## LESSON PLAN B <br> Food Fact Fun

Time Frame: Two to three 40-minute sessions

## Learning Objectives:

- Identify the importance of nutrients and learn how they help make us healthy.
- Learn about the different nutrients found in different types of fruits and vegetables.
- Identify a range of different types of fruits and vegetables in each color of the rainbow.
- Understand the importance of a balanced diet.


## Materials for Lesson Plan:

- Flip chart with paper (or whiteboard)
- Black marker and scissors (for teacher)
- Computer with Internet access (optional)
- Visual references of fruits and vegetables (from newspaper supermarket circulars, library books, etc.)
- Pipe cleaners in rainbow colors (optional activity): Red, orange, yellow, green, blue, purple
- Fruits and vegetables (see individual activity lists)
- Cutting board
- Kitchen knife (for teacher)
- Bowls or plates
- Paper and pencils for note-taking
- Toothpicks for food sculptures
- Copies of "10 Questions Game Cards" page

Part A. Rainbow Foods Challenge

Time Frame: 40 minutes
Materials for Activity:

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## Discussion: Rainbow Connections

Q: Which two food groups should you try to eat more of every day?
A: Fruits and vegetables
Fruits and vegetables are a healthy way to get the nutrients and energy your body needs to feel and look good.
Q: How much room should fruit and vegetables take up on your plate?
A: Half your plate!
Q: Different fruits and vegetables have different types of nutrients (like vitamins, minerals and fiber). What's a good way to get a good balance of those nutrients?
A: By "eating a rainbow" of fruits and vegetables every day!

## Make a List of Rainbow Foods

Let's make a list as a class of all the different fruits and vegetables you can think of in each color of the rainbow. [Do this on a whiteboard, blackboard or flip chart. Write the names of each color category horizontally across the paper.]

Help me out as I write the names of each color. [Red, Orange, Yellow, Green, Blue, Purple*]
*You are right if you named Indigo and Violet as the $6^{\text {th }}$ and $7^{\text {th }}$ colors of the rainbow. But for this activity, it's easier to just say Purple.

Now let's see how many we can think of for each color. Start with, "Name a fruit that's red..." Brainstorm as a class until you have 5-10 fruits/vegetables in each color category. If students are excited to name more, keep going. See this Fruit and Veggie Color List from the "More Matters" website for reference. Here are some ideas to get started:

Red strawberries or peppers; orange tangerines or sweet potatoes; green grapes or broccoli; white pears, mushrooms or onions; purple plums, cabbage or olives.

Continue your discussion with these key points:

## Fruits: All kinds count!

What kinds count? Any fruit or 100\% fruit juice counts as part of the Fruit Group. Fruits may be fresh, canned, frozen, or dried, and may be whole, cut-up, or pureed. Eating the whole fruit is better than drinking just its juice. This is because fiber is lost during the juicing process. Learn more here: www.choosemyplate.gov/fruit

## Vegetables: Who's in your group?

Veggies are divided into different subgroups - each with different types and amounts of vitamins and minerals. That's why it's important to mix things up! Learn more here: www.choosemyplate.gov/vegetables

Vegetables: [Focus on different colors rather than formal subgroups for this age group.]
Dark-green vegetables: Broccoli, kale, bok choy, and romaine lettuce
Red and orange vegetables
Variety is the spice of life! Eat a variety of:
Raw and cooked vegetables
Colors of vegetables (eat the rainbow!)

## Fun Fact:*

Which food group do you think the following food belong to: Peppers, tomatoes, squash, cucumbers and pumpkins. Vegetables? That's what most people think, but they are actually fruit! A fruit is something that contains the seeds of a plant. Have you ever scooped the pulp and seeds out of a pumpkin to carve a jack-o-lantern? The seeds are a clue. A pumpkin is a fruit, not a vegetable!

## Teacher Reference:

## * Fruits vs. Vegetables

Why does the ChooseMyPlate.gov website include tomatoes and avocados in the Vegetable Group instead of the Fruit Group?

A number of foods that are considered fruits by botanists are part of the Vegetable Group. For example, tomatoes, avocados, eggplants, cucumbers, green peppers, zucchini, butternut squash and others are classified as fruits by botanists because they are the fleshy plant part surrounding its seeds. However, for nutritional and culinary purposes, these foods are considered to be vegetables rather than fruits. The nutritional classification of foods considers not just botany, but a food's nutrient content, use in meals, and taste. The Fruit Group includes botanical fruits that are sweet and/or fart in taste - those which are usually thought of as fruits by consumers. The Vegetable Group, on the other hand, includes those botanical fruits that are not sweet or tart and are usually consumed along with other vegetables or as a vegetable.

