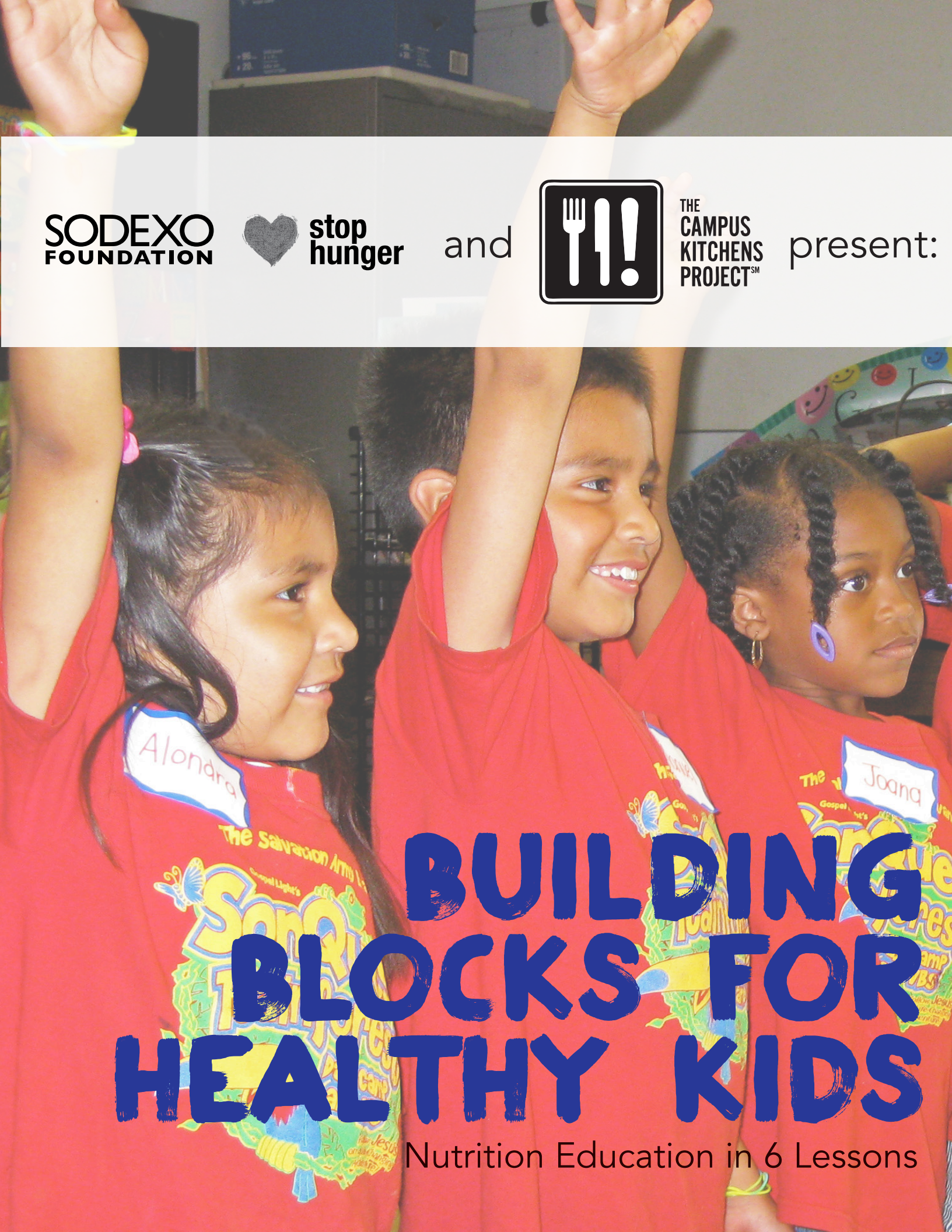
SODEXO FOUNDATION

stop hunger

and

THE CAMPUS KITCHENS PROJECT℠

present:



BUILDING BLOCKS FOR HEALTHY KIDS

Nutrition Education in 6 Lessons



ACKNOWLEDGEMENTS

The "Building Blocks for Healthy Kids" nutrition education curriculum is made possible by a partnership between The Campus Kitchens Project and Sodexo Foundation. Find this and other nutrition education plans at www.campuskitchens.org.

The Campus Kitchens Project

Founded in 2001, The Campus Kitchens Project is a national organization that empowers student volunteers to fight hunger in their community. On university and high school campuses across the country, students transform unused food from dining halls, grocery stores, restaurants, and farmers' markets into meals that are delivered to local agencies serving those in need. By taking the initiative to run a community kitchen, students develop entrepreneurial and leadership skills, along with a commitment to serve their community, that they will carry with them into future careers. Each Campus Kitchen goes beyond meals by using food as a tool to promote poverty solutions, implement garden initiatives, participate in nutrition education, and convene food policy events. To learn more about The Campus Kitchens Project, visit www.campuskitchens.org.

Sodexo Foundation

Sodexo Foundation, the charitable arm of Sodexo, Inc., works to ensure that every child in the United States, especially those most at-risk, grows up with dependable access to enough nutritious food to enable them to lead a healthy, productive life. One of the main priorities of Sodexo Foundation, and its partners, is to engage youth in the national anti-hunger movement by inspiring a new generation of passionate young leaders who will advocate for this cause among their peers. Since its inception in 1999, Sodexo Foundation has granted more than $25 million to eradicate hunger in America. Sodexo, Inc. funds all administrative costs for Sodexo Foundation to ensure that every cent raised is directed to those in need. Learn more at www.SodexoFoundation.org.

Revised March 2015



TABLE OF CONTENTS

ACKNOWLEDGEMENTS

INTRODUCTION

LESSONS
Lesson 1: What's on MyPlate
Lesson 2: Eat the Rainbow
Lesson 3: Become a Good Grains Detective
Lesson 4: Add Power to Your Plate
Lesson 5: From Seed to Plant
Lesson 6: Fitness is Fun

REFERENCES

APPENDICES
Appendix 1A: MyPlate Food Groups and MyPlate Poster
Appendix 1B: Food Group Cutouts
Appendix 1C: Evaluation Instructions
Appendix ID: Pre-Test
Appendix IE: Lesson 1 Newsletter
Appendix 3A: Eat the Rainbow Visual and Food Cutouts
Appendix 3B: Lesson 2 Newsletter
Appendix 4A: MyPlate Whole Grains Visual
Appendix 4B: Lesson 3 Newsletter
Appendix 4A: Food Group Jeopardy
Appendix 4B: Lesson 4 Newsletter
Appendix 5A: Life Cycle of a Plant
Appendix 5B: Plant Part Images
Appendix 5C: Plant Part Cutouts
Appendix 5D: Lesson 5 Newsletter
Appendix 6A: Activity Log
Appendix 6B: "Building Blocks for Healthy Kids" Completion Certificate
Appendix 6C: Post-Test
Appendix 6D: Lesson 6 Newsletter



INTRODUCTION

Discover healthy eating through a series of fun kid-friendly lessons with "Building Blocks for Healthy Kids." This six-lesson curriculum for elementary school students includes hands-on activities, educational takeaways, recipes and more! The Campus Kitchens Project and Sodexo Foundation curated this curriculum to empower children to make healthier food choices and teach them how to prepare nutritious meals and snacks at home.

It is important to introduce nutrition education early as a way to build a solid foundation for healthy children that will become healthy adults. Since 2001, The Campus Kitchens Project and Sodexo have worked together to recover food and engage students in America's fight against hunger.

We know we can't end hunger with food alone. From nutrition education classes to senior hunger outreach, from community gardens to policy events, our students delivery more than meals. The Campus Kitchens Project teaches the next generation of leaders to assess the specific need in their community and develop programs that address the underlying root causes of food insecurity. For several years, nutrition education for youth has been a focus across our network as we pioneer new ways to teach healthy eating in a way that will make a difference to the next generation.

We are honored to collaborate with Sodexo to present this innovative and effective nutrition education curriculum for youth. Sodexo is a longtime partner of The Campus Kitchens Project and continues to support the expansion of our network to new schools. Over the history of our partnership, Sodexo has invested over $1,000,000 in The Campus Kitchens Project, and it stands out in the field of corporate social responsibility for its support of local communities and investments in the fight against hunger.

This nutrition education curriculum is a powerful representation of our partnership and our commitment to address the issue of hunger in a holistic way. We sincerely hope it will be a useful resource for Campus Kitchens and other nonprofits serving youth.

– LAURA TOSCANO, DIRECTOR
THE CAMPUS KITCHENS PROJECT

LESSON 1:
WHAT'S ON MYPLATE

OBJECTIVES:

Introduce the program to the children and explain how the lessons will build off their knowledge from week to week (if applicable). Explain why healthy eating is important, and that you will be teaching basic concepts to help the student make healthy choices. Introduce the USDA MyPlate model to help them understand balanced meals, portion control and food groups. Emphasize the MyPlate principles for healthy eating: make ½ your plate fruits and vegetables; make ½ your grains whole; eat lean protein and dairy (in smaller quantities).

TIME:

One hour: 30 minutes instruction, 30 minutes activity

MATERIALS:

- paper plates - two per child ***or*** one plate and one plate print out per child
- food image cutouts [Appendix B]
- glue sticks
- celery sticks
- light cream cheese
- cran-raisins
- raisins
- almonds
- cream cheese
- plates
- napkins
- knives
- bowls
- MyPlate visuals [Appendix A]

PREPARATION:

Print out MyPlate poster visual, cut out food images for food plate activities.



This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger THE CAMPUS KITCHENS PROJECT™



BACKGROUND INFORMATION

What is MyPlate? MyPlate was developed by the USDA as a visual representation of what a healthy diet may include. The image is meant to encourage people to be thoughtful about what they include in their daily meals, taking into consideration variety and portion control. Although the image depicts a plate and glass with all five food groups, it is not necessary for every meal to include food from each food group. For instance, if fruit is not a typical part of someone's breakfast, eating fruit as a snack between meals is a great way to meet daily guidelines. The overall message of MyPlate is to include a variety of fruits and vegetables as half of your plate or diet. The other half should include lean sources of protein and grains, with at least half of your grains being whole grains. The MyPlate image also includes a glass of milk to encourage dairy consumption, but considering that about a quarter of the calories in a typical child's diet come from beverages, it is important to discuss other healthy beverage options as well.

Current daily nutrition guidelines for children. The following are estimated needs that vary depending on age, sex, activity level, height, and weight.

	4-8 years of age	9-13 years of age
Calories	1200-2000	1400-2600
Protein	4 oz	5 oz
Fruits	1-2 cups	1.5-2 cups
Vegetables	1.5-2.5 cups	2-3.5 cups
Grains	4-6 oz	5-9 oz
Dairy	2.5-3 cups	2.5-3 cups

Visualizing portion sizes. It can be challenging to look at a plate of food and determine whether the portion sizes are appropriate. To help visualize portion sizes of food, use familiar objects that are about the same size as a specific portion.

- Deck of cards: 3 oz of meat
- Four dice: 1 oz of cheese
- Ping-pong ball: 2 tbsp peanut butter
- Tennis ball: 1 cup grains, fruit, vegetables, or 1 medium piece of fruit

INTRODUCTION

Introduce the teachers. Talk about why we are here: to learn about food and how to make healthful decisions.

Introduce children. Invite the students to create name cards using a folded piece of paper. On one side have them write their name and on the other side their favorite food. Collect the cards after class and bring to all of the following classes.

Lead the children in setting classroom guidelines.

Ask the students to share what they think it means to live a healthy life.

Illustrate a plate, hiding the names of the various food groups (Appendix A). Ask children to name the different food groups and point out their position on the plate



INTRODUCTION, CONT.	**Introduce MyPlate using the poster visual.** Describe the different food groups: fruits, vegetables, protein, grains and dairy. Have students give examples of foods that make up each group. Discuss the group proportions on the plate (Appendix A). Inform students of appropriate portion sizes for each: 1-1½ c fruit, 1½-2 c vegetables, 3 oz grains and 4-5 oz protein. Help students visualize sizes of portions.. **Discussion starters:** • What's your favorite food group? • How many different food groups have you eaten today? • Have you seen the MyPlate image before? • Does your plate look like this at dinner? • What does your favorite meal look like compared to MyPlate? • Why do you think it's important to follow MyPlate?
ACTIVITY	• **Make paper plate collages.** Hand out blank paper plates to students, and scatter the food group icons in the center of each table. Ask students to assemble a plate that meets the MyPlate requirements. While students assemble their plates, the teacher should assemble one too. Review the teacher's example, then have students share what's on their plate. **Discussion starters:** 1. Did anyone end up with a food that isn't their favorite? What would you replace that food with, from the same food group? 2. What could a vegetarian put on their plate to replace meat? 3. What's missing from this meal? What kind of beverage should we have with it? **Optional:** While the students are assembling their plates, the teacher can also put together some plates that are not correctly assembled. 1. What's wrong with this plate? What food group is missing? What food group is represented twice? 2. Have students find the missing piece. Which one should I replace? **Optional:** Some food icons that we have included represent dishes that have ingredients from multiple food groups! 1. Are there any foods left in the center of the table? What food groups are they? 2. How do you place foods that have ingredients from two groups? Would you eat twice as much of them? 3. What are some other foods you eat that don't fall into just one food group? • **Make ants on a log:** Have children guess what each of the toppings are before starting and determine what food groups each ingredient belongs to. Let them make their own ants on a log by filling celery with cream cheese and topping with raisins.
WRAP UP	**Review the lesson.** Sample questions: • Who can name all of the food groups on MyPlate? • Which is the biggest food group on MyPlate? • Which group is the hardest for you to fill? **Take home:** Give each student a copy of the newsletter and take home recipe: tuna noodle casserole.

TUNA NOODLE CASSEROLE

INGREDIENTS

serves four

1 6 ounce can, drained tuna
1 cup raw whole grain or egg macaroni
1 chopped onion
1 14 ounce can of drained peas (or vegetable of choice)
1 10.5 ounce can of 98% fat free cream of mushroom soup
1 cup skim milk
6 tablespoons low-fat cheddar cheese

DIRECTIONS

1. Preheat oven to 350 degrees.

2. Spray 8 x 8 pan with non stick spray.

3. In a bowl, mix tuna, noodles, onions, peas, soup and milk.

4. Pour into pan and make sure noodles are covered with sauce. Sprinkle with cheese.

6. Cover and bake for 1 hour.

Tuna Noodle Casserole is an easy favorite! This recipe incorporates all of the items that are needed for a meal to meet the MyPlate standards. Tuna is an excellent and convenient source of protein, whole grain or egg macaroni noodles are just what you need to fulfill your grain portion on your plate, and the peas (or carrots) make a great vegetable component.

This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger THE CAMPUS KITCHENS PROJECT™



LESSON 2:
EAT THE RAINBOW

OBJECTIVES:

This lesson will focus on the value of fruits and vegetables, by discussing how they contain vitamins and minerals that benefit the body. Eat the Rainbow is an interactive activity designed to make exploring the rainbow of fruits and vegetables fun. Encourage students to eat many different colors and try foods they might not have eaten before. Explain how certain colors of food have certain nutrients that benefit different body parts.

