



# Connect: The Cafeteria to The Classroom



#### PROJECT COORDINATOR

Lois Coleman, MS, CHES

#### **ACTING EXECUTIVE DIRECTOR**

Aleshia Hall-Campbell, PhD, MPH

#### **Institute of Child Nutrition**

The University of Mississippi

The Institute of Child Nutrition was authorized by Congress in 1989 and established in 1990 at The University of Mississippi in Oxford and is operated in collaboration with The University of Southern Mississippi in Hattiesburg. The Institute operates under a grant agreement with the United States Department of Agriculture, Food and Nutrition Service.

#### **PURPOSE**

The purpose of the Institute of Child Nutrition is to improve the operation of child nutrition programs through research, education and training, and information dissemination.

#### **MISSION**

The mission of the Institute of Child Nutrition is to provide information and services that promote the continuous improvement of child nutrition programs.

#### **VISION**

The vision of the Institute of Child Nutrition is to be the leader in providing education, research, and resources to promote excellence in child nutrition programs.

This project has been funded at least in part with Federal funds from the U.S. Department of Agriculture, Food and Nutrition Service through an agreement with the Institute of Child Nutrition at The University of Mississippi. The contents of this publication do not necessarily reflect the views or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.

The University of Mississippi is an EEO/AA/TitleVI/Title IX/Section 504/ADA/ADEA Employer.

In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability.

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights; Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

© 2016, Institute of Child Nutrition, The University of Mississippi, School of Applied Sciences

Except as provided below, you may freely use the text and information contained in this document for non-profit or educational use with no cost to the participant for the training providing the following credit is included. These materials may not be incorporated into other websites or textbooks and may not be sold.

#### Suggested Reference Citation:

Institute of Child Nutrition. (2016). Connect: The cafeteria to the classroom. University, MS: Author.

The photographs and images in this document may be owned by third parties and used by The University of Mississippi under a licensing agreement. The University cannot, therefore, grant permission to use these images.

#### Connect: The Cafeteria to the Classroom

#### Table of Contents

**Lesson 1** Five Food Group Fun

Lesson 2 Whole Grains

**Lesson 3** Fun with Fruits

Lesson 4 Vary Your Vegetables

**Lesson 5** Food Label Fact

**Lesson 6** Portion Control

**Lesson 7** Herbs, Spice, and Everything Nice

**Lesson 8** Where Do We Get Our Food?



### Connect: The Cafeteria to the Classroom A Nutrition Education Curriculum

You are in a unique position to educate children on a variety of nutrition related topics. However, it is important to keep in mind that children learn best when they are actively engaged. Teaching them requires using fun activities during which they can use all of their senses. Children do not need to simply hear about food; they need to see, taste, touch, and smell it. The lessons included in this curriculum were developed to get you started doing just that.

Here are some tips to keep in mind as you plan and prepare the activities for your children:

- Plan activities that match children's abilities and interests. Consider the children's ages, interests, and attention spans. Generally, the younger the child the shorter the activity should be. Simple is usually best.
- Build on what children already know. Children learn new things by building on what they already know. When you introduce a new topic about food, connect it to something that is familiar to them. For example, young children would better comprehend the following statements: "Food helps people go like gas makes cars go," or "Beets are the same color as a stop light." On the other hand, you may be able to relate to older children by asking a question such as, "What would you like to learn how to cook?" Then, build on their interests.
- Allow children to explore. Children are naturally curious and love to explore. Allow them to handle food; let them touch, help prepare, smell, and taste it. The more hands-on experiences children have, the more likely they are to retain the information they have learned.
- **Set ground rules.** When working with children, it is important to create an environment that is positive, orderly, and conducive to learning. One way of doing so is to create a set of rules. Here are some examples: "It is okay not to like a food, but try at least one bite," or "If you do not like a particular food, do not make negative comments that may prevent others from discovering they do like it."
- Always evaluate and re-evaluate activities. This process helps you identify what does and does not
  work and helps you determine ways to improve activities for future use. Through routine evaluation, you
  can modify activities to make things flow more smoothly and be more enjoyable for children.

**REMEMBER:** Flexibility, patience, and a sense of humor are all necessary when planning any activity that involves children and food.

### Connect: The Cafeteria to the Classroom A Nutrition Education Curriculum

Connect: The Cafeteria to the Classroom is a nutrition education curriculum that consists of eight simple lessons. Each lesson can be used by school nutrition professionals, teachers, and chefs. The lessons can be used to instruct children in kindergarten through fifth grade in a variety of settings, including the cafeteria and the classroom. Lesson plans are designed to last approximately 30 minutes and to incorporate a variety of nutrition principles, all in an easy-to-use format.

#### **Getting Ready to Teach**

Each lesson includes the following components:

- Learning objective(s)
- Grades
- Materials
- Script
- Activity

The instructor will use the script to present the lesson to students. The script gives the following prompts— SAY, ASK, DO, and ACTIVITY.



This prompt lets the instructor know what to say to students.



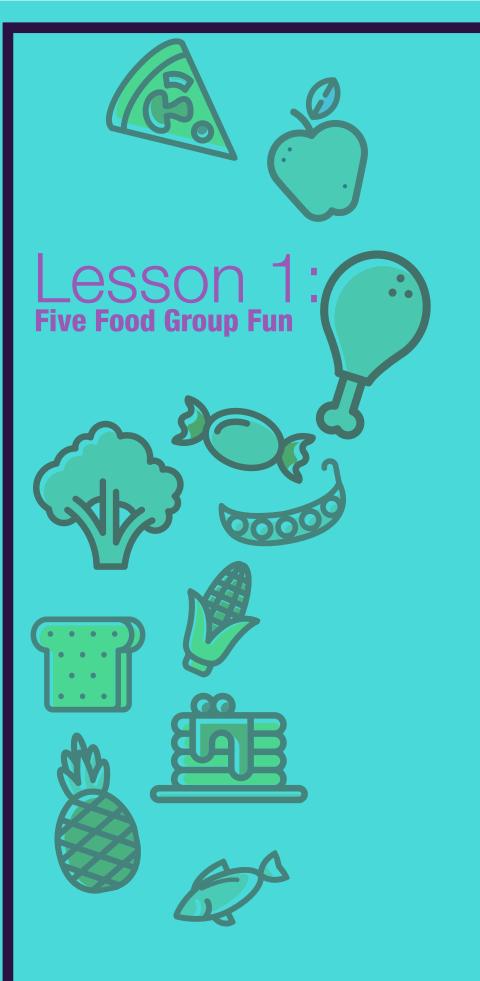
This prompt is used when the instructor should ask the students a question.



This prompt is used to explain what the instructor/participants are to do.

#### **ACTIVITY:**

This prompt lets you know it is time for a hands-on activity to reinforce concepts taught during lessons.



## Lesson 1: Five Food Group Fun





#### Materials:

- Sample of the MyPlate graphic
- "What Food Am I?" cards

#### Learning Objectives:

After completing this lesson, children will be able to:

- Identify the five food groups.
- List examples of foods that belong in each food group.
- Explain how MyPlate serves as a guide for eating a nutritious meal.

