Grains Lesson

The Little Red Hen by Paul Galdone

NUTRITION
Children will learn about the MyPlate Grains group and what foods are in the group. They will learn that half of their grains should be whole grains.

PHYSICAL ACTIVITY
The Chicken Dance

SNACK
Whole Grains Snack Mix or Whole Wheat Tortillas

LESSON OBJECTIVES
Children will be able to do the following
1. Identify foods in the Grains group.
2. Identify that whole grains are better for us than white or refined grains.
3. Identify that half of grains eaten each day should be whole grains.

LESSON ORDER
The lesson should be taught in this order
1. Introduce MyPlate Grains group
2. Read a children’s story book
3. Talk about MyPlate Grains group and nutrition
4. Play a physically active game
5. Make and enjoy a healthy snack
BACKGROUND INFORMATION FOR THE INSTRUCTOR

Not to be taught as part of the lesson—this is for instructor only so he/she has background knowledge

Grains Group: Make Half Your Grains Whole Grains

Choose whole grain foods such as whole wheat bread, oatmeal, whole wheat tortillas, brown rice, and popcorn more often.

Grains are divided into two groups: whole grains and refined grains.

Whole grains contain the entire grain kernel — the bran, germ, and endosperm. Examples of whole grains include whole wheat flour, bulgur (cracked wheat), oatmeal, whole cornmeal, brown rice, and quinoa.

Refined grains have been milled which means the bran and germ have been removed. This gives grains a finer texture. It also improves shelf life. Unfortunately, it also removes dietary fiber, iron, and many B vitamins. White flour, white bread, and white rice are all examples of refined grain products.

According to the 2015-2020 Dietary Guidelines for Americans (DGAs), at least half of the grains we eat each day should be whole grains. Whole grains are high in B vitamins, minerals, and dietary fiber. Substitute whole grain choices for refined grains whenever possible.

Watch for food products labeled with words such as wheat flour, multi-grain, stone-ground, 100% wheat, bran, and cracked wheat. Companies can be clever with words used on the front of packaging. Color is also not an indicator of whole grain content as additives can be used to make refined grains darker in color. If a whole grain such as whole wheat flour, whole cornmeal, oatmeal, or brown rice appears first in the list of ingredients, it often (although not always) indicates that the product is mostly a whole grain since ingredients are listed in order of weight.

Another way to identify whole grains is by the 100% Whole Grain stamp from the Whole Grains Council, which indicates a product is a whole grain.

On average, a child age 4-8 years old should be eating 4-6 ounce equivalents of grains each day.* Half of that amount should come from whole grains. Examples of amounts of food that count as one ounce equivalent of grains include 1/2 cup cooked grains (i.e., oatmeal, pasta, rice); 1 cup dry cereal; or 1 standard size slice of bread.

*MyPlate serving recommendations are based on age, estimated number of calories required, and daily physical activity level. Individual needs and recommendations vary. For specific guidelines go to https://www.choosemyplate.gov.

References
TEACHING THE LESSON

Begin by explaining you will read a book together, talk about MyPlate, make a healthy snack, and play a fun physically active game.

Sample Instructor Narrative

Instructor text is in blue

Today we are going to learn about the Grains group. The Grains group is part of My Plate. (Show MyPlate chart, poster or plate.) Can you see where the Grains group is on MyPlate?

We are going to read the book "The Little Red Hen" by Paul Galdone. (Show the book.) While we read the book, see if you can figure out what it has to do with the MyPlate Grains group.

Tips for Reading to a Group of Children:

• Make sure to read the book yourself ahead of time so you are familiar with it.
• Sit in a chair or on the floor in the center. Ask children to sit around you in a semi-circle. Ask kids to "sit on their pockets."
• Read the book holding it up.
• Hold book up high and slowly show it around the entire circle so all kids can see.
• Speak loudly with a clear voice – articulating voices for characters, etc., when it applies.

Tips for Increasing Engagement While Reading the Book

• When the hen asks the dog, cat and mouse to help plant the wheat, ask children, "Why do you think the other animals don't want to help the hen?"
• After reading "soon the wheat pushed through the ground and began to grow tall" ask children if they have seen wheat growing before?

AFTER READING THE BOOK

NOTE TO INSTRUCTOR: You may want to use the “Parts of the Grain” poster or the flower demonstration. In some cases you could use both. Think about the ages of children you are teaching and what they will be able to comprehend. In either case make sure to talk about the hen making a cake and that it isn't as healthy of an option. Make sure to show both kinds of bread from the kit and talk about which is healthiest. (Or, when reading the book, you could explain that the hen is making bread. It is difficult to tell in the picture that the hen is making cake instead of bread.)

Hold up the MyPlate poster or plate again. Remember when we looked at MyPlate before we read the book? Which food group was the book about again? (Let children answer.) That's right! The Grains group! MyPlate helps us to know how to eat in a healthy way. It reminds us that we should eat food from each of the food groups each day. Foods are divided into five different food groups: Grains, Vegetables, Fruits, Protein and Dairy.

