a meal. The five suggested food groups are: fruits, vegetables, grains, protein, and dairy. Oils are not considered a food group, however are still important as they provide essential nutrients to the body. In addition to foods from the five suggested food groupings, it is also recommended that Americans consume adequate amounts of water.

The **fruit** group includes any fresh, canned, frozen, or dried fruit, and 100% fruit juice. Generally, 1 cup of fruit, 1 cup of 100% fruit juice, or ½ cup of dried fruit are all considered 1 cup from the fruit group. Fruits are sources of many nutrients, including potassium, dietary fiber, vitamin C, and folate (folic acid). Eating fruit as part of an overall healthy diet may reduce risk for heart disease and type 2 diabetes, protect against some cancers, and lower blood pressure.



The **vegetable** group includes any fresh, frozen, canned, dried, or dehydrated vegetable, and 100% vegetable juice. In general, 1 cup of raw or cooked vegetables, 1 cup of vegetable juice, or 2 cups of raw leafy greens are all considered 1 cup from the vegetable group. Vegetables are naturally low in calories and fat, and provide important sources of many nutrients. Some of these nutrients include potassium, dietary fiber, folate (folic acid), vitamin A, and vitamin C. Eating a diet rich in vegetables as part of an overall healthy diet may reduce risk for heart disease and type 2 diabetes, protect against some cancers, and lower blood pressure. MyPlate recommends making half your plate fruits and vegetables.

The **grains** group includes any food made from wheat, rice, oats, cornmeal, barley or another cereal grain. Examples include bread, pasta, oatmeal, breakfast cereals, tortillas, and grits. Nutrients found in grains include fiber, B-vitamins, and minerals such as iron. Two subgroups of grains are **whole grains** and **refined grains**. **Whole grains** contain all parts of the grain: the bran, germ, and endosperm. Examples of whole grains include whole wheat flour, quinoa, oatmeal, whole cornmeal, and brown rice. MyPlate recommends making half of the grains you eat whole grains. **Refined grains** are grains that have been milled, a process that removes the bran and germ so that only the endosperm remains. Milling the grain improves shelf life and results in a finer texture. However the milling process also removes the dietary fiber, vitamin E, iron, and many B-vitamins that are found in the grain's bran and germ. Most refined grains are **enriched**, meaning certain B-vitamins and iron are added back after the milling process. Fiber and vitamin E, however, are not added back to enriched grains. Generally, the following are considered equivalent to 1 ounce from the grain



group: 1 slice of bread; 1 cup of ready-to-eat cereal; or ½ cup of cooked rice, cooked pasta, or cooked cereal. Consuming whole grains as part of a healthy diet may reduce the risk of heart disease, reduce constipation, and help with weight management.



The **protein foods** group includes meat, poultry, seafood, beans and peas, eggs, processed soy products, nuts, and seeds. In general, 1 ounce of meat, poultry or fish, ¼ cup cooked beans, 1 egg, 1 tablespoon peanut butter, or ½ ounce nuts or seeds are considered 1 ounce equivalent from the protein foods group. MyPlate recommends selecting lean protein, low in saturated fat. Protein foods provide many nutrients including protein, B-vitamins, vitamin E, iron, zinc, and magnesium.

The **dairy** group includes all fluid milk products and many foods made from milk. Generally, 1 cup of milk, yogurt, or soymilk, 1 ½ ounces of natural cheese, or 2 ounces of processed cheese are considered equivalent to 1 cup from the dairy group. MyPlate recommends switching dairy products to fat-free or low-fat options. Nutrients found in dairy products include calcium, potassium, and vitamin D (fortified). Consumption of dairy products may improve bone health, lower blood pressure, and reduce the risk of osteoporosis, cardiovascular disease, and type 2 diabetes.



Oils are fats that are liquid at room temperature. Nutrients found in oils include healthful fatty acids and vitamin E. Oils generally come from plant sources such as nuts, seeds, avocados, and olives. Examples of commonly consumed oils include canola oil, olive oil, safflower oil, and soybean oil. However, fish are also a good source of oil.

While not included on MyPlate, **water** is a very important nutrient. Much of our bodies are made up of water, and being dehydrated can lead to negative consequences. While there are no set recommendations for water consumption, the Dietary Guidelines for Americans states that healthy individuals are generally able to meet their water needs by drinking when they are thirsty and consuming liquids with meals. MyPlate recommends drinking plain water or calorie-free beverages instead of sugary beverages like soda.



MyPlate also makes recommendations for daily amounts from each food group for individuals when considering their gender, age, and level of physical activity. These all contribute to determining the number of **calories** and **nutrients** needed each day.

Concepts and Vocabulary

B-vitamins: Vitamins that are important in helping our bodies turn food into energy.

Calcium: A mineral important for bone health and muscle function.

Calories: The amount of energy in food; the number of calories necessary for normal body function depends on the individual.

Dairy: The food group consisting of all fluid milk products and many foods made from milk.

Dietary fiber: A type of carbohydrate that can't be digested, but is important for digestive health. It may help reduce blood cholesterol and lower risk of heart disease.

Folate: A B-vitamin that helps the body form red blood cells and is needed for growth and repair. It is also important in pregnancy to help prevent birth defects.

Fruits: The food group consisting of any fresh, canned, frozen, or dried fruit, and 100% fruit juice.

Grains: The food group consisting of foods made from wheat, rice, oats, cornmeal, barley, or another cereal grain.

Iron: A mineral that is important in red blood cells, and is used to move oxygen around in the blood.

Mineral: A micro-nutrient that helps with growth and maintenance in the body.

MyPlate: An illustration developed by the USDA depicting five recommended food groupings for a healthy diet, showing sections of a plate that should match the proportions of those foods when consumed over the course of a day.

Nutrients: Substances found in food and beverages that our bodies use for growth, maintenance, and repair.

Protein foods: The food group that includes meat, poultry, seafood, beans and peas, eggs, processed soy products, nuts, and seeds.

Oils: Fats that are liquid at room temperature, including mono- and poly-unsaturated fatty acids.

Refined grains: Grains that have been milled, which removes the bran and germ, leaving only the endosperm; most refined grains are enriched with certain B-vitamins and iron.

Vegetables: The food group consisting of raw or cooked, fresh, frozen, canned, dried, or dehydrated vegetables, and 100% vegetable juice.

Vitamin: A micronutrient that helps the body's growth and maintenance.

Water: A macronutrient that

Whole grains: Grains that contain all parts of the grain kernel, including the bran, germ, and endosperm.



4.1: Learning Activity

Getting Ready



Time Required

45 minutes



Materials Needed

(*Materials provided in the curriculum)

- Flip chart paper
- Markers, pens, or pencils
- *MyPlate (Appendix 4A)
- *Character Descriptions (Appendix 4B)
- *MyPlate Recommendations (Appendix 4C)
- *Food Cards (Appendix 4D) or food models
- *Eating from MyPlate (Appendix 4E)
- *MyPlate Serving Equivalents (Appendix 4F)
- *Character Lunches (Appendix 4G)

Optional:

- *Focus on Food Lesson 4 (PowerPoint)
- Computer
- PowerPoint Projector



Appendix 4C – MyPlate Recommendations

*Recommendations for individuals with less than 30 minutes of moderate physical activity per day.