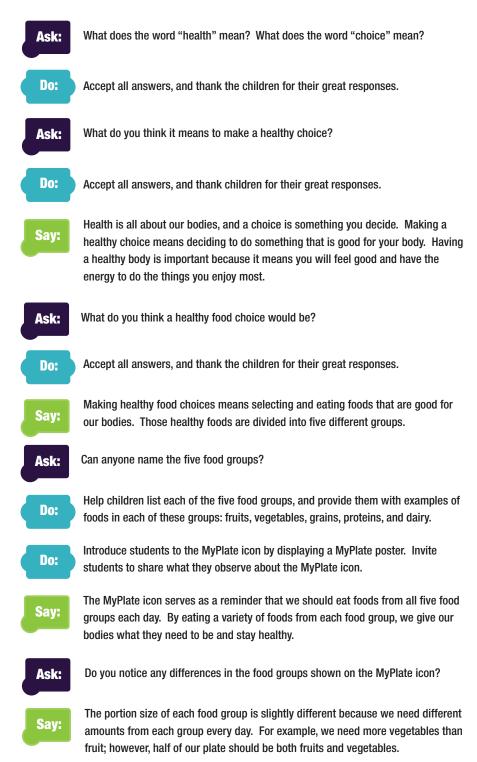
#### Lesson Overview:

MyPlate illustrates five food groups that are the building blocks of a healthy diet. It is important for children to learn about the food groups and the importance of consuming foods from each group daily. The purpose of this lesson is to help children become familiar with the MyPlate icon, as well as foods that belong in each of the five food groups.

#### Before the Lesson:

- MyPlate graphics can be printed from www.choosemyplate.gov.
- Sample "What Food Am I?" cards are provided. You may choose to print the handout on cardstock paper, or laminate, and cut along the perforated lines to create reusable "What Food Am I?" cards.
- You may choose to develop additional cards of differing complexity based on the age group you are teaching. Another option would be to use unlabeled pictures for young children, and let them guess the name of the food item.

#### Lesson 1: Script



## Lesson 1: Script

Ask: Do you notice any differences in the food groups shown on the MyPlate icon?

The portion size of each food group is slightly different because we need different amounts from each group every day. For example, we need more vegetables than fruit; however, half of our plate should be both fruits and vegetables.

Go around the room asking each student to mention something they learned about MyPlate. When everyone has shared something, see if the class can think of anything else they learned.

#### **ACTIVITY:**

Explain to the students that they will play the game, "What Food Am I?" They will need to guess what food you are describing based on the clues they are given

#### What Food Am I?

#### Instructions:

Divide students into small teams of three to four. Read clues one sentence at a time, pausing to see which team can guess each food with a minimum number of clues. Award one point for a correct answer. If the group can name which food group the item belongs to, award one additional point. If possible, provide children with a healthy snack to enjoy during the game.

#### **AVOCADO**



I have a tough, dark brown or green skin, a hard pit and a creamy, green inside. I'm very healthy to eat because I have lots of vitamin E, potassium, and good fat. Sometimes I'm served squashed up and people dip chips into me for a snack. What am I?

#### **BELL PEPPER**

I grow in a rainbow of colors: green, orange, red, and yellow. I have cousins who are very spicy, but I have a mild, sweet flavor. I'm common in stir-fry, fajitas, soups, and salads, but I also taste good if you eat me as crunchy slices. What am I?



#### **BLACK BEANS**



I am small, shiny, and black. I'm a great source of protein and fiber. I can be stuffed into a burrito, tossed into a salad, or eaten plain with a little cheese sprinkled on me. What am I?

#### **BREAD**

I smell wonderfully good when I'm freshly baked. I'm made from whole-wheat flour. I sometimes have seeds, nuts, or herbs baked into me. You might have a slice of me for toast or a sandwich. What am I?



## (A)

#### **BROCCOLI**

I look like a tiny, green tree, and I'm an excellent source of vitamins and fiber. I'm related to my brother, the cauliflower, and I am an excellent snack if you dip me in some ranch dressing or hummus. What am I?

#### **CARROTS**



I grow underground and am pulled out when I'm ready to be eaten. I'm very crunchy, and rabbits love to nibble on me. What am I?

#### **CELERY**

I am a green stalk that makes a loud, crunchy noise when you bite into me. I'm high in fiber and low in calories, which makes me a healthy snack option. Lots of people like to smear peanut butter on me. What am I?





#### **CHEESE**

I can be many shades of orange, from brightly colored to almost white. I can be mild or sharp tasting. I'm made from milk, which makes me a good source of calcium. I melt nicely between two pieces of bread. What am I?

#### CHICKEN

I can be grilled, baked, or even tossed into a salad. You might recognize me in "strips" or "nuggets." I hatch from an egg and am raised on a farm before I come to your kitchen. What am I?





#### CORN

I am a vegetable that grows on tall stalks throughout the United States. I am yellow. My ears are a popular food at summer barbeques. What am I?

#### **CUCUMBER**

I am a long, green vegetable. I have an almost watery taste and crunch when you bite into me. I'm common in salads and on sandwiches. I can also be made into pickles. What am I?





#### **EGGS**

Scramble me, boil me, or bake me. I can be eaten lots of different ways. I taste good on my own, but I am also an important ingredient in cookies, pancakes, and muffins. I am also a common breakfast food that comes in a shell. What am I?



#### MILK

I am a healthy beverage that is high in calcium. I taste best when I'm very cold. People like to pour me over cereal. When you have dinner with your family, make sure to have me on the table, too. If you drink me, I'll give you strong bones. What am I?

#### **OATMEAL**

On a cold day, I'm a terrific breakfast food. I can either be instant or homemade, and I taste best when mixed with a little milk and brown sugar. Some people also like to eat me with fruit. What am I?



#### KIWI



I have a fuzzy brown outside that wouldn't taste very good to eat. My green insides are nice and juicy, with little black seeds. I'm oval-shaped, and I make a great snack, or you can slice me up and put me in a fruit salad. What am I?

#### STRAWBERRY

I am a delicious, bite-sized, red summer fruit. I have tiny, yellow seeds all over my skin and a leafy, green hat on my top that you have to take off before you can eat me. I grow in patches on a farm or in a backyard. What am I?



#### **SWEET POTATO**



I am especially popular during Thanksgiving. I grow underground, where I can get to be as long as a pencil. Inside my brown skin, I am usually orange in color. What am I?

#### WATERMELON

I have a thick, green rind and a red, juicy center. I grow on a vine. I'm easy to eat when I'm sliced, but be sure to spit out my black seeds. What am I?



#### **YOGURT**



I'm made from milk. I am rich in calcium and come in lots of different flavors. You usually eat me with a spoon, but sometimes I'm "drinkable" or "squeezable." What am I?

