PILOT & LIGHT Anywhere

Food Education Standard #6: We can make positive and informed food choices.

The Whole Truth about Whole Grains

Grade Levels & Subjects: Grades 3 - 5 English Language Arts

Learning + Food Objectives:

Students will learn how to make informed decisions about how to incorporate whole grains into their diet and learn about whole grains and their benefits.

Common Core Standards: Common Core English Language Arts

Discuss and present persuasive information about the benefits of whole grains

CCSS.ELA-LITERACY.RI.4.7

Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

CCSS.ELA-LITERACY.SL.4.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.





MATERIALS NEEDED

- Pilot Light Video: "Whole Grains Salad" by Grace Chang <u>https://vimeo.com/592764972</u>
- Student Worksheet (Attached below)

CLASSROOM PROCEDURE

INTRODUCTION (10min)

- 1. Direct students' attention to the Whole Grains Bell Ringer activity on the student worksheet. Tell students to use the table provided to respond to the prompts:
 - a. Which of the grains in this list have you eaten before?
 - b. How did you eat it? How was it prepared?
- 2. Instruct students to turn to an elbow partner and share their responses before transitioning to the first instructional activity.

INSTRUCTION (40-60 minutes)

- 1. Explain that today's lesson will explain what whole grains are, how we eat them and the benefits whole grain has for our bodies.
- 2. Begin by reading facts about whole grains (options included in additional resources). Below are options/suggestions for important information to highlight with students prior to getting into the group work:
 - a. All grains start life as whole grains.
 - b. Whole grains are the entire seed of a plant. This seed (or "kernel") is made up of three edible parts (the bran, the germ, and the endosperm) protected by an inedible exterior (husk) that protects the kernel from by sunlight, pests, water, and disease
 - i. The endosperm is the middle and largest part of the grain. It is mostly starch.
 - ii. The bran is the outer layer made of fiber and contains lots of B vitamins and minerals.
 - iii. The germ is nutrient packed and full of B vitamins, Vitamin E, phytochemicals, and healthy fats
 - c. Foods made from grains include breads, pasta, breakfast cereals, muesli, oatmeal, tortillas, pastries, and cookies.
 - d. When the bran and germ layers of a grain are stripped away (to make them last longer or to improve the taste), it is then called a refined grain. Refined grains are foods like white rice, white flour
 - e. Some grains contain gluten. Gluten is a type of protein found in wheat, barley, and rye.
- 3. Assign students to small groups. Then, tell groups to respond to the prompts in the **Whole Grain Facts** section of the student worksheet based on the facts in the table.
 - a. Grains give our body longer lasting energy because they are digested more slowly.
 - b. Grains help us feel full for longer after we eat
 - c. Grains help our hearts stay strong
 - d. Grains have antioxidants (to help prevent disease).
 - e. Grains are high in fiber (to help our digestion and to keep our good bacteria healthy).
 - f. Foods made from grains include breads, pasta, breakfast cereals, muesli, oatmeal, tortillas, pastries and cookies
- 4. Bring the class back together to watch the Whole Grains Salad video.
- 5. Give students time to create their own version of the whole grains salad.
- 6. Share out responses to the questions as a class.

CLOSING (5 minutes teacher discretion)

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- 1. Ask students to respond to the following exit question:
 - a. Which whole grain are you willing to add to your diet? What is one way you can incorporate it?
- 2. Share out if time allows.

ADDITIONAL RESOURCES

- "Whole Grains vs. Refined Grains" by KSPS PBS <u>https://www.ksps.org/community/ksps-fitkids/eat/mindful-eating/</u>
- "Whole Grains 101" by Whole Grains Council <u>https://wholegrainscouncil.org/whole-grains-101</u>

RECIPE FROM VIDEO

Video: Whole Grains Salad

Below is the recipe from the video in this lesson. Pilot Light Anywhere lessons are designed to be able to be delivered from a remote setting; however, this recipe can be demoed by the teacher virtually/in person, sent home to families, or used for reference.