TIME:

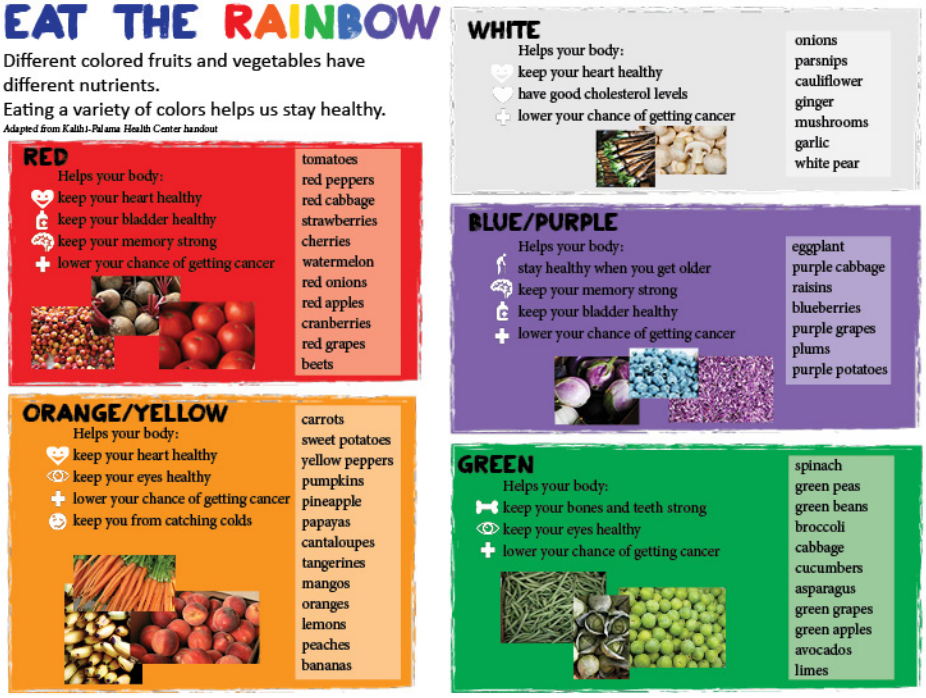
One hour: 30 minutes instruction, 30 minutes activity

MATERIALS:

- five large posters/paper
- black and white food cutouts [Appendix C]
- markers/crayons/pencils
- copies of Eat the Rainbow visual for each child [Appendix C]
- one large copy of visual
- kabob sticks
- plates/bowls
- fruits (one per color): kiwi, grapes, oranges, melon, strawberries, blueberries, bananas, other options: raspberries, mango, pineapple, grapes

PREPARATION:

Review Eat the Rainbow visual. Make copies of the Eat the Rainbow handout and take-home recipe. For matching game, label posters with the following colors: green, yellow/orange, red, blue/purple and white. Cut fruit for kabobs into appropriately sized pieces.



This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger

THE CAMPUS KITCHENS PROJECT™



BACKGROUND INFORMATION

Health benefits of fruits and vegetables: Most Americans do not eat the recommended amount of fruits and vegetables and there are many reasons why these foods should be highlighted in our daily meals. Promoting a diet rich in fruits and vegetables may reduce the risk of chronic disease, including certain cancers, cardiovascular disease, type 2 diabetes, and obesity. Fruits and vegetables are naturally low in calories and high in fiber, vitamins, and minerals that support growing bodies and minds. Many of the nutrients that Americans do not consume enough of, such as fiber, vitamin A, vitamin E, vitamin, C, folate, calcium, and potassium are found in fruits in and vegetables. Fruits and vegetables can be a part of a healthy diet in many forms, including raw, frozen, canned, cooked, dried, and 100% juice.

All kids should be encouraged to be adventurous and try new vegetables and fruits! Many people need to try a food a few different times before they grow to enjoy the taste. Taste testing fruits and vegetables raw or prepared using different methods can help kids discover how delicious these foods are. When taste testing with kids, encourage them to talk about the appearance, smell, taste, and texture of the food, but never force them to eat the food.

Recommendations for children: Variety is key! Fruits and vegetables get their color and many of their health benefits from phytochemicals. Phytochemical is a term for nutrients found in plant based food and includes antioxidants, carotenoids, anthocyanins, and polyphenols. It has been etimated that up to 4,000 phytochemicals exist, so in order to get all of the nutrients our bodies need it is important to eat a variety of different colored fruits and vegetables.

INTRODUCTION

Review previous lessons, if applicable.

Illustrate a plate, highlighting fruits and vegetables. Note that they cover half of the plate. Invite the children to share what fruits and vegetables they eat with breakfast, lunch, dinner, and for snacks.

Ask the students why eating a variety of fruits and vegetables is important.

Review the Eat the Rainbow visual, categorizing fruits/vegetables by their color and explaining how they benefit our bodies, i.e. red = healthy heart. (Note: remind students that they should eat at least five servings of fruits and vegetables every day.) Be sure to explain more difficult words/concepts like bladder and cholesterol.

Discussion starters:

- When you hear, "Eat the Rainbow" what do you think about? *(fruit candy, the sky, weather, etc.)*
- What color is your favorite food?
- How many colors have you eaten today?



INTRODUCTION CONTINUED	• Do you think a red piece of candy and a red strawberry do the same thing in your body? Why/why not? • What do you think would happen if you only ate one color for your whole life? • Do you eat fruits and vegetables at home? What about at school or restaurants? • Do you ever see commercials about fruits and vegetables on TV?
ACTIVITY	• **Matching game with food cutouts.** Split group into two teams. Give each team equal number of food cutouts. There will be five posters with a color and associated health benefit. Each team will compete to place as many food cutouts on the correct board within five minutes. (Note that a few food items could be colored one of two ways, like green or purple grapes.) Review game and discuss why answers were correct or incorrect. • **Creating & tasting rainbow fruit kabobs.** Have the children build rainbow fruit kabobs. Encourage students to try different colors and fruits they may not have eaten before. Everyone should try at least three colors. (Note: before starting, talk about food safety - hand washing, washing fruits and vegetables, and having a grownup use knives when cutting food items.) While children eat, ask one or two students to volunteer to share their rainbow fruit kabob with the class, asking the other students to respond how each color is beneficial to our bodies. Invite the students to share what fruits and vegetables they like to eat as a snack. • **Extra time:** have children draw their favorite fruit or vegetable on the back of the "Eat the Rainbow" handout.
WRAP UP	**Review the lesson.** Sample questions: • What did we learn today? • Why are fruits and vegetables important to eat? • Who can tell me what part of the body *[blue]* fruits/veggies are good for? *[various colors]* • How many *[red]* fruits/veggies can you name? *[various colors]* **Take home:** give each student a copy of the newsletter and the Eat the Rainbow chart with take home recipe: rainbow chili.

RAINBOW CHILI

INGREDIENTS

serves four

1 zucchini, sliced
1 yellow squash, sliced
1 red bell pepper, diced
1/2 eggplant, diced (optional)
1 onion, diced
2 garlic cloves, minced
2 28-ounce cans diced tomatoes, undrained
1 can black beans, rinsed and drained
1 can kidney beans, rinsed and drained
1 can corn or 1 cup frozen corn, rinsed and drained
2 tablespoons olive oil
1 tablespoon chili powder
1/4 teaspoon cayenne pepper
1/2 teaspoon ground black pepper

DIRECTIONS

1. Heat oil in a large pot over medium-high heat. Stir in zucchini, squash, pepper, eggplant, onions and garlic. Sauté until tender (about 5 minutes).

2. Add remaining ingredients and reduce heat to a simmer for about 30-45 minutes, stirring occasionally.

This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger
THE CAMPUS KITCHENS PROJECT™

LESSON 3:
BECOME A GOOD GRAINS DETECTIVE

OBJECTIVES:

Teach children about the grains food group. Identify what foods are in the grains category. Explain why whole grains are healthier than refined grains and how to identify them.

TIME:

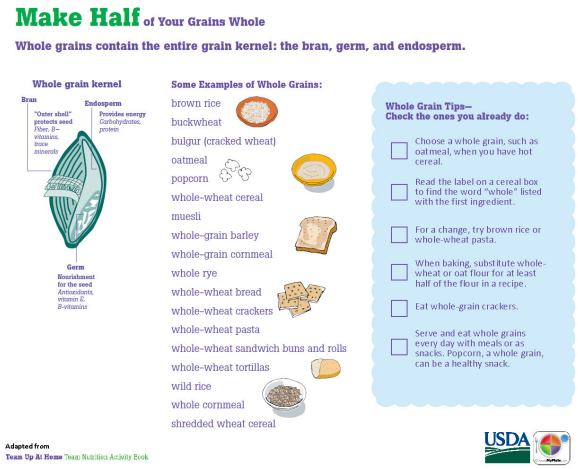
One hour: 30 minutes instruction, 30 minutes activity

MATERIALS:

- markers
- plates
- bowls
- three different whole grain foods to taste [e.g. Kashi 7 whole grain flakes cereal, popcorn, whole-wheat crackers. Note that whole wheat flour has whole grains, but wheat flour does not.]
- copies of MyPlate Whole Grain visual for each child [Appendix D]
- several different whole and refined grains [e.g. wheat flour, all purpose flour, quinoa, white rice, quick oats, flavored instant oatmeal]
- one large MyPlate Whole Grain visual [Appendix D]
- whole grain baked corn chips OR baked whole grain pita
- avocados
- salsa
- red bell peppers

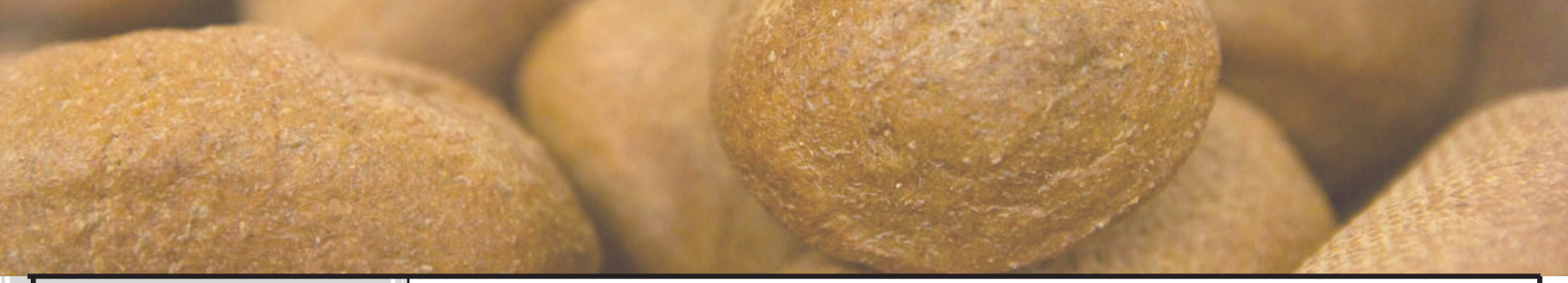
PREPARATION:

Review the whole grain visual. Make copies of the whole grain handout and take-home recipe. For taste exercise, purchase three whole grain foods, such as Kashi 7 whole grain flakes cereal, popcorn (pop prior to lesson), and whole-wheat crackers. Identify one of the purchased food items to show nutritional elements; write key "healthy" ingredients on the board. In addition, identify a "not-so-healthy" option to compare ingredients. For instance, use a whole grain flake cereal, like Kashi and a sugary alternative, like Frosted Flakes.



This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger THE CAMPUS KITCHENS PROJECT™



BACKGROUND INFORMATION

Health benefits of whole grains: Whole grains contain many beneficial nutrients including B vitamins, fiber, iron, magnesium, and selenium. Eating whole grains as part of an overall healthy diet may help reduce the risk for chronic disease including type 2 diabetes and cardiovascular disease.

Recommendations for children: Children should strive to make whole grains at least half of the grains they eat. The recommendations for grains are listed in ounces with children ages 4-8 needing 4-6 oz per day and children ages 9-13 needing 5-9 oz per day. To aid in determining healthy grain portion sizes, an ounce-equivalent chart can be used, which lists the portion size of various grains that count as one ounce. A few common examples of one ounce whole grain equivalents include 1/2 cup whole grain pasta, cooked brown rice, or cooked oatmeal, one slice whole grain bread, or 1 cup whole grain cold cereal.

What are whole grains? Whole grains are grains that contain the bran, germ, and endosperm as opposed to refined grains, which only contain the endosperm. Many important nutrients are found in the bran and germ, including B vitamins, fiber, healthy fat, iron, magnesium, and selenium that are lost when the bran and germ are removed. Examples of whole grains are oats, millet, rye, quinoa, teff, whole wheat, wild rice, brown rice, sorghum, corn, and barley.

Reading ingredient lists and packaging: The best way to determine whether a food contains whole grains is to inspect the packaging for the whole grains stamp and the ingredient list. If the ingredient list includes any of the following terms the food contains whole grains: whole grain, whole wheat, whole rye, brown rice, whole barley, and brown rice. A food may or may not contain whole grains if the ingredient list includes: wheat, durum wheat, multigrain, stoneground. The terms wheat germ, enriched flour, and bran do not signify a whole grain ingredient.

INTRODUCTION

Review previous lessons, if applicable.

Illustrate a plate, highlighting grains. Explain that grains are divided into two groups: whole grains and refined grains. Identify examples of foods in the grains category, i.e. bread, pasta, oatmeal, breakfast cereals.

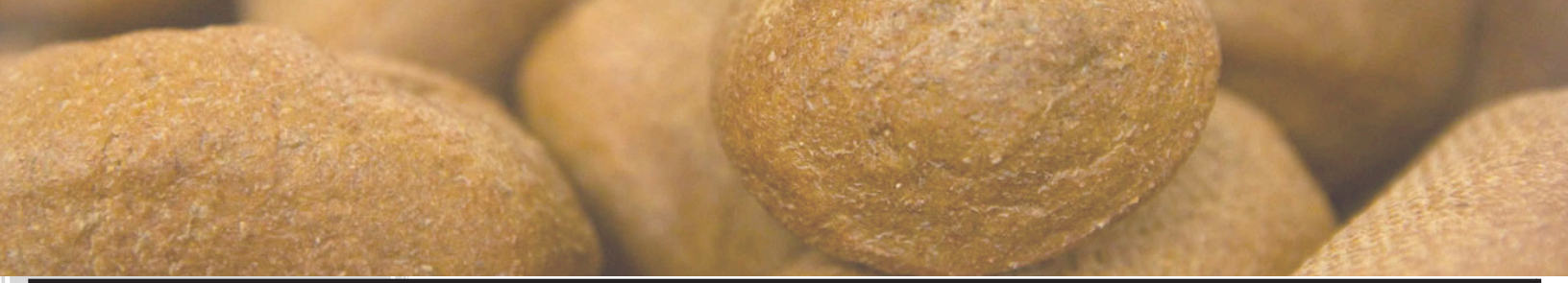
Ask the students why eating grains is important, especially whole grains.

Whole Grains:

- Have fiber, protein, and vitamins. Fiber keeps you fuller longer.
- Help maintain consistent blood sugar levels. (Explain how this gives you consistent energy for the whole day and eliminates highs and lows in energy.)
- Decreased chance of being overweight or having heart disease and type-2 diabetes.

Refined Grains:

- Have been processed to give grains a finer texture and improve their shelf life. This also removes dietary fiber, iron, and many B vitamins.



