

Are You Ready for the Challenge?
Meeting the Healthier US School Challenge Criteria

Lesson 2: Promoting Whole Grains in School Meals

Lesson Introduction and Learner Objectives

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

1. Define and identify whole grains.
2. Identify the Challenge criteria for whole-grain products.
3. Evaluate whole grain school-made recipes and purchased product labels against the Challenge criteria.

Lesson-at-a-Glance

Time	Topic	Task	Materials
5 minutes	Introduction and Overview	Regroup. Introduce lesson. Discuss the Dietary Guidelines recommendations for whole grains. Show slide on grain consumption. Review the 2008 HUSSC whole grain criteria	1 Slide on Grain Consumption Handout 2.1: <i>HUSSC Whole-Grain Resource</i>
Objective 1: Define and identify whole grains.			
15 minutes	Identifying Whole Grains	Define whole grain. Optional: Discuss common and unusual whole grains by reviewing actual products. Conduct Activity 1 using Handout 2.2.	Handout 2.1: <i>HUSSC Whole-Grain Resource</i> Sample whole grain products Handout 2.2: <i>Identifying Whole Grains Activity</i>

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			Activity Handouts 2.10 – 2.20: Sample Product Labels
5 minutes	Lesson Summary	Summarize lesson.	
Total of 60 minutes		If all objectives, activities, and handouts used.	

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Lesson Plan

Regrouping Activity

Note to Instructor: To rearrange groups, have the group count off, basing the highest number on the number of tables. For example, if there are 4 tables, have participants count off 1, 2, 3, 4, and then begin again by counting 1, 2, 3, 4, etc. until all participants have one of the numbers. All of the 1's go to Table 1, all of the 2's go to Table 2, etc. Designate Table 1, Table 2, Table 3, and Table 4 with numbers prior to session.

Introduction and Overview (5 minutes)

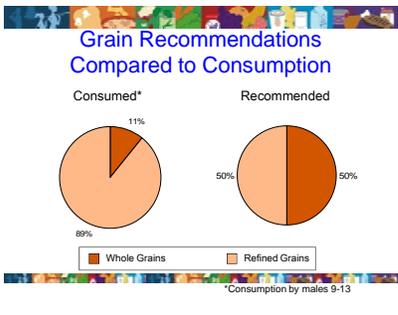
Materials Needed:

Handout 2.1: *HealthierUS School Challenge Whole-Grain Resource*

Introduce lesson

Say: The *2005 Dietary Guidelines for Americans* encourages consumption of whole grains and offering whole-grain foods is one of the HUSSC requirements.

Do: Show slide on grain consumption.

 <p>Grain Recommendations Compared to Consumption</p> <p>Consumed* Recommended</p> <p>11% 50% 50%</p> <p>89% 50%</p> <p>Whole Grains Refined Grains</p> <p><small>*Consumption by males 9-13</small></p>	<p>Slide 19</p> <p>The Dietary Guidelines for Americans recommends that half of your grains be whole. This slide gives a snapshot of the current grain consumption for males age 9-13 compared to the recommendation. Americans are eating enough grains but consume too many refined grains and not enough whole grains.</p>
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Say: In this lesson, we'll be discussing:

1. What are the HUSSC criteria for whole grains?
2. What is a whole grain? and
3. What is a whole-grain product?

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The HUSSC Whole Grain Criteria

Say: Please refer to your first handout in this lesson, Handout 2.1: *Whole-Grain Resource*. This USDA resource will become very useful to you in the future and we will be reviewing it thoroughly. The resource is also available for download from the HealthierUS School Challenge web site.

Look at the centered box on the first page entitled *2008 HUSSC Whole-Grain Criteria*.

Do: Call on someone to read criteria for Gold/Gold Award of Distinction criteria; then call on someone else to read the Silver/Bronze criteria for whole grains.

Say: Before we can identify whole-grain products, we need to define what constitutes a whole grain.

Identifying Whole Grains (15 minutes with Activity 1)

Materials Needed

- Sample grain products in plastic bags or containers (Optional)
- Handout 2.1: *HealthierUS Challenge Whole-Grain Resource*
- Handout 2.2: *Identifying Whole Grains Activity*

Define “whole grain.”

Say: Please refer to Handout 2.1: *HealthierUS School Challenge Whole-Grain Resource* again, page 3, “What is a Whole Grain”.

Do: Discuss the handout, have someone name the 3 parts of a grain, and especially point out “*If the milled grain retains the same relative proportions of bran, germ, and endosperm as the original grain kernel, it is considered a “whole grain.”*”

Say: This is the draft definition of a whole grain by the Food and Drug Administration (FDA) and is the Challenge definition of a whole grain.

