



the
Super Crew

Whole-Grain Fruit Bars

Taste All the Colors with the Super Crew®!

Grades: K-5

Designed by:

SuperKids Nutrition Inc. in partnership with the American Institute for Cancer Research.

Time Allotted for the Lesson:

Approximately 45 minutes

Instructional Objectives:

Nutrition Information:

- ✓ Students will state the benefits of whole grains.
- ✓ Students will learn about the components of whole grains and how they help fight against diseases like cancer.
- ✓ Students will identify the whole grains found in the whole-grain fruit bars and be able to explain why they are more beneficial than non-whole grains.
- ✓ Students will be able to state some of the super powers of featured fruit (apricot or cherries).

Self-assessment:

- ✓ Students will identify their favorite whole grains and do a self-assessment of:
 - › What percent of the grains they eat consists of whole grains?
 - › Which whole grains are their favorites?
 - › Which grains do they currently eat that could be replaced by a whole-grain option instead?

Health Behavior Change:

- ✓ Students will be able to name at least one benefit of whole grains and one benefit of apricots or cherries and understand how both whole grains and fruit can play a role in contributing to their overall health.
- ✓ Students will be able to taste a whole-grain fruit bar recipe in order to increase the likelihood of incorporating more whole grains and fruits into their diets at home.

Culinary Skills:

- ✓ Students will identify the different beneficial ingredients in the recipe and develop a taste for them.
- ✓ Students will learn that they can easily prepare items like whole-grain fruit bars at home, rather than buying them pre-made.
- ✓ Students will learn how to prepare whole-grain fruit bars

Self-efficacy/Action plan:

- ✓ Students will receive supplemental material on tracking their progress of eating more whole grains throughout the week.

Overview:

The lesson will focus on the benefits of eating whole grains primarily, with additional information about the benefits of fruit woven into the lesson. Students will discuss the different components and health benefits of whole grains to better understand how whole grains help them to grow up to be strong and healthy. Afterwards, students will have the opportunity to prepare whole-grain fruit bars. They will learn how they are full of protective phytochemicals, which the Super Crew® calls fight-o-chemicals because they fight off disease!



Preparation:

- ✓ Review equipment inventory, make sure oven is working and buy any necessary tools.
- ✓ Make copies of the handouts and recipes for the students.
- ✓ Create a grocery list.
- ✓ Purchase all ingredients about one day in advance.
- ✓ Fill out form below for organization.

Students and Site	
Age Group of Kids	K-5
Number of Kids	15
Kitchen or Classroom	Both
One-time Class	✓
Duration of Class	45 min.

✓ Check all that apply			
Nutrition Activity	✓	"Cold" Cooking	
Cooking Demo	✓	Minimal Equipment	✓
Tasting	✓	Full Kitchen	
No Cooking			

Materials/Resources Needed

- ✓ Computer and projector, to project Internet images
- ✓ Internet accessibility
- ✓ Handouts
- ✓ The whole-grain fruit bar 2-page recipe handout
- ✓ The Super Crew Color Tracker

Whole-Grain Fruit Bars: Grocery List
Ingredients <i>(serves approximately 16 children)</i>
<input type="checkbox"/> Canola oil cooking spray
<input type="checkbox"/> 1 cup quick-cooking rolled oats
<input type="checkbox"/> 1 cup whole-wheat flour
<input type="checkbox"/> 1/3 cup packed brown sugar
<input type="checkbox"/> ½ tsp. cinnamon
<input type="checkbox"/> ¼ tsp. salt
<input type="checkbox"/> ¼ tsp. baking soda
<input type="checkbox"/> 1/3 cup canola oil
<input type="checkbox"/> 5 Tbsp. apple juice, divided
<input type="checkbox"/> ½ cup apricot or cherry all-fruit preserves
<input type="checkbox"/> 1 package (7 oz.) dried apricots or dried tart cherries

Whole-Grain Fruit Bars: Equipment List
<input type="checkbox"/> 9x9 square pan
<input type="checkbox"/> Large bowl
<input type="checkbox"/> 2 small bowls
<input type="checkbox"/> Mixing spoon
<input type="checkbox"/> Oven
<input type="checkbox"/> Knife
<input type="checkbox"/> Plates
<input type="checkbox"/> Napkins



Instructional Procedures

Engage your audience!

1. Begin the lesson by saying that we are going to make whole-grain fruit bars and introduce the Super Crew Kids.

- a. Introduce Super Crew using the website: <http://www.superkidsnutrition.com/sckids/index.php>. Click on each character to discover their super power from healthy foods.
- The Super Crew gets their super powers from their favorite healthy foods.
 - Kira especially likes eating lots of whole grains because they can make you healthy and give you a lot of energy!
 - Whole grains have lots of nutrition and fiber! A whole-grain food must have 3 parts: the bran, the endosperm and the germ. Whole grains keep you healthy, help you look and feel your best, and prevent cancer and heart disease.

2. Briefly discuss the ingredients in the recipe. Explain that what students eat now impacts their health when they grow older. Lots of the ingredients in these whole-grain fruit bars have super powers that help them grow strong and healthy. Whole grains help you think your best and give you energy that lasts.