INTRODUCTION, CONT.	**Review the MyPlate whole grain visual.** Encourage students to make at least half of their grains whole grains, emphasizing portion sizes. Grain servings are about five ounces per day for children 4-8 years old. One ounce is equivalent to one slice of bread; one cup of breakfast cereal; ½ cup of oatmeal; ½ cup cooked rice, pasta or noodles; ½ small bagel, English muffin or hamburger bun; one tortilla, three cups of popped popcorn, or five whole wheat crackers. **Discussion starters:** • Why are grains important? • How many should you eat? What kind? • Who likes the taste of whole grain foods, like whole wheat bread? • When you make sandwiches at home, is your bread white or does it look brown? • When you eat rice is it usually white or brown or a mixture of darker colors? • Do you eat whole grains at home? What about at school or restaurants? • Do you ever see commercials about whole grains on TV?
ACTIVITY 100% WHOLE GRAIN 31g or more per serving WholeGrainsCouncil.org EAT 48g OR MORE OF WHOLE GRAINS DAILY	• **Become a good grains detective.** Set out different types of cooked and uncooked grains and allow the students to feel and see the difference between whole and refined grains. For example, wheat flour next to a bowl of all-purpose flour, brown and white rice, whole wheat pasta and pasta made with enriched white flour. Have students look for the whole grain logo on packages. Be sure to bring an example of a grain food package for each student. Inform them that darker colored items are not always whole wheat or whole grain. Compare food labels of two different foods – one whole grain (use one they taste) and the other refined. The first ingredient should be 100% whole wheat, not refined white flour. Explain to the students that they should be searching for the word "whole" on the ingredient list. • **Tasting whole grain snacks.** Allow children to taste different whole grain foods. A few suggestions include popcorn, oatmeal, granola, and whole wheat crackers. Talk more about grains and how to incorporate grains into their own diet. • **Extra time: make a healthy snack** - chips with guacamole Ingredients: whole grain baked corn chips OR baked whole grain pita/tortilla chips, avocados, salsa, red bell peppers. Set up separate bowls with each ingredient. Give each child a bowl with some corn chips or whole grain tortillas or pita bread. Separate the ingredients ahead of time and invite the students make their own guacamole, choosing ingredients they like and mixing them together in their bowls.
WRAP UP	**Review the lesson.** Sample questions: • Which type of grains are more nutritious? • How much grain products should you eat each day? **Take home:** give each student a copy of the newsletter, MyPlate whole grain visual, and take home recipe: easy granola.

EASY GRANOLA

INGREDIENTS

serves four

1 ½ cup sliced almonds
1 ½ cup rolled or quick oats
1 ¼ cup corn flakes
3 ounces maple syrup or honey
2 teaspoons canola oil
½ teaspoon cinnamon
¼ cup golden raisins
¼ cup raisins
¼ cup cran-raisins

DIRECTIONS

1. Preheat oven to 350 degrees.

2. Mix everything except for the fruit together in a large bowl.

3. Spread onto a baking sheet and bake at 350 for 10 – 15 minutes, occasionally stirring gently so that the cereal browns evenly.

4. Allow to cool. Once cool, mix in the dried fruit and store in an airtight container.

This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger

THE CAMPUS KITCHENS PROJECT™



LESSON 4:

ADD POWER TO YOUR PLATE

OBJECTIVES: Teach children about the protein food group. Identify foods that fall into this category. Highlight the need for protein and how it functions as building blocks in the body.

TIME: One hour: 30 minutes instruction, 30 minutes activity

MATERIALS:

- food group jeopardy [Appendix E]
- paper and pens for keeping score
- scissors and tape
- plates
- banana for each student
- jar of peanut butter (substitute sunflower seed butter for nut allergies)
- large container of vanilla Greek yogurt
- maple syrup or honey
- almonds

PREPARATION: Prepare jeopardy game by cutting out monetary amounts and divide banana split ingredients according to class size.

FOOD GROUP JEOPARDY

FRUITS	VEGETABLES	GRAINS	PROTEIN
I am also the word for a color.	I look like a miniature tree.	I am the type of grain that has more vitamins.	I am made by chickens.
I am red, white and green with seeds.	I am very popular around Halloween.	I make up both sides of your sandwich.	I am often found in your cereal bowl.
People say that one of me a day keeps the doctor away.	I grow in the ground and rabbits like to eat me.	I am necessary to bake almost anything, like bread or cookies.	I am made from milk and go with crackers, pizza and more.
Monkeys like to eat me.	We grow together inside of a pod.	Some people like to eat me for breakfast, especially when it is cold outside.	I come in lots of varieties, like cashews and almonds.
I grow in bunches and am a popular fruit juice.	I help make you strong and Popeye likes to eat me.	DAILY DOUBLE	I like to swim.
I wear my seeds on my outside.	I grow on vines and people like to make sauce out of me.	I am the type of grain that is more processed and is less healthy.	I am what a hamburger is made out of.
I am small, green and similar to a lemon.	DAILY DOUBLE	You can often find me with red sauce and meatballs on top.	I am made from nuts, but am not crunchy.

DAILY DOUBLE – Name one vegetable from each of the "Eat the Rainbow" color groups
DAILY DOUBLE – True or false: all brown grains are whole grains.

This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger THE CAMPUS KITCHENS PROJECT™



BACKGROUND INFORMATION	**This lesson is largely focused on protein, but it offers a good opportunity to discuss dairy, fat, and the importance of reading food labels as well.** **Health benefits of protein:** Some food sources of protein are healthier than others. It is important to take into consideration the type and amount of fat in the food, the sodium content, and any additional phytochemicals or nutrients that may provide health benefits. **Protein recommendations for children:** Children ages 4-8 should eat about 4 oz of protein foods per day. Boys and girls ages 9-13 should eat about 5 oz of protein foods per day. It is recommended that children eat a variety of lean meat, lean poultry, and vegetarian sources of protein such as beans, lentils, nuts, and seeds. It is also recommended that seafood be eaten twice a week. **Calcium and dairy:** Dairy is recommended as a part of a healthy diet, because of the protein, calcium, potassium, and vitamin D content that help promote strong bones and teeth. There are healthy sources of calcium and vitamin D for those who are lactose intolerant or prefer not to consume dairy, including fortified soy or nut milk, beans, collard greens, bok choi, broccoli, and tofu. **Calcium and dairy recommendations for children:** Children ages 4-8 are encouraged to drink 2 1/2 cups of low-fat milk, yogurt, or soymilk a day. Boys and girls ages 9-13 are encouraged to drink 3 cups of low-fat milk, yogurt, or soymilk a day. **Health benefits of fat:** While fat doesn't have it's own food group, it is an important part of our diet. Depending on the type and quantity, fat can help us feel satisfied and full, promote cardiovascular, brain, and cellular health, and assist with absorption of vitamins A, D, E, and K. Unsaturated fats are liquid at room temperature and include olive oil and canola oil. Saturated fats are solid at room temperature and include butter, lard, and coconut oil. Trans fats are vegetable oils that have been processed to be solid at room temperature. The health benefits associated with fats are typically derived from olive oil or canola oil and therefore it is recommended that individuals choose unsaturated fats over saturated or trans fats.
INTRODUCTION	**Review previous lessons**, if applicable. **Illustrate a plate**, highlighting the protein group. Discuss what foods fall into the protein food group, as well as foods that do not fall into the group, but still contain a good amount of protein (e.g. green peas). Address a common misconception: protein = meat. Give examples of non-meat sources of protein. **Ask the students why protein is important** and what it does to make us healthy. Explain that it's necessary for building strong muscles and body tissues, helps sustain energy so that we do not tire as quickly and is the building block for muscles, hair, nails, organs etc.



INTRODUCTION, CONT.	**Talk about the difference between lean and full-fat proteins.** Lean proteins do not have as much unhealthy fat as full-fat proteins do. They still do have fat, just not as much unhealthy saturated (solid) fat, and in some cases (such as with fish, nuts and seeds) can have healthy mono and poly-unsaturated fats. Healthy fats help protect your heart whereas unhealthy fats will hurt it (cause high cholesterol, heart attacks, etc.). Give students a few examples of each, and have them come up with a few more. Emphasize that whole milk and other full-fat dairy products are less healthy than reduced fat versions. *Lean proteins: fish, black beans, nut butters, white meat chicken, turkey, lean ground beef* *Full-fat proteins: whole milk, hot dogs, bacon, highly marbled cuts of beef/other red meat* **Discussion starters:** • Why are proteins important? • What are non-meat sources of protein? *Answers can include: beans, eggs, fish, milk, cheese, nuts, seeds and tofu.* • How do you get all the protein your body needs each day? • What is your favorite source of protein? • What sources of protein do you eat at home? What about at school or restaurants? • Do you ever see commercials about plant-based protein or dairy on TV?
ACTIVITY	• **Play food group jeopardy.** Split class into two teams; each team will take turns choosing a question (category and points). There are 28 questions total. • **Make a protein packed banana split.** Allow children to make their own banana split. **Banana Split** 1 medium banana 2 tablespoons peanut butter (or sunflower seed butter) 1/4 cup vanilla Greek yogurt 1 teaspoon maple syrup or honey 1 tablespoon roasted almonds, chopped Lay banana on a plate, slice in half (long-ways). Spread peanut butter evenly on the banana, dollop Greek yogurt on top, drizzle with maple syrup or honey, and sprinkle with nuts.
WRAP UP	**Review the lesson.** Sample questions: • What kinds of foods have complete proteins? • What is your favorite protein-filled food? • What is a non-meat source of protein? **Take home:** give each student a copy of the newsletter and take home recipe: black bean quesadilla.

BLACK BEAN QUESADILLA

INGREDIENTS

serves one

10” whole-wheat tortilla
1/4 cup pepper jack or cheddar cheese
2 tablespoons salsa
1/2 cup canned black beans, rinsed and drained
1/8 teaspoon garlic
1/8 teaspoon oregano
1/8 teaspoon chili powder

DIRECTIONS

1. Add seasonings to ½ cup of black beans. Mash until smooth consistency.

2. Spread mashed black beans on tortilla. Fold in half.

3. In large sauté pan, heat filled tortilla until golden brown for 1-2 minutes on each side.

4. Top with salsa and cheese. Cut in 4 triangles and serve.

This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger THE CAMPUS KITCHENS PROJECT™



LESSON 5:
FROM SEED TO PLANT

OBJECTIVES:

Educate children about plant-based foods and how they grow. Identify which parts of a plant make up various foods (e.g.: carrots = roots, broccoli = flowers). Explain the physical needs for growth, such as soil, water and sun. Children will develop a basic understanding of where food comes from, why it's important to eat many plant-based foods and how plants grow.

TIME:

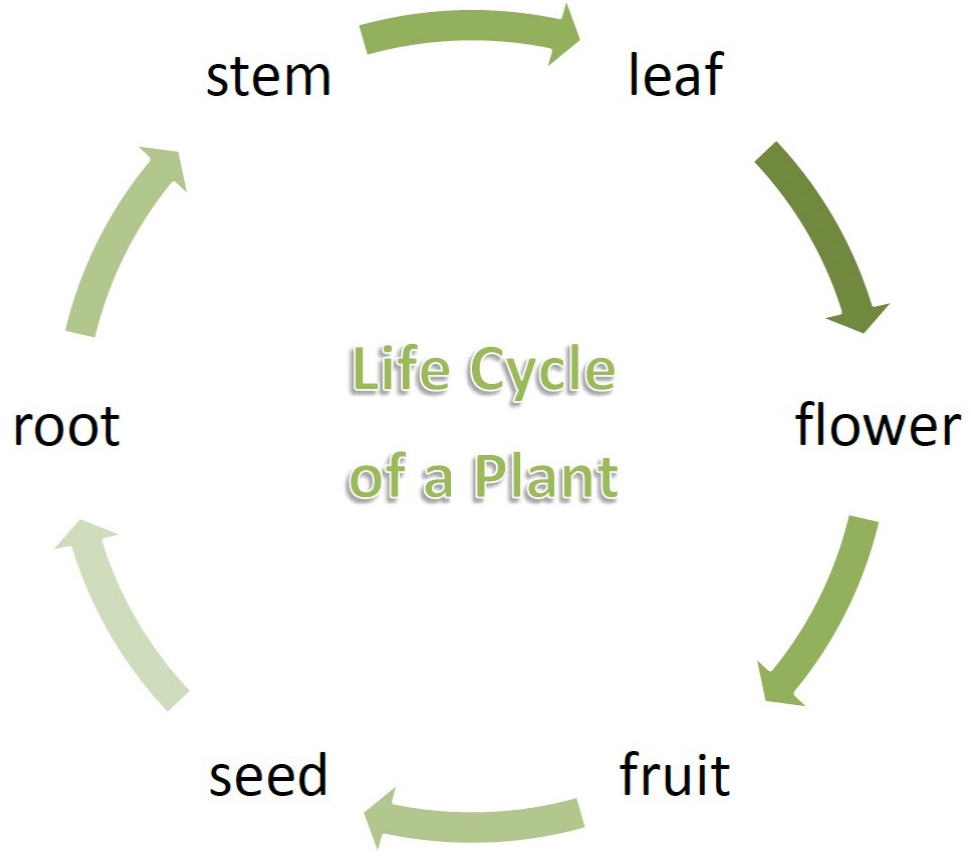
One hour: 30 minutes instruction, 30 minutes activity

MATERIALS:

- book on gardening or plant life [optional]
- chalkboard, white board or poster
- Life Cycle of a Plant diagram [Appendix F]
- plant part images [Appendix F]
- one or two fruits or vegetables per part of plant (seed, stem, flower, leaf, roof)
- plant part cutouts[Appendix F]

PREPARATION:

Cut out outlines of foods that are parts of plants from Appendix F.



This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger

THE CAMPUS KITCHENS PROJECT™



BACKGROUND INFORMATION	**Plant-based foods:** Plant-based foods can be found in each of the food groups, except for dairy, but there are many plant-based foods that contain the nutrients found in dairy, such as protein and calcium. All vegetables, fruits, and grains come from plants. Plant-based sources of protein include nuts, seeds, legumes, lentils, and soy. Plant-based sources of calcium include soy, bok choi, collard greens, and broccoli. A diet rich in plant-based foods can be very healthy, affordable, and environmentally friendly. Plant-based foods are often low in calories and high in nutrients such as fiber, vitamins, minerals, and phytochemicals.
INTRODUCTION	**Review previous lessons, if applicable.** **Illustrate a plate** and have students name each food group present. Discuss which foods come from plants and which come from animals. Ask students to guess how long humans have been growing plants for food (*answer: about 10,000 years!*). Tell the class that today's lesson will show them how plants grow, what types of food people can grow to eat, and what part of a plant these foods come from. **Optional: read a book about plants**. Depending on the time available for the lesson and the age of the students, you may choose to check a book out of the library to read to the group. We recommend *From Seed to Plant* by Gail Gibbons. **Ask the students how a plant grows** then explain using the "Life Cycle of a Plant" diagram in Appendix F and accompanying visual aids. Inform students that seeds are usually planted in dirt, but all a seed needs is sunlight and water. The seed first grows roots, then a stem appears and grows toward the sun. Leaves grow on the plant, collecting energy from the sun. When the plant is big enough it flowers, and then the fruit appears and ripens. Emphasize the cyclical nature of plants growing: it is not a one-way process that starts when you plant the seed and ends when you harvest the fruit; rather, the seeds grow inside the fruit and the process begins again. Help students understand that foods come from plants, some of which are seeds, roots, stems, leaves, or flowers, and lots of them are the fruit of the plant. **Discussion starters:** Why should we eat plant-based food? What plant foods have you eaten today? What are your favorite plant foods for breakfast, lunch, and dinner? Explain to the students that we eat food from each part of a plant, then use the following questions to discuss food from each part of a plant: 1. Which foods are the leaves of the plant? *Kale, collard greens, spinach, arugula, beet greens, bok choy, chard, turnip greens, lettuce, mustard greens, watercress, garlic chives* 2. Which foods are stems? *Celery, rhubarb, asparagus*



INTRODUCTION, CONT.	3. Which foods are flowers? *Broccoli, cauliflower, artichokes, capers* 4. Which foods are seeds? *Corn, peas, beans* 5. Which foods are roots? *Carrots, parsnips, beets, radishes, rutabagas, turnips*
ACTIVITY	• **Draw a generic picture of a plant**, including all the parts of the plant, and pass out food icons to the students. Invite the students to color in the icons and then ask them to come up to the board and place their food icon on the part of the plant where they think it grows. • **Additional discussion starters:** 1. What part of the plant do we eat most often? 2. Which ones take the longest to grow? 3. Where can we buy plant foods in our community? 4. What plant foods can we grow in our community during winter, spring, summer, and fall? • **Taste test fruits and/or vegetables from each part of the plant.** Prepare a variety of fruits and vegetables for the children to taste prior to class. Bring a yogurt or bean-based dip as well, or have the children help prepare a dip in class. Invite the children to taste the food and determine which they like better based on appearance, smell, taste, and texture. Ask the children to compare and contrast the different food and share what they do or do not like about each food.
WRAP UP	**Review the lesson.** Sample questions: • What part of a plant is your favorite fruit and vegetable? • Who can tell me each step of the plant life cycle? Take home: give each child a copy of the newsletter and take home recipe: sun, seeds and plants salad

SUN, SEEDS AND PLANTS SALAD

INGREDIENTS

serves four

Salad

1 pound kale
3 carrots
1 head broccoli
1 bell pepper
1 15oz can chickpeas

Dressing

2 lemons
¼ cup olive oil
1 cup sunflower seeds

DIRECTIONS

1. Open can of chickpeas and rinse well under cold running water; drain.
2. Rinse, dry, remove stem and rib, and roughly chop kale, tossing it into a large bowl.
3. Peel and grate the carrots. Chop the broccoli into small florets. Slice bell pepper and add all to salad.
4. Add the chickpeas to the salad.
5. Mix dressing in a separate bowl or measuring cup. Juice lemons and add olive oil slowly, mixing to combine. Pour the dressing over the salad and toss ingredients together until lightly coated.
6. Top the salad with the sunflower seeds and serve.