In contrast to *whole* grains, *refined* grains are milled to remove part or all of the bran and/or germ. This process removes 25 to 90% of the nutrients in the grain. Most (but not all) refined grains are enriched to add back some of the iron, thiamin, niacin, and riboflavin lost in the milling process. Enriched grains also have folic acid added to increase this important nutrient in our diets.

Look at Attachment A of Handout 2.1 to review the standards of identify for a few of whole grains, common names and uncommon names, and grain products that are not whole grains.

Do: Briefly review other parts of the handout such as common grains, uncommon grains, etc. (Optional: have the sample grains at each table for participants to see.)

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Activity 1: Identifying Whole Grains

Say: At your tables, pair up and refer to the handouts to determine which of the grains in Handout 2.2, *Identifying Whole Grains Activity*, are whole grains. Discuss with your partner why the grain is a whole grain or not. Use the activity handout to record your answers. Please stand when you have completed the activity.

Do: Allow 5-7 minutes for participants to determine if grains are whole. Ask which are not whole grains and why. Allow participants to provide answers. Use the information provided on Handout 2.2 **Answers** to reinforce why these products are not whole grains.

Identifying the Challenge Criteria for Whole-Grain Products

(20 minutes with Activity 2)

Materials Needed

- Handout 2.1: *HealthierUS School Challenge Whole-Grains Resource*
- Handout 2.3: *FCS Instruction 783.1 Rev 2: Exhibit A*
- Flip Chart and marker

Say: You know now how to identify whole grains. If the grain is relatively intact after processing, it's a whole grain. Now we are going to discuss how to determine if a whole-grain food or product contains sufficient whole grain to meet the Challenge criteria.

Ask: What is your *current* experience in offering whole grains on school menus?

Do: Give participants 1-2 minutes to respond. Write responses on a flip chart.

Turn again to Handout 2.1: *HealthierUS School Challenge Whole-Grains Resource*. Starting at the bottom of the front page of this handout, you'll find a section entitled "How Can Schools Comply with the HUSSC Whole Grain Criteria?"

Say:

1. Number 1 tells us that the HealthierUS School Challenge criteria include a requirement for one serving of a whole-grain food at least three times a week for the Bronze and Silver level awards, and one serving of a whole-grain food everyday for the Gold level awards.
 2. Number 2 states that the whole-grain product serving size or portion size must be the minimum grains/bread serving size as listed in *FCS Instruction 783.1 Rev 2: Exhibit A*, on pages 3.15-3.16 of the Food Buying Guide. This instruction has been duplicated for you as Handout 2.3: *FCS Instruction 783.1 Rev 2: Exhibit A*. This handout documents portion size requirements to meet HUSSC criteria. How many of you are familiar with this chart in the Food Buying Guide? We'll be using this handout in a future activity.
 3. Look at Number 3. This tells us that schools are being provided two options for qualifying a food product as a HUSSC whole-grain product; Group A or Group B.
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- A. Group A tells us those foods with **whole grains as the primary ingredient by weight** (first ingredient listed in the ingredient statement) meets the Challenge criteria.
- B. Group B states that food products in which **whole grains are the primary grain ingredient by weight** will also qualify, but cannot be offered the majority of times on the weekly menus. An example of this type product may be one where water is the first ingredient on the ingredient statement, indicating that water is the primary ingredient by weight. You may see this if you buy an unbaked product, such as bread dough.

Note to Instructor: Remind participants that Group A & B products in Handout 2.3 determine serving size only. Whole grain products must be evaluated using Handout 2.1 categories to determine if they qualify as a Group A or Group B whole grain.

- 4. Whole-grain products from Group A, where the whole grains(s) is the primary ingredient by weight (first ingredient listed in the product's ingredient statement) must be offered the *majority* of times on your menu

For example, if you're going for either Gold award, you have to offer a whole-grain product how many times per week? Answer: 5 days per week. What is a majority of 5? Answer: 3. You must offer a whole-grain product with the whole grain as the primary ingredient by weight at least 3 times that week. Super, if you want to offer such a product all 5 days. The product will be providing a substantial amount of whole grains to your students.

If you're going for the Bronze award, how many times must you offer a whole-grain product where the whole grain is the primary ingredient by weight? Answer: 2 times per week is the majority of 3 times per week.

A whole-grain food from Group B may be counted as a whole grain food for the remainder of the days in the week.

Do: Review the flow chart on page 2 of Handout 2.1, *HealthierUS School Challenge Criteria for Whole-Grain Products*.