## Lesson 2: Whole Grains









#### **Materials:**

- Popcorn kernels
- Small plastic bags
- Nutrition facts label from a whole wheat product
- "Meet the Kernel" handout
- "Whole Grain Unscramble" handout

#### Learning Objective:

After completing this lesson, children will be able to:

Identify whole grains and whole grain products.

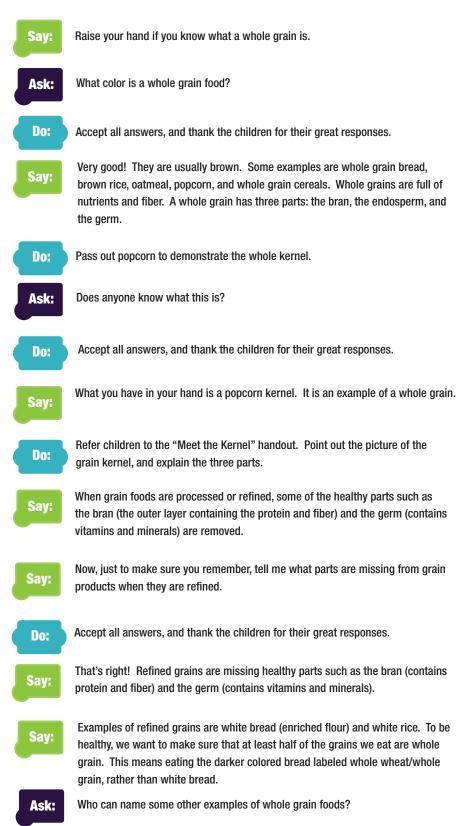
#### Lesson Overview:

Whole grains are an important source of fiber and nutrients. Research has shown consuming whole grains may reduce the risk of developing chronic diseases and may help with weight maintenance. The purpose of this lesson is for children to learn how to identify whole grains.

#### Before the Lesson:

- Prepare several bags of popcorn kernels to pass around
- Cut out the nutrition label from a whole wheat product
- Print copies of handouts.

## Lesson 2: Script



## Lesson 2: Script

Accept all answers, and thank the children for their great responses. Reinforce answers such as shredded wheat cereals, toasted oat cereals, whole grain pasta, quinoa, rye, etc.

Sometimes foods pretend to be healthy and may seem like a whole grain, but they are really not! To make sure you eating a whole grain, you should check the Ingredients Label on the product.

Show the children the whole grain/whole wheat Ingredients Label. Discuss how whole grain products commonly have "whole grain" or "whole wheat flour" as the first ingredient.

Wrap up the lesson by encouraging the children to eat more whole grains and to remember to check the list of ingredients on list food packages.

#### **ACTIVITY:**

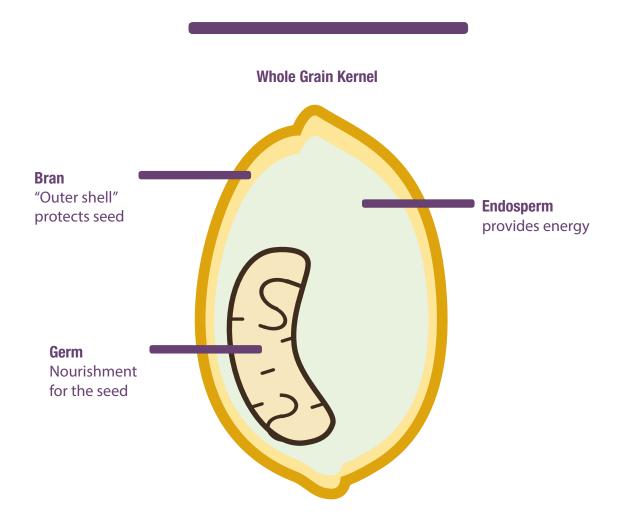
Allow the children to complete the "Whole Grain Unscramble" handout.

#### **Meet the Kernel**



Here is a wheat kernel or seed. It is enlarged so you can see how complex one kernel is. Kernels are very tiny — even smaller than our little fingernails! There are about 50 kernels in a head of wheat and 15,000 to 17,000 kernels in just one pound! The large inner portion of the kernel is called the endosperm. It's the part that is ground to make white flour. The hard outer coating is the bran, which is sometimes used in cereals, muffins, and breads. This portion is made of many layers.

Finally, the tiniest part of the kernel is the germ. It's the part that grows into a new wheat plant if the kernel is planted in soil. Whole wheat flour is made when the whole kernel is ground or milled. Whole wheat foods contain all three parts of the kernel.



#### **Whole Grain Unscramble**

#### Unscramble the letters to find the answer to each riddle.

1. My color can be either white or brown, and I am the most eaten grain in the world.				
ICRE				
2. I am a grain that is eaten in the morning with milk.				
RCAEEL				
<del></del>				
3. I am a grain usually eaten at movie theaters.				
NRPPOOC				
4. I am a whole grain that is served hot and eaten at breakfast. Some people add milk or fresh fruit to this whol grain.				
LAEMTAO				
5. I help maintain intestinal health. I am found in fruits, vegetables, nuts and seeds, legumes, and whole grains.				
RFBEI				
<del></del>				
6. If Leontain the entire grain kernel, Lam referred to as a what				
6. If I contain the entire grain kernel, I am referred to as a what.  OWHEL NRGIA				
OWILL MIGH				

#### **Whole Grain Unscramble (ANSWER KEY)**

#### Unscramble the letters to find the answer to each riddle.

1. My color can be either white or brown, and I am the most eaten grain in the world.

RICE

2. I am a grain that is eaten in the morning with milk.

**CEREAL** 

3. I am a grain usually eaten at movie theaters.

#### **POPCORN**

4. I am a whole grain that is served hot and eaten at breakfast. Some people add milk or fresh fruit to this whole grain.

#### **OATMEAL**

- 5. I help maintain intestinal health. I am found in fruits, vegetables, nuts and seeds, legumes, and whole grains.
- 6. If I contain the entire grain kernel, I am referred to as what.

**WHOLE GRAIN** 



## Lesson 3: Fun with Fruits







Estimated Time
30 min

#### **Materials:**

- Three (or more) different local or seasonal fruits
- Chef's knife
- Small serving bowls and serving spoons
- Disposable plates and forks for each child
- Beach ball or any medium size ball (Optional)
- "Descriptive Words from A to Z" handout

#### Learning Objective:

After completing this lesson, children will be able to:

Describe a variety of fruits.

#### Lesson Overview:

Eating fruit has many health benefits because it provides vital nutrients needed for the maintenance of your body. The purpose of this lesson is to emphasize the importance of eating fruits and to familiarize children with local and/or seasonal fruits.

#### Before the Lesson:

Purchase fruits that the children may be unfamiliar with such as kiwi, star fruit, or papaya. Purchase enough of each fruit so every child can have a sample and one piece of each fruit that can be used for demonstration purposes only. (The quantity of fruit needed will be based on the size of the class you are teaching. Local and/or seasonal fruits are typically less expensive.)

