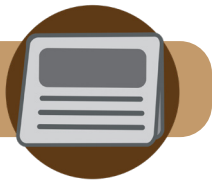




Lesson 1: Grains, Fruits and Vegetables



Fuel Your Body with Grains

Youth 14-18 years old need 6-10 ounces of grains each day—at least half that amount should be whole grains.

Whole Grains—Check the ingredients to make sure wheat or corn products say “whole grain”.

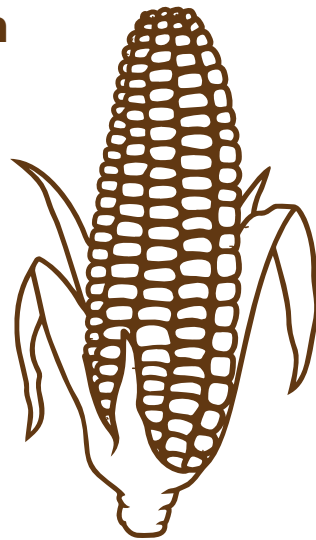
- oats
- millet
- brown rice
- whole grain corn meal
- barley
- quinoa
- wild rice
- buckwheat
- kamut
- whole grain wheat
- rolled oats
- muesli
- sorghum
- popcorn
- amaranth
- dark rye

Refined Grains—Check the ingredients. Some products may be made with whole grains.

- noodles
- cookies
- pancakes
- pita bread
- rice paper (*spring roll wrappers*)
- bagels
- white rice
- pasta
- cabbage
- crackers
- flour tortillas
- waffles
- naan
- green beans
- cake
- white bread
- pizza crust

A Short History of Corn

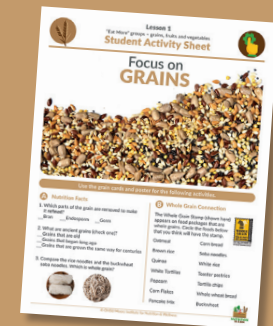
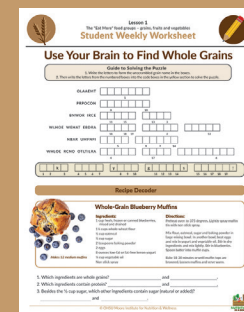
Corn was the main food grown by Native Americans. They dried and ground corn into cornmeal. They placed corn kernels on a flat stone called a metate, and crushed the kernels with a smaller stone called a mano (meaning “hand”). Today, most corn is processed with machines that refine the corn into flour to make foods like chips, cereals, breads and pastas.