## Activity Choice \#1: Rainbow Foods \& Friendship Bracelets

## Materials for Activity:

- Color illustration of a rainbow to display
- Pipe cleaners in rainbow colors:
- Red, orange, yellow, green, blue, purple
- Raw fruits and veggies in the 6 colors (2 types of each if possible)
- Checklist to track which students have tried which foods


## Overview:

Students help prepare and then try samples of a variety of fruits and veggies in a rainbow of colors. By playing a key role in the prep activities, they learn basic kitchen skills. While trying different foods, they expand their horizons and discover new tastes and textures.

After trying one food from 5 of the 6 colors of the rainbow, they can choose one pipe cleaner to make into a bracelet. If they choose to do another round and eat another 5 samples (from 5 of the 6 rainbow colors), they can choose a second pipe cleaner, in a second color. Then they can twist the two pipe cleaners around each other to make a bracelet.

## Instructions:

Prepare a variety of fruits and veggies in a rainbow of colors. Serving sizes should be small, as the emphasis is on trying a variety of different foods.
Make prep time a key part of this activity by getting students to help with the cleaning, sorting or chopping. Let them help in various age-appropriate ways, for instance:
Scrub vegetables like carrots with a sponge or vegetable scrubber. Wash apples and peppers.

Pour water for classmates, using small pitchers of water into cups. Chop some fruits and vegetables with a blunt knife, under teacher supervision.
Peel carrots and cucumbers with a peeler, under teacher supervision.
Wash tables with a soapy sponge before and after, wash and dry cutting boards, wash fruits and vegetables and wash everyone's hands.
Set up a table with different foods on different plates, categorized by color. Line up the plates in the order of the colors in a rainbow: red, orange, yellow, green, blue, purple.
Tell students they may try one serving of food from each plate. (Decide on the serving size based on the amount of food available. Make them small enough so that they can have seconds the next time around. For example: Two grape halves, one banana chunk, two baby carrots...
Each time they try a different food, make a check mark next to their name.
For every 6 different colors of food they try, they can get one pipe cleaner in the color of their choice to make a bracelet. Then they can have a second round, eating one food from each color group again.
When they've had one from each of the 6 colors, they get another pipe cleaner in their choice of color.
Then they can twist the two colors together to make a friendship bracelet.

## Activity Choice \#2: Rainbow Snack Stations

## Materials:

Fruits and vegetables (see below)
Cutting board
Kitchen knife (for teacher)
Bowls or plates
Paper and pencils for note-taking
Toothpicks for food sculptures
Set up some snack stations for sampling different varieties and colors of food. Keep in mind these are just samples, so there's no need to purchase large quantities of food.

## Instructions and Prep:

Have students taste different varieties of each type of food and note their observations. Older students should write notes to describe the taste of each food they try. As an extension, they may do research to identify the nutrients in each type as well.

## Pick a Pepper

Cut up strips of peppers — and ask kids to compare the taste of each different color. Which is the sweetest? Which do they like best?
Red peppers
Yellow peppers
Orange peppers
Green peppers
Purple peppers (if available)
Curious Carrots
Orange carrots
Red carrots
Purple carrots
White carrots

## Other Rainbow Foods Ideas:

Color Theme: Serve a variety of fruits and vegetables all of one color (e.g., yellow peppers, pineapple, corn, star fruit...)
Vitamin C Special: Research the best sources of this nutrient and present a multi-colored assortment.
Green Vegetables: Provide low-fat ranch dressing or dip with a selection of raw vegetables: string beans, pea pods, zucchini, broccoli, etc.

Rainbow Sculptures: Make an edible sculpture with 5 different colored foods. It can be anything you like: a food creature, a veggie monster, a banana boat, a work of art. Let your imagination run wild!

## Rainbow Song and Video

PBS Kids: Fizzy's Lunch Lab / Food Songs \& Videos
These funny videos and songs with clever lyrics will keep students engaged while learning key content. Look for the song about the Food Rainbow!

## Family Connection:

## Crunchy Rainbow Wrap

Try this tasty rainbow foods-themed recipe at home!

## Frozen Foods: Convenient and Nutritious!

Make a snack or meal recipe at home using frozen and/or canned fruits and vegetables.
Frozen foods meal planning and prep guide from EatRight.org.
Buy fruit and vegetables in loose-pack plastic bags. You'll only need to pour out what you need; then immediately return what you don't use to the freezer.
Look for frozen fruits as an option when fresh fruits are out of season. Choose frozen fruit without added sugars in the ingredients list. To help frozen fruit keep its shape, serve while it's still somewhat frozen. Frozen fruit bars make a nutritious snack, too.
Choose frozen plain vegetables or those made with low-sodium sauces.