	Fruits	Vegetables	Grains	Protein	Dairy
Children					
2-3 years	1 cup	1 cup	3 ounce equivalents	2 ounce equivalents	2 cups
4-5 years	1 1/2 cups	1 1/2 cups	3 ounce equivalents	2 ounce equivalents	2 1/2 cups
Girls					
6-11 years	1 1/2 cups	2 cups	3 ounce equivalents	5 ounce equivalents	3 cups
12-15 years	1 1/2 cups	2 1/2 cups	3 ounce equivalents	5 ounce equivalents	3 cups
Boys					
6-11 years	1 1/2 cups	2 1/2 cups	3 ounce equivalents	5 ounce equivalents	3 cups
12-15 years	2 cups	3 cups	3 ounce equivalents	6 ounce equivalents	3 cups
Women					
16-19 years	2 cups	2 1/2 cups	3 ounce equivalents	5 1/2 ounce equivalents	3 cups
20-24 years	1 1/2 cups	2 1/2 cups	3 ounce equivalents	5 1/2 ounce equivalents	3 cups
25-34 years	1 1/2 cups	2 cups	2 ounce equivalents	5 ounce equivalents	3 cups
35-44 years	1 1/2 cups	2 cups	2 ounce equivalents	5 ounce equivalents	3 cups
45-54 years	1 1/2 cups	2 cups	2 ounce equivalents	5 ounce equivalents	3 cups
55-64 years	2 cups	3 cups	2 ounce equivalents	5 1/2 ounce equivalents	3 cups
65-74 years	2 cups	3 cups	2 ounce equivalents	5 1/2 ounce equivalents	3 cups
75+ years	2 cups	3 1/2 cups	2 ounce equivalents	5 1/2 ounce equivalents	3 cups



Appendix 4E – Eating from MyPlate

Character name: _____

Recommended number of cups or ounce equivalents for each food group

Fruits: _____ Vegetables: _____ Grains: _____ Protein: _____ Dairy: _____

	Breakfast	Lunch	Dinner	Snacks	Total
Fruits					
Vegetables					
Grains					
Protein					
Dairy					



Preparation

1. Make copies of MyPlate (Appendix 4A), one for each group.
2. Make copies of the Character Descriptions (Appendix 4B), one character for each group.

Facilitator Tip: Printing these in color will make it easier to match to the Character Lunches when distributing to groups.

3. Make copies of MyPlate Recommendations (Appendix 4C), one for each group.
4. Prepare set of Food Cards (Appendix 4D) or food models, one set per group. (See Appendix 4D for a list of recommended food models.)
5. Make copies of Eating from MyPlate (Appendix 4E), one for each group.
6. Make copies of MyPlate Serving Equivalents (Appendix 4F), one per person.
7. Make copies of Character Lunches (Appendix 4G), one character for each group.
8. Organize the class into small groups of 2 to 3 participants.

Facilitator Tip: These can be the same groups that were formed in Lesson 1.

9. Provide each group with a sheet of flip chart paper and markers or writing utensils to answer opening questions/prompts.

10. Provide each group with a copy of *MyPlate* (Appendix 4A) to answer the opening questions.

Optional:

11. Before participants arrive, connect laptop to projector. Load *Focus on Food Lesson 4* (PowerPoint).



Opening Questions/Prompts

1. **Say:** Let's get started with Lesson 4 – MyPlate: Foods for Life! To begin, I'd like everyone to discuss some opening questions within your group. Once you've discussed the prompts within your groups, we will come back together as a class and discuss your thoughts and responses as a whole. **(Slide 2)**

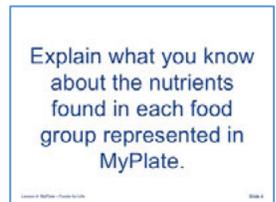
On your table is an image for you to refer to for this first prompt. The first prompt I'd like you to discuss within your groups is:

- Explain what you know about this image. **(Slide 3)**
2. **Do:** Allow 2 to 3 minutes for groups to discuss the prompt.
 3. **Say:** Now I'd like you to discuss within your groups the next prompt:
 - Explain what you know about the nutrients found in each food group represented in MyPlate. **(Slide 4)**
 4. **Do:** Allow 2 to 3 minutes for groups to discuss the prompt.
 5. **Say:** As a class, let's discuss what you talked about in your groups. What were some of your thoughts on the first prompt, "Explain what you know about this image"?
 6. **Do:** Allow about a minute for participants to share their thoughts on this topic with the class.

Facilitator Tip: This sharing phase is a great opportunity to begin to build rapport with participants. Some statements and questions to help engage participants at this phase are: "Tell me more about that"; "What do you mean by..."; "How is that motivating you?"; "Did anyone else write this?"; "That's a very popular opinion." At this stage, it is important that you do not correct misconceptions. Instead, make note of them, and if they are not corrected organically through the lesson, address them briefly at the end of the lesson.

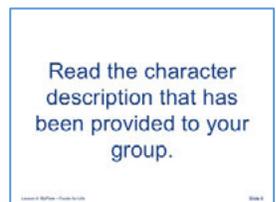
7. **Say:** What were some of your thoughts on the second prompt, "Explain what you know about the nutrients found in each food group represented in MyPlate"?
8. **Do:** Allow about a minute for participants to share their thoughts with the class.

Facilitator Tip: Continue to make note of misconceptions as they arise. Assure participants that there will be more time to discuss these topics at the end of the lesson.



Procedure (Experiencing)

1. **Say:** Now that we've completed our opening discussion, we'll start on the activity for this lesson. This activity is about MyPlate. I am going to hand out a different *Character Description* to each group. Within your groups, read about your character. **(Slide 6)**
2. **Do:** Provide each group with one of the *Character Descriptions* (Appendix 4B). Allow one to two minutes for groups to read their description.



3. **Say:** Next, I'm going to hand out a *MyPlate Recommendations* chart. This chart shows recommendations for varying levels of activity, both genders, and different ages. Use this chart to identify your character's recommendations. **(Slide 7)**

Look through the food cards to become familiar with the foods, paying attention to the food groups and what counts as one cup or one ounce-equivalent.

4. **Do:** Provide each group with the *MyPlate Recommendations* Handout (Appendix 4C).

5. **Say:** Next, I will handout a set of *Food Cards* (or food models, if using) to each group. I'd like you to look through the food cards to become familiarized with the foods, paying attention to the food groups and what counts as one cup or one ounce-equivalent. **(Slide 8)**

Use the food cards as a guide for selecting foods to create a day's worth of food for your character.
Complete the handout by recording the name of the foods and the number of cups or ounce equivalents they select for the different meals.

6. **Do:** Provide each group with a set of food cards (Appendix 4D) or food models. Allow a few minutes for groups to peruse the cards.

7. **Say:** Now that you've identified your character's recommendations, and had a chance to look through the food cards, I'm going to hand out a worksheet to complete as part of the next task:

Use the *MyPlate Recommendations Chart* to identify your character's recommendations.