Did you know there are three different parts to a kernel of grain? (Show grains part poster from the kit.) A whole grain has three parts. Point to all three and say the names. If a grain is a whole grain it has all three. When a grain is refined some parts are removed. The bran is removed. Tear the bran off. The germ is also removed. Tear the germ off. So a kernel of whole grain is made up of three parts and a refined grain has only one part—something called an endosperm. Which do you think is more healthy? (Allow kids to guess.) It is better to have ALL of the parts. At least half of the grains we eat each day should be whole grain.
OPTIONAL: Now show children the flower from the kit. Think of a whole grain like this flower. It has three parts - the stem, the petals and the leaves. What happens when you start separating the parts? (Pull the petals from the stem and the leaves off the stem. Allow children to give you answers such as “it isn’t pretty,” “it isn’t whole.”) Just like this flower, once you break apart a whole grain it isn’t complete any more.

In the book, the little red hen grew the grain, then had it milled and turned into flour. It was milled into white or refined flour. She then used it to make a cake. Cake is really yummy but isn’t as healthy as another kind of food the hen could have made from the wheat. Any guesses what kind of food I’m thinking about? Here’s a hint (show food replica of whole grain bread).

Show the children the bread models. The darker brown slice of bread is a whole grain and just like the whole flower, it was made with all of the parts of the grain—the “whole grain.” Show the white bread model. When making this white bread the bran and germ are removed. Which of these two breads (show both) do you think are a healthier choice? (Allow children to guess.) That’s right the whole grain bread is better for us. Remember that half of our grains each day should be whole grains!

PHYSICAL ACTIVITY: CHICKEN DANCE

You will need: “The Chicken Dance” music – download on ipad mini or phone. Video with music and motions available at: https://www.youtube.com/watch?v=kQQ59Z-al4w. Watch the video if you are not familiar with the dance movements.

Show children the Chicken Dance Steps poster.

Ask children: What kind of animal was the “Little Red Hen”? She was a chicken, and because she was a chicken, we are going to do the chicken dance!

Have children stand up and face you. Start music. Demonstrate the steps so they can follow you.

Here are the basic movements:

- Begin with arms by sides.
- Put your forearms up with your hands facing in front of you. Make a beak shape with fingers. Use a “quack-like” movement with fingers and thumbs.

**STEPS 1–4**

- Do the above movement four times to the beat of the music.
- Flap arms like a chicken: elbows out, forearms facing inward.

**STEPS 5–8**

- Do the above movement four times to the beat of the music.

**STEPS 9–12**

- Clap hands four times.

**STEPS 13–16**

- Wiggle your tail feathers (shake your rear end) down to the floor for two counts and back up.
- Repeat from beginning.
HEALTHY SNACK

NOTE ABOUT FOOD ALLERGIES: Check with parents before any snacks are served to see if there are any food allergies. If a snack has an ingredient known to be a common allergen, such as peanut butter, make sure to have an alternative such as a low fat ranch dip.

INSTRUCTOR NOTE: Please instruct children to wash hands prior to eating. NEA should wear disposable gloves when preparing food.

WHOLE GRAINS SNACK MIX

As children enjoy their snack mix, talk about what whole grains are in the mix.

Ingredients
- 100% whole grain cereal (ex: Cheerios, Wheat Chex, Corn Chex, Wheaties)
- Popcorn
- Whole grain goldfish crackers
- Yogurt covered raisins

Other Supplies
- Small cups
- Large zip plastic bag or bowl
- Plastic food prep gloves

Instructions
1. Put on food prep gloves. Mix all ingredients in a large zip bag. Pour into small cups for each child.

**You could incorporate other ingredients as well. Keep in mind you want to include “whole grains.”

Alternative recipe idea

WHOLE WHEAT TORTILLAS

Ingredients
- 2 cups wheat flour
- 1/2 teaspoon salt
- 3 tablespoons oil
- 3/4 cup of warm water
- 16 cheese slices

Instructions
1. In a large bowl combine flour and salt. Add water and oil to form the dough. If necessary, add a bit more water. Knead the dough with your hands and mix until the dough is smooth and is able to be molded.
2. Divide the dough into 16 small round portions and form them into ball shapes. Let the dough rest for 10 minutes. On a lightly floured surface, roll out tortillas to your preferred thinness. In a hot greased pan cook them for a minute on each side. Top with a slice of cheese and roll up.
WHILE ENJOYING THE SNACK REVIEW THE LESSON

Ask children:

1. **Do you remember how a whole grain is different from a refined grain?** (Allow children to give answers, then show diagram again.)

2. **Why are whole grains better for you?** (Allow children to give answers and then talk about it again.)

3. **What are some whole grains you like to eat?** Help children come up with some whole grains they will try.

OTHER BOOKS CHILDREN MIGHT ENJOY

- *If You Give a Mouse a Muffin* by Laura Numeroff
- *If you Give a Pig a Pancake* by Laura Numeroff
- *Strega Nona* by Tomie dePaola
- *The Popcorn Book* by Tomie de Poala
- *Sun Bread* by Elisa Kleven