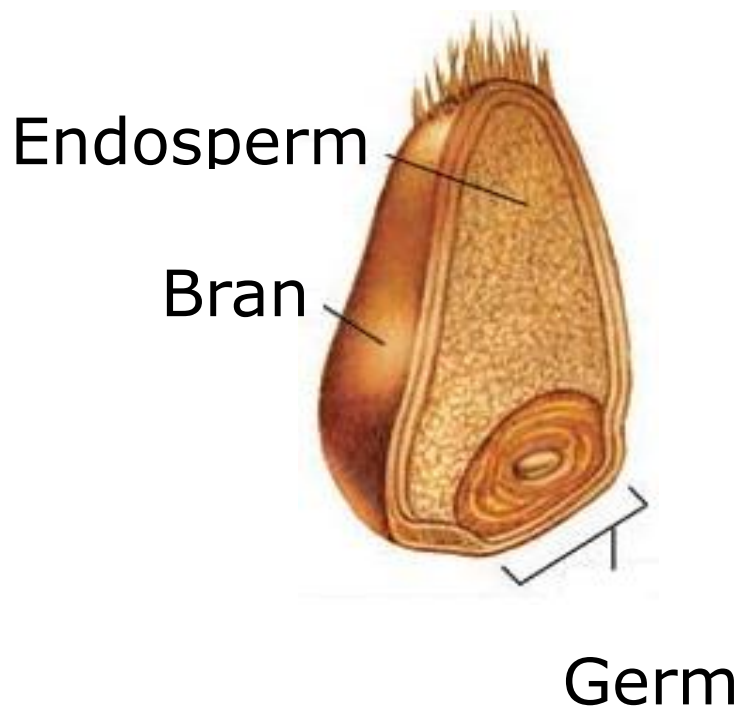


Child Nutrition & Wellness
Kansas State Department of Education
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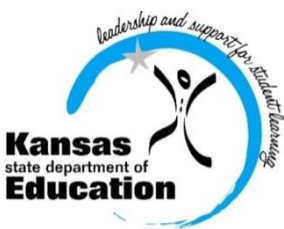


**Whole Grains –
Did you Know?
Lesson Plan**

This class was developed by Child Nutrition & Wellness, Kansas State Department of Education. Class content and activities were adapted from the following sources:

- *Facts about Corn:* <http://www.stumblez.com/fun-facts-about-corn/>
- *Facts About Kansas Wheat, Kansas Wheat* www.kansaswheat.org
- *Facts About US Rice, US Rice Federation*
http://www.usarice.com/index.php?option=com_content&view=article&id=44&Itemid=58
- *Facts about Rice, Professor's House,* <http://www.professorshouse.com/Food-Beverage/Topics/Rice-Pasta/Articles/Facts-About-Rice/>
- *Oats, Dictionary of American History, 2003, Encyclopedia.com;*
<http://www.encyclopedia.com/topic/oats.aspx>
- *Health Benefits of Whole Grains, Whole Grains 101, Whole Grains Council,*
<http://wholegrainscouncil.org/whole-grains-101/what-are-the-health-benefits>

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Whole Grains – Did You Know?

Learn It Live It Lesson Plan

Objective: Participants will use listening, moving and tasting to encourage intake of more whole grains.

Supplies:

- Finding Whole Grains Handout – copy for each participant.
- Small bowls of yogurt – one for each participant
- Assorted dry whole grain cereals to mix with yogurt such as Cheerios, Wheat Chex, Granola, Wheat Flakes.

Listen and Learn - Did you know?

Facts about grains:

Wheat:

- Wheat is a grass whose seed belongs to the cereal grains group. Wheat contains more gluten than other grains making it best for bread flour.
- On average, Kansas is the largest wheat producing state. Nearly one-fifth of all wheat grown in the United States is grown in Kansas.
- The annual average wheat production in Kansas for the past five years has been about 328 million bushels harvested from 8.5 million acres.
- All the wheat grown in Kansas in a single year would fit in a train stretching from western Kansas to the Atlantic ocean.

Corn:

- Corn is a type of grass and the number of rows on an ear is always an even number.
- The average ear of corn has sixteen rows and a total of 800 kernels.
- Corn silk must be pollinated for corn to grow and there is one strand of silk for each kernel of corn.
- Corn is grown on every continent except Antarctica.
- Corn was first grown by Native Americans more than 7000 years ago in the country that is now Mexico.
- The first windmills that are recorded were used in present-day Iran for grinding corn.
- Corn is produced in greater volume than any other grain in the world; about 800 million tons of corn are produced annually.