This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger

THE CAMPUS KITCHENS PROJECT™



LESSON 6:
FITNESS IS FUN

OBJECTIVES: Show children that physical activity can be fun and a part of their everyday routine.

TIME: One hour: 30 minutes instruction, 30 minutes activity

MATERIALS:

- deck of cards
- large poster/chalk board to write game directions
- tortillas
- peanut butter (use sunflower seed butter for nut allergies)
- honey
- bananas
- nutty cereal
- movement tracker for each student [Appendix G]

PREPARATION: Write Hit the Deck instructions on a board or poster: touch elbow to knee or crunches for 20 seconds for hearts; jog in place or march in place for 20 seconds for diamonds; jumping jacks or scissors for 20 seconds for clubs; and modified push up or cabbage patch for 20 seconds for spades. Divide banana in a blanket ingredients according to class size.

Day	Physical Activities	# of Minutes
Mon		
Tues		
Wed		
Thurs		
Fri		
Sat		
Sun		

Healthy Eating—Circle and continue with previous goals, and add a new goal.



adapted from The Presidential Active Lifestyle Award materials at presidentschallenge.org

This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger THE CAMPUS KITCHENS PROJECT™



BACKGROUND INFORMATION

Physical activity and healthy eating: Encouraging children to be physically active every day is just as important as eating a healthy diet. Participating in sports teams, walking to school, playing outside, and gardening are just a few of the many ways kids can be more active. Eating nutritious meals and snacks can help children feel energized and stay active all day.

Physical activity recommendations for children: Children should be physically active for 60 minutes or more each day with the majority of the physical activity being aerobic and at a moderate or vigorous level of intensity. At least 3 days each week, children should do muscle-strengthening and bone-strengthening activities.

Examples of aerobic, muscle-strengthening, and bone-strengthening activities include:

- Aerobic, moderate-intensity: riding a bicycle, going for a walk
- Aerobic, vigorous-intensity: jumping rope, karate, tag, running
- Muscle-strengthening: push-ups, sit-ups, gymnastics, tug of war
- Bone-strengthening: jumping rope, gymnastics, hop-scotch

INTRODUCTION

Review previous lessons, if applicable, emphasizing how healthy eating positively influences physical activity abilities. Inform students that food provides energy, and people need to burn off as much energy as you take in. A healthy lifestyle is about balancing the amount of calories you take in with the amount of calories you burn. If these are out of balance, you will either gain or lose weight. Further, healthy eating makes healthier bodies, which are better able to perform physical activities.

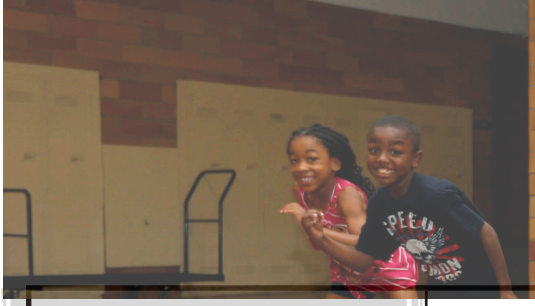
Administer post test for evaluation if pre test was given during leson 1

Ask the students what physical activity is and why it is important. Definition: movement of the body that uses energy. Exercise helps you feel better, live longer, decreases your chances of becoming depressed, sleep well at night, move around more easily, have stronger muscles and bones and maintain a healthy weight. As people age their metabolism slows, so maintaining energy balance requires moving more and eating less.

Go over how much exercise is necessary each day. Children and adolescents should do 60 minutes or more of physical activity each day. Most of the 60 minutes should be either moderate- or vigorous intensity aerobic physical activity, and should include vigorous-intensity physical activity at least 3 days a week. As part of their 60 minutes of daily physical activity, children should include muscle-strengthening activities, like climbing, at least 3 days a week and bone-strengthening activities, like jumping, at least 3 days a week.

Discussion starters:

- What is your favorite snack to eat after exercising?
- What is your favorite way to be physically active?
- How do you stay active during winter, spring, summer, and fall?
- How much time do you get at school to be physically active?





ACTIVITY

- **Play a game of Hit the Deck.** Appropriate for ages 6-10. Have children stand and move away from desks and tables. The teacher places the deck of cards in front of the class. One student selects a card and students will do the corresponding activity for each suit. Heart: touch elbow to knee or crunches for 20 seconds. Diamond: jog in place or march in place for 20 seconds. Club: jumping jacks or scissors for 20 seconds. Spade: modified push up or cabbage patch for 20 seconds. Provide other students with the opportunity to pick a card from the deck and repeat activity.

If a deck of cards is unavailable, this may be substituted for a game of Simon Says.

- **Make bananas in a blanket.** Tell the children that they will be making a healthy snack with bananas, peanut butter, and whole wheat tortillas. Ask them what food groups are included in this recipe and why they think it is a healthy snack that is great for active kids to eat.

  Banana in a Blanket
  Ingredients:
  1 (6 inch) whole wheat tortilla
  1 tablespoon peanut butter
  1 medium banana
  1 teaspoon maple syrup or honey
  1 tablespoon crunchy, nutty cereal

  Directions:
  Lay one tortilla on a plate for each child. Invite the children to spread peanut butter evenly on the tortilla. Pass around cereal for the children to sprinkle over peanut butter. Pass out bananas and have them peel and place the banana on the tortilla and roll the tortilla. Drizzle maple syrup or honey on top.

WRAP UP

Review the lesson. Sample questions:

- What does living a healthy life mean to you?
- Why is exercise good for you?
- How much exercise should you get each day?
- How does healthy eating impact your physical ability?

Farewell! Take a few minutes to thank the students for participating in the nutrition lessons and encourage them to continue learning about how to live a healthy life. Invite the students to share something fun they learned during the lessons. Pass out Certificate of Completion and take a group photo.

Take home: give each student the newsletter, a movement tracker so they can record their physical activity, and the take home recipes: yummy healthy snacks.

YUMMY HEALTHY SNACKS

APPLE CARTWHEELS

serves one

Ingredients:
1 medium apples
1 ounce chocolate chips
1 tablespoon peanut butter
1 teaspoon raisins
1 teaspoon honey

Directions:
1. Remove the core from the apple, leaving a 1-1/4 inch diameter cavity down the center; set aside. In a blender, process the chocolate chips until they are chopped.
2. In a small bowl, combine the chopped chocolate chips with the last 3 ingredients.
3. Stuff each apple with the mixture.
4. Wrap each apple in plastic wrap and refrigerate until well chilled.
5. When ready to serve, cut each apple crosswise into 1/2 inch slices.

STRAWBERRY & CREAM CHEESE SANDWICH

serves one

Ingredients:
1 tablespoon reduced-fat cream cheese
1/4 teaspoon honey
2 slices very thin whole-wheat sandwich bread
2 medium strawberries, sliced

Directions:
1. Combine cream cheese and honey in a bowl.
2. Spread bread with the cheese mixture.
3. Place sliced strawberries on one piece of bread; top with the other.

NO BAKE COOKIES

serves eight

Ingredients:
8 whole-wheat graham cracker squares, finely ground
1/4 cup raisins
1/4 cup smooth natural peanut butter
2 tablespoons plus 2 teaspoons honey
4 teaspoons unsweetened coconut

Directions:
1. Combine ground whole-wheat graham crackers, raisins, peanut butter and honey in a small bowl.
2. Pat into eight cookies and press lightly in coconut.

This lesson plan is made possible by a partnership between The Campus Kitchens Project and the Sodexo Foundation. Find other nutrition education plans at campuskitchens.org.

SODEXO FOUNDATION stop hunger THE CAMPUS KITCHENS PROJECT™



REFERENCES

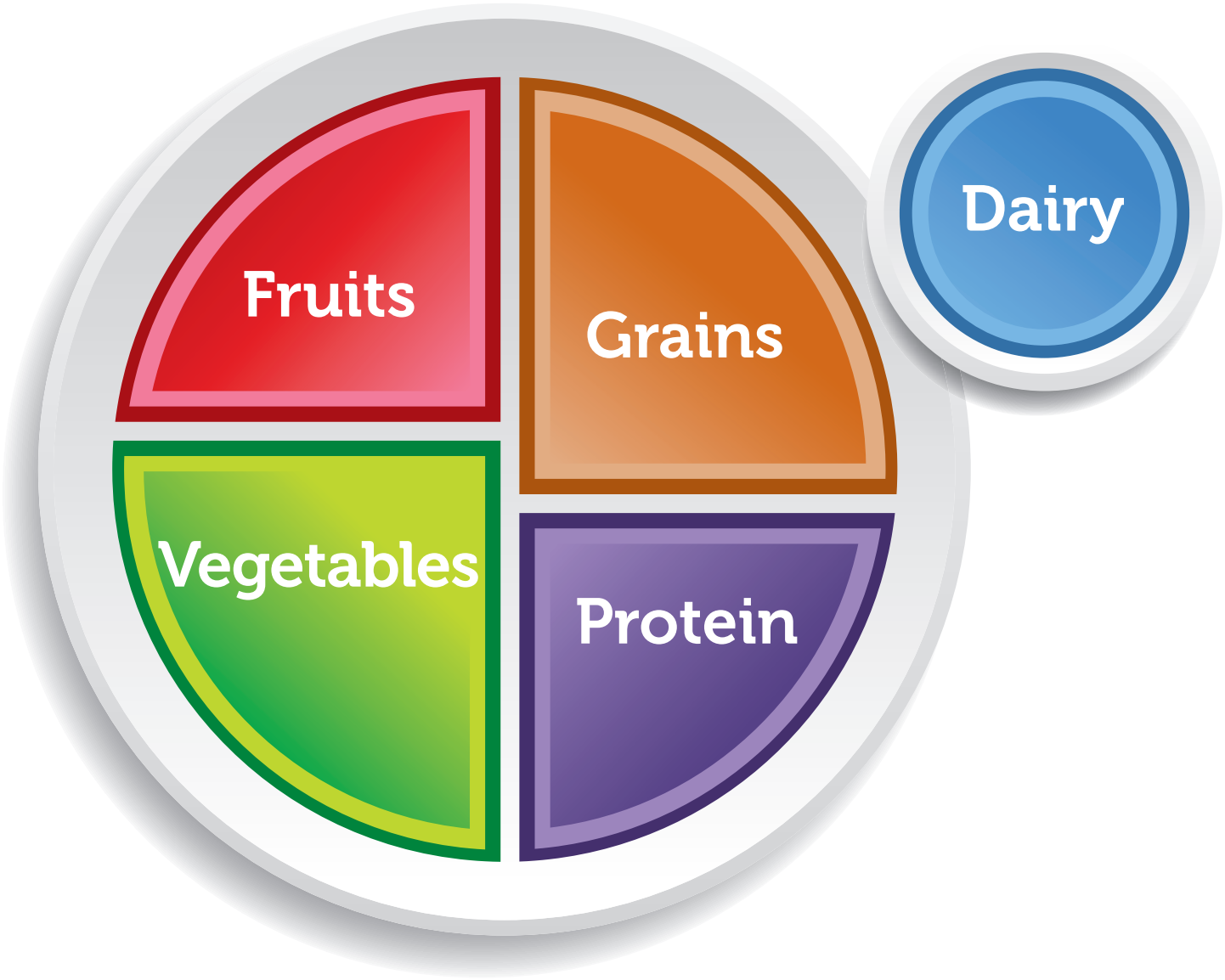
"Eat the Rainbow," Kalihi-Palama Health Center. Original source accessed September 26, 2013, http://www.healthyhawaii.com/healthy_eating/healthy_eating/eat_a_rainbow.htm.

"Make Nutrition Fun," Academy of Nutrition and Dietetics, accessed September 26, 2013, http://www.eatright.org/nnm/blog.aspx?id=6442451160&blogid=6442450952.

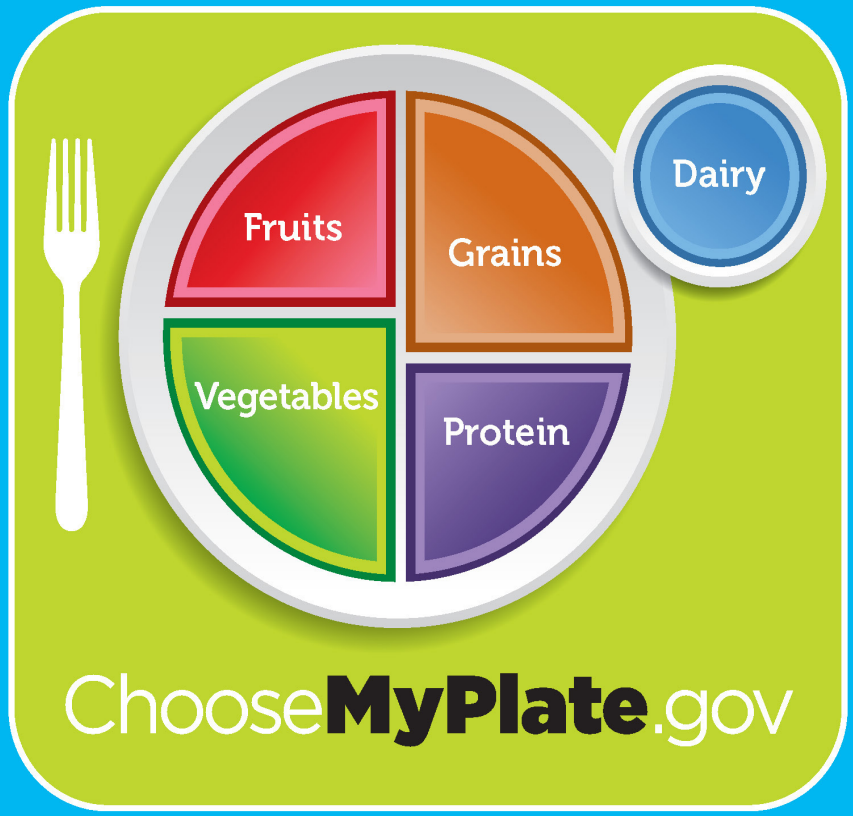
"Presidential Active Lifestyle Award (PALA+) Activity Log (PDF) - Single Page," The President's Challenge, https://www.presidentschallenge.org/tools-resources/docs/PALAplus_log_onepage.pdf.

"USDA Choose MyPlate," United States Department of Agriculture (USDA) Center for Nutrition Policy and Promotion, accessed September 26, 2013, http://www.choosemyplate.gov.

