Introduction
This lesson focuses on the grain food group, emphasizing the role of whole grains in maintaining a healthy diet and preventing disease. Participants will develop their understanding of whole grains and share strategies for including more whole grains in their diets.

Preparation
1. Review the topic.
   - Start with the key concepts and discussion guide. The discussion guide provides suggested questions to draw out participants’ existing knowledge as well as information you can offer in response to each question.
   - Consider your participant demographics and potential interests, and conduct any additional research that may be necessary to prepare for specific questions or improve your own understanding of key concepts (see “Program Guide” for suggested resources).

2. Plan your lesson structure.
   - Determine whether time and resources allow for a food-based activity or whether you will use an alternate activity. This lesson includes one alternate activity, and additional activity suggestions are available in the “Program Guide.”
   - See “Exercise for Health” lesson for ways to incorporate physical activity into the lesson, and plan to ask participants to share their favorite ways to exercise.
   - Prepare a rough timeline of your lesson and a plan to integrate discussion with the activity. Depending on available time and participant interests, you can integrate discussion topics into an activity or use discussion time to open or close the lesson.

3. Plan how to administer pre-test (as well as post-test if this is the final session). See “Program Guide” for details.

4. Prepare materials.
   - Review the appropriate activity and prepare any necessary materials.
   - Choose and print handouts, recipes and pre-tests.

Suggested Recipes
Recipes should focus on whole grains like oats, brown rice, quinoa, bulgur, or whole-wheat bread or pasta products.
- Vegetable Fried Rice
- Whole Wheat Pancakes

Suggested Handouts
- “Look for Whole Grains on the Label”

Key Concepts
Foods in the grain group help give us energy and make us feel full (from fiber). Although there are many different kinds of grains, the most important distinction between grain foods is how much they have been processed. Try to make at least half the grains you eat whole grain foods.
What do you know about whole grains? How are they different from refined grains?

- Whole grain foods are either the whole seed of a plant (brown rice, corn, oats, quinoa) or made from all of the parts of a whole seed (whole grain breads, crackers or flours).

- Refined grains are processed to get rid of some parts of the seed. White rice might look like a whole grain, but it has been polished to remove the outer parts. Many foods made with wheat or other grains use only some parts of the grain seed. Breads and pastries made with refined grains are usually lighter and fluffier.

- Grain seeds are made up of the bran, germ and endosperm. The bran and germ are removed during the refining process because the majority of the calories are contained in the endosperm. However, the bran and germ contain many important nutrients.

What are some of the benefits of eating whole grains?

- The parts of the grain that are lost when grains are refined contain many important nutrients: protein, iron, magnesium, B vitamins and dietary fiber.

- Whole grains contain dietary fiber to help keep us full for longer. They also contain protein that is mostly lost when grains are refined.

- Fiber and protein keep the glucose in whole grain foods from raising our blood sugar. Eating refined grain foods like white bread can be dangerous for people with diabetes who are trying to keep their blood sugar level regular.

Why is fiber important?

- There are two different types of fiber: soluble and insoluble. Both are beneficial; soluble fiber can help lower cholesterol, and insoluble fiber cleans out your digestive system. Fiber may also help prevent blood clots.

How many servings of grains should you be eating in a day? How can you measure serving sizes?

- The USDA's MyPlate model recommends that you fill 1/4 of your plate with grain foods and try to make half the grain foods you eat whole grain foods. Women over 51 can aim to eat about 5 servings of grains a day, while men over 51 can eat about 6. What counts as one serving in the grain foods group?

- 1 slice of bread
- 1 cup of cereal
- 1/2 cup cooked rice, bulgur, or other grains
- 1/2 cup cooked pasta or 1 oz. uncooked pasta
- 1 mini bagel
- 1 small muffin
- 5-7 crackers
- 3 cups popped popcorn
- 1 small (4.5”) pancake
- 1 small (6”) tortilla
What are some strategies for including more whole grains in your diet?

- Read the label carefully. Just because something says “whole grains” on the front of the package or looks brown doesn’t actually mean it’s a 100% whole grain food. Not all wheat bread is whole wheat—white bread is made from wheat too.
- Check the ingredients list to see if a whole grain like “whole wheat” is listed first, and check for the Whole Grain Stamp (show participants an example)—the regular stamp means that one serving of the product has at least half a serving of whole grains, and the “100% Whole Grain” stamp means one serving is a full serving of whole grains. You can also check the nutrition facts label for products with higher amounts of fiber.
- Try switching half your white rice for brown rice.
- Oatmeal is a quick, cheap whole grain breakfast—try it topped with fruit or yogurt.
- Look for whole grain pastas; try different varieties of whole wheat pasta, or pasta made from brown rice or other grains.
- Whole grains can be a good substitute for pasta in cold salads; barley, quinoa and whole wheat berries hold their shape well and have a nice nutty flavor.
- Add whole grains like brown rice or barley to soups and stews.
- Use leftover brown rice for fried rice or rice pudding.
- You can find whole cornmeal to use for baking cornbread or muffins or for making polenta or grits.
- Plain popcorn is a great whole grain snack—top with your favorite spices and seasonings.
- There are many varieties of whole wheat breads, pastas, and crackers—just be careful when you read the label to check the actual ingredients.
- Examples of whole grain food servings:
  
  | 3 cups popped popcorn | 1 slice of bread | 1/2 cup cooked rice |

Are there any benefits to eating refined grains?