#### Special Notes for the Instructor:

- 1. Because ready-to-eat foods will not have further heat treatment to kill microorganisms, special care is needed to decrease opportunities for cross contamination:
  - Wash, rinse, sanitize, and air-dry all work surfaces before and after each food-related activity.
  - The instructor and children should always wash their hands before and after each food-related activity.
  - After properly washing your hands, wash fresh produce vigorously under cold running water. Packaged fruits
    and vegetables labeled as being previously washed and ready-to-eat are not required to be washed.
  - · Avoid using bare hands to handle ready-to-eat foods, unless washing fruits and vegetables
  - Use proper procedures for glove use, including washing hands before putting on gloves.
- 2. Remember that peanut butter and nuts are common allergens for young children. Allergic reactions may occur from coming in contact with them, as well as eating them.
- 3. Check with all sponsoring agencies for restrictions on allowing children to participate in food activities.
- 4. Water is always a good beverage to serve any time food is tasted.

## Lesson 3: Script

Say: Clap your hands if you like fruit.

Say: Stomp your feet if you eat fruit every day.

Do: Give the children a few seconds to settle down.

Very good! It looks like some of you really like fruit. Not only will fruit help keep you healthy, it also provides some of the nutrients you need to grow and gives you the energy you need to run and play. So, it is important to eat fruit every day.

Say: Today, I brought three (or more) fruits for you to try!

Tell the children the names of the fruits you brought, and pass them around one at a time for children to examine (use the demo piece of fruit). While doing so, encourage the children to look at, feel, and smell each fruit.

What color is the fruit?
What does it feel like?
What does it smell like?
Have you ever eaten this kind of fruit before?

- If yes, what did it taste like?
- If no, would you like to try it?

After the group has discussed the fruits, allow the children to watch you cut it into bite-size pieces. Place the fruits in serving bowls with serving spoons, and allow the children to take turns placing a few pieces of each fruit on their plates to sample.

\*You may choose to have fruits precut to save time.

As the children are sampling the fruit, continue discussing the way it looks, tastes, smells, etc. Use some of the sample words listed on the "Descriptive Words from A to Z" handout. Offer unfamiliar words to help the children describe their fruits.

Do: Encourage the children to try new fruits, and explain that fruit is a great item to eat as a snack or add to salads.

#### **ACTIVITY:**

Instruct the children to stand to up to play Fruit Ball! Form a wide circle. Instruct the children that when the ball is passed to them, quickly name a fruit and pass it to another person. End the game by summarizing the fruits that were named.

#### **Sample of Descriptive Words from A-Z**

Use your five senses and your imagination.

acidic	firm	nutritious	shiny	tasty
aromatic	flavorful	oblong	short	tender
beautiful	flavorless	oily	silky	thick
bland	fluffy	orange	simple	thin
blue	fragrant	oval	skinny	tiny
brittle	fresh	pale	slimy	tough
brown	golden	peeled	small	unripe
bumpy	good	peppery	smooth	watery
chewy	grand	pink	soft	wet
chunky	green	pleasing	sour	white
cold	hard	plump	speckled	wilted
colorful	healthy	purple	spicy	yellow
cool	heavy	red	spongy	yummy
creamy	hot	rich	spotty	zesty
crispy	interesting	ripe	squishy	
crumbly	juicy	rough	starchy	
crusty	liquid	round	stringy	
delicious	little	runny	striped	
doughy	long	salty	strong	
dry	luscious	satisfying	sugary	
dull	melted	savory	sweet	
fair	moist	scented	syrupy	
fat	mushy	scrumptious	tan	
fine	nice	sharp	tart	



## Lesson 4: Vary Your Vegetables



## Lesson 4: Vary Your Vegetables

Grades: 3-5

Estimated Time
30 min

#### Materials:

- "Vegetable Subgroups Activity" handout
- "Vegetable Subgroups List"

#### Learning Objectives:

After completing this lesson, children will be able to:

- List the vegetable subgroups.
- Identify a variety of vegetables that belong to each group.

#### Lesson Overview:

In order for children to make healthy food choices, it is important for them to learn about nutritious foods that are available, such as vegetables. Vegetables are a vital component of our diet; they are needed to provide the body with many of the vitamins and minerals needed to sustain health. The purpose of this lesson is to help children learn about the vegetable subgroups and a variety of vegetables that belong in each group.

#### Before the Lesson:

- Print handouts

## Lesson 4: Script

Who has a favorite vegetable? What is it? Ask: Do: Allow the children to provide feedback. Vegetables are very good for us! They provide important nutrients such as Say: vitamins and minerals. Vegetables come in a variety of ways. They can be fresh, frozen, or canned, and I'm sure you already know they come in a variety of colors as well. Ask: What is your favorite color vegetable to eat? Accept all answers, and provide feedback. Do: Since there are a variety of vegetables, they are divided into five different vegetable Say: subgroups: dark green vegetables, red and orange vegetables, starchy vegetables, beans and peas, and other vegetables. Let's discuss which vegetables belong in each subgroup. Ask: Who can name a dark leafy vegetable that belongs in the dark green subgroup? Accept all answers, and thank the children for their great responses. Do: Dark leafy vegetables such as spinach, turnip greens, romaine lettuce, kale, and Say: collard greens all belong to the dark green subgroup. These vegetables are low in calories and high in vitamins A and C. Another vegetable that belongs in the dark green subgroup is broccoli. Ask: Who can name a vegetable in the red and orange vegetable subgroup? Accept all answers, and thank the children for their great responses. Do: The red and orange vegetables are good sources of nutrients like vitamin A, Say: potassium, and fiber. Vegetables in this group include carrots, pumpkins, red peppers, tomatoes, and the different varieties of squash (acorn, butternut, and hubbard).

Who can name a vegetable in the starchy vegetable subgroup?

Ask:

## Lesson 4: Script

Do: Accept all answers, and thank the children for their great responses.

Starchy vegetables are higher in calories and should be eaten in smaller amounts than the other vegetable food groups. Although they are a good source of fiber and carbohydrates, choose dark green and red/orange vegetables more often than starchy vegetables.

Say: Examples of starchy vegetables are corn, potatoes, green lima beans, water chestnuts, green bananas, and field peas.

Ask: Who can name a vegetable in the beans and peas subgroup?

Do: Accept all answers, and thank the children for their great responses.

Dry or mature beans and peas have protein, fiber, and many minerals. Examples of beans and peas include black beans, kidney beans, chickpeas, navy beans, split peas, lentils, and pinto beans.

Ask: Who can name a vegetable in the other vegetable subgroup?

Do: Accept all answers, and thank the children for their great responses.

The vegetables in the "Other" subgroup have a variety of nutrients. Vegetables in the other subgroup are listed there because they do not fit in any of the other specific categories. Examples of vegetables that belong in this subgroup include asparagus, brussel sprouts, cabbage, celery, cucumbers, eggplants, green beans, green peppers, iceberg lettuce, okra, turnips, and zucchini.

Say: Now, you see that there is quite a variety of vegetables to choose from!

