



**Dear Teacher:**

Today's lesson is "Refueling with Whole Grains." Your GrowingGreat Docent will lead the students through a brief lesson on what makes a grain or flour "whole" and why eating them is so important. The children will then investigate grains, first through a worksheet activity then by actually milling whole grains. All students will receive a "Grill Me About" handout to take home to their parents or it will be sent home via email.

Your packet includes:

- An **outline** of the lesson for you to follow
- Optional **enrichment activities** and recommended reading you may offer to the students as extra credit
- A **survey** for your feedback, which you can return to \_\_\_\_\_  
\_\_\_\_\_

We hope you and your students enjoy the lessons this year.

Sincerely,

# LESSON OUTLINE

## Lesson #4: Refueling with Whole Grains

**Lesson Objective:** Students will identify what makes a grain or flour “whole” and will know why eating whole grains more often than processed grains is a higher-quality choice.

### Classroom Lesson Outline:

1. **Review** from lesson #3, fats (2 minutes)
  - a. Identify what beneficial fats do for our bodies
  - b. Discuss what new, higher-quality fats the kids are now eating
2. **Introduction** (2 minutes)
  - a. Lesson today is about whole grains, a fuel type called carbohydrates
3. **Main concepts:** whole grain flour versus white flour (25 minutes)
  - a. What is a whole grain?
  - b. Definition of processed
  - c. Why we want to eat whole grains more often than highly-processed grains
4. **Activity:**
  - a. students discover different types of whole grains
  - b. Students “process” whole grains
5. **Review** (2 minutes)
6. **Optional food sample** (5 minutes)



### **Recommended Reading** (Provided in training packet)

- The Carbohydrate Controversy by Daryn Eller, *Vegetarian Times*
- The Whole Truth About Whole Grains by Sally Squires

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### California State Standards met by grade

#### 3rd grade:

Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations.

- Students will:

Collect data in an investigation and analyze those data to develop a logical conclusion.

#### 4th grade:

Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations.

- Students will:

Follow a set of written instructions for a scientific investigation.

#### 5th grade

Plants and animals have structures for respiration, digestion, waste disposal, and transport of materials.

As a basis for understanding this concept:

- Students know that plant and animal cells break down sugar to obtain energy, a process resulting in carbon dioxide (CO<sub>2</sub>) and water (respiration).



## Enrichment Activities and Recommended Reading

### **Lesson #4: Refueling with Whole Grains**

#### **Creative writing topics:**

1. Write a 5-6 sentence paragraph on why it is important to include whole grains in your diet everyday. Include which foods you might choose to eat. Try to include 3 different types of grains.
  
2. Foods that contain a good source of whole grains list “whole” as the first ingredient. For example, a bread or cracker’s ingredient may list “whole wheat” or whole rye” as the first ingredient. Sometimes a label claims to be a good source of whole grains but the “whole” grain is NOT listed as the first ingredient.
  - a. Find an example of a food with the whole grain listed as the first ingredient
  - b. Find an example of a food that says it is a good source or contains whole grains but they are listed far down in the ingredientsCompare and contrast these 2 foods. Which one is the higher quality choice?
  
3. Write a story about the journey of a grain from the farm to the store. (For example: “Grettel the Grain goes to Market”)



#### **Recommended reading:**

1. Bread Is For Eating, *David and Phillis Gershator*
  
2. Everybody Bakes Bread, *Norah Dooley*