- Use the food cards/food models to select foods to create a day's worth of meals and snacks for your character.
- First, record the recommendations for your character at the top of the handout.
- Then, complete the handout by recording the name of the foods and the number of servings you select for the different meals. **(Slide 9)**

8. **Do:** Provide each group with the *Eating from MyPlate* Handout (Appendix 4E). If using food models, provide each participant with the *MyPlate Serving Equivalents* Handout (Appendix 4F) to use as a reference.

Facilitator Tip: While participants are selecting foods for their character, visit with each group and ask them to describe their character, his or her recommendations, and how they are choosing foods for him or her. Some suggested prompts:

- Tell me a little bit about your character and his/her recommendations. How are these different from other age groups or physical activity levels? Explain why you think this might be.
- Describe how you are choosing foods for him/her.

Facilitator Tip: Participants may need to be reminded that not every food group needs to be present in each meal. However the total for each food group at the end of the day should meet the MyPlate recommendations.

9. **Say:** Now, let's change gears a little bit and think about school lunch. I'm going to hand out a card with your character's choices for school lunch. I'd like you to:

Determine if the student selected a reimbursable meal.
Discuss within your group how the students' lunch selections compare to their daily food recommendations according to MyPlate.

- Determine if the student selected a reimbursable meal.
- Discuss within your groups how the students' lunch selections compare to their daily food recommendations according to MyPlate. **(Slide 10)**
- Record your observations on your flip chart paper.

10. **Do:** Provide each group with the *Character Lunch Choices* (Appendix 4G) that matches with the character previously assigned.

Facilitator Tip: While participants are reviewing the choices of the character, visit each group and ask them to describe their observations. Some suggested prompts:

- Explain how MyPlate recommendations are similar or different compared to the lunch meal pattern.
- Explain how your character's lunch fits within the MyPlate requirements for the day. Looking at his or her lunch choices, what are some changes you would consider to his or her breakfast, snack, or dinner choices?



Activity Wrap-Up (Sharing, Processing, and Generalizing)

1. **Say:** As a class, let's discuss your observations about the students and their choices. First, let's go around the room and have each group present their character description along with the meals and serving sizes chosen for him or her. **(Slide 11)**
2. **Do:** Follow the group's line of thinking, and if necessary, ask more targeted questions.
 - Explain what you noticed about the amount of food recommended for your character from each food group.
 - Explain how and why the recommendations for each character differ.
 - Explain why age, physical activity, and gender might influence the recommended amount of food for a person.
 - Explain how or why MyPlate recommendations are different from the lunch meal pattern.



Facilitator Tip: If there are any misconceptions remaining in this phase of the lesson, you should address these now.



Concept and Term Discovery/Introduction

Over the course of the lesson, participants should be able to identify the following concepts:

- Make sure the key messages of MyPlate are either discovered by the participants or are introduced to them, including:
 - » Make half your plate fruits and vegetables
 - » Make half your grains whole
 - » Go lean with protein
 - » Switch to fat-free or low-fat milk
- Participants should understand there are different caloric, food group, and nutrient needs depending on gender, age, and activity level of individuals. (This concept will be reinforced in Lesson 5.)

The following key vocabulary terms should be discovered by participants or introduced to them: dairy, fruits, grains, MyPlate, protein foods, oils, refined grains, vegetables, and whole grains.



4.2: Expanding Knowledge

Getting Ready



Time Required

10 minutes



Materials Needed

(*Materials provided in the curriculum)

- **Focus on Food Lesson 4* (PowerPoint)
- PowerPoint Projector
- Computer



Preparation

1. Connect laptop to projector. Load *Focus on Food Lesson 4* PowerPoint.
2. Queue the PowerPoint presentation to Slide 12.



Procedure

1. **Do:** Go through the Expanding Knowledge presentation slide by slide. The following script is available for use if you so choose.



Expanding Knowledge

Lesson 4: MyPlate – Foods for Life

Slide 12

Slide 12

Let's review some of the concepts we learned during Lesson 4, MyPlate – Foods for Life.

MyPlate

- An illustration developed by the USDA
- Depicts different proportions of different foods to include in your diet.



Lesson 4: MyPlate – Foods for Life

Slide 13

MyPlate is an illustration developed by the USDA to depict the different proportions of different foods to include in your diet.

Slide 13

Key Messages of MyPlate

- Make half your plate fruits and vegetables
- Make half your grains whole
- Go lean with protein
- Switch to fat-free or low-fat (1%) milk

Lesson 4: MyPlate – Foods for Life

Slide 14

The USDA has included four key messages they want Americans to keep in mind when choosing foods. These are:
Make half your plate fruits and vegetables
Make half your grains whole
Go lean with protein
Switch to fat-free or low-fat (1%) milk

What are some reasons you can think of for emphasizing these for key messages?

[Pause to allow responses from the class.]

Slide 14

MyPlate Food Groups

- The five MyPlate food groups are:
 - Fruit
 - Vegetables
 - Grains
 - Protein Foods
 - Dairy
- Oils and Water are not considered food groups, but are still important to include



Lesson 4: MyPlate – Foods for Life

Slide 15

MyPlate contains 5 food groupings. Fruit, Vegetables, Grains, Protein Foods, and Dairy. Oils and Water are not food groups, but are still important to include.

Thinking back to lesson 1, why are oils important?

[Pause to allow responses from the class.]

Why is water important?

[Pause to allow responses from the class.]

Oils contain healthy fats, essential fatty acids and vitamin E. Water is important to stay hydrated and keep our bodies cool and functioning.

Slide 15



Fruits

- Includes any fresh, canned, frozen, or dried fruit and 100% fruit juice.
- What counts as a cup?
 - 1 cup fruit
 - 1 cup 100% fruit juice
 - ½ cup of dried fruit
- What are some nutrients found in fruit?



Lesson 4: MyPlate – Foods for Life

Slide 16

Fruits are any fruit, including fresh, canned, frozen, dried, and juice as long as it's 100% juice.

The following counts as a cup: 1 cup of fruit, 1 cup of 100% fruit juice, and ½ cup of dried fruit

What are some nutrients you can recall that are found in fruit?
[Pause to allow responses from the class.]

Slide 16



Vegetables

- Includes any fresh, canned, frozen, or dried fruit and 100% vegetables juice.
- What counts as a cup?
 - 1 cup raw or cooked vegetables
 - 1 cup 100% vegetable juice
 - 2 cups of leafy greens
- What are some nutrients found in vegetables?



Lesson 4: MyPlate – Foods for Life

Slide 17

Vegetables are any vegetable, including fresh, canned, frozen, dried, and juice as long as it's 100% juice.

The following counts as a cup: 1 cup of vegetables, either cooked or raw, 1 cup of 100% vegetable juice, and 2 cups of leafy greens.

What are some nutrients you can recall that are found in vegetables?

[Pause to allow responses from the class.]

Slide 17



Grains

- Includes any food made from wheat, rice, oats, cornmeal, barley, or other cereal grain.
- What counts as an ounce?
 - 1 slice of bread
 - 1 cup of cold cereal
 - ½ cup cooked rice, pasta, cereal
- What are some nutrients found in grains?



