

2ND GRADE

LESSON: Whole Grains and Fiber

SC STANDARD: 2.ATO.2



It's your world.

WHY IS IT IMPORTANT TO BE HEALTHY?

OBJECTIVES:

- Teach students about the types of whole grains (corn, rice, oats, and wheat)
- Relate fiber back to whole grains and explain what fiber is and how it is good for the body
- Understand which foods have fiber versus those that do not

LET'S GET STARTED

- Ask the students if they know what a whole grain is and to name some examples
- Talk about the four main types of whole grains, and how they all have fiber in common
- Discuss what fiber is and its benefits, as well as other examples of fiber rich foods using the "Boss' Fiber Rich Foods" handout

ACTIVITY (15 MINUTES):

- Using addition and subtraction, the kids will design and draw a high fiber lunch that equals 20 grams of fiber, getting some of their examples from the "High Fiber Foods" list provided.

WRAPPING UP (5 MINUTES):

- Ask if anyone can remember the four main whole grains and why fiber is important
- Hand out Boss' Backpack Bulletin with the goal of the week on it

SC STANDARDS:

- 2.ATO.2 Demonstrate fluency with addition and related subtraction facts through 20.

MATERIALS:

- Whole grains sheet
- Boss' Fiber Rich Foods sheet
- Design and Draw a High Fiber Lunch handout
- Boss' Backpack Bulletin
- Pencils

LET'S GET STARTED!

- Whole grains and fiber are this week's topic! Start off by asking the kids if they know what a whole grain is and some examples.
- Using the Whole Grains sheet provided, show the kids the four main types of whole grains, which include corn, rice, oats, and wheat. Ask if anyone has ever seen these types of plants or eaten any of the foods that come from the four whole grains.

DIALOGUE BOX

- Whole grains are plant foods made from grains. Four main types of whole grains are corn, rice, oats, and wheat.
- Before grains can be eaten, they have to be processed, which is changing the grain from its natural state to something new. If the grains are processed in a bad way, then they are not very healthy; for example, processing wheat into white flour to make white bread or white tortillas. If they are processed in a good way that keeps all the vitamins and minerals, like in whole wheat bread or pasta, then it is still very healthy!
- Remember, whole wheat foods are GO foods, and processed grains, like white bread and white rice, are SLOW foods.

- Once whole grains have been explained, ask the students if they have any questions about whole grains.
- Tell students that all whole grains have something important in common; they all have something called Fiber. Ask if anyone knows what fiber is or what it does for the body.
- Explain what fiber is and some of the health benefits it has for the body, along with other fun facts provided.

DIALOGUE BOX

- Fiber is something in certain foods that helps cleanse the body where food passes through. It only comes from plant foods and never comes from anything animal based, such as meat, cheese, milk, or yogurt.
- You all ideally need about 25-28 grams of fiber per day through the foods you eat.
- The more a food looks like it did when it was in nature, the more fiber it has than if it had been processed. For example, an apple, which can be found in nature, has more fiber than applesauce or apple juice, which cannot be found in nature.
- Can anyone think of any more ideas of foods in nature with more fiber in them than after they have been processed?
- Fiber can be found in grains, fruits, vegetables, and also beans! Beans are a high fiber food, which means they have a lot of fiber in them!



ACTIVITY

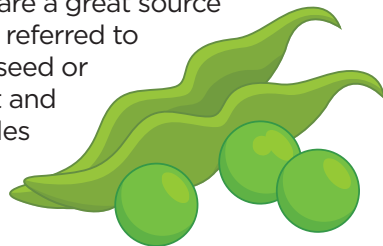
- The activity for this lesson is going to focus on creating high fiber meals; in this case, it will be lunch.
- Each student will work individually on their own work sheet to create a fiber rich lunch using the High-Fiber Foods list that will tell them how much fiber is in some of their favorite foods.
- Hand out Boss' Fiber Rich Foods sheet that gives visual examples of different foods that have a lot of fiber in them. Each student should get one of these sheets, unless they are in groups, which in that case, each group can share one sheet.
- When all the papers and pencils are handed out, begin explaining the activity.

DIALOGUE BOX

- This activity is going to test how well you all can design a fiber rich meal, as well as your math skills.
 - I will give you all a blank lunch sheet where you will think of a meal that has a lot of fiber, and then draw a picture of that meal.
 - You will also write out the amount of fiber in each food or ingredient you choose, and add up those numbers as you go to equal 20 grams of fiber.
 - If you have a hard time thinking of some fiber rich foods, I have a handout that will have some foods on it with the amount of fiber written beside it.
 - Does anyone have any questions about the activity?
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- Once the students have finished designing and drawing their fiber rich lunch, go around the room and ask if anyone would like to share the lunches they designed.
 - If there is time, allow students to design and draw out another meal.