Reinforce the importance of eating vegetables and encourage the children to try new and different colored vegetables.

#### **ACTIVITY:**

Say:

Allow the children to complete the Vegetable Subgroups Activity. A vegetable subgroups list has been provided to assist children, if needed.

#### **Vegetable Subgroups Activity**

Read the vegetable names in the column on the right and write the corresponding vegetable subgroup in the blank to the left.

Dark Green Vegetables Red/Orange Vegetables Other Vegetables
Starchy Vegetables Beans and Peas

1.	Romaine lettuce	
2.	carrot slices	
3.	kale	
4.	white beans	
5.	green beans	
6.	yellow crookneck squash	
7.	Iceberg lettuce	
8.	broccoli	
9.	green peas	
10.	sweet potatoes	

#### **Vegetable Subgroups Activity (continued)**

 11.	green lima beans	
12.	black beans	
13.	acorn squash	
14.	turnip greens	
15.	corn	
16.	Brussels sprouts	

#### **Vegetable Subgroups Activity (Answer Key)**

Read the vegetable names in the column on the right and write the corresponding vegetable subgroup in the blank to the left.

Dark Green Vegetables
Red/Orange Vegetables
Other Vegetables
Beans and Peas
Starchy Vegetables

ash

#### **Vegetable Subgroups List**

This is a list of the five subgroups and the vegetables that belong to each subgroup. Use this list, if needed, to complete the activity.

#### **Dark Greens Vegetables**

bok choy broccoli collard greens dark green leafy lettuce

kale mesclun mustard greens Romaine lettuce

spinach turnip greens watercress

#### **Starchy Vegetables**

cassava
corn
cowpeas
green bananas
green peas
green lima beans
plantains

plantains potatoes taro

water chestnuts

#### **Red and Orange Vegetables**

acorn squash butternut squash

carrots

hubbard squash

pumpkin red peppers sweet potatoes tomatoes tomato juice

#### **Other Vegetables**

artichokes asparagus avocado bean sprouts beets

**Brussels spouts** 

cabbage (red or green)

cauliflower celery cucumbers eggplant green beans wax beans

green or red peppers Iceberg lettuce

mushrooms

okra
onions
parsnips
squash
turnips
wax beans
zucchini

#### **Beans and Peas**

black beans

black-eyed peas (mature, dry) garbanzo beans (chickpeas)

kidney beans

**lentils** 

navy (pea) beans pink beans

pinto beans soy beans (mature)

split peas

white beans (cannellini beans)





## Lesson 5: Food Label Facts





#### Materials:

- Samples of healthy (e.g., low fat, low sodium, low sugar, minimally processed foods) and unhealthy (e.g., cookies, cakes, chips, processed foods) food labels
- "Reading Food Labels" handou

#### Learning Objective:

After completing this lesson, children will be able to:

Identify sections of a food label.

#### Lesson Overview:

There are many food items that are available to us, and in order to make healthy decisions, we need to understand the basics of reading food labels. The purpose of this lesson is to emphasize the importance of reading food labels.

#### Before the Lesson:

Request nutrition label donations from co-workers, family, and friends

## Lesson 5: Script

Ask: Can you think of anything you could do to determine if food is healthy or not?

Do: Accept all answers, and thank the children for their great responses.

Do any of you know what a nutrition label is? Have any of you read a nutrition label before? Why or why not?

Do: Accept all answers, and thank the children for their great responses.

Nutrition labels can be found on the back, or sometimes the side, of food packages.

Think of a food label as you would the table of contents inside of a book. Just as the table of contents has a list of what is inside a book, food labels list what is in our food.

Do: Pass out sample labels for the children to examine.

Reading the nutrition label is a great way to determine whether a food is healthy or not. We can also use the information on the labels to compare the nutritional value of different foods and even beverages. There are some foods that do not have a nutrition label, like some fresh fruits and vegetables.

Food contains specific levels of calories, fat, cholesterol, sodium, protein, and carbohydrates. Food also contains vitamins and minerals. Our bodies need different amounts of each.

Ask: Do you see any of those words listed on the labels I gave you?

People who work in the field of nutrition know how much of each item we should get every day to be healthy. Even though the numbers on the food label are based on an adult's body, it is important for children to learn to read labels as well. We all need to work on making healthier food choices. If this is your first time reading a food label, it might seem really hard, but I will explain each part.

Refer the children to the Reading Food Labels handout and discuss each part. As you are discussing each nutrient explain: Most nutrients are measured in grams, also written as g. Some nutrients are measured in milligrams, or mg.

Milligrams are very, very small; there are 1,000 milligrams in 1 gram. Other information on the label is given in percentages based on the recommendations for a 2,000 calorie diet for adults (this can vary based on a person's size, health, and activity level).

#### **ACTIVITY:**

Say:

Divide the children into small groups. Each group should have three to four food labels. Ask groups to find the label that has the highest sugar content/lowest sugar content, most calories/least calories, etc. Provide assistance if needed

#### **Reading Food Labels**

Start with the **Serving Size**. All the numbers are based on one serving size. The package might actually contain several servings. This is very important information that will help you with portion control.

**Calories** tell you how much energy you will get from one serving of this food. If you don't use up that energy, it gets stored as fat.

Total Fat is the amount of all the different kinds of fat in one serving. Your body needs some fat. Avoid foods high in saturated fats and look for zero Trans fats. These fats are not good for your heart.

**Protein** is very important because it is the building block for all cells. Read carefully. High protein foods can be high in fat.

The **Vitamin** section tells you if these foods are high in vitamins. Vitamins help your body stay healthy. 20% or more is high and makes your body very happy!

### **Nutrition Facts**

Serving Size 1 cup (228g)

Servings Per Container about 2

Amount	Per	Serv	/ina
AIIIOUIIC		201	1119

Calories 250

Caloffed 250	carones from rac rio
	% Daily Value
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 3g	10%
Sodium 470mg	20%
<b>Total Carbohydrate</b> 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	

Calories from Fat 110

<b>Proteins</b> 5 g		
	Į.	
Vitamin A		4%
Vitamin C		2%
Calcium		20%
Îron		4%

\*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

The Servings Per Container tells you how many servings in that package. Some foods are low in calories and fat if you have only one serving. But if you eat more than one serving, then calories and fat can really add up! See how many servings this label shows - 2 servings.

**Calories from Fat** tells you how much energy of that food comes from fat. Your heart likes foods lower in fat.

The **Fiber** section tells you how much fiber is in one serving. Fiber helps your food move through your body easily. Foods with 4 grams or more are high in fiber and good for you!

**Sugar** is the total amount of natural sugar and added sugar that is in the one serving. Our body does not need too much.

The % (Percent) Daily Value (DV) is a number on the label given in percentages. These percentages are the amount of a certain nutrient that a person will eat in one serving.

Food labels can seem confusing but if you look at them one block at a time, you will see they are actually very easy to read! All the blocks work together to help you choose healthy foods that will keep you healthy and feeling great!