Recipe Name

Serves: 1-2 people

Ingredients:

- Red or French breakfast radishes and their leaves
- Farro or any whole grain of your choosing
- Olive oil
- Apple Cider Vinegar or any kind of vinegar
- Oregano or another herb of your choosing
- Cayenne pepper
- Salt
- Pepper
- Fresh garlic
- Water (for boiling)
- Chopped Almonds or other nuts
- Olives
- Cheese

Materials:

- Plate and fork
- Salad or Large Mixing Bowl
- Salad utensils or big spoon
- Saucepan

Preparation:

- 1. Build your dressing starting with olive oil.
- 2. Then, add apple cider vinegar, oregano, cayenne pepper, salt, pepper, and fresh garlic.
- 3. Boil the farro in water as you would for rice or oatmeal.
- 4. For a salad, put a layer of radish leaves in a bowl. Then, add a layer of cooked farro.
- 5. Then, add sliced almonds, chopped olives, chopped radishes and cheese.
- 6. Mix and serve.

The student worksheet below can be printed or copied onto any online learning platform.

The Whole Truth About Whole Grains

Whole Grains Bell Ringer

Directions: Answer the two prompts below the table. Be prepared to share your response with a partner.

| Whole grains | | |
|----------------|--------------|--|
| Buckwheat | Brown rice | |
| Barley | Yellow rice | |
| Corn | Rye | |
| Whole cornmeal | Sorghum | |
| Popcorn | Wheatberries | |
| Quinoa | Wild rice | |
| Oats | Amaranth | |
| Millet | Teff | |
| | | |
| | | |

| Which of the grains in this list have you eaten | |
|---|--|
| before? | |
| How did you eat it/how was it prepared? | |
| | |
| | |
| | |

Whole Grains Facts

Directions: Look at the list of whole grains statements with your group. **Choose 1 fact that is your group thinks is the most important or most persuasive reason to eat more whole grains**. One member of your group should be prepared to share the group's response with the class.

| Group Member's Names | |
|---|--|
| Grains give our body longer lasting energy because they are digested more slowly. | |
| Grains help us feel full for longer after we eat. | |
| 3. Grains help our hearts stay strong. | |
| 4. Grains have antioxidants to help prevent disease. | |
| Grains are high in fiber to help our digestion and to keep our good bacteria healthy. | |

Why did you choose this statement? What made is more important/persuasive than the others?

Whole Grains Salad Video Response

Directions: After watching the Whole Grains Salad video, you will use the ingredient table to complete the activity below. Use the chart to help you fill-in-the-blanks of the sentence starters. Then, discuss and write your responses to each prompt in the spaces provided.

| Whole grain | Fruits and vegetables | Protein |
|---|---|---|
| Brown rice, quinoa, wheat berries, barley | Vegetables: Lettuce, carrots, celery, onions, radishes, turnips, potatoes, green beans, lima beans, cabbage Fruits: Tomatoes, cucumbers, apples, peaches, cherries, pears, grapes, orange slices, dried cranberries, raisins | Nuts/Seeds: Almonds, walnuts, pecans, sunflower seeds, Beans, chickpeas, black beans, kidney beans, navy beans, Meats: roasted chicken, fish, shrimp, beef Dairy: different cheeses, yogurt, Soy: tofu, tempeh Eggs |

| In the Whole Grains Salad video, the chef used (the whole grain she used), (fruits/vegetables that were added) andfor protein. | |
|--|--|
| If I were going to make a Whole Grains Salad, I would use (whole grain), (fruits or vegetables) and (protein). | |
| How did you choose your ingredients for your Whole Grains Salad recipe above? | |

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Closing: Whole Grain Exit Prompt

Directions: On your own, respond to the exit questions in the space provided.

Which whole grain are you willing to add to your diet? What is one way you can incorporate it?