APPENDIX 1A
MYPLATE FOOD GROUPS



What's on your plate?





Before you eat, think about what and how much food goes on your plate or in your cup or bowl. Over the day, include foods from all food groups: vegetables, fruits, whole grains, low-fat dairy products, and lean protein foods.



Make half your plate fruits and vegetables.



Make at least half your grains whole.



Switch to skim or 1% milk.



Vary your protein food choices.

APPENDIX 1A

Vegetables	Fruits	Grains	Dairy	Protein Foods
Eat more red, orange, and dark-green veggies like tomatoes, sweet potatoes, and broccoli in main dishes. Add beans or peas to salads (kidney or chickpeas), soups (split peas or lentils), and side dishes (pinto or baked beans), or serve as a main dish. Fresh, frozen, and canned vegetables all count. Choose "reduced sodium" or "no-salt-added" canned veggies.	Use fruits as snacks, salads, and desserts. At breakfast, top your cereal with bananas or strawberries; add blueberries to pancakes. Buy fruits that are dried, frozen, and canned (in water or 100% juice), as well as fresh fruits. Select 100% fruit juice when choosing juices.	Substitute whole-grain choices for refined-grain breads, bagels, rolls, breakfast cereals, crackers, rice, and pasta. Check the ingredients list on product labels for the words "whole" or "whole grain" before the grain ingredient name. Choose products that name a whole grain first on the ingredients list.	Choose skim (fat-free) or 1% (low-fat) milk. They have the same amount of calcium and other essential nutrients as whole milk, but less fat and calories. Top fruit salads and baked potatoes with low-fat yogurt. If you are lactose intolerant, try lactose-free milk or fortified soymilk (soy beverage).	Eat a variety of foods from the protein food group each week, such as seafood, beans and peas, and nuts as well as lean meats, poultry, and eggs. Twice a week, make seafood the protein on your plate. Choose lean meats and ground beef that are at least 90% lean. Trim or drain fat from meat and remove skin from poultry to cut fat and calories.
For a 2,000-calorie daily food plan, you need the amounts below from each food group. To find amounts personalized for you, go to Choose**MyPlate**.gov.				
Eat 2½ cups every day **What counts as a cup?** 1 cup of raw or cooked vegetables or vegetable juice; 2 cups of leafy salad greens	**Eat 2 cups every day** **What counts as a cup?** 1 cup of raw or cooked fruit or 100% fruit juice; ½ cup dried fruit	**Eat 6 ounces every day** **What counts as an ounce?** 1 slice of bread; ½ cup of cooked rice, cereal, or pasta; 1 ounce of ready-to-eat cereal	**Get 3 cups every day** **What counts as a cup?** 1 cup of milk, yogurt, or fortified soymilk; 1½ ounces natural or 2 ounces processed cheese	**Eat 5½ ounces every day** **What counts as an ounce?** 1 ounce of lean meat, poultry, or fish; 1 egg; 1 Tbsp peanut butter; ½ ounce nuts or seeds; ¼ cup beans or peas

U.S. Department of Agriculture • Center for Nutrition Policy and Promotion
August 2011
CNPP-25
USDA is an equal opportunity provider and employer.

Cut back on sodium and empty calories from solid fats and added sugars



Look out for salt (sodium) in foods you buy. Compare sodium in foods and choose those with a lower number.

Drink water instead of sugary drinks. Eat sugary desserts less often.

Make foods that are high in solid fats—such as cakes, cookies, ice cream, pizza, cheese, sausages, and hot dogs—occasional choices, not every day foods.

Limit empty calories to less than 260 per day, based on a 2,000 calorie diet.

Be physically active your way

Pick activities you like and do each for at least 10 minutes at a time. Every bit adds up, and health benefits increase as you spend more time being active.

Children and adolescents: get 60 minutes or more a day.

Adults: get 2 hours and 30 minutes or more a week of activity that requires moderate effort, such as brisk walking.

APPENDIX 1B














CORNBREAD


PASTA SALAD


BEANS


CHEESE


CHICKEN

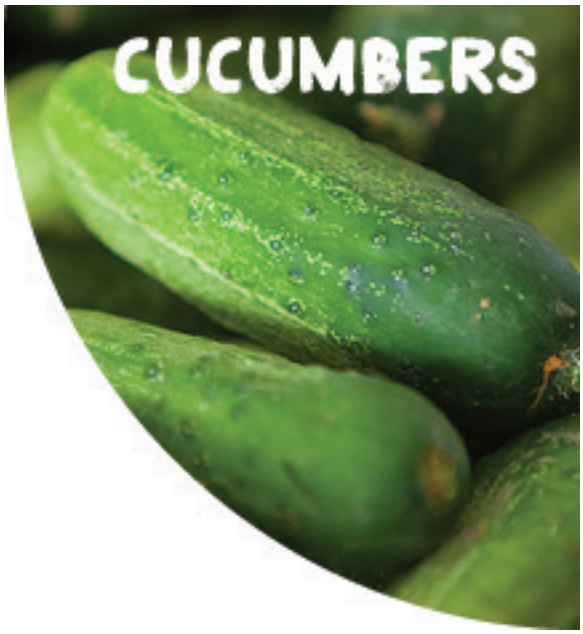

EGGS


MEATBALLS


TURKEY


CABBAGE


CARROTS


CUCUMBERS


EGGPLANT


TOMATOES


RICE


GRANOLA


WHOLE WHEAT
ROLLS

Building Blocks for Healthy Kids
Pre- & Post-Test Instructions

Organization name:

Program host site (if different from your organization):

Program dates:

Step 1: On the first day of your class you will give students the pre-test. Explain that we want to see what they already know about healthy eating and where food comes from, and that they should fill out the worksheet as well as they can but not to worry if they don't know all the answers. Make sure that they know they won't be graded.

Step 2: Take attendance at each class. This way when you are reviewing the post-test you will be able to see if achievement gaps result from not grasping a new concept, or from missing a class.

Step 3: On the last day of class you will give students the post-test.

Step 4: Use the scoring rubric in this document to grade the pre- and post-tests. Score questions 1-11, which are about knowledge, separately from questions 12-15, which are about behavior change.

Step 5: Match each student's pre-test to his or her post-test and complete the following table:

Total number of students who completed both the pre- and post- test	
Number of students who increased their knowledge (increase in total score on questions 1-11)	
Number of students who increased the frequency of communicating with family about eating fruits and vegetables (increase in score of question 12)	
Number of students who increased their willingness to try new healthy foods (increase in score of question 13)	
Number of students who increased the frequency of preparing food with family (increase in score of question 14)	
Number of students who prepared any recipes and snacks from the newsletters (post-test only: number who responded "Yes" to question 15)	

Step 6: What did you learn from your students' pre- and post-tests? Did class attendance have any effect?

Please send completed form and any other feedback to info@campuskitchens.org.

THE CAMPUS KITCHENS PROJECT℠

Classroom Questionnaire

Name_____

Date_____

1. What are the 5 food groups on the MyPlate?

a. _____ b. _____ c. _____d. _____e. _____

2. At lunch and dinner, fruits and vegetables should take up _____ of your plate.

a. less than half b. about half c. all d. none

3. Healthy foods come in all the colors of the rainbow. Name a healthy food that is the color……

RED:_____ GREEN:_____

ORANGE:_____ BLUE:_____

YELLOW:_____ PURPLE:_____

4. Circle all the grains below that are *whole* grains:

a. popcorn b. white bread c. oatmeal

d. whole wheat pasta e. white rice

5. Of all the grains you eat every day, how many should be whole grains?

a. None b. less than half c. at least half

6. Meat contains protein, but so do a lot of other foods. Circle all the foods below that have a lot of protein:

a. Eggs b. Nuts c. Apples

d. Milk e. Carrots f. Beans

7. Some proteins are lean proteins, and some are full-fat proteins. For each protein example circle what kind of protein it is:

White meat chicken (circle one): Lean protein **OR** full fat protein

Whole milk: (circle one): Lean protein **OR** full fat protein

Black beans: (circle one): Lean protein **OR** full fat protein

Bacon: (circle one): Lean protein **OR** full fat protein

Fish: (circle one): Lean protein **OR** full fat protein

8. Where does food come from originally?

a. The store b. The refrigerator c. A bag or can

d. A farm or garden e. A restaurant f. The kitchen at home

9. Did you know that potatoes are the root of the plant they grow on? All of the fruits and vegetables that we eat are a part of a plant. Match the food on the LEFT with the part of the plant they are on the RIGHT by drawing a line from one side to the other.

Lettuce	Leaf
Tomato	Root
Carrot	Stem
Celery	Flower
Broccoli	Fruit

10. How many minutes of active play time or exercise should you have *every day*?

a. 10 minutes b. 30 minutes c. 60 minutes or more d. none

11. Circle all of the activities that count as physical activity:

a. Walking with my family after dinner b. Taking the stairs c. Playing a video game

d. Playing basketball at recess e. Taking the bus to school f. Dancing

12. About how often do you talk to your family about eating more fruits and vegetables?

a. Never b. Rarely c. Once a month d. Once a week e. Every day

13. How often do you try new healthy foods like new fruits, vegetables or whole grains?

a. Whenever they are offered b. Sometimes if it looks good c. Never, I only like the foods I already eat

14. About how often do you prepare food with your family?

a. Never b. Rarely c. Once a month d. Once a week e. Every day



THE CAMPUS KITCHENS PROJECT℠

BUILDING BLOCKS FOR HEALTHY KIDS

LESSON 1

Dear families,

Your student is participating in a nutrition education series through a partnership between and .

After each lesson, they will bring home a grocery bag with a newsletter and recipe with non-perishable ingredients. We hope you will use the recipe and ingredients to cook with your student and use the newsletters to continue talking about healthy living at home!

Our first lesson was all about MyPlate. MyPlate was created by the USDA to show how the five food groups, fruits, vegetables, grains, protein, and dairy, can fit into a healthy diet. MyPlate helps us visualize how much of each food group we should include in our meals throughout the day. We will talk more about each of the food groups in the upcoming classes, but the overall message from MyPlate is to eat a variety of fruits, vegetables, whole grains, lean sources of protein, and low-fat dairy.



Cook Up a Conversation

- What is your favorite food from each food group?
- What food group do you eat the most? What food group do you eat the least?
- Do your plates look like MyPlate when you eat at home? What about when you eat outside of home?

Mindful Munching

Don't worry if you don't eat all five food groups with each meal!

Healthy snacks can be a great way to meet your daily nutritional needs. Raw veggies with bean dip, nonfat greek yogurt, a piece of fruit, and popcorn are all great options.

Family Activity: Grocery Store Scavenger Hunt!

Take your student on a trip to the grocery store and help them find a healthy food from each food group. Use the space below to write the name of the food and where it was located in the store.

	Fruit	Vegetable	Grain	Protein	Dairy (or other source of calcium)
Name of Food					
Location of Food					

EAT THE RAINBOW

Different colored fruits and vegetables have different nutrients. Eating a variety of colors helps us stay healthy.

RED

Helps your body:

- keep your heart healthy
- keep your bladder healthy
- keep your memory strong
- lower your chance of getting cancer



- tomatoes
- red peppers
- red cabbage
- strawberries
- cherries
- watermelon
- red onions
- red apples
- cranberries
- red grapes
- beets

ORANGE/YELLOW

Helps your body:

- keep your heart healthy
- keep your eyes healthy
- lower your chance of getting cancer
- keep you from catching colds

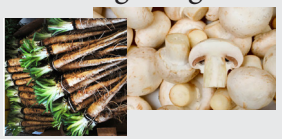


- carrots
- sweet potatoes
- yellow peppers
- pumpkins
- pineapple
- papayas
- cantaloupes
- tangerines
- mangos
- oranges
- lemons
- peaches
- bananas

WHITE

Helps your body:

- keep your heart healthy
- have good cholesterol levels
- lower your chance of getting cancer



- onions
- parsnips
- cauliflower
- ginger
- mushrooms
- garlic
- white pear

BLUE/PURPLE

Helps your body:

- stay healthy when you get older
- keep your memory strong
- keep your bladder healthy
- lower your chance of getting cancer



- eggplant
- purple cabbage
- raisins
- blueberries
- purple grapes
- plums
- purple potatoes

GREEN

Helps your body:

- keep your bones and teeth strong
- keep your eyes healthy
- lower your chance of getting cancer

