

Short Lessons for School Nutrition Assistants

MyPlate-A Look at Grains

Lesson Overview

Lesson Participants: School Nutrition Assistants/Technicians, School Nutrition Managers, CACFP Staff, Teachers

Type of Lesson: Short, face-to-face training session

Time Needed to Conduct the Lesson: 15 minutes

Lesson Description: This lesson is designed to explain the grains group represented in the MyPlate icon. Participants will learn why grains are an important part of the daily diet and the foods that count as grains. Nutrition professionals will be able to apply the information presented in this lesson to the school menu. MyPlate and related resources developed by USDA are helpful tools for child nutrition program staff to use when providing nutrition education to children of all ages.

Lesson Objectives:

At the end of this lesson, the participant will be able to:

- 1. Discuss why grains are important in the diet.
- 2. Identify foods from the grain group that are whole grains and refined grains.

Get Ready to Train

Note: This lesson should be taught following the No Time to Train lessons on the *Dietary Guidelines for Americans 2010* and *MyPlate – The "New Generation" Food Icon.*

The format for the **No Time to Train** lessons includes an overview, preparation checklist, lesson at a glance with timeline for conducting the lesson, references, handouts, and an instructor's script. The manager/instructor will use the script to present the lesson to the participants. The script gives directions to the manager/instructor—**DO**, **SAY**, **ASK**, **LISTEN**, **AND ACTIVITY**—to deliver the lesson.

No special audiovisual or electronic equipment is needed to conduct the lesson. The lesson can be presented in the cafeteria, media center, or classroom.

Teachers and others in the school or child care setting may wish to participate. This lesson also could be used to integrate nutrition education into the classroom. With some modifications, the lesson could be used with middle and secondary students.



Preparation Checklist

Directions: Use the Preparation Checklist to prepare for the training session. Track your progress by checking off tasks as they are completed.

Done	Lesson Tasks	
	Gather Materials	
	Materials Needed:	
	Instructor's Script	
	Handout 1: MyPlate–Grains (one for each participant; accessible at http://www.choosemyplate.gov/global_nav/media_resources.html)	
	Handout 2: Whole Grains and Refined Grains (one for each participant)	
	Pencils (one for each participant)	
	Session Evaluation form (one for each participant)	
	Prepare for Lesson	
	 Before the Training: Make copies of Handouts 1 and 2 (one for each participant). 	
	 Make copies of Handouts 1 and 2 (one for each participant). Make copies of Session Evaluation form (one for each participant). 	
	On Training Day:	
	Place pencils on tables (one for each participant).	
	Distribute Handouts 1 and 2 to each participant.	
	On the Instructor's Table:	
	Instructor's Script	
	Handout 1: MyPlate–Grains	
	Handout 2: Whole Grains and Refined Grains	
	Session Evaluation forms	



Time	Торіс	Task	Materials
2 minutes	Introduction and Overview	Introduce topic and relate it to the Dietary Guidelines for Americans 2010 and MyPlate – The "New Generation" Food Icon No Time to Train Lessons.	Instructor's Script
4 minutes	Objective 1: Discuss why grains are important in the diet.	Use Handout 1 to relate the importance of grains in a healthy diet.	Handout 1: MyPlate–Grains
5 minutes	Objective 2: Identify foods from the grain group that are whole grains and refined	Use Handouts 1 and 2 to identify food in the grain group-whole grains and refined grains.	Handout 1: MyPlate–Grains
	grains.	Participants complete activity and brainstorm ways to encourage students to eat grains.	Handout 2: Whole Grains and Refined Grains
2 minutes	Wrap up and Review	Instructor encourages participants to ask questions and to make comments.	Handout 1: MyPlate–Grains Handout 2: Whole Grains and Refined
2 minutes	Session Evaluation	Conduct a short evaluation of the lesson.	Grains Session Evaluation form

Lesson at a Glance (15 minutes)

Note to Instructor:

Answer questions to the best of your ability. If there are questions you can't answer, tell the participants you will find out the answer and let them know later. If you need assistance in finding answers, please call the National Food Service Management Institute at 800-321-3054.

References:

National Food Service Management Institute. (2005, Rev. 2011). Nutrition 101: A taste of food and fitness. University, MS: Author.

U.S. Department of Agriculture. (2011). ChooseMyPlate.gov Website. Washington, DC. News and Media. <u>http://www.choosemyplate.gov/global_nav/media_resources.html</u> Accessed August 4, 2011.