Rice:

- Rice is a type of grass that looks similar to a common weed.
- Rice grows in areas with heavy rainfall and flooding or in areas well-irrigated.
- The Chinese word for “meal” translates as “eat rice”.
- More than six billion people around the world eat rice.
- More than 20 billion pounds of rice is grown in the U.S. each year by farmers in Arkansas, California, Louisiana, Mississippi, Texas and Missouri.
- Rice has been produced in the United States for more than 300 years.

Oats:

- Oats are a type of grass grown mainly in temperate climates.
- Wild oats can be traced back to Europe where it grew as a weed.
- As horses were used as draft animals, oats were grown as feed.
- Settlers in this country brought oats from Europe.
- George Washington tended several hundred acres of oats at his Mount Vernon farm.
- Oatmeal became popular during the Civil War.

Health Benefits of Whole Grains:

- Consuming whole grains lowers the risk of chronic diseases such as stroke, Type 2 diabetes and heart disease.
- Whole grains are more filling assisting with maintenance of a healthy body weight.
- Whole grains reduce the risk of colon cancer.
- Whole grains reduce the risk of gum disease and tooth loss.

Review Finding Whole Grains Handout

Keep Moving Activity – Pantomime Making Whole Grain Rolls

- Ask: How many of you have made homemade dinner rolls in the past? How often did you make homemade dinner rolls?
- Say: Today we are stepping back into the past and acting out making whole grain rolls to keep hands arms and legs moving. You may stand to play-act making rolls or stay seated.
- Actions:
 - Measuring - Pretend to pour several ingredients into a bowl.
 - Mixing - Use one arm to pretend stir – then use the other arm to pretend stir.
 - Proofing - Raise both arms in the air to simulate rising dough
 - Pinching and Rolling – use both hands to pretend to pinch off pieces of dough and roll them into balls.
 - Proofing – Raise arms in the air to simulate proofing rolls.
 - Baking – Pretend to open the oven door and place the pan of rolls on the rack.
 - Cooking – Pretend to remove the rolls from the oven and wave arms over the pan to cool the rolls.
- Say: Thank you for participating in our roll-baking, play-acting, activity.

Hands-On Activity (optional)

- Provide each participant with assorted whole grain pasta shapes, glue and an 8x11 piece of poster board.
- Encourage participants to glue pieces of pasta to the board to create pasta-art.

Taste It Try It Activity:

- Provide each participant with a small bowl of yogurt.
- Provide each participant with choices of whole grain dry cereals to mix with the yogurt.

Finding Whole Grains

What are Whole Grains?

Whole grains are foods such as whole wheat, brown rice, whole grain corn, and oatmeal. Whole grains contain the entire grain kernel. Refined grains such as enriched wheat flour and white rice have had the bran and germ removed. This process also removes much of the B vitamins, iron, and dietary fiber.

What is a Whole Grain Rich Food?

A Whole Grain Rich Food must contain at least 50% of grains by weight from whole grains. There are three ways to tell if a grain product is whole grain rich.

1. Ingredient Label: If the first ingredient listed on the ingredient label is “whole grain” or “whole wheat” the product is whole grain rich.

INGREDIENTS: **WHOLE GRAIN WHEAT**, WHEAT BRAN, HIGH FRUCTOSE CORN SYRUP, SALT, MALT FLAVORING.

2. The package contains a Whole Grain Stamp from the Whole Grains Council.



3. The package contains an FDA-Authorized Health Claim.

Diets rich in whole grain foods and other plant foods, and low in total fat, saturated fat and cholesterol may reduce the risks of heart disease and certain cancers.

Whole Grain and Whole Grain Rich Foods Include:

- Whole grain bread, pancakes and waffles
- Oatmeal
- Brown rice and instant brown rice
- Whole grain pasta
- Whole grain cold cereals
- Whole wheat tortillas
- Corn tortillas

Whole Grain Breakfast Foods:

- Brown rice or instant brown rice for a hot cereal.
- Oatmeal or instant oatmeal
- Toast made from whole wheat bread or whole grain bread
- Whole grain English muffins or waffles
- Whole grain cold cereal

Whole Grain Snack Options:

- Whole grain cereal mixed with yogurt
- Assorted whole grain cereals with dried fruit and nuts as trail mix
- Whole grain crackers with low fat cheese
- Cinnamon whole grain toast