# Lesson 6: Portion Control













#### **Materials:**

- Bag or box of pretzels or wheat crackers
- Ingredients for "Fastest Veggie Dip Around" recipe (see recipe)

#### Learning Objective:

After completing this lesson, children will be able to:

Identify sections of a food label.

#### Lesson Overview:

Eating too much food can cause children to consume more calories than their bodies need to grow and move. Since those extra calories are turned into body fat, it is important for children to know the meaning of portion control.

#### Before the Lesson:

 Depending on time, you may choose to prepare the recipes before class or wait and allow children to observe and/or assist.

#### Special Notes for the Instructor:

- 1. Because ready-to-eat foods will not have further heat treatment to kill microorganisms, special care is needed to decrease opportunities for cross contamination:
  - · Wash, rinse, sanitize, and air-dry all work surfaces before and after each food-related activity.
  - The instructor and children should always wash their hands before and after each food-related activity
  - After properly washing your hands, wash fresh produce vigorously under cold running water. Packaged fruits
    and vegetables labeled as being previously washed and ready-to-eat are not required to be washed.
  - Avoid using bare hands to handle ready-to-eat foods, unless washing fruits and vegetables
  - Use proper procedures for glove use, including washing hands before putting on gloves.
- 2. Remember that peanut butter and nuts are common allergens for young children. Allergic reactions may occur from coming in contact with them, as well as eating them.
- 3. Check with all sponsoring agencies for restrictions on allowing children to participate in food activities.
- 4. Water is always a good beverage to serve any time food is tasted.

### Lesson 6: Script

Ask: Who knows what a portion of food is?

Do: Accept all answers, and thank the children for their great responses.

Say: A portion is the amount of food a person eats at one time. Monitoring the serving size of the foods we eat is one way to ensure we eat the right portions.

Many people believe the serving size listed on a food nutrition label is telling you the amount of food you should be eating, but the serving size is a guide to help you see how many calories, nutrients, etc. are in a specific quantity of that food.

Sometimes the serving size listed on a food label will be less than the amount you usually eat, and sometimes more. When it comes to foods that are high in calories, sugar, or fat, like some of the snack foods we like to eat, the serving size is a useful guide to alert you that you may be getting more than what is good for you.

What are some of your favorite snacks? Do you ever look at the serving size listed on the nutrition label of those snacks?

Do: Accept all answers, and thank the children for their great responses.

Do you think you usually eat more than 1 serving size of your favorite snack?

Do: Accept all answers, and thank the children for their great responses.

Ask for a volunteer to pour the amount of snack (pretzels or wheat crackers) they would eat in one sitting onto a plate. On another plate, count out the exact amount of the snack that is one serving, based on the "Serving Size" on the package.

Lead a discussion about portion size based on the comparison of the two plates. Also emphasize the importance of not eating if you aren't hungry, and to stop eating when you feel full.

Choosing smaller portions of food can help you maintain a healthy weight, and give you enough energy to do all the activities you enjoy doing.

#### **ACTIVITY:**

Say:

Make a simple healthy snack, such as "Fastest Veggie Dip Around", for the children to enjoy!

#### **Fastest Veggie Dip Around**

#### Ingredients:

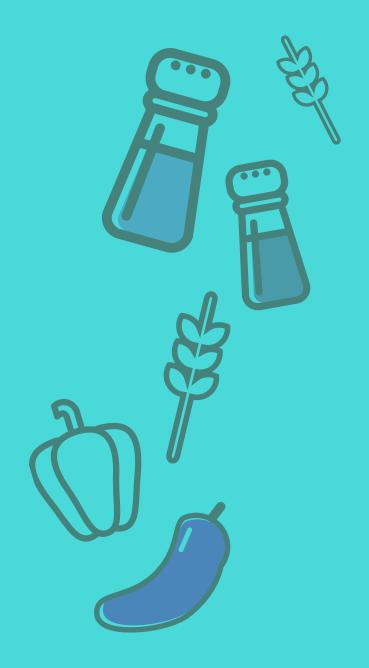
- 1 cup plain non-fat yogurt (or Greek yogurt)
- 1 package of dry ranch dressing mix, or other dry herbs such as basil and garlic
- An assortment of vegetables such as carrot sticks, broccoli, bell peppers, cauliflower, or celery

#### Instructions:

Season the yogurt with the dressing mix or dry herbs. Add just enough for it to taste great. Presto, ready to dip with cut vegetables!



# Lesson 7: Herbs, Spice, and Everything Nice



#### Lesson 7:

#### Herbs, Spice, and Everthing Nice





#### **Materials:**

- "Herbs and Spices Charts" (optional)
- A variety of fresh herbs and spices: sweet basil, chives, dill, mint, parsley, etc.
- A small container of a dried herb or spice
- Small plastic sandwich bag for each herb and spice used.

#### • Paper plates (one for each child)

 If possible, bring an actual plant such as parsley

#### Learning Objectives:

#### After completing this lesson, children will be able to:

- Explain the use of herbs and spices.
- Recognize the aroma and taste of different herbs and spices.

#### Lesson Overview:

Herbs and spices are a great way to flavor foods without the addition of salt. The purpose of this lesson is to help children become familiar with a variety of herbs and spices.

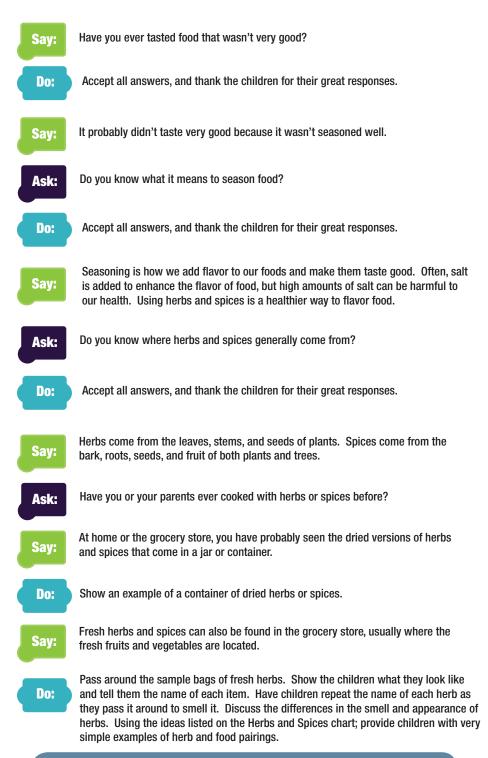
#### Before the Lesson:

- Pour samples of the herbs and spices in plastic bags. Label each bag with the appropriate name of the herb or spice.
- Prepare a small plate for each child with each herb or spice for the children to taste.