U.S. Department of Agriculture, Food and Nutrition Service. (2010). *HealthierUS school challenge recognizing excellence in nutrition and physical activity-application kit.* (http://www.fns.usda.gov/tn/healthierus/application.html

Accessed August 4, 2011.



U.S. Department of Agriculture, Food and Nutrition Service. (2011). Nutrition Assistance Programs Website. <u>http://www.fns.usda.gov/fns/</u> Accessed July 14, 2011.

U.S. Department of Agriculture, Food and Nutrition Service. (2011). Team Nutrition: Resources A-Z Website. <u>http://www.fns.usda.gov/tn/library.html</u> Accessed July 14, 2011.

U.S. Department of Agriculture and U.S. Department of Health and Human Services (2011). *Dietary Guidelines for Americans 2010* 7th Edition, Washington, D.C., U.S., Government Printing Office, December 2010.

http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/PolicyDoc.pdf Accessed July 14, 2011.

U.S. Department of Health and Human Services. (2011). Healthfinder.gov Website. <u>http://healthfinder.gov/</u> Accessed July 14, 2011.



Instructor's Script



SAY: In previous lessons, we learned about the *Dietary Guidelines for Americans 2010* and *MyPlate–The "New Generation" Food Icon*. Medical research shows that we need to learn more about basic nutrition so that we can make healthier food choices and live longer lives. Today, we are going talk about MyPlate as we continue to learn about basic nutrition.

This lesson will focus on grains. We are going to discuss why grains are important in our diet and what foods are in the grain group.



DO:

Distribute copies of Handout 1: MyPlate–Grains.



SAY:

From our lesson on MyPlate, we learned that the food groups are represented on the plate by different colors. Grains are represented by the orange color. Grains are divided into two groups, whole grains and refined grains. The key consumer message is to make at least half our grains whole grains.



DO:

Refer participants to **Handout 1: MyPlate–Grains** and point to the orange section of the plate.



ASK:

Why do you think grains are an important part of our diet?



LISTEN:

Listen to individual responses.



SAY:

Eating grains, especially whole grains, provides many health benefits.

- Whole grains are rich in fiber. Fiber in the diet reduces the risk of heart disease, constipation, diverticulitis, and can help with weight management. Fiber from whole grains provides a feeling of fullness with fewer calories.
- For pregnant women, the consumption of fortified grains helps prevent neural tube defects in babies.
- Grains provide several of the B vitamins. They include thiamin, riboflavin, niacin, and folate. Folate is a B vitamin that helps the body form red blood cells. These vitamins play a key role in metabolism and are essential for a healthy nervous system.



 Grains also provide minerals. Minerals found in grains include iron, magnesium, and selenium. Iron is used to carry oxygen to the blood. Magnesium is a mineral used in building bones and releasing energy from muscles. Selenium protects cells from oxidation and is important for a healthy immune system.

Any food made from wheat, rice, oats, cornmeal, barley or another cereal grain is a grain product. Breads, pastas, oatmeal, breakfast cereals, tortillas, and grits are grain products.

Grains are divided into two groups, *whole grains* and *refined grains*. Whole grains contain the entire grain kernel including the bran, germ, and endosperm. Usually the kernel is cracked, crushed, or flaked during the milling process. If the finished product retains the relative proportions of bran, germ, and endosperm as the original grain, it is considered a whole grain. Examples of whole grains include whole-wheat flour, bulgur (cracked wheat), oatmeal, whole cornmeal, and brown rice.

Refined grains have been milled. When a grain is milled, the bran and the germ have been removed to provide a finer texture and longer shelf life. Milling also removes the dietary fiber, iron, and many of the B vitamins. Most refined grains are enriched. Enriched means that thiamin, riboflavin, niacin, folic acid, and iron are added back after the processing is complete.

Whole grain kernel

Bran

"Outer shell" protects seed Fiber, B vitamins, trace minerals Endosperm Provides energy Carbohydrates, protein

Germ Nourishment for the seed Antioxidants, vitamin E, B-vitamins

Fiber is not added back to enriched grains and that is why we should eat more whole grains than enriched grains. Examples of refined grains include white flour, degermed cornmeal, white bread, and white rice.



DO:

Distribute copies of Handout 2: Grains Group.



SAY:

Take a few minutes to complete the activity on **Handout 2** and review the grains that are divided into two groups, whole grains and refined grains.





ACTIVITY:

Participants will complete **Handout 2** and identify the grains that are divided in two groups, whole grains and refined grains. Encourage students to choose more whole grains.