## Canned Food Recipes

To help ease the stress of meal planning, budgeting and managing busy schedules, the Canned Food Association created the concept of "Just Add One" - one canned ingredient, that is - to make healthier, tastier dishes faster. See the Just Add One recipes here.

## Part B. Fun Food Facts

Time Frame: 40 minutes

Key points to remember about food choices and meal planning for $\mathrm{K}-2$ :

## Strive for Five.

Eat a mix of foods across all food groups. Choose foods and beverages from all 5 food groups - vegetables, fruits, grains, dairy, and proteins - not just 1 or 2 of them.

## Mix it up!

Eat a mix of foods within each food group. For example, each week try eating several types of vegetables. How many colors can you eat in one week? Switch up the protein foods you eat, too - for example, if you like to eat a peanut
butter sandwich every day, try something new - like a tuna sandwich or hummus with whole-grain crackers and carrots or celery.

## Eat a Rainbow!

## Food Study Prep

Use the following talking points to teach students some key facts about nutrition. Tell them they need to study before playing the 10 Questions Game in the next session!

Q: Which two food groups should you try to eat more of every day?
A: Fruits and vegetables
Fruits and vegetables are a healthy way to get the nutrients and energy your body needs to feel and look good.
Q: Which food group is most important for building strong bones and teeth?
A: Dairy
Dairy products contain calcium, which is very important for children and teens who are still growing. The Dairy Group includes most foods made from milk, including yogurt and cheese. Calcium-fortified soy milk also counts as a dairy food.

Q: Along with soy milk, can you think of other calcium-rich foods that do not contain milk?
A: Almonds and broccoli are both good sources.
Q: Can you think of a food that belongs in two food groups?
A: Beans and peas are in both the Protein Foods and Vegetables groups.
Q: Fill in the blank: Make sure half of your grains are $\qquad$ -
A: Whole grains
Grains include any foods made from a cereal grain such as wheat, rice, barley or cornmeal. At least half of all your grain servings should come from whole-grain foods, as they provide more fiber and nutrients.

Q: Meat and chicken are part of the Protein Foods Group. Name another kind of protein that swims in the rivers or the sea.
A: Fish
Protein builds bones, muscles, blood and other body parts. Protein-rich foods keep us feeling full. The Protein Foods Group includes more than just meat, poultry and fish. Other foods like eggs, beans, peas, soy products, nuts and seeds all fall into the protein food group.

Q: Name a kind of protein food that grows on trees or in the ground.
A: Beans, peas, soybeans, peanut butter, nuts and seeds.
Q: Name a type of food that you can cook with, spread on bread, drizzle on salads, or fry potatoes with.
A: Oils and fats. Examples are salad dressing, butter, margarine or liquid oil that comes in a bottle. Try to keep this type of food to 4 teaspoons a day.

Q: Doctors say we should all try to eat more foods rich in potassium. Potassium is a nutrient that's important for our brain, our heart and our muscles. Do you know of any foods that are high in potassium?
Clue: I'm thinking of a fruit that monkeys like to eat. (bananas)
Clue: I'm thinking of a melon that's orange. (cantaloupe)
Clue: I'm thinking of a vegetable that's sometimes mashed. (potatoes and sweet potatoes)
Clue: I'm thinking of a green "superfood" vegetable that's also high in calcium and vitamin C (broccoli)
Clue: I'm thinking of a dried fruit that starts out as a grape. (raisins)
TogetherCounts.com

Q: Vitamin D is another nutrient most people don't get enough of, especially during the winter. That's why it's often called the "sunshine vitamin." Can you guess which foods contain vitamin D? A: Cheese, eggs, fortified orange juice or fortified cereal with milk are all good sources. Going outside to play for a half hour a day is also a great way to get vitamin D. The "sunshine vitamin" is good for our minds and our bodies.

## Part C. 10 Questions Game: What Am I?

Time Frame: 40 minutes
Materials for Activity:
Copies of "10 Questions Game Cards" page
Scissors (for cutting pages into squares)
In addition to reinforcing content learned thus far, this game helps develop strategic thinking and communication skills.

## Instructions:

Cut out game cards and hand one to each student, face down on their desk. Each card has the name of a food le.g., chicken, egg, milk, bread, broccoli, banana, etc.) It also lists some clues and facts.
Tell students to look at their cards but to keep the information a secret!
Offer students the opportunity to come to your desk for help with reading words or understanding content.