#### Special Notes for the Instructor:

- 1. Because ready-to-eat foods will not have further heat treatment to kill microorganisms, special care is needed to decrease opportunities for cross contamination:
  - · Wash, rinse, sanitize, and air-dry all work surfaces before and after each food-related activity.
  - The instructor and children should always wash their hands before and after each food-related activity.
  - After properly washing your hands, wash fresh produce vigorously under cold running water. Packaged fruits
    and vegetables labeled as being previously washed and ready-to-eat are not required to be washed.
  - Avoid using bare hands to handle ready-to-eat foods, unless washing fruits and vegetables
  - Use proper procedures for glove use, including washing hands before putting on gloves.
- 2. Remember that peanut butter and nuts are common allergens for young children. Allergic reactions may occur from coming in contact with them, as well as eating them.
- 3. Check with all sponsoring agencies for restrictions on allowing children to participate in food activities.
- 4. Water is always a good beverage to serve any time food is tasted.

### Lesson 7:



#### **ACTIVITY:**

Place small amounts of each herb and spice on paper plates for the children to sample. Ask them to try and identify the herbs and spices as they taste them. Have a group discussion about the tastes and children's favorite flavor. Encourage the children to tell their parents about how healthy it is to cook with herbs and spices instead of salt. You may print the "Herbs and Spices' charts for the children to take home and share with their families.

### **Herb and Spices Chart - Herbs**

Name	From	Taste	Uses
Anise seed	Seeds	Sweet licorice flavor	Cookies, cakes, fruit mixtures, chicken
Basil	Fresh, dried chopped leaves	Mint licorice-like flavor	Pizza, spaghetti sauce, tomato dishes, vegetable soups, meat pies, peas, zucchini, green beans
Bay leaves	Whole, ground	Flavor distinctly different from celery	Fish, soups, tomato juice, potato salad dressing
Caraway seed	Whole	Sharp and pungent	Baked goods such as rye bread, cheeses, sauerkraut dishes, soups, meats, stews
Celery seed	Whole, ground	Flavor distinctly different from celery	Fish, soups, tomato juice, potato salad
Chives	Fresh, freeze dried	In the onion family; delicate flavor	Baked potato topping, all cooked green vegetables, green salads, cream sauces, cheese dishes
Coriander seed	Whole, ground	Pleasant, lemon orange flavor	Ingredient in curry, ground form used in pastries, buns, cookies, and cakes; in processed foods such as frankfurters
Cilantro	Fresh, dried	Sweet aroma, mildly peppery	Ingredient in Mexican foods
Cumin	Whole seeds, ground	Warm, distinctive, salty-sweet, resembles caraway	Ingredient in chili powder and curry powder; German cooks add to pork and sauerkraut and Dutch add to cheese
Dill	Fresh, dried, seeds	Aromatic, like caraway but milder and sweeter	Dill pickles; seeds in meats, sauces, salads, coleslaw, potato salad, and cooked macaroni; dill weed in salads, sandwiches, and uncooked mixtures
Fennel seed	Whole	Flavor similar to anise, pleasant sweet licorice	Breads, rolls, apple pies, seafood, pork and poultry dishes; provides the distinctive flavor to Italian sausage
Marjoram	Fresh, dried whole or ground	Faintly sage like, slight mint aftertaste, delicate	Vegetables, one of the ingredients in poultry and Italian seasoning; processed foods such as bologna
Mint	Fresh leaves or dried flakes	Strong and sweet with a cool aftertaste	Peppermint is the most common variety; popular flavor for candies and frozen desserts; many fruits, peas and carrots

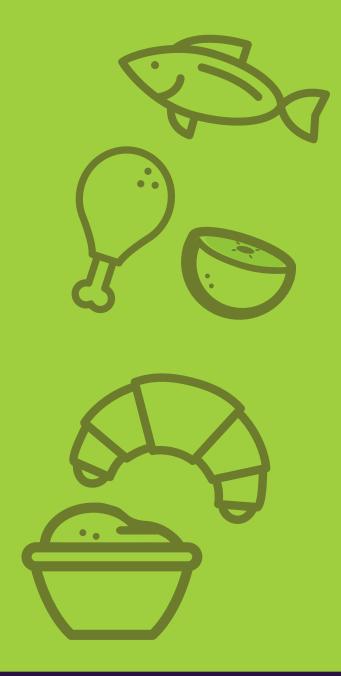
### **Herb and Spices Chart - Herbs**

Name	From	Taste	Uses
Oregano	Fresh, dried leaves, ground	More pungent than marjoram, reminiscent of thyme	Pizza, other meat dishes, cheese and egg dishes; vegetables such as tomatoes, zucchini, or green beans; an ingredient in chili powder
Parsley	Fresh, dried flakes	Sweet, mildly spicy, refreshing	A wide variety of cooked foods, salad dressings, and sandwich spreads
Poppy seed	Whole, crushed	Nut flavor	Whole as a topping for rolls, breads, cakes, cookie, and pastries; crushed in fillings for pastries; over noodles and pasta or rice; in vegetables such as green beans
Rosemary	Fresh, whole leaves	Refreshing, pine, resinous, pungent	Chicken dishes and vegetables such as eggplant, turnips, cauliflower, green beans, beets, and summer squash; enhances the flavor of citrus fruits
Sage	Whole, rubbed, ground	Pungent, warm, astringent	Meats, poultry stuffing, salad dressings; cheese; a main ingredient in poultry seasoning blend; an ingredient in a wide variety of commercial meat products
Savory	Fresh, dried whole or ground	Warm, aromatic, resinous, delicate sage flavor	Beans, meats, soups, salads, sauces; an ingredient in poultry seasoning blend
Sesame seed	Whole	Toasted nut flavor	Rolls, bread, and buns
Tarragon	Fresh, dried leaves	An aroma with a hint of anise; licorice flavor, pleasant, slightly bitter	Vinegar, salad dressings, chicken, tartar sauce, and egg salad
Thyme	Fresh, dried whole or ground	Strong, pleasant, pungent clove flavor	New England clam chowder, Creole seafood dishes, midwest poultry stuffing; blended with butter is good over green beans, eggplant, and tomatoes
Turmeric (Tumeric)	Dried, powder	Aromatic, warm, mild	Prepared mustards; a main ingredient in curry powder; chicken and seafood dishes, rice, creamed or mashed potatoes, macaroni; salad dressing for a seafood salad; in melted butter for corn on the cob