Lesson 4: MyPlate – Foods for Life

Slide 18

Grains include any foods that are made from rice, oats, cornmeal, barley or other cereal grain. What are some nutrients found in grains?

[Pause to allow responses from the class.]

Slide 18

What is a whole grain?

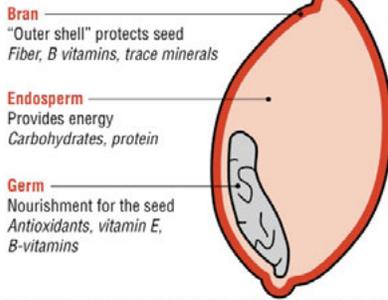


Image source: USDA Whole Grains Resource for the National School Lunch and School Breakfast Programs, 2014
Lesson 4: MyPlate – Foods for Life Slide 19

Slide 19

MyPlate recommends that half our grains are whole, and the meal pattern requires that all grains are whole grain rich, meaning that they contain 51% or more whole grain.

What is a whole grain? A whole grain is a grain that still contains all three of its component parts. First is the bran, which is the outer shell of the grain. It has fiber, B vitamins, and minerals. Endosperm is the starchy part of the grain, and it has carbohydrates and protein. The germ provides nourishment for the seed when it's growing, and it contains antioxidants, vitamin E, and B vitamins.

What is a refined grain?

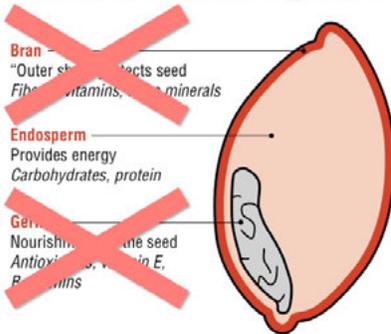


Image source: USDA Whole Grains Resource for the National School Lunch and School Breakfast Programs, 2014
Lesson 4: MyPlate – Foods for Life Slide 20

Slide 20

A refined grain contains only the endosperm. The bran and the germ are removed. How do you think the nutrient content compares between whole grains and refined grains?

[Pause to allow responses from the class.]

By refining, we lose the fiber from the bran, a lot of the minerals and vitamins.

Whole vs. Enriched Grains

Whole Grains

- Contains bran, germ, and endosperm
- Nutrients found in the bran and germ remain: Niacin, Thiamin, Riboflavin, Iron, and Fiber
- Most are not fortified with folic acid

Enriched Grains

- Contains only endosperm
- Milling removes nutrients found in bran and germ
- Nutrients added back: Niacin, Thiamin, Riboflavin, Iron
- Fortified with folic acid

Lesson 4: MyPlate – Foods for Life Slide 21

Slide 21

That's why we have what are called "enriched grains." Enriching adds back in some of what was lost when the bran and the germ were removed.

Enrichment adds back in certain B vitamins: Niacin, Thiamin, and Riboflavin, as well as iron. Enriched flour is also fortified with folic acid.

Are there any nutrients that typically aren't added back?

[Pause to allow responses from the class.]



Protein Foods

- Includes all foods made from meat, poultry, seafood, beans and peas, eggs, processed soy products, nuts, and seeds.
- What counts as an ounce?
 - 1 ounce of meat, poultry, or seafood
 - ¼ cup cooked beans
 - 1 egg
 - 1 tablespoon peanut butter
 - ½ ounce of nuts or seeds
- What are some nutrients found in protein foods?



Lesson 4: MyPlate – Foods for Life

Slide 22

Slide 22

Protein foods include all foods made from meat, poultry, seafood, beans and peas, processed soy products, nuts and seeds. A long time ago, Protein Foods was called the Meat group, but that ignores all of the great sources of protein that are plant-based.

Protein foods are counted as ounce-equivalents. What counts as an ounce?

A ounce of meat, poultry our seafood.

¼ cup of cooked beans

1 egg

1 tablespoon or peanut butter or other nut butter

½ ounce of nuts or seeds.

What are some nutrients found in protein foods?

[Pause to allow responses from the class.]



Dairy

- Includes fluid milk products and many foods made from milk.
- What counts as a cup?
 - 1 cup of fluid milk, yogurt, or soymilk
 - 1 ½ ounces of natural cheese
 - 2 ounces of processed cheese
- What are some nutrients found in dairy?



Lesson 4: MyPlate – Foods for Life

Slide 23

Slide 23

Dairy includes fluid milk products, many foods made from milk, and fortified soy beverages (which are usually called soymilk). Dairy is measured in cups.

1 cup of milk, yogurt, or soymilk is 1 cup of dairy.

1 ½ ounces of natural cheese is 1 cup.

2 ounces of processed cheese is 1 cup.

While the dairy group is illustrated as a glass of milk on the side of the plate, it doesn't have to be milk, it could be yogurt or cheese, and it can be incorporated onto the plate. For example, vegetable lasagna with 1 ½ ounces of mozzarella would have the equivalent of 1 cup of dairy.

What are some nutrients found in dairy?

[Pause to allow responses from the class.]

MyPlate Recommendations

- Recommended amounts of each of the food groups over the course of a day.
- Differ by age, gender, and physical activity level.
- Get your personalized recommendations at:
<http://www.choosemyplate.gov/tools-daily-food-plans>



Lesson 4: MyPlate – Foods for Life

Slide 24

Slide 24

MyPlate recommends that everyone consume foods from all five food groups, but the recommended amounts are different depending on age, gender, and physical activity level.

You can get your own personalized recommendations, such as a daily food plan on the ChooseMyPlate website at this link.

Thinking about MyPlate

- Proportions are the important thing.
- Not every meal needs to look exactly like MyPlate as long as the food you eat over the course of the day does.

Lesson 4: MyPlate – Foods for Life

Slide 25

Slide 25

There are a few things you should keep in mind about MyPlate. What is important is that you're eating foods in the recommended proportions, not that every plate looks exactly like MyPlate.

Over the course of the day is what matters, not necessary each meal. Over one day, half of what you eat should be fruits and vegetables, one quarter should be protein foods, one quarter should be grains, and with that you should have the equivalent of three cups of dairy, or other calcium-rich alternatives. You can divide it up however makes sense to you.



4.3: Goal Setting Activity

Getting Ready



Time Required

5 minutes



Materials Needed

(*Materials provided in the curriculum)

- *MyPlate Recommendations (Appendix 4C)
- *Goal Setting: MyPlate – Foods for Life (Appendix 4H)

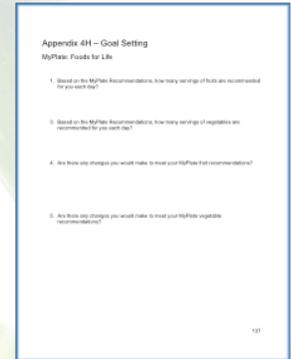


Preparation

1. Make copies of the *Goal Setting: MyPlate – Foods for Life* Handout (Appendix 4H), one for each participant.
2. Make sure that each table still has a copy of the *MyPlate Recommendations* (Appendix 4C) used in the Learning Activity.