Activity 2: Evaluating Whole Grain Product Ingredient Statements

Materials Needed:

- Handout 2.4: *Evaluating Whole-Grain Product Ingredient Statements* Activity

Say: It's practice time. Find Handout 2.4: *Evaluating Whole-Grain Product Ingredient Statements* Activity. You see 3 sample ingredient statements at the top of the page, followed by 3 questions to answer.

This will be a group or table activity so each table will need a reporter. Everyone at your table point to the person at your table that you think should be the reporter. The person at your table, who has the most fingers pointing at them, is the reporter.

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You'll have a few minutes to review the 3 ingredient statements and answer the questions.

Do: Allow participants 8 minutes or less to brainstorm and answer questions. Call on different tables to report on their answers to the various questions.

Say: You have another great resource, the USDA Fact Sheet with your handouts. It is numbered Handout 2.5: *Fact Sheet: Serve More Whole Grains for Healthier School Meals*. This fact sheet can be downloaded from the FNS/CND website: www/fns.usda.gov/cnd. It makes a good resource for staff training and/or to send home messages for parents.

Evaluating Whole-Grain Products (20 minutes with Activity 3 and Activity 4)

Say: Let's practice some of our skills of evaluating whole grain products.

Demonstrate how to evaluate recipes

As you review grains/bread recipes that might meet the Challenge or modify existing recipes to meet the Challenge criteria, remember that:

- 1) the product must provide a minimum G/B serving as defined in the FBG and
- 2) the whole grain(s) must: a) be the primary ingredient, by weight, i.e., the whole grain weighs more than any other ingredient, or b) the whole grain(s) must weigh more than any refined grain(s) in the recipe.

Note: Some products will feature a whole grain stamp boasting the amount of whole grains the product contains or packaging may have a claim that the product contains at least 51% whole grain. Product packaging that displays the whole grain stamp or 51% whole grain claim does not verify the product as a HUSSC product.

Schools are encouraged to submit information requested on Attachment B of the Handout 2.1: *HealthierUS School Challenge Whole-Grains Resource* to assist with identifying school-made recipes as Group A or Group B food products.

Activity 3: Evaluating Whole-Grain Recipes

Materials Needed

Handout 2.6: *Recipe for Whole Wheat Bread*

Handout 2.7: *Recipe for White Whole Wheat Bread*

Say: You have two sample school roll recipes. Take a minute to review the two recipes at your table.

Note to Instructor: Some participants may not be familiar with white whole wheat flour which is only popular in some of the states. They may be more familiar with the red wheat flour, which gives products their traditional brown color.

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Ask: Do either of these recipes meet the Challenge Criteria? Are the serving sizes sufficient?

Answers: For Handout 2.6, Whole Wheat Bread recipe, the whole wheat flour weighs 12 lbs., 6 oz. Is there another ingredient that weighs more than this? No, therefore the whole wheat flour is the primary ingredient, by weight (weighs more than any other ingredient). The serving size is 2 oz., 2 servings of Grains/Bread. This school-made product meets the Challenge criteria and can be offered to students the *majority* of times a whole-grain product is offered on the menus.

In Handout 2.7, White Whole Wheat Roll recipe, the whole wheat flour weighs 3 pounds, 12 ounces and the all-purpose flour weighs 3 pounds, 8 ounces. But what is the primary ingredient, by weight? It's the water—weighing in at 4 lbs, 5 oz. We know that most of the water will evaporate during baking, but we don't know how much. We can see that the whole wheat is the primary grain ingredient (it weighs more than the all-purpose flour) so it meets part of the Challenge requirement. Is the serving size sufficient? Yes, it weighs 2 oz; the FCS Grains/Bread Instruction 783.1 Rev requires a minimum of 0.9 ounces of bread, so this roll provides 2 servings grains/breads. Yes, this is a sufficient serving size.

But because the whole grain is not the primary ingredient, by weight for the whole product, it cannot be used for the majority of whole-grain products.

Optional activity enhancement: Consider adding a Spanish Rice recipe (if time allows) using brown rice and added ingredients to show how additions such as peppers, onions, and tomatoes displaces rice volume so that the serving size has to be increased to meet the whole grain serving requirement for HUSSC.