- Refined grains are fine in moderation—they make some of the most delicious pastries, and white flour is more shelf-stable than whole grain flours. But remember that when you eat refined grains, your blood sugar can spike and you’re missing out on the nutrients like fiber, iron and protein that are removed in the refining process. Try to make at least half your grain food choices whole grain foods.
Suggested Activities

If you have access to basic ingredients and supplies, we recommend planning the lesson around a cooking demonstration or activity that will show participants concrete skills that apply the lesson concepts. If limited resources or time make a food-based activity impossible, use the alternate activity or any of the other suggested activities in the “Program Guide.”

A. Food-Based Activity: Make Your Own Instant Oatmeal

*Instant oatmeal packets can be a good choice for quick breakfasts, but some instant oatmeal contains lots of added sugar and ingredients you might not add at home. While you don’t need to discourage participants from eating instant oatmeal, you can show them how easy it can be to make their own quick oats. If you have access to boiling or very hot water you can show participants the full process, or you can soak and refrigerate oats overnight to bring to class.*

Discussion points to address while preparing food (see discussion guide as well):

- Does anyone like to eat oats or oatmeal? What makes oats so healthy? Oats are whole grains that are high in fiber, which helps you stay full longer and can help to lower your blood sugar.
- Rolled oats can be soaked instead of cooked on the stovetop, covered with water or milk and left overnight in the refrigerator (this is called muesli and is popular in Germany) or covered in very hot water for five minutes before eating.
- Do you like to add any toppings to your oatmeal? What are some favorite dried, frozen or canned fruits that don’t even require cutting? How about favorite types of chopped nuts?
- Adding fruit, nuts, or even nut butter or yogurt to quick oats adds flavor and helps you stay full even longer without the sugar crash that can come from the flavoring in instant oatmeal packets.

<table>
<thead>
<tr>
<th>Materials</th>
<th>Serving bowl(s): one for demo, or per group</th>
<th>Plates or lids to cover bowls</th>
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<tbody>
<tr>
<td></td>
<td>Serving spoon(s): one for demo, or per group</td>
<td>Sample dishes and spoons for each participant</td>
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<thead>
<tr>
<th>Preparation</th>
<th>Start by deciding whether the activity will be a demonstration or will involve participation. If participants will be preparing food themselves, decide whether they will work alone or in groups.</th>
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<tr>
<td></td>
<td>Review Program Guide for tips on leading a cooking demo or guiding participants through a recipe.</td>
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<td>Review ingredients and make substitutions as necessary.</td>
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<td>Modify recipe as necessary, and print copies for participants to take home.</td>
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<td></td>
<td>If you have no way to heat water on-site, cover oats in water and refrigerate overnight to soften.</td>
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<tr>
<th>Ingredients</th>
<th>Rolled oats</th>
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<tbody>
<tr>
<td></td>
<td>Assorted toppings: fresh or (defrosted) frozen berries, fruit (canned in water or juice and drained), or dried fruit; sliced almonds, walnuts or pecans; peanut or almond butter; and/or plain nonfat yogurt.</td>
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<thead>
<tr>
<th>Directions</th>
<th>Pour very hot water over oats until they are covered, and cover the container with a plate or lid. (If using pre-soaked oats, skip this step.)</th>
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<td>Give each participant a sample of oats, and offer an assortment of toppings to add.</td>
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B. Alternate Activity: Looking for Whole Grains on the Label

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<tr>
<th>Materials</th>
<th>“Cheat Sheet” handout</th>
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<td></td>
<td>Example whole grain labels (bring in actual products, or print out Appendix)</td>
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<tr>
<th>Preparation</th>
<th>Decide how to divide participants into groups</th>
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<tr>
<td></td>
<td>Print cheat sheets for all participants and a set of whole grain labels for each group</td>
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<td></td>
<td>Review labels to determine which are actually whole grain foods</td>
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<tr>
<th>Activity</th>
<th>Pass out the “Cheat Sheet” handout and review with participants—start by explaining that not all food with grain words on the label actually have whole grains. Looking at the ingredient list is the best way to be sure, regardless of what the front of the package says.</th>
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<td></td>
<td>Divide participants into groups and give each group a set of labels.</td>
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<td></td>
<td>Ask everyone to work in groups to decide which products are whole grain foods, and then have groups share their answers as you go over the options with everyone.</td>
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Quick Whole Grain Oats

Instant oatmeal packets can be a good choice for quick breakfasts, but some instant oatmeal contains lots of added sugar and ingredients you might not add at home. You can make your own quick oatmeal by simply steaming rolled oats in hot water, or even use cold water or milk to soak oats overnight in the refrigerator.

**INGREDIENTS**

- Rolled oats
- Assorted toppings (suggestions to choose from):
  - Fresh or (defrosted) frozen berries
  - Fruit canned in water or its own juices
  - Sliced almonds, walnuts, or pecans
  - Peanut or almond butter
  - Plain nonfat yogurt
  - Cinnamon, nutmeg, honey or maple syrup
  - Water or milk

**DIRECTIONS**

1. A: Pour very hot water over oats until they are covered, and cover the container with a plate or lid.
   B (overnight alternative): Cover oats with cold water, milk or yogurt, cover the container, and refrigerate overnight.
2. Add toppings.