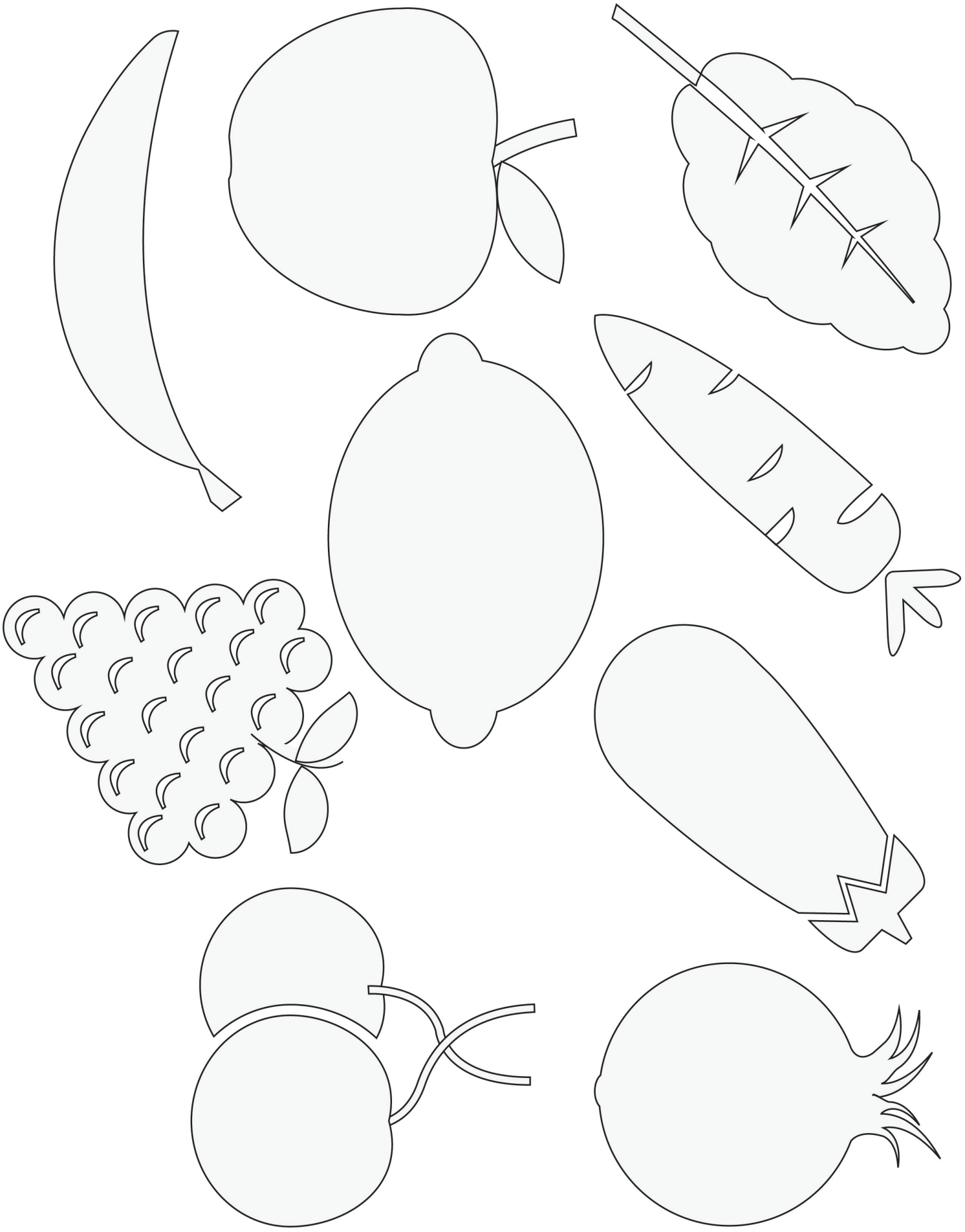


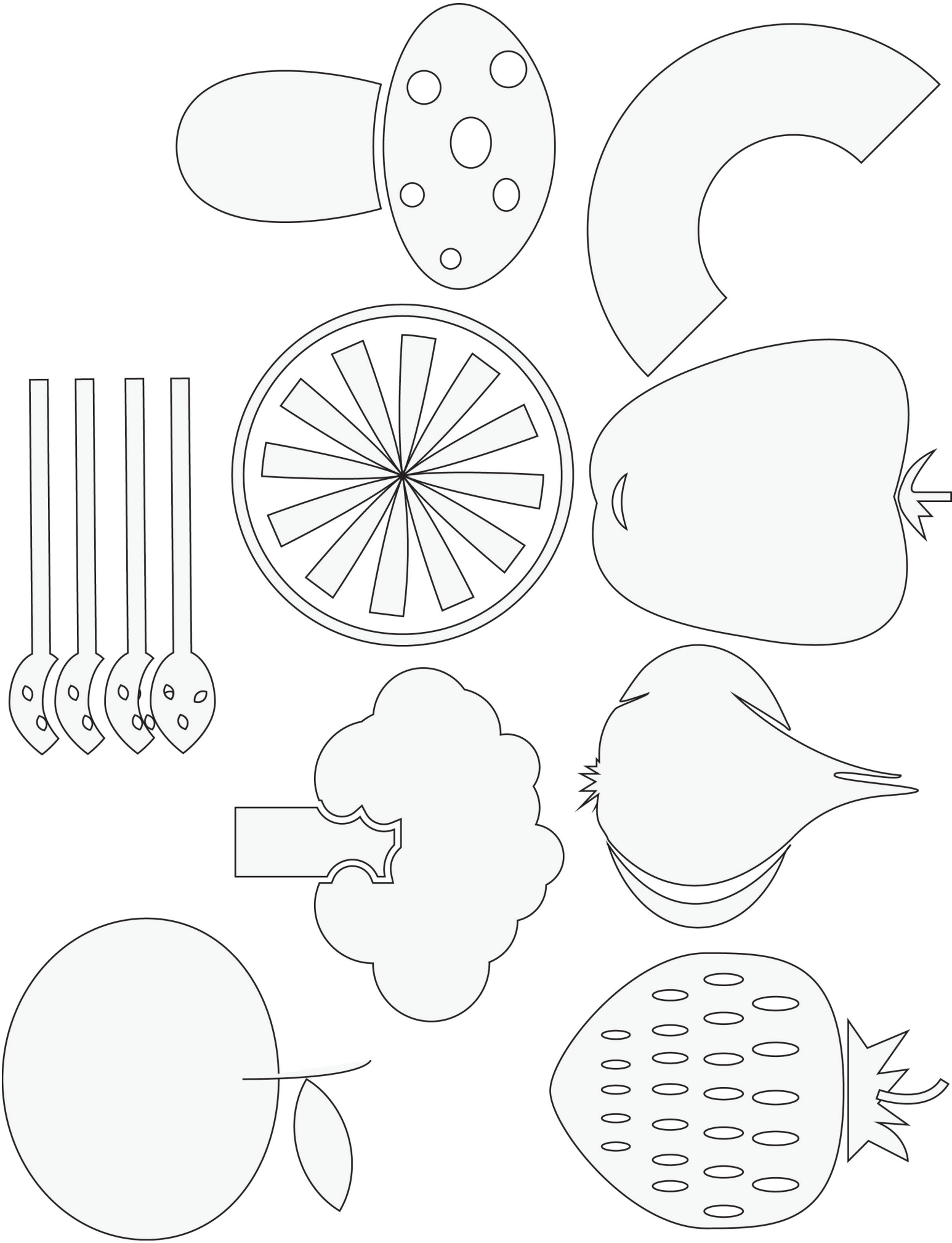
- spinach
- green peas
- green beans
- broccoli
- cabbage
- cucumbers
- asparagus
- green grapes
- green apples
- avocados
- limes

Adapted from Kalihi-Palama Health Center handout

APPENDIX 2A

APPENDIX 2A







THE CAMPUS KITCHENS PROJECT℠

BUILDING BLOCKS FOR HEALTHY KIDS

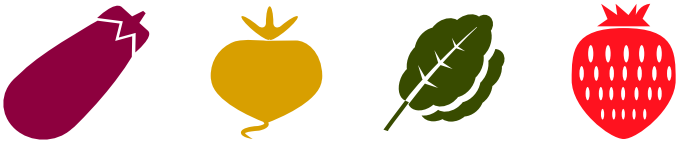
LESSON 2

Dear families,

Today's class was all about fruits and vegetables! We learned that different colored vegetables and fruit give our bodies a variety of important nutrients. Fruits and vegetables are low in calories and high in nutrients that support a healthy life. These nutrients include fiber, which is usually found in the skin of fruits and vegetables and helps us feel full after eating. Potassium, calcium, vitamins A, E, and K are a few of the other wonderful nutrients we get from eating fruits and vegetables. Children ages 4-13 should eat 1.5-3.5 cups of vegetables and 1-2 cups of fruit a day. Raw, cooked, canned, and frozen fruits and vegetables can all be included as part of a healthy diet.

Cook Up a Conversation

- What are our family's favorite fruits and vegetables?
- What fruits and vegetables are in season in our state?
- Where in our community can we purchase fruits and vegetables?



Family Activity: Vegetable Taste Test

Try a new vegetable prepared three different ways and describe the appearance, smell, taste, and texture of each cooking method.

Name of Vegetable:

	Raw	Steamed	Baked	Other
Appearance				
Smell				
Taste				
Texture				

Mindful Munching

Add cooked vegetables to a hummus recipe for added nutrients and color!

Ingredients:

- ½ cup cooked beet or sweet potato or cauliflower
- 1 15 oz can garbanzo beans, drained
- Juice of half a lemon
- Pinch of salt
- 2 cloves garlic, crushed
- 2 Tbsp tahini or peanut butter
- 2 Tbsp canola or olive oil

Instructions:

- Place cooked vegetable of choice in a food processor or blender and blend until smooth.
- Add the remaining ingredients and blend until well combined.
- Place in the refrigerator for at least 30 minutes before serving with raw veggies and whole wheat pita. Enjoy!

Make Half of Your Grains Whole

Whole grains contain the entire grain kernel: the bran, germ, and endosperm.

Whole grain kernel



Some Examples of Whole Grains:

brown rice

buckwheat

bulgur (cracked wheat)

oatmeal

popcorn

whole-wheat cereal

muesli

whole-grain barley

whole-grain cornmeal

whole rye

whole-wheat bread

whole-wheat crackers

whole-wheat pasta

whole-wheat sandwich buns and rolls

whole-wheat tortillas

wild rice

whole cornmeal

shredded wheat cereal

Whole Grain Tips—
Check the ones you already do:

- ☐ Choose a whole grain, such as oatmeal, when you have hot cereal.
- ☐ Read the label on a cereal box to find the word "whole" listed with the first ingredient.
- ☐ For a change, try brown rice or whole-wheat pasta.
- ☐ When baking, substitute whole-wheat or oat flour for at least half of the flour in a recipe.
- ☐ Eat whole-grain crackers.
- ☐ Serve and eat whole grains every day with meals or as snacks. Popcorn, a whole grain, can be a healthy snack.

APPENDIX 3A

Adapted from
Team Up At Home Team Nutrition Activity Book



THE CAMPUS KITCHENS PROJECT℠

BUILDING BLOCKS FOR HEALTHY KIDS

LESSON 3

Dear families,

Today we learned about the grains food group! Children ages 4-13 should eat 4-9 oz of grains each day. At least half of the grains should be whole grains. The best way to tell if a food has whole grains is to read the ingredient list or search for the whole grains stamp on the packaging. Some whole grain ingredients to look for are whole wheat, whole rye, brown rice, and whole barley.

100% WHOLE GRAIN 31g or more per serving WholeGrainsCouncil.org
EAT 48g OR MORE OF WHOLE GRAINS DAILY

Cook Up a Conversation

- What are our family's favorite grains?
- Why are whole grains an important part of a healthy diet?

Mindful Munching

Popcorn is a wonderful whole grain snack!

Pop popcorn on the stove with canola or olive oil and sprinkle with salt for a tasty treat that will keep you feeling full and satisfied. Heat oil in a saucepan, add whole popcorn kernels to cover the bottom of the pan, put the lid on and cook, shaking occasionally, until popping has stopped.

One serving of popcorn is 3 cups.

Family Activity:
Whole Grains Word Search!

There are a lot of delicious grains at grocery stores and markets. How many of the grains in this wordsearch have you tried?

T	E	F	F	I	R	Y	B	W	L
X	E	S	J	U	R	Y	Z	H	S
V	V	T	C	R	I	C	E	E	Y
D	D	N	Y	X	W	A	X	A	L
W	O	A	T	S	T	U	O	T	Z
K	K	U	Q	Q	P	M	O	F	D
F	E	B	A	R	L	E	Y	H	K
D	A	M	A	R	A	N	T	H	P
U	B	U	C	K	W	H	E	A	T
J	K	K	C	K	I	B	K	C	B

Word Bank:

- amaranth
- barley
- buckwheat
- oats
- rye
- teff
- wheat
- rice

APPENDIX 4A
FOOD GROUP JEOPARDY INSTRUCTIONS

PREPARATION

1. This game may be played with individual contestants or with teams (for a noisier, more enthusiastic effect).

2. Cover each answer under each category with a piece of paper labeled $100, $200, $300, etc. (Values increase as rows go down, so the first row is worth $100, the second worth $200, and so on.) As contestants choose questions to answer, remove the paper to see the answer for which they need to guess the question.

PLAY

1. First contestant chooses the food group from which s/he would like to hear an answer. For example, FRUITS.

2. Moderator removes the cover to display the answer. For example, "People say that one of me a day keeps the doctor away."

3. Contestant states: "What is an apple?" That response is correct. Contestant gets value indicated for that question.

4. Proceed as above with next contestant. A contestant may choose whatever square s/he wishes. For example, if s/he is the first contestant and wants to go directly to a $700 square, that is permitted.

5. If any contestant responds incorrectly, give the next contestant the opportunity to respond and receive the money.

6. When someone selects the "Daily Double," s/he may wager some or all of his money. If s/he responds correctly, s/he receives double the amount wagered. If s/he is incorrect, s/he loses the money wagered.

7. Play continues until all squares are uncovered. Contestant or team with the most money wins.

SIMPLER PROCEDURE

1. First contestant chooses the food group from which s/he would like to hear an answer. For example, GRAINS.

2. Teacher states an answer from the attached grid. For example, "I make up both sides of your sandwich."

3. Contestant states: "What is bread?" That response is correct. Contestant gets a point.

4. Proceed to next player as above. Play continues until all questions have been answered.

Food Group Jeopardy adapted from EatRight.org

FOOD GROUP JEOPARDY

FRUITS	VEGETABLES	GRAINS	PROTEIN
I am also the word for a color.	I look like a miniature tree.	I am the type of grain that has more vitamins.	I am made by chickens.
I am red, white and green with seeds.	I am very popular around Halloween.	I make up both sides of your sandwich.	I am often found in your cereal bowl.
People say that one of me a day keeps the doctor away.	I grow in the ground and rabbits like to eat me.	I am necessary to bake almost anything, like bread or cookies.	I am made from milk and go with crackers, pizza and more.
Monkeys like to eat me.	We grow together inside of a pod.	Some people like to eat me for breakfast, especially when it is cold outside.	I come in lots of varieties, like cashews and almonds.
I grow in bunches and am a popular fruit juice.	I help make you strong and Popeye likes to eat me.	DAILY DOUBLE	I like to swim.
I wear my seeds on my outside.	I grow on vines and people like to make sauce out of me.	I am the type of grain that is more processed and is less healthy.	I am what a hamburger is made out of.
I am small, green and similar to a lemon.	DAILY DOUBLE	You can often find me with red sauce and meatballs on top.	I am made from nuts, but am not crunchy.

DAILY DOUBLE - Name one vegetable from each of the "Eat the Rainbow" color groups

DAILY DOUBLE - True or false: all brown grains are whole grains.

APPENDIX 4A

FOOD GROUP JEOPARDY ANSWERS

FRUITS	VEGETABLES	GRAINS	PROTEIN
orange	broccoli	whole grain	eggs
watermelon	pumpkin	bread	milk
apple	carrot	flour	cheese
banana	peas	oatmeal	nuts
grape	spinach	DAILY DOUBLE	fish
strawberry	tomato	refined grain	beef
lime	DAILY DOUBLE	pasta	peanut butter

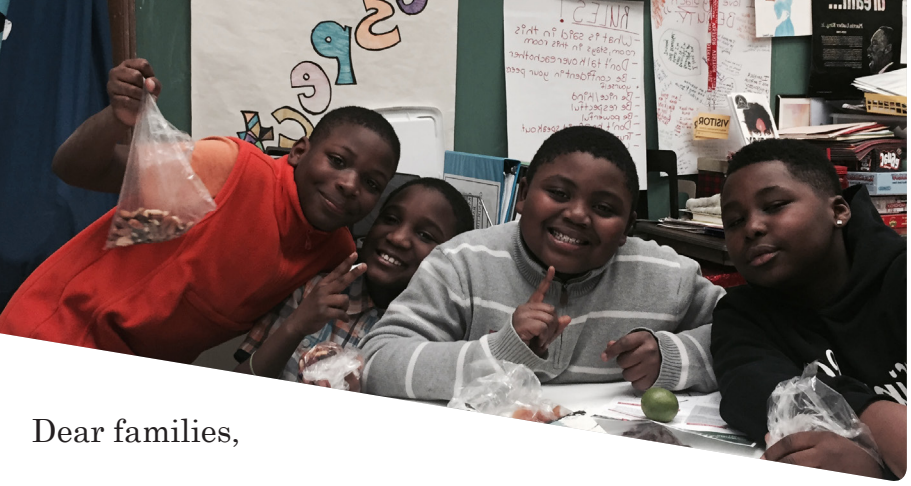
DAILY DOUBLE - Answers vary, but may include tomatoes, carrots, onions, broccoli and eggplant.
DAILY DOUBLE - False.

APPENDIX 4A

APPENDIX 4A
FOOD GROUP JEOPARDY MONETARY AMOUNTS

Monetary amounts for food group jeopardy. Tape over the answer squares.

$100	$100	$100	$100
$200	$200	$200	$200
$300	$300	$300	$300
$400	$400	$400	$400
$500	$500	$500	$500
$600	$600	$600	$600
$700	$700	$700	$700



THE CAMPUS KITCHENS PROJECT℠

BUILDING BLOCKS FOR HEALTHY KIDS

LESSON 4

Dear families,

We learned about the protein and dairy food groups today!
We also talked about healthy fats. Children should eat about 4 to 5 oz of protein foods each day. Skinless chicken and turkey, fish, beans, lentils, eggs, and soy are all great options from the protein food group. The dairy food group includes milk, yogurt, and cheese. Low fat or fat free dairy is a great source of calcium and protein. Children should drink 2 to 3 cups of low fat milk or soymilk each day. For those who are lactose intolerant or do not like to eat dairy products, there are other healthy foods that have protein and calcium such as soy or almond milk, collard greens, bok choi, tofu, and beans. Fat is also an important part of our diets. Canola oil, olive oil, almonds, walnuts, and avocados are all healthy sources of fat. These sources of fat are good for our brain, heart, and cells and help our bodies absorb certain vitamins.