Some suggestions could be to:

- Use brown rice or whole-wheat pasta for certain dishes.
- Offer a whole-grain bun or bread for sandwiches.
- Substitute whole wheat flour for half of the recipe in pancakes or muffins.



SAY:

Thank you for all of these great ideas! I'll schedule some time for us to make a plan to implement some of these ideas.

Today we have talked about the importance of grains. Grains provide essential vitamins, minerals, and fiber. It is important that we serve our customers the grains they need for maintaining a healthy diet.

1	
40	2
C	97

ASK:

Do you have any questions about MyPlate or the grains group?



LISTEN:

Listen to individual responses. Answer questions to the best of your ability. If there are questions you can't answer, tell the participants you will find out the answer and let them know later. If you need assistance in finding answers, please call the National Food Service Management Institute at 800-321-3054.



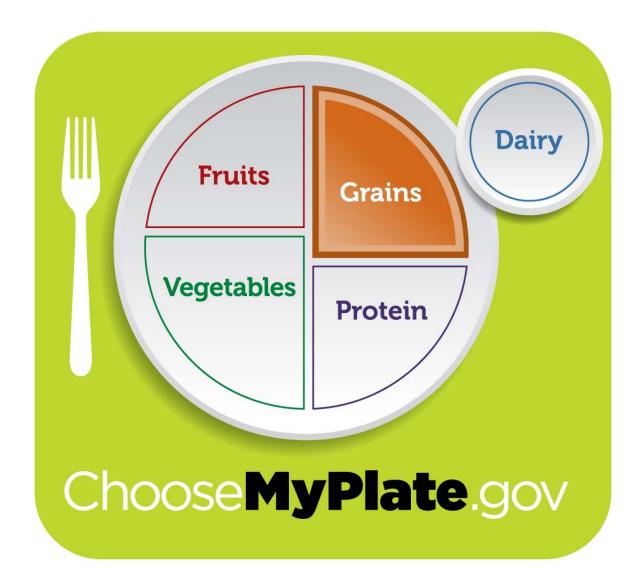
DO:

Distribute the Session Evaluation form.

SAY:

Thank you for participating in the lesson today. Please take a couple of minutes to complete the Session Evaluation. Thank you for your input.





Source: U.S. Department of Agriculture. (2011). ChooseMyPlate.gov Website. Washington, DC. News and Media. <u>http://www.choosemyplate.gov/global_nav/media_resources.html</u> Last modified: June 16, 2011.



Handout 2-Whole Grains and Refined Grains

Take a few minutes to discuss grains that at divided in two groups: whole grains and refined grains. Ask participants to discuss and recognize the difference of the two grains. The key consumer message is to make at least half our grains whole grains in our diet.

Whole grains:AmaranthBrown riceBuckwheatBulgur (cracked wheat)OatmealPopcornReady-to-eat breakfast cereals: Whole wheat cereal flakes MuesliRolled oats Quinoa Sorghum TriticaleWhole-grain barley Whole-grain cornmeal	<u>Whole grains:</u> Whole-wheat pasta Whole-wheat sandwich buns and rolls Whole-wheat tortillas Wild rice	Refined grains:Cornbread*Corn tortillas*Couscous*Crackers*Flour tortillas*GritsNoodles*Pasta*SpaghettiMacaroniPitas*PretzelsReady-to-eat breakfast cereals CornflakesWhite bread
č		White bread White sandwich buns and rolls White rice

*Most of these products are made from refined grains. Some are made from whole grains. Check the ingredient list for the words "whole grain" or "whole wheat" to decide if they are made from a whole grain. Some foods are made from a mixture of whole and refined grains.

Some grain products contain significant amounts of bran. Bran provides fiber, which is important for health. However, the products which added bran or bran alone (e.g., oat bran) are not necessarily whole grain products.