Optional:

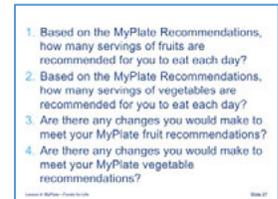
3. Make copies of the *Focus on Food Lesson 4 Newsletter* (Appendix 4I), one for each participant.
4. Connect laptop to projector. Load *Focus on Food Lesson 4* (PowerPoint). Queue the PowerPoint Presentation to Slide 26.



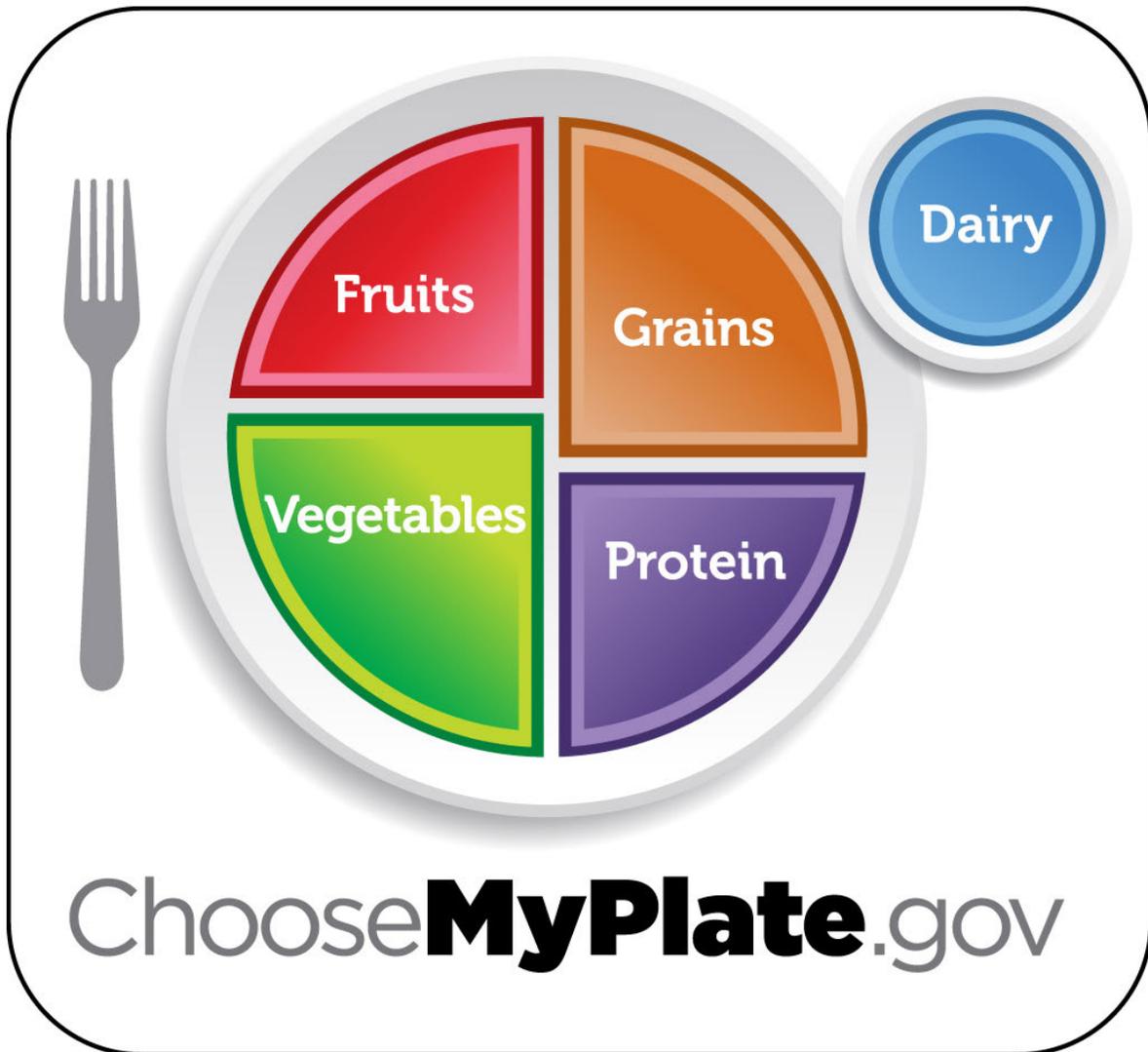


Procedure (Experiencing)

1. **Say:** Now let's move on to Goal Setting! **(Slide 26)** We've talked about how important consuming a variety of foods is to our health. The next step is to set some goals and make a plan. First, are there any volunteers to share with the class some of the key messages of MyPlate you learned from the Expanding Knowledge portion of the lesson?
 2. **Say:** Now, I will distribute a Goal Setting Handout that has the following questions: **(Slide 27)**
 - 1) Based on the MyPlate Recommendations, how many cups of fruits are recommended for you each day?
 - 2) Based on the MyPlate Recommendations, how many cups of vegetables are recommended for you each day?
 - 3) Are there any changes you would make to your diet to meet your MyPlate fruit recommendations?
 - 4) Are there any changes you would make to your diet to meet your MyPlate vegetable recommendations?
 3. **Do:** Provide a copy of the *Goal Setting Handout: MyPlate – Foods for Life* (Appendix 4H) to each participant. Allow participants a few minutes to complete the handout.
 4. **Say:** Would anyone like to share the goals they set for themselves?
- Optional:
5. **Say:** I'm going to distribute one last handout, which is a newsletter with some extra information you might be interested in. Thank you all for participating in Lesson 4! **(Slide 41)**
 6. **Do:** Provide a copy of the *Focus on Food Lesson 4 Newsletter* (Appendix 4I) to each participant.



Appendix 4A – MyPlate



Appendix 4B – Character Descriptions

Miguel

Miguel is 5 years old. He enjoys making artwork. He likes to paint pictures of animals. During recess at school, Miguel plays tag with his friends.

Tiffany

Tiffany is 8 years old. She likes to ride her bike to school with friends who live in her neighborhood. Tiffany goes to dance class twice a week and goes to piano practice two different evenings during the week.

Dominic

Dominic is 12 years old and likes to skateboard at the local skate park. He wants to be a professional skater one day so he skateboards as often as he can. Dominic also enjoys playing basketball with his older siblings in the evenings.

Camilla

Camilla is 15 years old and loves to play soccer. She plays on the Varsity soccer team at her school and she also plays on a separate soccer team outside of school. When Camilla is not playing soccer she enjoys running and texting with her friends.

Jacob

Jacob is 17 years old. He enjoys spending time with friends playing board games and trivia games. In his free time Jacob enjoys traveling and reading about where he wants to travel to next.

Appendix 4C – MyPlate Recommendations

*Recommendations for individuals with less than 30 minutes of moderate physical activity per day.