Cook Up a Conversation

- When does our family usually eat protein?
- What would someone who is vegetarian eat from the protein group?

Family Activity: Meatless Monday!

As a family, pick one day of the week to eat plant-based sources of protein instead of meat or fish. Here are a few tasty ideas for breakfast, lunch, and dinner:

Breakfast:
Greek yogurt, eggs, or toast with peanut butter

Lunch:
Grilled cheese, black bean soup, or veggie wrap with hummus

Dinner:
Rice and lentil salad, black bean tacos, stir fried vegetables with tofu and brown rice

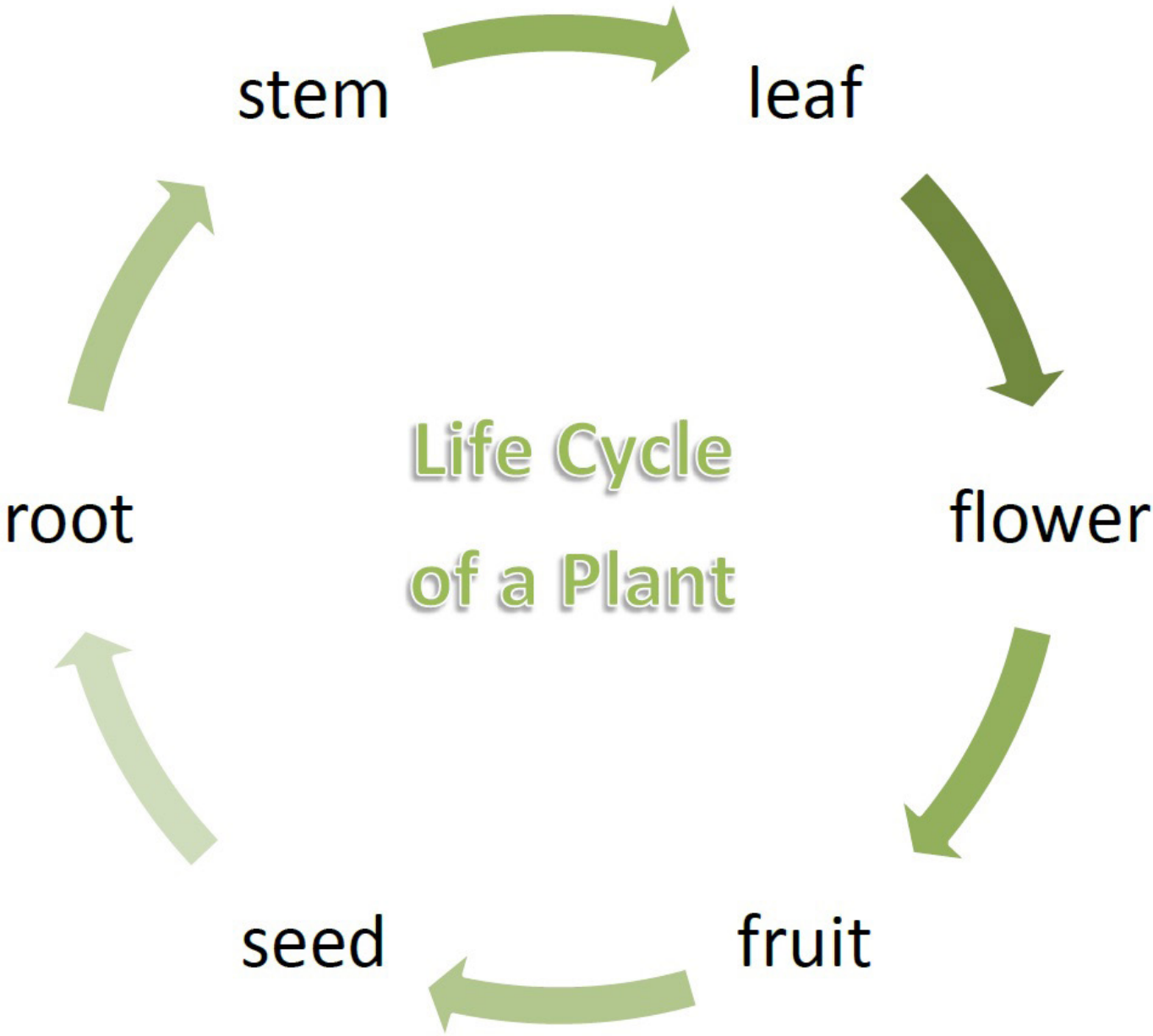
Mindful Munching

Black beans are a great source of protein and make a delicious salsa when mixed with corn, tomatoes, and onions. Try this recipe out and dig in with whole grain tortilla chips.

Ingredients:
1 15 oz can black beans, drained
¼ cup red onion, chopped
1 clove garlic, crushed
¼ cup tomato, chopped
¼ cup corn
2 Tbsp red wine vinegar

Instructions:
Combine all ingredients in a bowl and refrigerate for at least 30 minutes before serving.