Source: U.S. Department of Agriculture (2011). ChooseMyPlate.gov Website. Washington, DC. Good Groups-Grains. <u>http://www.choosemyplate.gov/foodgroups/grains.html</u> Last modified: June 8, 2011. Accessed July 15, 2011



No Time To Train–Short Lessons for School Nutrition Assistants MyPlate –A Look at Grains

Whole Grains and Refined Grains Activity

Multiple Choice Questions

- 1. Which of the following is NOT a whole grain?
 - a. Brown rice
 - b. Rolled oats
 - c. Whole quinoa
 - d. Degerminated cornmeal
- 2. Which of the following is a whole grain?
 - a. All-purpose flour
 - b. Unbleached flour
 - c. Self-rising wheat flour
 - d. Whole-wheat flour
- 3. Manufacturers sometimes use misleading terms on grain products which is the first ingredient term on a label to be a significant source of whole grain.
 - a. 100% wheat
 - b. Contains whole grain
 - c. 100% whole wheat
 - d. Made with whole grains
- 4. Which of the following is NOT a whole grain?
 - a. Whole corn
 - b. Corn grits
 - c. Whole grain corn flour
 - d. Whole-grain grits
- 5. Which of the following is a whole grain?
 - a. Instant Oatmeal
 - b. Couscous
 - c. Farina
 - d. Semolina
- 6. What of the following is a whole grain?
 - a. White rice
 - b. Rice flour
 - c. Enriched rice
 - d. Brown rice

Source: U.S. Department of Agriculture, Food and Nutrition Service. (2010). *HealthierUS school challengerecognizing excellence in nutrition and physical activity*. <u>http://www.fns.usda.gov/tn/healthierus/application.html</u> Accessed August 4, 2011.



Whole Grains and Refined Grains Activity (Answers)

Multiple Choice Questions

- 1. Which of the following is NOT a whole grain?
 - a. Brown rice
 - b. Rolled oats
 - c. Whole quinoa
 - **d. Degerminated cornmeal:** No, only whole cornmeal or whole-grain cornmeal is grain. "Degerminated" means that the germ has been removed. Removing the germ from whole cornmeal results in a longer shelf life.
- 2. Which of the following is a whole grain?
 - a. All-purpose flour
 - b. Unbleached flour
 - c. Self-rising wheat flour
 - d. Whole-wheat flour: Yes, whole wheat flour is whole grain.
- 3. Manufacturers sometimes use misleading terms on grain products which is the first ingredient term on a label to be a significant source of whole grain.
 - a. 100% wheat
 - b. Contains whole grain
 - c. 100% whole wheat
 - d. Made with whole grains
- 4. Which of the following is NOT a whole grain?
 - a. Whole corn
 - **b. Corn grits:** No, grits are not whole grain unless they are made from whole-grain corn. Specialty mills may produce whole-grain grits, but grits commonly available on the market are made by drying and grinding corn kernels from which the hull and germ have been removed.
 - c. Whole grain corn flour
 - d. Whole-grain grits
- 5. Which of the following is a whole grain?
 - **a. Instant Oatmeal:** Yes, whole oats (ole fashioned, quick, and instant) are whole grain. However, instant oatmeal is not encouraged because it is highly processed.
 - b. Couscous
 - c. Farina
 - d. Semolina
- 6. What of the following is a whole grain?
 - a. White rice
 - b. Rice flour
 - c. Enriched rice
 - **d.** Brown rice: Yes, brown rice is whole grain. In some areas of the country, brown rice should be refrigerated to retard spoilage.

Source: U.S. Department of Agriculture, Food and Nutrition Service. (2010). *HealthierUS school challenge-recognizing excellence in nutrition and physical activity*. http://www.fns.usda.gov/tn/healthierus/application.html Accessed August 4, 2011.



	Session Evaluation							
	Instructions: Completely fill in the circle of your answer. Use a #2 pencil. Please select only one response for each statement. Do not fold or crease this sheet.							
Title	e of Meeting:ssion Topic:	Train	er's C	ode:		_		
Dat	te: Time Slot: Location: Length of E	vent (h	rs/mi	n):				
Atten	dee Status: Major city director Private consultant/trainer State agency staff Site-level manager Foodservice assistant Educator Other (please list) Site-level manager							
	Reaction to this Session Please read the following statements related to the session. Rate your level of agreement by using the scale 5 (Strongly Agree) to 1 (Strongly Disagree).	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree		
1.	The session objectives were clearly presented.	5	4	3	2	1		
2.	The session objectives were achieved.		4	3	2	1		
3.	I can apply what I learned in this session to my job.		4	3	2	1		
4.	Attending the session increased my skill on the topic.		4	3	2	1		
5.	Attending the session increased my knowledge on the topic.	5	4	3	2	1		
6.	I would recommend this session to others.	5	4	3	2	1		
7.	Overall, the session met or exceeded my expectations.	5	4	3	2	1		

Comments about this Session

The information I found MOST useful was:

Please share any additional comments:

National Food Service Management Institute - The University of Mississippi