	Fruits	Vegetables	Grains	Protein	Dairy
Children					
2-3 years	1 cup	1 cup	3 ounce equivalents	2 ounce equivalents	2 cups
4-8 years	1-1½ cups	1½ cups	5 ounce equivalents	4 ounce equivalents	2½ cups
Girls					
9-13 years	1½ cups	2 cups	5 ounce equivalents	5 ounce equivalents	3 cups
14-18 years	1½ cups	2½ cups	6 ounce equivalents	5 ounce equivalents	3 cups
Boys					
9-13 years	1½ cups	2½ cups	6 ounce equivalents	5 ounce equivalents	3 cups
14-18 years	2 cups	3 cups	8 ounce equivalents	6½ ounce equivalents	3 cups
Women					
19-30 years	2 cups	2½ cups	6 ounce equivalents	5½ ounce equivalents	3 cups
31-50 years	1½ cups	2½ cups	6 ounce equivalents	5 ounce equivalents	3 cups
51+ years old	1½ cups	2 cups	5 ounce equivalents	5 ounce equivalents	3 cups
Men					
19-30 years	2 cups	3 cups	8 ounce equivalents	6½ ounce equivalents	3 cups
31-50 years	2 cups	3 cups	7 ounce equivalents	6 ounce equivalents	3 cups
51+ years	2 cups	2½ cups	6 ounce equivalents	5½ ounce equivalents	3 cups

***Recommendations for individuals with 30-60 minutes of moderate or vigorous physical activity per day.**

	Fruits	Vegetables	Grains	Protein	Dairy
Children					
2-3 years	1½ cup	1½ cup	5 ounce equivalents	4 ounce equivalents	2½ cups
4-8 years	1½ cups	2 cups	5 ounce equivalents	5 ounce equivalents	3 cups
Girls					
9-13 years	1½ cups	2½ cups	6 ounce equivalents	5 ounce equivalents	3 cups
14-18 years	2 cups	2½ cups	6 ounce equivalents	5½ ounce equivalents	3 cups
Boys					
9-13 years	2 cups	2½ cups	6 ounce equivalents	5½ ounce equivalents	3 cups
14-18 years	2½ cups	3½ cups	10 ounce equivalents	7 ounce equivalents	3 cups
Women					
19-30 years	2 cups	3 cups	7 ounce equivalents	6 ounce equivalents	3 cups
31-50 years	2 cups	2½ cups	6 ounce equivalents	5½ ounce equivalents	3 cups
51+ years old	2 cups	2½ cups	6 ounce equivalents	5½ ounce equivalents	3 cups
Men					
19-30 years	2½ cups	3½ cups	10 ounce equivalents	7 ounce equivalents	3 cups
31-50 years	2 cups	3½ cups	9 ounce equivalents	6½ ounce equivalents	3 cups
51+ years	2 cups	3 cups	8 ounce equivalents	6½ ounce equivalents	3 cups

***Recommendations for individuals with more than 60 minutes of moderate or vigorous physical activity per day.**

	Fruits	Vegetables	Grains	Protein	Dairy
Children					
2-3 years	1½ cup	1½ cup	5 ounce equivalents	4 ounce equivalents	2½ cups
4-8 years	1½ cups	2½ cups	6 ounce equivalents	5 ounce equivalents	3 cups
Girls					
9-13 years	2 cups	2½ cups	6 ounce equivalents	5½ ounce equivalents	3 cups
14-18 years	2 cups	3 cups	8 ounce equivalents	6½ ounce equivalents	3 cups
Boys					
9-13 years	2 cups	3 cups	7 ounce equivalents	6 ounce equivalents	3 cups
14-18 years	2½ cups	4 cups	10 ounce equivalents	7 ounce equivalents	3 cups
Women					
19-30 years	2 cups	3 cups	8 ounce equivalents	6½ ounce equivalents	3 cups
31-50 years	2 cups	3 cups	7 ounce equivalents	6 ounce equivalents	3 cups
51+ years old	2 cups	3 cups	7 ounce equivalents	6 ounce equivalents	3 cups
Men					
19-30 years	2½ cups	4 cups	10 ounce equivalents	7 ounce equivalents	3 cups
31-50 years	2½ cups	3½ cups	10 ounce equivalents	7 ounce equivalents	3 cups
51+ years	2½ cups	3½ cups	10 ounce equivalents	7 ounce equivalents	3 cups

Appendix 4D – Food Cards

In lieu of Food Cards, you may also use food models. The recommended food models for each group are:

Milk
Yogurt
Cheese
Carrots
Potato (baked or mashed)
Broccoli
Spinach
Lettuce
Red Pepper
Beans (black or pinto)
Eggs

Fish
Chicken
Almonds
Bread (two slices)
Oatmeal
Tortilla
Raisins
Juice
Apple
Grapes

Fat-Free Milk

1 cup counts as 1 cup of dairy

Low-Fat Fruit Yogurt

1 cup counts as 1 cup of dairy

Cheddar Cheese

1½ ounces counts as 1 cup of dairy

Carrots (Cooked)

1 cup counts as 1 cup of vegetables

Baked Potato (with skin)

1 medium counts as 1 cup of vegetables

Broccoli (Cooked)

1 cup counts as 1 cup of vegetables

Spinach (Cooked)

1 cup counts as 1 cup of vegetables

Romaine Lettuce (Raw)

2 cups count as 1 cup of vegetables

Red Bell Pepper (Raw)

1 cup chopped counts as 1 cup of vegetables

Black Beans (Cooked)

1 cup counts as 1 cup of vegetables
¼ cup counts as 1 oz of protein foods

Egg (Cooked)

1 egg counts as 1 oz of protein foods

Turkey Deli Meat

1 slice counts as 1 oz of protein foods

Fish (Broiled)

1 oz counts as 1 oz of protein foods

Chicken (Baked)

1 oz counts as 1 oz of protein foods

Almonds (Raw)

1/2 oz counts as 1 oz of protein foods

Whole Wheat Bread

1 slice counts as 1 oz of grains

Whole Wheat Crackers

5 crackers count as 1 oz of grains

Oatmeal (Cooked)

1/2 cup counts as 1 oz of grains

Rice (White or Brown, Cooked)

1/2 cup counts as 1 oz of grains

Tortilla (Flour or Corn)

1 small tortilla counts as 1 oz of grains

Whole Grain Muffin

1 muffin counts as 1 oz of grain

Whole Grain Roll

1 roll counts as 1 oz of grain

Whole Grain Breakfast Bar

1 muffin counts as 1 oz of grain

Tomato Sauce

1 cup counts as 1 cup of vegetables

Pasta (White or Brown, Cooked)

½ cup counts as 1 oz of grains

Ground Turkey Meat

1 serving counts as 3 oz of protein foods

Raisins

½ cup counts as 1 cup of fruit

100% Fruit Juice

1 cup counts as 1 cup of fruit

Apple (Whole)

1 small apple counts as 1 cup of fruit

Grapes

1 cup counts as 1 cup of fruit

Peach (Whole)

1 large peach counts as 1 cup of fruit

Applesauce (Unsweetened)

1 cup counts as 1 cup of fruit

Appendix 4E – Eating from MyPlate

Character name: _____

Recommended number of cups or ounce equivalents for each food group:

Fruits: _____; Vegetables: _____; Grains: _____; Protein: _____; Dairy: _____

	Breakfast	Lunch	Dinner	Snacks	Total
Fruits					
Vegetables					
Grains					
Protein					
Dairy					