APPENDIX 5A



APPENDIX 5B

SEEDS



FLOWER



STEM



ROOTS



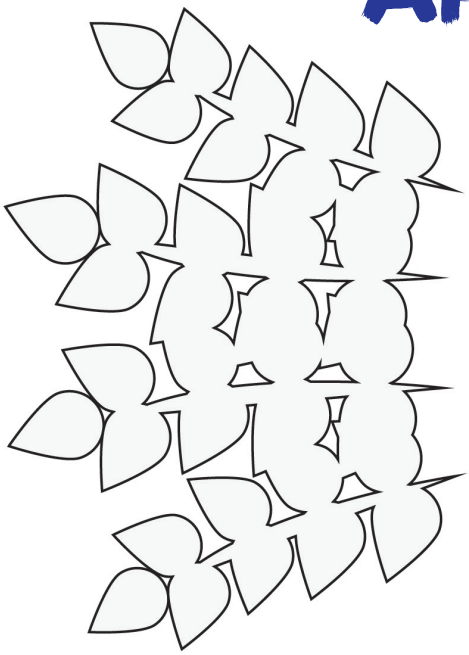
LEAF

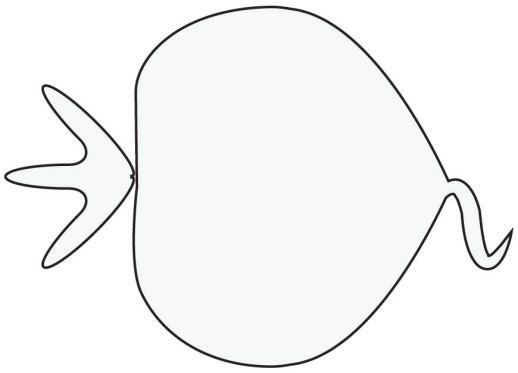


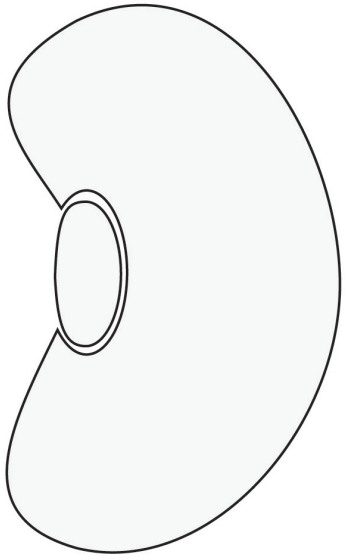
FRUIT

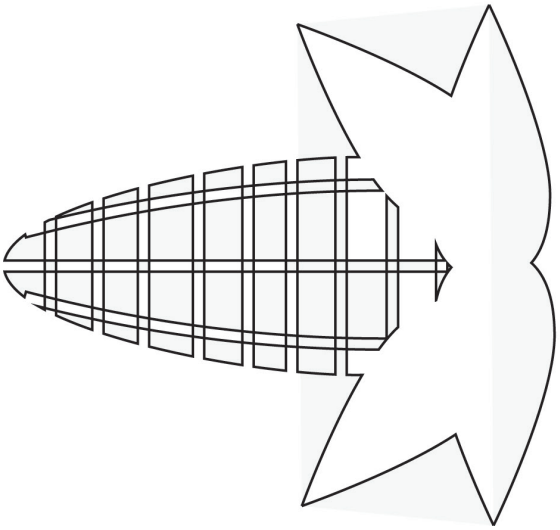


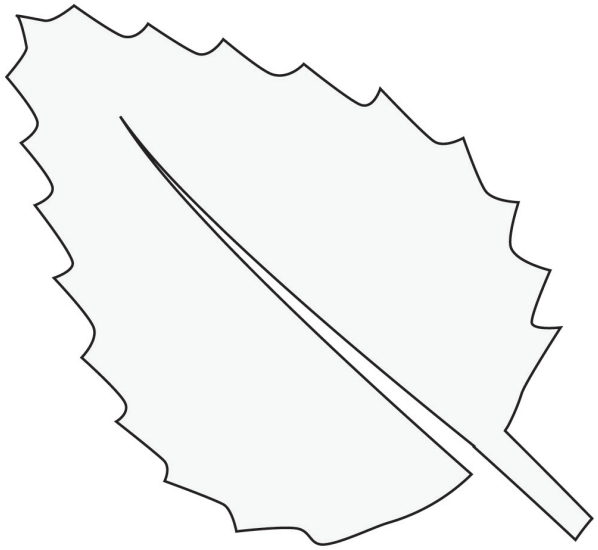
APPENDIX 5C

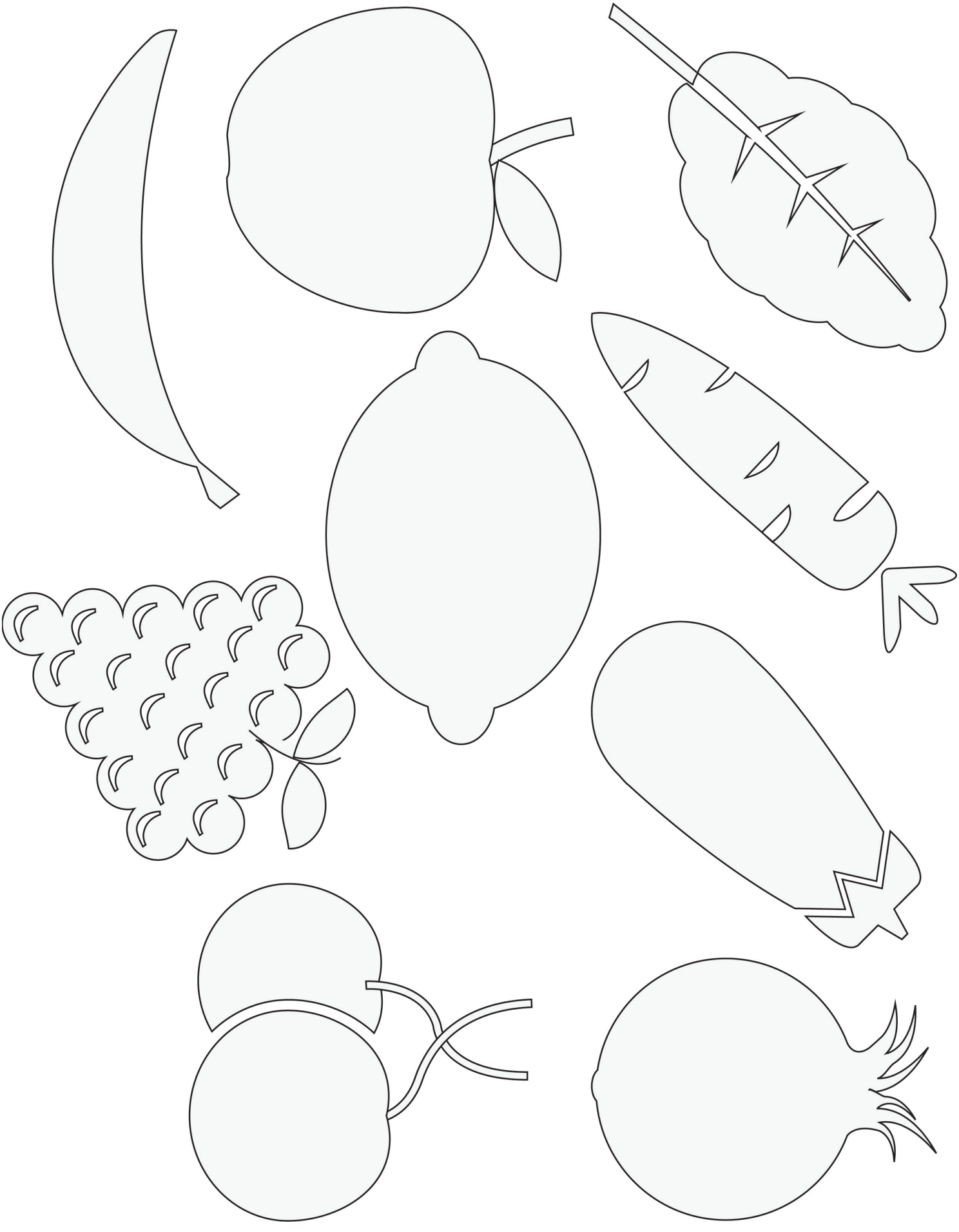


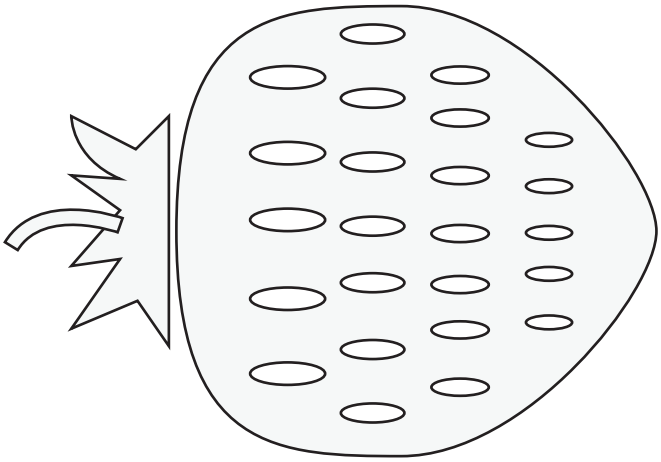


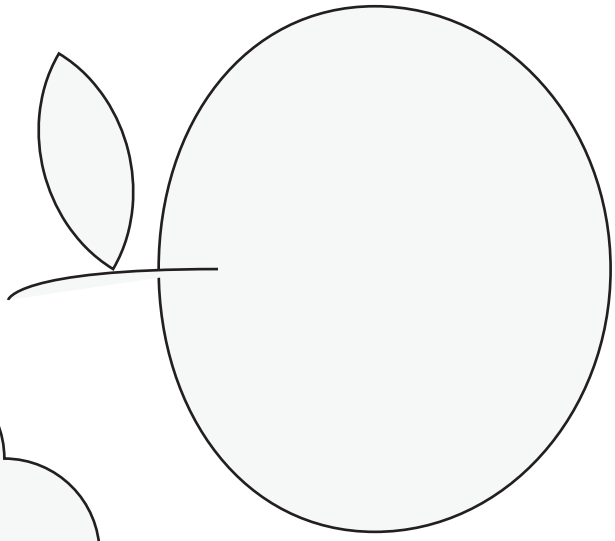


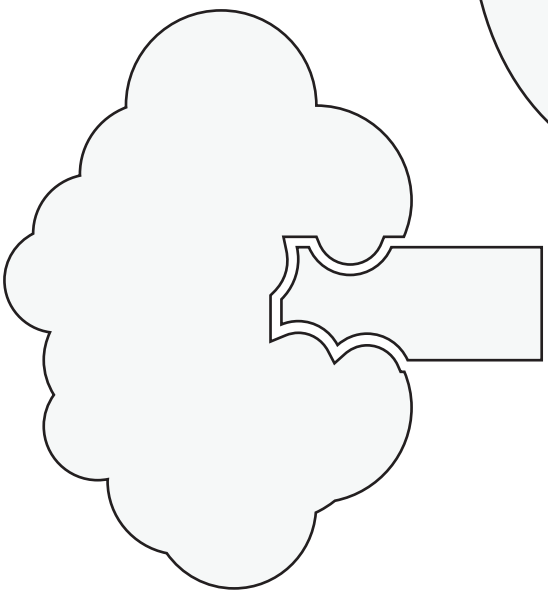


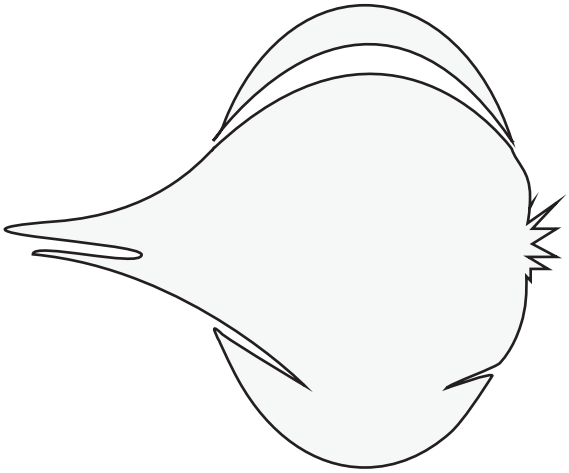


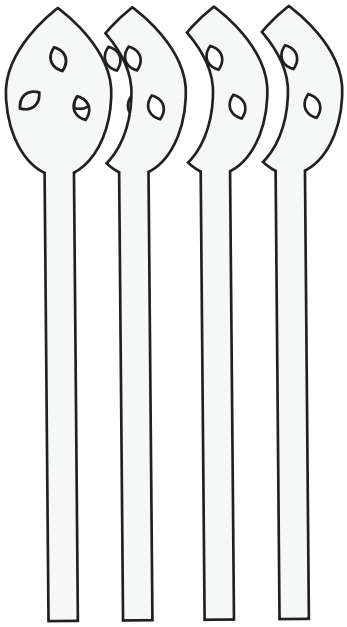


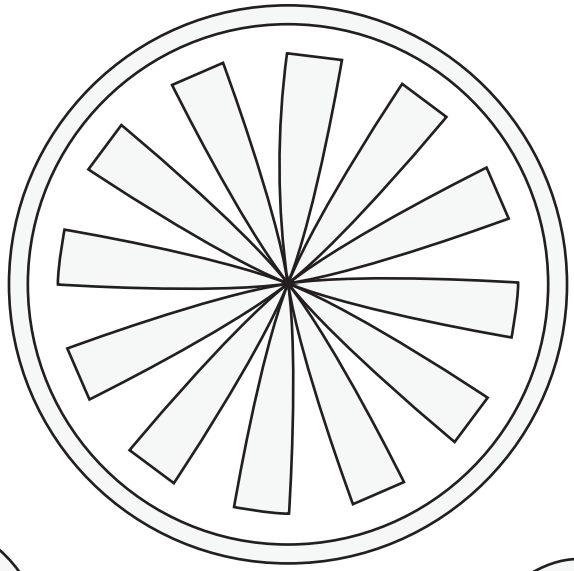


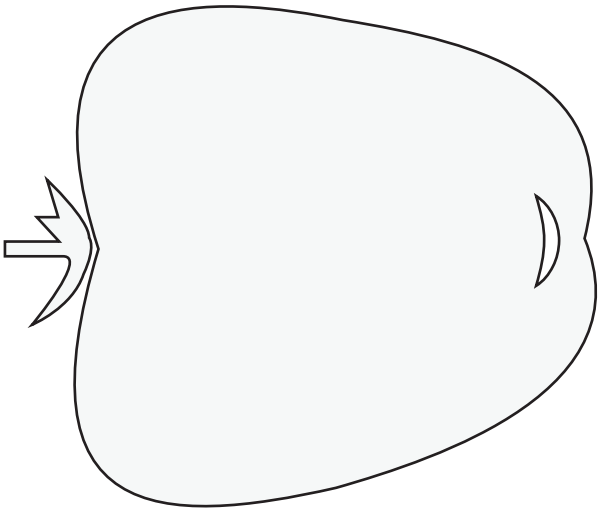


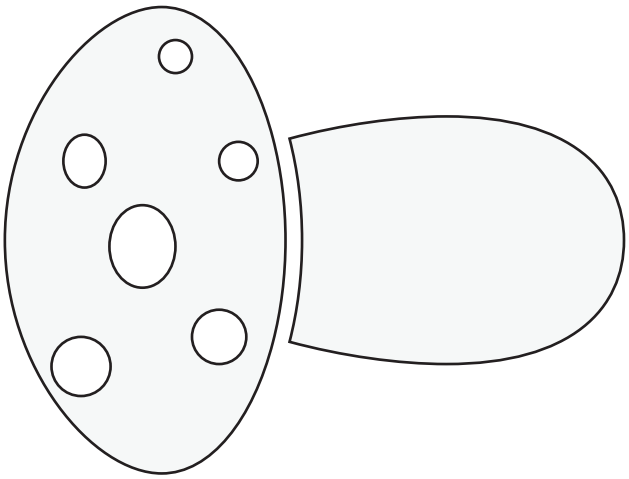














THE CAMPUS KITCHENS PROJECT℠

BUILDING BLOCKS FOR HEALTHY KIDS

LESSON 5

Dear families,

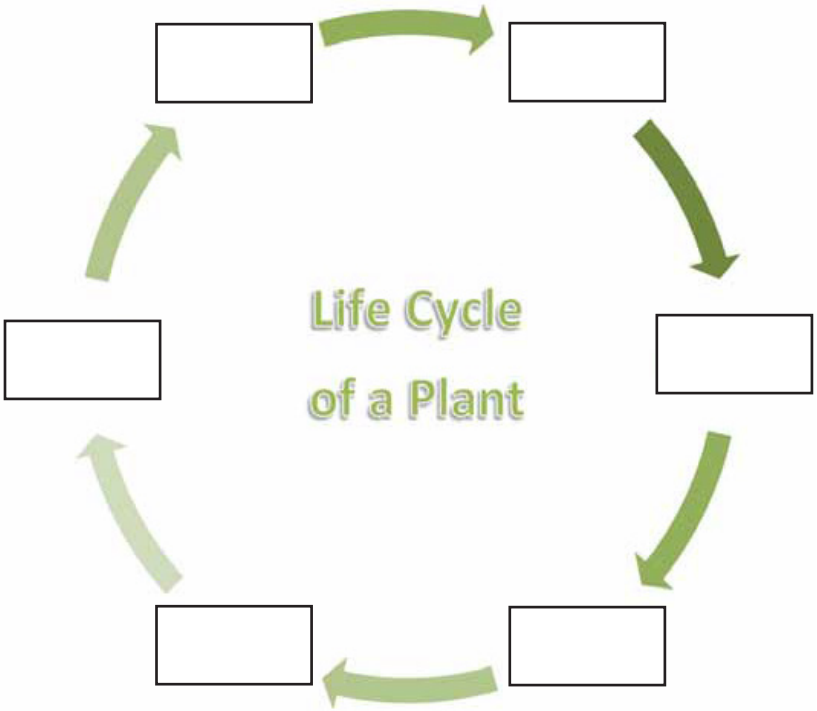
Today we learned all about the foods we eat that come from plants! Plant-based foods can be very healthy, affordable, and good for the planet. We learned that many foods from the vegetable, grain, fruit, and protein food groups come from different parts of a plant including the seed, root, stem, leaf, and fruit. We also talked about the life cycle of a plant and what plants need to grow.

Cook Up a Conversation

- What food do we eat for breakfast that comes from a plant? What about the food we eat for lunch and dinner?
- What happens between when a plant is harvested on a farm and when we see it on our plates?

Family Activity: Plant Life Cycle!

Use the word bank to fill in the boxes with the correct part of the plant.



Word Bank:

- stem
- flower
- seed
- fruit
- leaf
- root

Mindful Munching

Different foods grow during different seasons. Cooking with seasonal food can inspire fun ideas for classic snacks and meals.

Try these yummy toppings for whole wheat toast that feature a seasonal fruit or vegetable!

- Winter: cranberry jam
- Spring: two thinly sliced radishes, ¼ c mashed avocado, lemon juice
- Summer: sliced strawberries, blueberries, and cream cheese
- Fall: nut butter or ricotta with sliced apples or pears

APPENDIX 6A

Day	Physical Activities	# of Minutes
Mon		
Tues		
Wed		
Thurs		
Fri		
Sat		
Sun		

Healthy Eating—Circle and continue with previous goals, and add a new goal.



Healthy Eating Goals


I made half my plate fruits and vegetables


At least half of the grains that I ate were whole grains


I chose fat-free or low fat (1%) milk, yogurt, or cheese


I drank water instead of sugary drinks


I chose lean sources of protein


I compared sodium in foods like soup and frozen meals and chose foods with less sodium

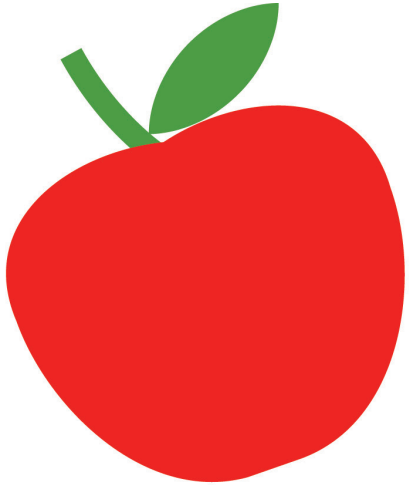

I ate seafood


I ate smaller portions

adapted from the Presidential Active Lifestyle Award materials at presidentschallenge.org



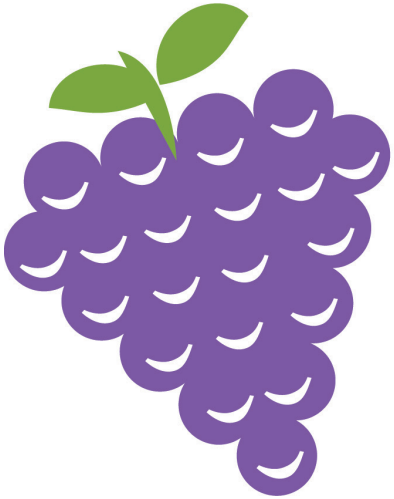
CERTIFICATE OF COMPLETION



PRESENTED TO

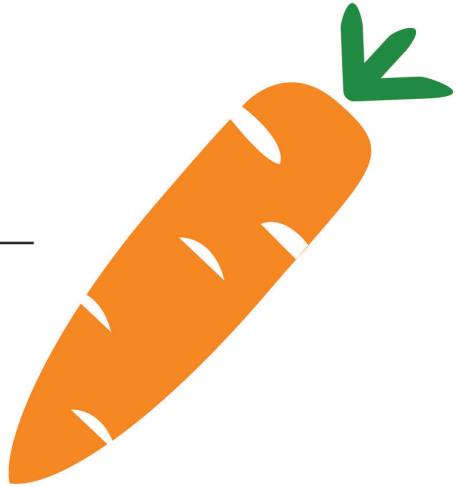
_____

FOR FINISHING THE BUILDING BLOCKS FOR
HEALTHY KIDS NUTRITION EDUCATION COURSE



_____ _____

DATE SIGNED



SODEXO FOUNDATION

STOP HUNGER
A Sodexo Initiative

THE CAMPUS KITCHENS PROJECT℠

THE CAMPUS KITCHENS PROJECT℠

Classroom Questionnaire

Name_____

Date_____

1. What are the 5 food groups on the MyPlate?

a. _____ b. _____ c. _____d. _____e. _____

2. At lunch and dinner, fruits and vegetables should take up _____ of your plate.

a. less than half b. about half c. all d. none

3. Healthy foods come in all the colors of the rainbow. Name a healthy food that is the color……

RED:_____ GREEN:_____

ORANGE:_____ BLUE:_____

YELLOW:_____ PURPLE:_____

4. Circle all the grains below that are *whole* grains:

a. popcorn b. white bread c. oatmeal

d. whole wheat pasta e. white rice

5. Of all the grains you eat every day, how many should be whole grains?

a. None b. less than half c. at least half

6. Meat contains protein, but so do a lot of other foods. Circle all the foods below that have a lot of protein:

a. Eggs b. Nuts c. Apples

d. Milk e. Carrots f. Beans

7. Some proteins are lean proteins, and some are full-fat proteins. For each protein example circle what kind of protein it is:

White meat chicken (circle one): Lean protein **OR** full fat protein

Whole milk: (circle one): Lean protein **OR** full fat protein

Black beans: (circle one): Lean protein **OR** full fat protein

Bacon: (circle one): Lean protein **OR** full fat protein

Fish: (circle one): Lean protein **OR** full fat protein

8. Where does food come from originally?

a. The store b. The refrigerator c. A bag or can

d. A farm or garden e. A restaurant f. The kitchen at home

9. Did you know that potatoes are the root of the plant they grow on? All of the fruits and vegetables that we eat are a part of a plant. Match the food on the LEFT with the part of the plant they are on the RIGHT by drawing a line from one side to the other.

Lettuce	Leaf
Tomato	Root
Carrot	Stem
Celery	Flower
Broccoli	Fruit

10. How many minutes of active play time or exercise should you have *every day*?

a. 10 minutes b. 30 minutes c. 60 minutes or more d. none

11. Circle all of the activities that count as physical activity:

a. Walking with my family after dinner b. Taking the stairs c. Playing a video game

d. Playing basketball at recess e. Taking the bus to school f. Dancing

12. About how often do you talk to your family about eating more fruits and vegetables?

a. Never b. Rarely c. Once a month d. Once a week e. Every day

13. How often do you try new healthy foods like new fruits, vegetables or whole grains?

a. Whenever they are offered b. Sometimes if it looks good c. Never, I only like the foods I already eat

14. About how often do you prepare food with your family?

a. Never b. Rarely c. Once a month d. Once a week e. Every day

15. Did you ever make any of the recipes or snacks from the newsletters with your family? (Circle one) Yes / No



THE CAMPUS KITCHENS PROJECT℠

BUILDING BLOCKS FOR HEALTHY KIDS
LESSON 6

Dear families,

Today was the last lesson of our nutrition education series.
We have had a lot of fun talking about healthy eating and learning together.
Thank you for supporting your student throughout the classes. We hope that you and your student will continue to learn about healthy living at home!

We wrapped up the series with a celebration of all that we have learned. We reviewed the food groups and talked about how eating right and being physically active are both important parts of a healthy life. It is recommended that all children should be physically active for 60 minutes or more each day. Physical activity can include riding a bike, gardening, swimming, playing tag, dancing, and many other in-door and outdoor activities.

Cook Up a Conversation

- What does it mean to be healthy?
- What are our favorite outdoor activities?
- What are our favorite indoor activities?

Mindful Munching

Trail mix is a great snack that can help fuel active bodies and include more than one food group!

In a sandwich bag, combine 1/2 cup of your favorite whole grain cereal, 2 Tbsp almonds or walnuts, 2 Tbsp dried fruit, and 2 Tbsp dark chocolate chips.

Family Activity: Healthy Eating and Physical Activity Charades!

Give each person playing four notecards or use scraps of paper like the examples below. Invite everyone to secretly write a type of physical activity on two of the cards, such as tap dancing or running, and a healthy food on the other two, such as fish or carrot. Fold the cards in half and place them in a bowl. Have fun taking turns to pick a card and act out the food or physical activity without speaking until someone guesses the correct word.

GARDENING

BEETS