Activity 4: Evaluating Labels of Commercial Whole-Grain Products

Materials Needed

Handout 2.8: *Label Literacy for Whole Grains*

Handout 2.9: *Evaluating Whole-Grain Products Activity*

Handout 2.10: *Product Label #1, Whole Wheat Bread*

Handout 2.11: *Product Label #2, Whole-Grain Chips*

Handout 2.12: *Product Label #3, Seven Grain Bread*

Handout 2.13: *Product Label #4, Bread Sticks Dough*

Handout 2.14: *Product Label #5, Pizza, with Whole-Grain Crust*

Handout 2.15: *Product Label #6, Wedge Cheese Pizza with Whole Wheat Crust*

Handout 2.16: *Product Label #7, Honey Graham Crackers*

Handout 2.17: *Product Label #8, Wheat Crackers*

Handout 2.18: *Product Label #9, Whole-Grain Pasta*

Handout 2.19: *Product Label #10, Whole-Grain White Bread*

Handout 2.20: *Product Label #11, Whole-Grain Hamburger Bun*

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Demonstrate how to read food product labels.

Say: In a few minutes, you are going to evaluate some food product labels to determine if they meet the Challenge criteria. Have your handouts available.

Do: Call attention to Handout 2.8: *Label Literacy for Whole Grains*. Review with participants.

Say: An ingredient statement is required by law on all food products that have more than one ingredient. Ingredients are listed in decreasing order of predominance by weight, so that means there is more of the first ingredient listed in a product and less of the latter ingredients listed. When evaluating a food product label to determine if the product contributes significantly to consumption of whole grains and therefore meets the Challenge criteria, look for products that list whole-grain ingredients first on the ingredient statement.

Ask participants to say whether the whole grain terminology listed can be used to identify a whole-grain product that meets the HUSSC criteria.

Instructor Notes: On Handout 2.8 are examples of terminology on labels that may be misleading. Here are examples with the reason why a product with this phrase on its label may not be “whole grain.”

Whole Grain Terminology

- **“Whole grain”**
A: May contain a small amount of whole grain and mostly refined grain.
- **“Contains whole grain”**
A: May contain a small amount of whole grain, but is usually mostly refined grain.
- **“100% wheat”**
A: All bread made from any part of the wheat kernel is 100% wheat. May contain some whole wheat flour but may contain only refined flour.
- **“Made with whole wheat”**
A: Must have some whole wheat but may contain mostly refined flour.
- **“Multigrain”**
A: Must contain more than one type of grain. Some breads labeled as “multigrain” may have enriched wheat flour as the primary ingredient and multiple grains in smaller amounts. On the other hand, some bread labeled as “multigrain” may contain mostly whole grains. Read the ingredient statement carefully before selecting this food item.

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- **“Graham crackers”**

A: Usually contain refined flour as the primary ingredient and graham flour as a less predominant ingredient.

- **“Cracked wheat bread”**

A: Although cracked wheat is a whole grain, cracked wheat bread may contain refined flour as the primary ingredient and cracked wheat as a less predominant ingredient.

Say: Don’t depend on color. Dark color is not an indication that a product is whole grain. Manufacturers may use molasses or other ingredients to make a grain product appear darker and more nutritious.

Now, to identify your Scribe/Reporter for this next activity, we are going to become button counters. How many buttons are you wearing today? The person at your table with the most buttons will be your Scribe/Reporter. Please stand when your table has completed the activity.

Do: Allow participants to work in small groups to practice determining if the 11 sample product labels meet the HUSSC whole grains requirement. They will use Handouts 2.3, 2.8 and 2.9 to review sample product labels. Participants determine if the product meets the Challenge criteria for whole grains. (Note: If time does not allow the review of all 11 sample products, review the following sample product labels: 2.10, 2.12, 2.14, 2.15, and 2.18).

Say: In this activity, each table will evaluate labels for the 11 sample products. Locate the sample product labels.

Do: Review the first two labels as a group. Give participants 10 minutes to complete the Handout 2.9: *Evaluating Whole-Grain Products* Activity. Rotate calling on the various tables to evaluate each label.

Do: Cover the remaining parts of Handout 2.1 beginning with Attachment B (page 7) with participants.

Say: Attachment B is required for manufactured products and strongly suggested for school-made recipes.

Do: Review the remaining parts of Handout 2.1 with participants: Storing Whole Grains, Taste Testing Whole Grain Products, and Ideas for Adding Whole Grains to Menus in Child Nutrition Programs.

Lesson Summary (5 minutes)

Summarize lesson.

Say: As you add whole grains to menus, consider ways to let your customers know about whole grains and why they are healthy. Gaining student involvement in your efforts to

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increase whole grains can build excitement about the new products on menus. Look one more time at the USDA Fact Sheet: *Serve More Whole Grains for Healthier School Meals*.

What is one thing you've learned in this lesson that you think you will use in your school foodservice operation?

Record these ideas in your handouts at the end of Lesson 2.