- Discuss the super powers of whole grains, like whole-wheat flour and oats: both are good sources of protein and fiber. Fiber is good for your digestive system (keep you from getting constipated), helps protect against colon cancer and keeps your cholesterol from clogging your arteries. Questions that may arise:
 - *What is cholesterol?*
Answer: it's a waxy, fat-like substance that's found in all cells of the body.
 - *Why do we need cholesterol?*
Answer: your body needs some cholesterol to make hormones, vitamin D and some substances that help you digest foods. Your body makes all the cholesterol it needs; however, cholesterol can also be found in some of the foods that we eat. Because whole grains come from plants, they have no cholesterol.
 - *Why is high cholesterol bad?*
Answer: People who have high cholesterol levels have a greater chance of getting heart disease. And we want to avoid that! So, this is why whole grains, and oats in particular, are especially good.
- Discuss the super powers of orange foods like apricots: apricots are a wonderful source of powerful fight-o-chemicals called carotenoids! They help your eyes and skin stay healthy. They are also full of potassium, which helps your heart beat like a drum.
- Discuss the super powers of spices, like cinnamon. Cinnamon is one of the most antioxidant-rich spices on the planet! Antioxidants are good because they neutralize free radicals (bad guys) and protect our cells and body from damage that can lead to cancer.
- Discuss the **super powers of plant foods** in general (repeat that oats, whole-wheat flour and apricots are all plants foods): plant foods like whole grains protect our DNA. DNA is a list of instructions that tells our bodies what to do. We want to make sure it tells our bodies to do the right things. By protecting our DNA, we help protect our eyesight and memory. We also slow down aging and prevent cancer, heart disease and diabetes. But most of all, these foods help keep us looking and feeling great!

3. Aim to make at least half of all your servings of grains to be whole grains.

- Instructor will describe the importance of eating a diet rich in whole grains.
- All grains from nature start as whole grains – meaning the three layers, the bran, endosperm and germ are all intact. A grain is no longer whole when parts of these layers are removed in processing, as with white rice for example. By removing layers of the grain food companies are also removing valuable nutrition – like fiber, vitamins, minerals and what the Super Crew calls fight-o-chemicals.
- Whole grains such as whole wheat, brown rice, wild rice, oats, corn, quinoa, spelt, kamut and millet are all excellent sources of 100% whole grains. Try to make half or more of the grains you eat whole grains. In addition to being full of flavor and fiber, they also fuel the body, are great for your heart and are great fuel for the brain. Whole grains are also excellent for preventing cancer and heart disease.
- Review how many servings of whole grains everyone should aim to eat per day.

Child's age	Grain recommended amount
4-8 year old boy or girls	5 oz. equivalents
9-13 girls	5 oz. equivalents
9-13 boys	6 oz. equivalents
*1 oz. equivalent of grains: 1 whole-grain mini bagel, 1/2 cup of cooked brown rice, 1/2 cup cooked oatmeal, 1/2 cup of cooked whole grain pasta, or 1 regular slice of whole-grain bread (for ready-to-eat whole-grain breakfast cereals, see serving size on package label).	

4. Super Crew Tracker (Handout: The Super Crew Whole-Grain Food Tracker)

- Use the Super Crew Color Tracker activity to have students track the number of whole-grain foods they eat over the course of 1 week. Then encourage them to continue the tracker for the rest of the month.

How to Be a Whole-Grain Fruit Bar Expert

Instructor will introduce recipe and help children prepare a healthy snack.

Before Cooking:

1. Explain: "Today we are going to make a recipe that has lots of whole grains and fruit, both of which are super-power foods!"
2. Introduce Whole-Grain Fruit Bars. Review and discuss each ingredient in the bars:
 - › Oats
 - › Apricots
 - › Cinnamon
 - › Whole-wheat flour
 - › Plant foods
3. Review hand washing:
 - › **Good hand washing habits** are your first line of defense against the spread of many illnesses, not just the common cold.
 - › Hand washing can prevent the transfer of germs and foodborne illnesses.
 - › Scrub hands with warm, soapy water for at least 15 seconds (according to the CDC).
 - › Don't forget to wash your hands before, during and after cooking.

Whole-Grain Fruit Bars Recipe

Ingredients:

- ✓ Canola oil cooking spray
- ✓ 1 cup quick-cooking **rolled oats**
- ✓ 1 cup **whole-wheat flour**
- ✓ 1/3 cup packed brown sugar
- ✓ 1/2 tsp. **cinnamon**
- ✓ 1/4 tsp. salt
- ✓ 1/4 tsp. baking soda
- ✓ 1/3 cup canola oil
- ✓ 5 Tbsp. apple juice, divided
- ✓ 1/2 cup apricot jam or cherry jam, fruit-sweetened
- ✓ 1 package (7 oz.) **dried apricots** or **dried tart cherries**, chopped



Directions:

1. Preheat oven to 350 degrees.
2. Spray 9 x 9-inch baking pan with cooking spray.
3. In large bowl, mix together oats, flour, sugar, cinnamon, salt and baking soda until well combined.
4. In small bowl, whisk oil and 3 tablespoons juice together and pour over oat mixture, blending well until moist and crumbly. Reserve 3/4 cup of mixture for topping.
5. Press the remainder evenly into prepared pan.
6. In small bowl, blend jam with remaining 2 tablespoons apple juice.
7. Stir in dried fruit.
8. Spread evenly over crust.
9. Sprinkle reserved crumb mixture over fruit, lightly pressing down with fingers.
10. Bake 35 minutes or until golden.
11. Cool in pan on wire rack.
12. Cut into bars.

Makes 16 bars.

Nutrition analysis for apricot option. Per serving (1 bar): 162 calories, 5 g total fat (<1 saturated fat), 28 g carbohydrate, 2 g protein, 2 g dietary fiber, 63 mg sodium.

Goal Activity

Assessment:

Use the Super Crew Whole-Grain Tracker Activity to see how many whole grains you consume over the course of 1 week.

Visit www.superkidsnutrition.com for more fun activities with the Super Crew.