### **Herb and Spices Chart - Herbs**

Name	From	Taste	Uses
Allspice	Whole berries, ground	The aroma suggests a blend of cloves, cinnamon, and nutmeg; sweet flavor	Fruit cakes, pies, relishes, preserves, sweet yellow vegetables, such as sweet potatoes and tomatoes
Cardamom seed	Whole, ground	Mild, pleasant, sweet ginger-like flavor	Baked goods, apple and pumpkin pies; an important ingredient in curry
Cinnamon	Whole sticks, ground	Warm, spicy and pies sweet flavor	Cakes, buns, breads, cookies, and pies
Cloves	Whole, ground	Hot, spicy, sweet, penetrating flavor	Whole cloves for baking hams and other pork, pickling fruits, and in stews and meat gravies; ground cloves in baked goods and desserts and to enhance the flavor of sweet vegetables such as beets, sweet potatoes, and winter squash
Ginger	Fresh, whole, cracked, ground	Aromatic, sweet, spicy, penetrating flavor	Baked goods; rubbed on meat, poultry, and fish; in stir-fry dishes
Mace	Ground	Strong nutmeg flavor	The thin red network surrounding the nutmeg fruit; used in baked goods where a color lighter than nutmeg is desirable
Mustard	Whole seeds, powdered, prepared	Sharp, hot, very pungent	Meats, poultry, fish, sauces, salad dressings, cheese and egg dishes; whole seeds in pickling and boiled beets, cabbage or sauerkraut
Nutmeg	Whole, ground	Spicy, pleasant flavor	Seed of the nutmeg fruit for baked goods, puddings, sauces, vegetables; in spice blends for processed meats; mixed with butter for corn on cob, spinach, and candied sweet potatoes
Paprika	Ground	Sweet, mild, or pungent flavor	A garnish spice, gives an appealing appearance to a wide variety of dishes; used in the production of processed meats such as sausage, salad dressings, and other prepared foods
Peppercorns: black, white, red, and pink	Whole, ground, coarse ground	Hot, biting, very pungent	Many uses in a wide variety of foods; white pepper ideal in light colored foods where dark specks might not be attractive
Red pepper (Cayenne)	Ground, crushed	Hot, pungent flavor	Meats and sauces

## Lesson 8: Where Do We Get Our Food?



## Lesson 8: Where Do We Get Our Food?

**Grades:** K-5

**Estimated Time** 30 min

#### **Materials:**

- Clear plastic cups
- Plastic bowls
- Soil
- Bean seeds
- Plastic bags
- Rubber bands

#### Learning Objective:

After completing this lesson, children will be able to:

Discuss how plants are grown.

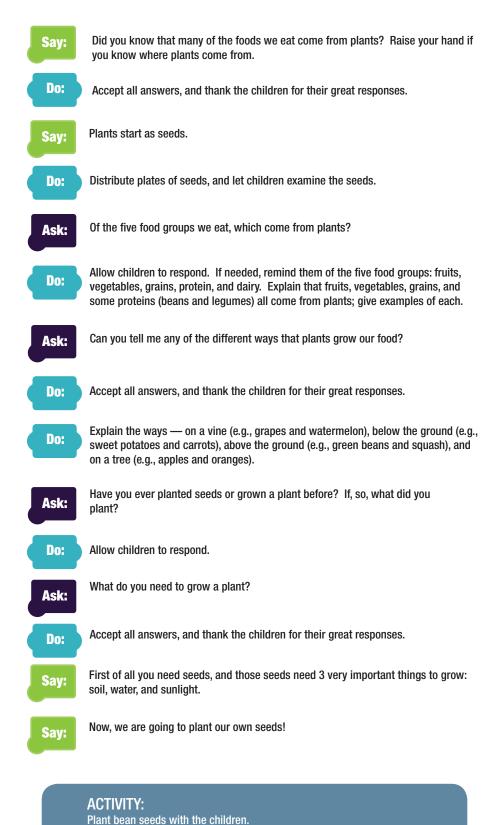
#### Lesson Overview:

Now, more than ever, it is important for children to learn about where food comes from. Not only does it build basic foundational knowledge, but knowing where food comes from enables children to establish a healthy relationship with food. During this lesson children will learn that many of our foods come from plants, and plants come from seeds.

#### Before the Lesson:

- Soak the bean seeds in water overnight to speed germination.
- Poke two or three small holes in the bottom of the plastic cups for drainage.

## Lesson 8: Script



#### **Instructions for Planting Beans**

Before this activity, soak the beans in water overnight to speed germination. Poke two or three small holes in the bottom of the plastic cups for drainage.

- 1. Each child's work area should have a plastic cup ¾ full of moistened soil, a plastic bowl, two beans, a permanent marker, a spray bottle with water, a sandwich bag, and a rubber band. (Sit the cup inside the bowl to catch any water or soil that might come through the holes)
- 2. Demonstrate how to correctly plant a bean in a clear plastic cup: Plant the bean near the side of the cup so the growing roots will be visible to children. The bean should be covered with ½ inch of soil, and there should be space between the soil and the top of the cup. The soil should be moist but not wet.
- 3. Assist children with following the same procedure.
- 4. Have the children write their names on the cups with a black permanent marker.
- 5. Give each student a plastic bag and instruct them to put the bag over the top of the cup. Explain that this forms a small greenhouse, which retains moisture in the soil and helps keep the bean warm during germination. Secure the bag with a rubber band.
- 6. Place all the cups near a window in the classroom, or allow children to take cups home with further instructions.
- 7. Children should check their plants daily. For the first few days of plant growth, children should only mist the soil if it is dry. Remove the sandwich bag as soon as the first shoot appears (approximately three to four days after planting).

#### References

- District of Columbia Department of Health. (2015). *Whole grain unscramble*. Retrieved from https://snaped.fns.usda.gov/snap//resourcefinder/WholeGrainUnscramble.pdf
- Institute of Child Nutrition. (2014). *Culinary techniques for healthy school meals*. Retrieved from http://www.theicn.org/documentlibraryfiles/PDF/20150331085151.pdf
- Institute of Child Nutrition. (2011). *MyPlate—Let's talk vegetables!*. Retrieved from http://www.theicn.org/documentlibraryfiles/PDF/20110831092328.pdf
- National Food Service Management Institute. (2012). *More than mud pies: A nutrition curriculum guide for preschool children* (6th ed.). University, MS: Author.
- North Dakota Wheat Commission. (2011). *The story of wheat for kids.* Retrieved from http://www.ndwheat.com/uploads/resources/854/story-of-wheat\_nd.pdf
- Nemours. (2015). *Keeping portions under control*. Retrieved from http://kidshealth.org/parent/nutrition\_center/healthy\_eating/portions.html#
- Nourish Interactive. (2015). *Chef Soulous' food label guide*. Retrieved from http://www.nourishinteractive.com/nutrition-education-printables/20-reading-parts-of-food-labeling-page-kids-printable-teaching-guide-learning-food-labels-nutrition-facts-page
- Oregon Dairy Council. (2010). *What food am I?* Retrieved from http://www.oregondairycouncil .org/resources/free downloads/downloads/what food am i game.pdf
- Share Our Strength. (2012). Cooking Matters for Chefs and Kids. Washington, DC: Author.
- U.S. Food and Drug Administration. (2015). *Nutrition facts label images for download*.

  Retrieved from http://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/ucm114155.htm
- U.S. Department of Agriculture. (n.d.) *Plant a Plant.* Retrieved from http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs144p2\_037378.pdf
- U.S. Department of Agriculture. (2008). *Get on the grain train, whole grain kernel [Graphic]*.

  Retrieved from http://www.cnpp.usda.gov/sites/default/files/dietary\_guidelines\_for\_americans/GrainTrain-revisedMar08.pdf



The University of Mississippi School of Applied Sciences 800-321-3054 www.theicn.org