From Paper to Plate Activities this Week

1. Use your brain to solve the puzzles on the grains worksheet.

2. Complete the Focus on Grains activity sheet.





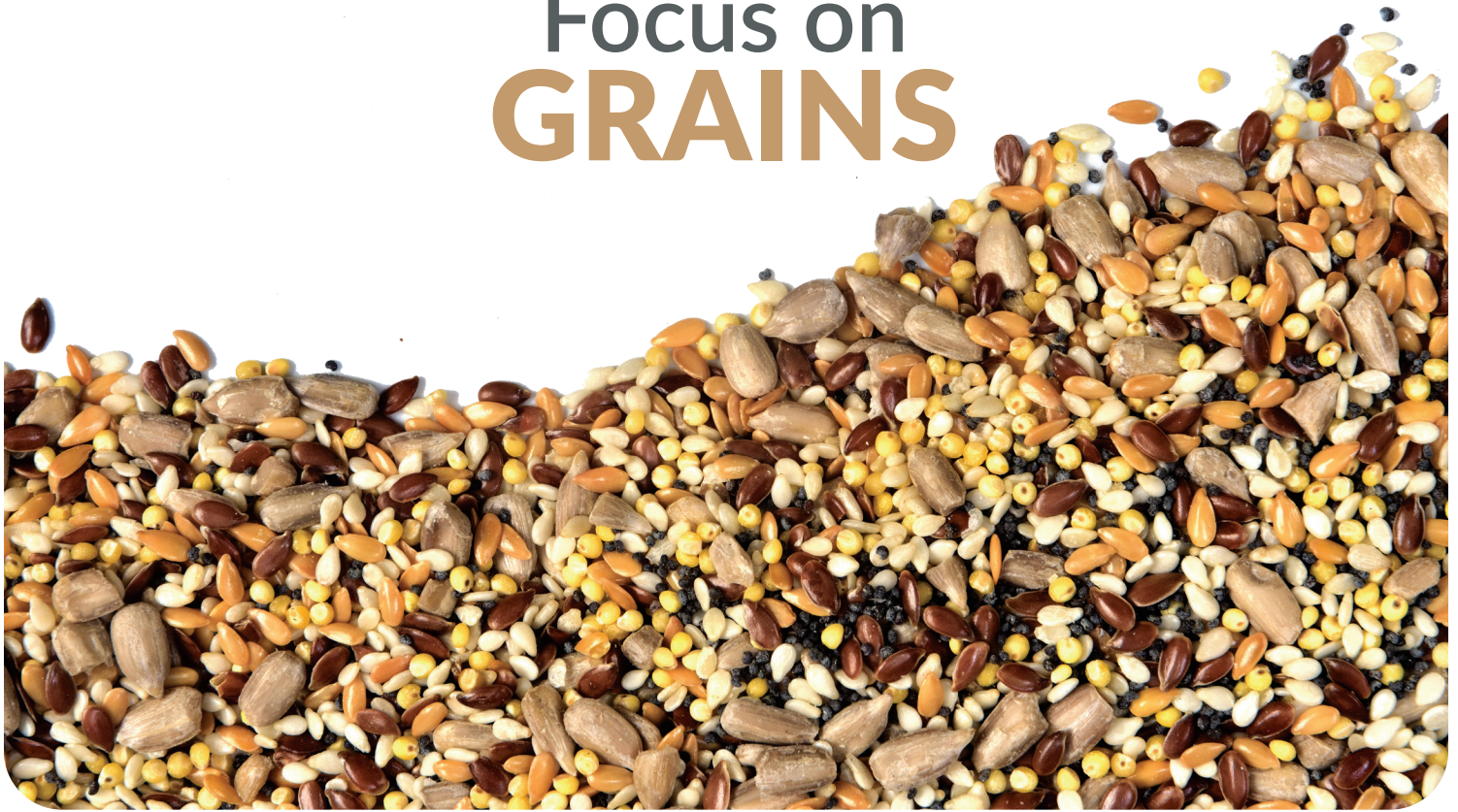
Lesson 1

"Eat More" groups – grains, fruits and vegetables

Student Activity Sheet



Focus on GRAINS



Use the grain cards and poster for the following activities.

A Nutrition Facts

- Which parts of the grain are removed to make it refined?
☐ Bran ☐ Endosperm ☐ Germ
- What are ancient grains (check one)?
☐ Grains that are old
☐ Grains that began long ago
☐ Grains that are grown the same way for centuries
- Compare the rice noodles and the buckwheat soba noodles. Which is whole grain?



B Whole Grain Connection

The Whole Grain Stamp (shown here) appears on food packages that are whole grains. Which foods below do you think will have the stamp?



- | | |
|-----------------|-------------------|
| Oatmeal | Corn bread |
| Brown rice | Soba noodles |
| Quinoa | White rice |
| White Tortillas | Toaster pastries |
| Popcorn | Tortilla chips |
| Corn Flakes | Whole wheat bread |
| Pancake Mix | Buckwheat |



Lesson 1

"Eat More" groups – grains, fruits and vegetables

Student Activity Sheet



Fact box - Grains

- Grains contain carbohydrates (carbs), a major source of energy for your brain and body. Grains provide fuel for physical activity. If you are active in sports and exercise, you may need more grains.
- Whole grains have more nutrition than refined grains. A whole grain includes the entire grain seed or kernel. Refined grains have the outer covering (bran) and germ removed. Because refined grains lose nutrients, they are enriched by adding back iron and four of the B vitamins (niacin, thiamin, riboflavin and folic acid).
- Youth ages 10 to 14 need five to eight servings of grains each day. A serving is one ounce, which is equal to 1 small slice of bread, a 6-inch tortilla, 1 cup dry cereal or ½ cup of cooked grains such as rice, pasta or oatmeal. At least half of the grains eaten should be whole grains.

Action Steps

The list below includes action steps for eating more whole grains. Whole grains are a good energy source. Circle the checks for one or more actions that you would be willing to work on. Have your own idea? Write it below.

- ✓ Eat a sandwich with whole grain bread.
- ✓ Eat popcorn as a snack.
- ✓ Choose a breakfast cereal that has the whole grain stamp on the package.
- ✓ Switch to brown rice instead of white rice.
- ✓ My idea for adding more whole grains to my diet (describe):

Grains for Your Brain

Complete the Grains Worksheet to solve a fun puzzle and decode a recipe.