Appendix 4F – MyPlate Equivalents

Fruits

Amount that counts as 1 cup of fruit
1 small apple
1 cup applesauce
1 cup whole grapes
1 large peach
1 cup whole, halved, or sliced strawberries
1 cup 100% fruit juice
½ cup raisins
½ cup dried apricots

Grains

Amount that counts as 1 ounce equivalent of grains
1 regular slice of bread
1 “mini” bagel
5 whole wheat crackers
½ English muffins
½ cup cooked oatmeal
3 cups popped popcorn
1 cup ready-to-eat cereal, flakes or rounds
1 ¼ cup ready-to-eat cereal, puffed
½ cup cooked rice
½ cup cooked pasta
1 small flour or corn tortilla (6” diameter)

Dairy

Amount that counts as 1 cup of dairy
1 cup milk
1 regular 8 ounce container of yogurt
1 cup of yogurt
1 ½ ounces hard cheese (cheddar, mozzarella, Swiss, Parmesan)
2 cups cottage cheese
1 cup frozen yogurt
1 ½ cups ice cream
1 cup calcium-fortified soymilk

Vegetables

Amount that counts as 1 cup of vegetables
1 cup broccoli, chopped or florets
1 cup cooked spinach or greens (kale, collards)
2 cups raw leafy greens (spinach, romaine, leafy lettuce)
1 cup baby carrots
1 cup chopped carrots
1 cup chopped red peppers
1 cup tomatoes
1 cup tomato juice
1 large sweet potato
1 cup whole or mashed beans (black, garbanzo, kidney, pinto, soybeans, etc.)
1 cup corn
1 large ear of corn
1 cup celery
1 cup green beans

Protein Foods

Amount that counts as 1 ounce equivalent of protein foods
1 ounce lean beef or pork
1 ounce cooked chicken or turkey
1 slice turkey deli meat
1 ounce cooked fish
1 egg
1 Tablespoon peanut butter
½ ounce of nuts (12 almonds, 24 pistachios, 7 walnut halves)
¼ cup cooked beans (black, kidney, pinto, etc.) or peas (chickpeas, lentils, split peas, etc.)
¼ cup (approximately 2 ounces) of tofu

Appendix 4G – Character Lunch Choices

Miguel

For lunch Miguel decided to take 1 cup of croutons from the salad bar (MyPlate 2 ounce equivalent of grains). He also decided to take 1 cup of applesauce (MyPlate 1 cup of fruit) and 1 cup of fat-free chocolate milk (MyPlate 1 cup of dairy).

Tiffany

Tiffany went to the salad bar for lunch and selected 1 cup of romaine lettuce (MyPlate ½ cup of vegetables), 1 cup of red bell peppers (MyPlate 1 cup of vegetables), and 1 egg (MyPlate 1 ounce equivalent of protein foods). She also chose 1 cup of calcium-fortified soymilk (MyPlate 1 cup of dairy).

Dominic

For lunch Dominic decided to eat 3 cups of corn flakes cereal (MyPlate 3 ounce equivalents of grains) with 1 cup of milk (MyPlate 1 cup of dairy). He also selected 1 cup of 100% fruit juice (MyPlate 1 cup of fruit) and 1 cup of fat-free chocolate milk (MyPlate 1 cup of dairy).

Camilla

Camilla chose the teriyaki bowl for lunch, which included ½ cup cooked brown rice (MyPlate 1 ounce equivalent of grains), 2 ounces of chicken (MyPlate 2 ounce equivalent of protein foods), and ½ cup carrots (MyPlate ½ cup of vegetables). She also selected 1 large peach (MyPlate 1 cup of fruit) and 1 cup of low-fat milk (MyPlate 1 cup of dairy).

Jacob

Jacob chose 1 English muffin (MyPlate 2 ounce equivalents of grains) with 2 tablespoons of peanut butter (MyPlate 2 ounce equivalents of protein foods). He also chose 1 small apple (MyPlate 1 cup of fruit) and ½ cup green beans (MyPlate ½ cup of vegetables), with one bottle of water.

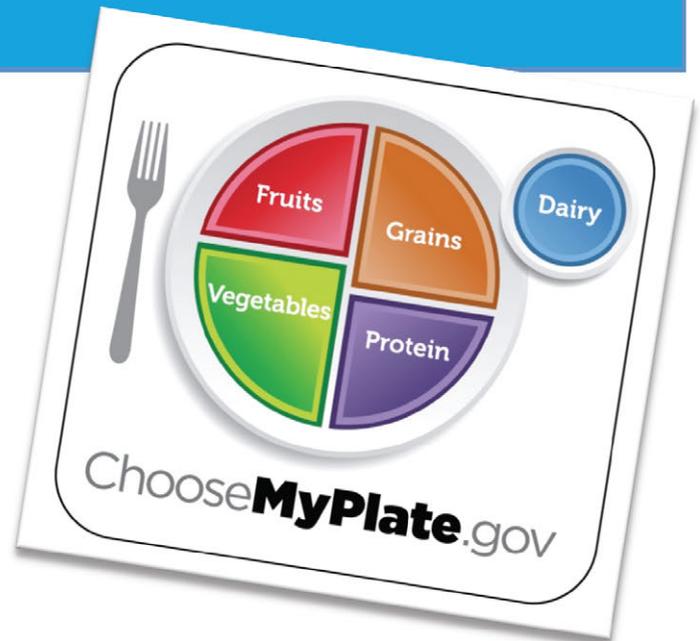
Appendix 4I – Focus on Food Lesson 4 Newsletter

The optional newsletter on the following pages is designed to help reinforce the concepts learned. If offering this course in a single workshop, you may wish to distribute the lesson newsletters weekly in order to help refresh participants' memory and solidify the concepts.

MyPlate - Foods for Life

In this issue...

Focus on Fruits and Veggies	Page 2
Whole Grains: Whole Lot of Nutrients	Page 3
Protein Foods: More than Just Meat	Page 4
Dairy: Something for Everyone	Page 4
What Is Lactose Intolerance Anyway?	Page 4
Test your knowledge! Take our whole grain quiz!	Page 5



What's on your plate?

MyPlate is an illustration developed by the United States Department of Agriculture (USDA) to represent the five food groups for a healthy diet in terms of a place setting. The five food groups are: **fruits**, **vegetables**, **grains**, **protein**, and **dairy**.

Oils are not considered a food group, however are still important as they provide essential nutrients to the body.

Water is also not included as a food group, but proper hydration is very important for overall health.

Turn the page to learn more about the MyPlate food groups!

Shop Smart for Fruits and Veggies

Want to know an easy tip for spending less on fresh fruits and vegetables AND getting better flavor?

Buy fruits and vegetables that are **in season!** An in-season fruit or veggie is one that's currently being harvested – it's going from the farm to the market in abundance. This saves you money because there is a lot available. And, as an added bonus, in-season produce is the best tasting!