## How to Play:

Students take turns going to the front of the class to play the role of the food on their card.
They may do this individually or in pairs.
Classmates ask simple questions and try to guess the food type based on the answers given.
Give students ideas for possible questions to ask, such as:
Yes or No Questions:
Are you an animal?
Are you a plant?
Do you belong to the Dairy Group? (repeat for other food groups)
Are you sweet?
Are you crunchy?
Do you have seeds?
Simple Questions / One-Word Answers:
What's your main nutrient?
What do you taste like?
Are you usually eaten raw or cooked?
Where do you come from?
Are you an animal or a plant?
Are you covered in fur/feathers/scales?

## Family Connection:

Use the 10 Questions game cards in the activity above to teach and test your family members. Make more game cards yourselves, using reference sources and information learned at school.

Community Connection: Visit a local farm or farmer's market. Or ask a local farmer or farmer's market representative to visit your classroom to present examples of different types of fruits and vegetables and to explain how they're categorized into different groups (root vegetables, dark-green leafy vegetables, etc.).

## Resources:

## Fruit and Veggie Color List

Fruits \& Veggies More Matters IProduce for Better Health Foundation

## Standards Alignment | Students will:

## National Health Education Standards

Standard 1. Comprehend concepts related to health promotion and disease prevention to enhance health.
Standard 3. Demonstrate the ability to access valid information, products, and services to enhance health.
Standard 5. Demonstrate the ability to use decision-making skills to enhance health.
Standard 7. Demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

## SHAPE America, National Physical Education Standards

Standard 1. Demonstrate competency in a variety of motor skills and movement patterns.
Standard 4. Exhibit responsible personal and social behavior that respects self and others.

## Common Core Standards > English Language Arts > Speaking \& Listening

Comprehension and Collaboration:
CCSS.ELA-LITERACY.SL.1.1 - Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
CCSS.ELA-LITERACY.SL.1.1.A - Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
CCSS.ELA-LITERACY.SL.I.1.B - Build on others' talk in conversations by responding to the comments of others through multiple exchanges.
CCSS.ELA-LITERACY.SL.1.1.C - Ask questions to clear up any confusion about the topics and texts under discussion.
CCSS.ELA-LITERACY.SL.1.2 - Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
CCSS.ELA-LITERACY.SL.1. 3 - Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

## Worksheets \& Downloads:

## 10 Questions Game Cards: "What am I?"

| Food Groups: Protein Foods and Vegetables (two groups!) <br> Key nutrients include: Fiber <br> Color: Brown, red, white, black, green <br> I am a bean! | Food Group: Grains <br> Color: Brown or white Where I come from: Bakeries Key nutrients include: Fiber <br> I am bread! |
| :---: | :---: |
| Food Group: Protein Foods <br> Key nutrients include: Vitamin D <br> Color: Brown or white <br> Where I come from: Chickens <br> I am an egg! | Food Group: Vegetables <br> Color: Green <br> Key nutrients include: Vitamin C <br> Where I grow: In the ground <br> I am broccoli! |
| Food Group: Dairy <br> Key nutrients include: Calcium <br> Color: White <br> Where I come from: Cows <br> I am milk! | Food Group: Fruit Color: Yellow outside but white inside Key nutrients include: Potassium, fiber Where I grow: On trees <br> I am a banana! |
| Food Group: Protein Foods Color: Silver, grey, blue, green, striped Where I come from: Oceans or rivers I'm covered in: Scales <br> I am a fish! | Food Group: Dairy <br> Color: White <br> Key nutrients: Calcium, Protein Where I come from: Cows <br> I am yogurt! |
| Food Group: Protein Foods Color: White or brown Where I come from: Farms I'm covered in: Feathers <br> I am a chicken! | Food Group: Grains <br> Color: Brown <br> Key nutrients include: Fiber, Vitamin D Usually eaten with: Milk <br> I am cereal! |
| Food Group: Vegetables <br> Color: Orange <br> Key nutrients include: Vitamin A, Potassium <br> Where I grow: In the ground <br> I am a sweet potato! | Food Group: Fruit <br> Color: Orange <br> Key nutrients include: Vitamin C <br> Where I grow: On trees <br> I am an orange! |


[^0]:    - Flip chart with paper (or whiteboard)
    - Black marker
    - Computer with Internet access (optional)
    - Visual references of fruits and vegetables (from newspaper supermarket circulars, library books, etc.)