The worksheet is titled "Lesson 1 The 'Eat More' food groups - grains, fruits and vegetables Student Weekly Worksheet". It contains a word search puzzle with the following words: OLAFENIT, PERFOON, ENVOIR ICE, WILCOE WENKAT EEDNA, NBEAR UNFENY, WILCOE REND OFTELEA. Below the puzzle is a "Recipe Decoder" section for "Whole-Grain Blueberry Muffins". The ingredients list includes: 1 cup brown rice or cornmeal, 1/2 cup oil, 1/2 cup whole wheat flour, 1 cup sugar, 2 eggs, 1/2 cup baking powder, 2 cups, 1/2 cup vegetable oil, and 1/2 cup water. The directions are: Preheat oven to 375 degrees. Lightly spray muffin tins. Mix flour, cornmeal, sugar and baking powder in large mixing bowl. In another bowl, beat eggs and add to sugar and vegetable oil. Stir to mix ingredients and mix lightly. Stir in fruit. Spoon batter into muffin cups. Bake 18-20 minutes. Muffins are done when a toothpick inserted into the center comes out clean.



Lesson 1

The "Eat More" food groups – grains, fruits and vegetables

Student Worksheet



Use Your Brain to Find Whole Grains

Guide to Solving the Puzzle

1. Write the letters to form the unscrambled grain name in the boxes.
2. Then write the letter from the box above the number into the code boxes in the yellow section to solve the puzzle.

OLAAEMT	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	1
PRPOCON	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	8 10
BNWOR IRCE	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	11 15 13 3
WLHOE WEHAT EBDRA	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	16 18 19 2 12
NBAR UMFNFI	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	5 9 7 14
WHLOE RCNO OTLTILRA	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	4 17 6

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

Recipe Decoder



Makes 12 medium muffins

Whole-Grain Blueberry Muffins

Ingredients:

1 cup fresh, frozen or canned blueberries, rinsed and drained
 1¼ cups whole-wheat flour
 ½ cup oatmeal
 ½ cup sugar
 2 teaspoons baking powder
 2 eggs
 8 ounces low-fat or fat-free lemon yogurt
 ¼ cup vegetable oil
 Non stick spray

Directions:

Preheat oven to 375 degrees. Lightly spray muffin tin with non stick spray.

Mix flour, oatmeal, sugar and baking powder in large mixing bowl. In another bowl, beat eggs and mix in yogurt and vegetable oil. Stir in dry ingredients and mix lightly. Stir in blueberries. Spoon batter into muffin cups.

Bake 18-20 minutes or until muffin tops are browned. Loosen muffins and serve warm.

1. Which ingredients are whole grains? _____ and _____.
2. Which ingredients contain protein? _____ and _____.
3. Besides the ½ cup sugar, which other ingredients contain sugar (natural or added)?
 _____ and _____.



Grains

Fuel Your Body & Brain

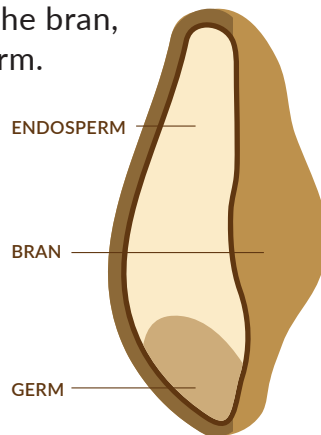
Grains are rich in carbohydrates,
the major source of fuel for both your brain and body.



What is a Whole Grain?

Whole grains keep the entire grain kernel, with the bran, endosperm and germ.

Refined grains use a process to remove the outer covering (bran) and germ, leaving only the starchy endosperm.



What are Ancient Grains?



Ancient grains have been grown the same way for centuries without modern processing. Ancient grains include chia, amaranth, quinoa, millet, barley, kamut and farro. While chia and quinoa are technically seeds, they are considered ancient grains because they closely match the nutrients in other ancient grains.



Lesson 1

The “Eat More” Food Groups



Focus on Grains

Whole Grains vs. Refined Grains



White rice begins as brown rice, but is refined using a process to remove the bran and germ.



Corn tortillas use milled corn, a whole grain, while white tortillas use white refined flour.



Granola contains oats and dried fruits. Fruit-o's usually don't contain whole grains or fruit.



Both pastas are made of wheat, but traditional pasta (on the right) is made of refined or enriched wheat.



Look at the Ingredient Label

Which ingredients are whole grains?

Brown rice	Durum wheat
Oats	Whole wheat
Bran	Buckwheat
Semolina	Degerminated Enriched flour

Serving sizes matter. Make yours count.

For rice, pasta, cereals, oatmeal and other cooked grains, 1/2 cup is one serving.

For tortillas, one small tortilla (6 inches) counts as one serving.

3 cups of popcorn counts as one serving.