For handy lists of what's in season, check out:

<http://www.fruitsandveggiesmorematters.org/what-fruits-and-vegetables-are-in-season>

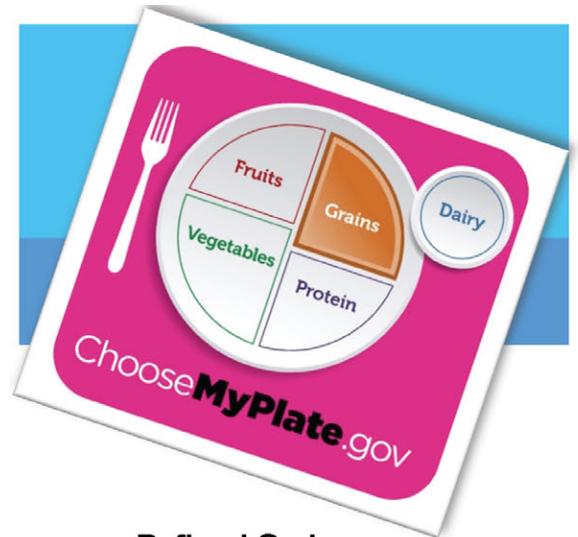
Did you know?

Meatless meals can be delicious and healthy! Challenge yourself to Meatless Monday with our recipe for Black Bean and Veggie Tostada Ole on page 2!

Whole Grains

Whole Lot of Nutrients

The **grains** group includes any food made from wheat, rice, oats, cornmeal, barley, or another cereal grain. Examples include bread, pasta, oatmeal, breakfast cereals, tortillas, and grits. Nutrients found in grains include **fiber**, **B-vitamins**, and **minerals** such as **iron**. Consuming whole grains as part of a healthy diet may **reduce the risk of heart disease**, **reduce constipation**, and help with **weight management**.



There are two subgroups of grains: **whole grains** and **refined grains**.

Whole Grains

These contain all parts of the grain: bran, germ, and endosperm

Examples include:
Whole Wheat Flour
Quinoa
Oatmeal
Whole Cornmeal
Brown Rice

What is considered as 1 ounce equivalent from the **grains** group?

1 slice of bread
1 cup of ready-to-eat cereal
½ cup of cooked rice, pasta, or cereal

Whole Grain Kernel

Bran

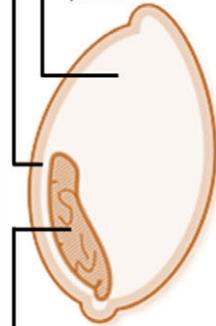
"Outer shell" protects seed
Contains: Fiber, B-vitamins, trace minerals

Endosperm

Provides energy
Contains: Carbohydrates, protein

Germ

Nourishment for the seed
Contains: Antioxidants, vitamin E, B-vitamins



Refined Grains

These have been milled which removes the bran and germ, leaving only the endosperm.

Milling Pros and Cons

Pros:

Improves shelf life
Finer texture

Cons:

Removes dietary fiber
Removes iron
Removes many B-vitamins

Note: Most refined grains are enriched, meaning certain B-vitamins and iron are added back after the milling process. Fiber, however, is not added back to enriched grains.

Did you know?

Labels on the front of packaging can be misleading.

Check for known whole grains or the word "Whole" when looking at the ingredients.

Make Half Your Grains Whole!

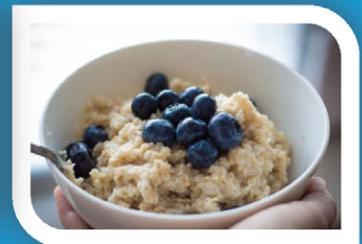
Try some of these delicious alternatives to refined grains.



Brown Rice



Whole Grain Bread



Oatmeal



Protein Foods

More Than Just Meat

The **protein** foods group includes all foods made from meat, poultry, seafood, as well as beans and peas, eggs, processed soy products, nuts, and seeds. Protein foods provide many nutrients including **protein, B-vitamins, vitamin E, iron, zinc, and magnesium.** MyPlate recommends selecting **lean protein** that is low in fat and saturated fat. There are a lot of great protein options that contain no meat. Beans are chock full of nutrients like fiber, potassium, and folate, which aren't found in meat.



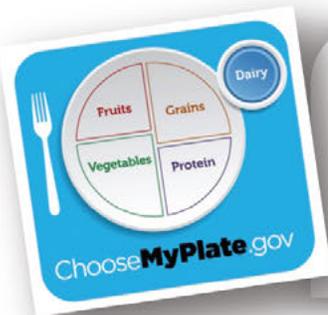
Examples of Lean Protein

- | | |
|------------------|------------------------|
| Egg Whites | Fish (not fried) |
| Meatless Burgers | Poultry (without skin) |
| Shellfish | Beans and Peas |
| Tofu | |



What is considered as 1 ounce equivalent from the **protein** foods group?

- 1 ounce of meat, poultry, or fish
- ¼ cup of cooked beans
- 1 egg
- 1 tablespoon peanut butter
- ½ ounce nuts or seeds



Dairy



Something for Everyone

What is considered as 1 cup from the **dairy** foods group?

- 1 cup of milk, yogurt, or soymilk
- 1½ ounces of natural cheese
- 2 ounces of processed cheese

The **dairy** group includes all fluid milk products and many foods made from milk. MyPlate recommends switching dairy products to **fat-free** or **low-fat** (1% milk) options. Nutrients found in dairy products include **calcium, potassium, and vitamin D.** Consumption of dairy products may **improve bone health, lower blood pressure, and reduce the risk of osteoporosis, cardiovascular disease, and type 2 diabetes.**

What is Lactose Intolerance Anyway?

Lactose intolerance is an impaired ability to digest lactose, a sugar found in milk and other dairy products. Many adults with lactose intolerance are still able to digest some lactose. While digesting fresh milk may be difficult, some people can still safely eat certain dairy products like **cheese** and **yogurt**, which contain **less lactose.**

For those who can't have dairy at all, try calcium-rich alternatives, like soy milk.





Test your knowledge! Take our whole grain quiz!

Can you figure out if a food is whole grain just by looking at the name?

1. Brown rice
 - a. Whole grain
 - b. Not whole grain
 - c. Could be either
2. Wheat bread
 - a. Whole grain
 - b. Not whole grain
 - c. Could be either
3. Oatmeal
 - a. Whole grain
 - b. Not whole grain
 - c. Could be either
4. Popcorn
 - a. Whole grain
 - b. Not whole grain
 - c. Could be either
5. Shredded Wheat Cereal
 - a. Whole grain
 - b. Not whole grain
 - c. Could be either
6. Bran Muffin
 - a. Whole grain
 - b. Not whole grain
 - c. Could be either

The Results are In!

If you got all six right:

You are a whole grain guru! You know which grains are whole and which are not. Keep getting out there and learning more!

If you got three to five right:

You're on the right track! Try finding the information you missed in other pages of this newsletter to become a whole grain master!

If you got two or less right:

It just means you have more opportunities to learn. Read through the newsletter again, or try contacting your local Cooperative Extension office to get reliable nutrition information. Find your Cooperative Extension office at http://ucanr.edu/County_Offices/

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(1) mail: U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410;

(2) fax: (202) 690-7442; or

(3) email: program.intake@usda.gov.

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