BOSS' FUN FACTS

As mentioned earlier, beans are a great source of fiber, but they can also be referred to as "legumes." A legume is a seed or fruit that comes from a plant and can be used as food. Examples of legumes are peas, beans, lentils, and even peanuts.



GLUTEN FREE

If a student happens to be gluten free, remind them that just because they cannot have wheat, they can still eat some of the other whole grains, like corn, rice, and oats, if gluten has not been added during the processing period!

WRAPPING UP

- Ask students if they have any last questions on the lesson about whole grains and fiber.
- Remind them briefly of the four main types of grains that we discussed at the beginning, and then recap what fiber is with a couple benefits.

DIALOGUE BOX

- The four main types of whole grains are corn, rice, oats, and wheat, and all four of these grains have one thing in common: fiber.
 - If whole grains are processed a certain way that turns them in to white grains, then those foods aren't as healthy.
 - If you remember correctly, fiber comes from plant foods only, and helps clean out the parts of the body where food passes through.
 - Beans, fruits and vegetables are three other great sources of fiber; eating these foods is an easy way to reach your daily goal of 25-28 grams of fiber per day.
 - And remember, the more the food looks like it looked in nature, the more fiber it contains!
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- Hand out Boss' Backpack Bulletin with the weekly goal on it of eating more whole grains and foods with fiber.
 - This handout is going to be a quick recap of several things that were talked about during the lesson, as well as the weekly goal.

DIALOGUE BOX

- Boss' Backpack Bulletin has a list of fiber rich foods as well as the four whole grains (corn, rice, oats, and wheat) we talked about.
- There are also some examples of foods that those four grains can be found in.
- This week's goal is to try and eat more whole grains and foods with fiber in them.

ADDITIONAL ACTIVITY

Showing the students how to make air-popped popcorn in the microwave can be another activity that will teach them a healthier alternative to the already packaged popcorn.

Pour some plain popcorn kernels, which can be found in a plastic container near the other popcorn items at the grocery store, in to a brown paper bag. Fold the bag down one time, and put in the microwave until all the kernels start popping. It will probably take about 2:30-3:00 minutes.

If you bring the kernels and the already made popcorn in to class for the lesson, show them what a plain popcorn kernel looks like and explain that it is a whole grain. Allow them to try the popcorn if they would like to.

WHOLE GRAINS

CORN



WHOLE GRAIN FOODS:

- Corn on the Cobb
- Corn Tortilla Chips
- Popcorn
- Corn Tortilla

RICE



- Brown Rice
- White Rice
- Rice Cakes

OATS



- Oatmeal (Old Fashioned, Quick, and Steel Cut)

WHEAT



- Wheat Bread, Bagels, and Wraps
- Whole Wheat Pasta
- Wheat Crackers
- Whole Wheat Cereal
- Wheat Flour

DESIGN AND DRAW YOUR OWN HIGH FIBER LUNCH

Add up the grams of fiber in each of your foods and try to get them to equal around 20 grams. Use Boss' High Fiber Foods hand out to help with some ideas of foods that have a lot of fiber in them.

Total Grams of Fiber = _____



BOSS' HIGH FIBER FOODS

FRUITS



Pear = 5.1 grams



Apple = 4.4 grams



Raspberries = 8 grams per cup



Banana = 3.1 grams



Blueberries = 3.6 grams per cup



Pineapple = 13 grams



Strawberries = 3 grams per cup

GRAINS



Plain Oatmeal = 4 grams per 1/2 cup



Whole Wheat Pasta = 6 grams per serving



Corn = 3 grams



Whole Wheat Bread = 2.1 grams per slice



Brown Rice = 3.5 grams per cup



Air Popped Popcorn = 1.2 grams per cup

VEGETABLES



Broccoli = 2.4 grams per cup



Carrots = 4.8 grams per cup



Brussels Sprouts = 6.4 grams per cup



Potato = 4.4 grams per cup



Spinach = 0.7 grams per cup



Asparagus = 2.8 grams per cup



Artichoke = 10 grams per cup

Name: _____ Date: _____

BOSS' BACKPACK BULLETIN

Your goal for this week is to try and eat more whole grains and high fiber foods, like fruits and vegetables. High fiber foods have lots of fiber in them that help clean out the parts of your body that food travels through! This keeps you strong and healthy!

- You need about 25 - 28 grams of fiber per day!
- The more food looks like it did in nature, the more fiber it has! Remember, an apple has more fiber than apple sauce... you cannot find apple sauce in nature!
- And don't forget about your beans! They are also a great way to get fiber!

Some of the whole grains you tried this week:

Some of the high fiber fruits you tried this week:

Some of the high fiber vegetables you tried this week:

