

LESSON 1



A Date with MyPlate

Concept

Making healthy food choices is a critical part of living a healthier life. The US Department of Agriculture recently released MyPlate, which provides information about nutrition and physical activity to make it easier for people of all ages to make better choices. This lesson introduces MyPlate, with a focus on eating a variety of foods.



Background

Since the early 1980s the rate of childhood obesity in the United States has tripled (1–3). Children who are overweight or obese are at higher risk for weight-related problems such as type 2 diabetes (4), high blood pressure, high cholesterol (5), depression (4, 6) and problems with bones, joints (7) and breathing (8). In order to address this problem, there has been a focus on developing programs and policies that focus on obesity prevention. In fact, the two main concepts of the newly released Dietary Guidelines for Americans, 2010, are to 1) maintain calorie balance over time to achieve and sustain a healthy weight and 2) focus on consuming nutrient-dense foods and beverages (9). Implementing the key recommendations of the Dietary Guidelines for Americans, 2010, can help Americans make better choices and lead healthier lives.

DIETARY GUIDELINES FOR AMERICANS

One of the important jobs of nutrition educators is to translate federal guidelines into educational materials and programs that are easy to understand and meaningful to Americans. The Dietary Guidelines for Americans, 2010, (9) provide evidence-based nutrition and physical activity recommendations for healthy Americans and those at risk for chronic diseases ages two and older. The “Selected Messages for Consumers” from the Dietary Guidelines, 2010, published by the US Department of Agriculture include (10):

1. Balancing calories
 - a. Enjoy your food but eat less.
 - b. Avoid oversized portions.
2. Foods to increase
 - a. Make half your plate fruits and vegetables.
 - b. Make at least half your grains whole grains.
 - c. Switch to fat-free or low-fat (1%) milk.
3. Foods to reduce
 - a. Compare sodium in foods like soup, bread, and frozen meals and choose the foods with lower numbers.
 - b. Drink water instead of sugary drinks.

MYPLATE

MyPlate is the US Department of Agriculture’s newly released food guidance system based on the Dietary

Guidelines for Americans, 2010, that uses printed materials and the ChooseMyPlate.gov website to provide Americans with information on the types and amounts of foods to eat every day (11). Americans can visit the ChooseMyPlate.gov website to get a personalized nutrition plan based on their age, sex, height, weight and activity level. The five food groups represented by the colors used on MyPlate include Grains – orange, Vegetables – green, Fruits – red, Dairy – blue, and Protein Foods – purple. Each of the food groups has a key message designed to help Americans make better choices, which include the following:

Grains – Make half your grains whole

Vegetables – Vary your veggies

Fruits – Focus on fruits

Dairy – Get your calcium-rich foods

Protein Foods – Go lean with protein

In summary, the Dietary Guidelines for Americans, 2010, and MyPlate were developed to help American families make better food and physical activity choices. Teaching young children about nutrition and providing specific recommendations in a fun activity is a first step in preventing obesity in children.

REFERENCES

1. Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in US children and adolescents, 2007–2008. *JAMA*. 2010;303:242–9.
2. Ogden CL, Carroll MD, Flegal KM. High body mass index for age among US children and adolescents, 2003– 2006. *JAMA*. 2008;299:2401–5.
3. Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and trends in overweight among US children and adolescents, 1999–2000. *JAMA*. 2002;288:1728–32.
4. Whitlock EP, Williams SB, Gold R, Smith PR, Shipman SA. Screening and interventions for childhood over- weight: a summary of evidence for the US Preventive Services Task Force. *Pediatrics*. 2005;116:e125–44.
5. Freedman DS, Mei Z, Srinivasan SR, Berenson GS, Dietz WH. Cardiovascular risk factors and excess



adiposity among overweight children and adolescents: the Bogalusa Heart Study. *J Pediatr.* 2007;150:12-17 e2.

6. Dietz WH. Health consequences of obesity in youth: childhood predictors of adult disease. *Pediatrics.* 1998;101:518-25.
7. Taylor ED, Theim KR, Mirch MC, Ghorbani S, Tanofsky-Kraff M, Adler-Wailes DC, Brady S, Reynolds JC, Calis KA, Yanovski JA. Orthopedic complications of overweight in children and adolescents. *Pediatrics.* 2006;117:2167-74.
8. Sutherland ER. Obesity and asthma. *Immunol Allergy Clin North Am.* 2008;28:589-602, ix.
9. US Department of Health and Human Services and US Department of Agriculture. Dietary Guidelines for Americans, 2010. Available at: <http://www.cnpp.usda.gov/DGAs2010-PolicyDocument.htm>. Accessed May 19, 2011.
10. US Department of Agriculture. Dietary Guidelines 2010. Selected Messages for Consumers. Available at: <http://www.choosemyplate.gov/downloads/MyPlate/SelectedMessages.pdf>. Accessed June 27, 2011.
11. US Department of Agriculture. MyPlate. Available at: <http://www.choosemyplate.gov/index.html>. Accessed June 23, 2011.

Pre K/K Lesson

LEARNING OBJECTIVES:

The students will:

- state the names and colors of the different food groups on MyPlate.
- identify foods from each of the food groups.

BEHAVIORAL OBJECTIVE:

The students will:

- eat a variety of foods from the different food groups.

RECOMMENDED BOOK:

Spriggles Health & Nutrition by Jeff and Martha Gottlieb. For special pricing (\$5.00/book) call Jeff Gottlieb directly at 888-875-5856 or fax him a Purchase Order at 781-823-6648 and tell him that you work with the Cooperative Extension Service.

FLORIDA STANDARDS:

HEALTH EDUCATION:

HE.K.B.3.2.: The student will recognize healthy options to health-related issues or problems.

HE.K.C.1.1.: The student will recognize healthy behaviors.

HE.K.C.2.1.: The student will name healthy behaviors that family members should practice.

HE.K.P.1.1.: The student will identify healthy practices to maintain or improve health.

READING/LANGUAGE ARTS:

LA.K.5.2.1.: The student will listen carefully and understand directions for performing tasks (e.g., three or four-step oral directions).

LA.K.5.2.4.: The student will recite short poems, rhymes, songs and stories with repeated patterns.

MUSIC:

MU.K.S.2.1.: The student will sing or play songs from memory.

PHYSICAL EDUCATION:

PE.K.L.1.5.: The student will recognize that physical activity is good for you.

PE.K.L.2.4.: The student will participate in a variety of games that increase breathing and heart rate.

PE.K.M.1.1.: The student will use a variety of locomotor skills to travel in personal and general space.

PE.K.R.1.1.: The student will treat others with respect during play.

PE.K.R.2.3.: The student will continue to participate when not successful on the first try.



Learning Activity: MyPlate Colors

MATERIALS:

- MyPlate Poster
- Construction paper – orange, green, red, blue, purple
- Paper clips

PRIOR TO ACTIVITY

Cut construction paper into 1-inch strips. Group different colors into sets using a paper clip, so each student receives one strip of each color. Mix up the colors so that they are not in the MyPlate order.

ACTIVITY INTRODUCTION:

Who likes to eat healthy foods? Allow the class to raise their hands. *This is the MyPlate poster and it helps us choose healthy foods.* Point to the poster and use it as your visual throughout the discussion. *Did you know that there are different types of foods and that we should eat a variety of these foods every day? Does anyone know what the word “variety” means?* Allow students to answer. *Good. If you are getting a variety of foods that means you are eating different kinds of foods. What colors do you see on MyPlate?* Point to the different colors and allow students to answer. *That’s right. Orange, green, red, blue, and purple. Each color stands for a different kind of food. The first group is called the Grains group. It is the orange food group. Who can tell me what kinds of food you see in the Grains group?* Allow student to answer. *The green group is the Vegetables group. What are some of your favorite vegetables?* Allow student to answer. *Next is the red group, which is the Fruits group. What are some of your favorite fruits?* Allow student to answer. *The blue group is the Dairy group. What kinds of foods do you see in this group?* Allow children to answer. *And last but not least is the Protein foods group, which is purple. What kinds of foods do you see in this group?* Allow children to answer. *It’s very important that you eat foods from all the food groups every day so you can stay healthy and grow up big and strong. Let me see your muscles.* Flex your muscles. *Wow! You guys are already on your way! I am going to teach you a song to help you remember the different colors of MyPlate. Ready?*

ACTIVITY DIRECTIONS

1. Sing the song with the movements for the students once through and then teach them the lyrics and movements.

Lyrics (sung to the tune of the Battle Hymn of the Republic):

MyPlate has different colors for good health,
MyPlate has different colors for good health,
MyPlate has different colors for good health,
Orange, green, red, blue, and purple.

MyPlate has different colors for good health,
MyPlate has different colors for good health,
MyPlate has different colors for good health,
Eat from every color every day!

Movements:

MyPlate has different colors
*Arms in front of chest in shape
of a plate*

for good health
Flex biceps

MyPlate has different colors for good health
Repeat above movements

MyPlate has different colors for good health
Repeat above movements

Orange, green, red, blue, and purple.
Point to each color on MyPlate poster

MyPlate has different colors for good health,
Repeat above movements

MyPlate has different colors for good health,
Repeat above movements

MyPlate has different colors for good health,
Repeat above movements

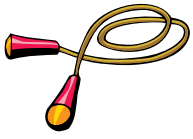
Eat from every color every day!
Swing hands above head in an arc.

2. Choose one of the words to delete and clap in place of that word throughout the song. For example, you might first delete the word "colors." So every time the word "colors" comes up in the song you would clap instead of sing the word:

MyPlate has different –clap– for good health,
MyPlate has different –clap– for good health,
MyPlate has different –clap– for good health,
Orange, green, red, blue, and purple.

EXTRA ACTIVITY:

If you have time, hand each student a group of construction paper strips. *Now that you know the different colors of MyPlate let's see how fast you can put these pieces of construction paper in the order that you learned them. There is one piece of construction paper for each color on MyPlate. When I say go, put them in order as fast as you can. The first person to put all of the pieces in the correct order is our MyPlate champion. Ready, set, go!* Walk around and make sure all of the students are able to put the bands in order.



Physical Activity: Jump MyPlate

MATERIALS

- Construction paper 9" X 12": orange, green, red, blue, purple
- Duct tape
- Music CD – any music is appropriate

PRIOR TO ACTIVITY

Write the name of each food group on a piece of construction paper that corresponds with the color of the food group. Put a piece of duct tape underneath each piece of construction paper to attach it to the floor.

ACTIVITY INTRODUCTION

I am very impressed by how quickly you learned the colors on MyPlate. When you think of those colors you should remember to eat foods from all of the food groups every day. Now we are going to play a fun game using those colors. Who has played "jump the rope?" This game is very similar, but instead of jumping over ropes, we are going to jump over the colors of MyPlate. If you jump over the colors without touching them you can keep going. But if your foot lands on one of the colors you are out.

ACTIVITY DIRECTIONS

1. *I need everyone to get into a line.* Help the students get into a line at one end of the room. *First we are going to jump over the first color. What is the first color on MyPlate? Orange. Good and which food group is orange? Grains. Great.* Tape the orange construction paper to the floor. *I am going to play some music. While you wait your turn I want you to dance and warm up so you are ready to jump over the construction paper. Okay. Let's go.* Let each student jump over the orange piece of construction paper. They can take a running jump if necessary.
2. *Great job! What's the next color on MyPlate? Green. And which food group is it? Vegetables.* Tape the green construction paper on the floor next to the orange one. *Can you jump over the orange and the green colors?* Have students jump over the colors one at a time. If they do not clear the colors they are out. Continue with the rest of the colors until all of the colors are down or all of the students are out.

SUMMARY

All of you did great learning the food groups and colors of MyPlate. Who can tell me all of the colors in order? Allow students to answer: orange, green, red, blue, purple. *Great job. Now what are the food groups for each of the colors?* Allow students to answer. *Why is it important to eat foods from each of the food groups every day?* To get good nutrition and grow strong and healthy.



COMMONLY ASKED QUESTIONS:

Q: Why do we need to eat foods from each of the food groups every day?

A: The foods in each of the different food groups provide us with different nutrients that our bodies need to be healthy. Leaving out a food group could lead to a deficiency of a nutrient.

Q: How can I find out how much food I need every day?

A: Visit www.ChooseMyPlate.gov to get a personalized recommendation based on age, height, weight, sex, and activity level.

Dear Parent or Caregiver,

For the next six weeks your child is going to learn about nutrition using the *Youth Understanding MyPlate* (YUM) curriculum developed by the University of Florida Cooperative Extension Service. This curriculum focuses on *MyPlate*, the newest symbol designed by the US Department of Agriculture to help Americans eat healthier. Today your child was introduced to *MyPlate* and the different food group names and colors. Ask your child to tell you the colors of the different food groups, and they should say that the Grains group is orange, Vegetables – green, Fruits – red, Dairy – blue, and Protein Foods – purple. The foods in each of the different food groups provide us with different nutrients that our bodies need to be healthy, so it is important to eat a variety of foods from the different food groups every day.

You can start helping your child eat healthier by preparing the snack on the back of this letter for MyPlate Dip. It's a healthy snack that includes foods from all of the food groups. Below is a list of activities you can do at home with your child to encourage them to eat a varied diet.

- During this lesson, your child learned a song about the five food groups on MyPlate. Have your child teach you the lyrics and motions to the song. Once you know the lyrics, sing the song and do the motions together.
- Allow your child to help with the grocery shopping. Let them pick out foods for the family to eat from each of the five food groups. This allows your family to eat a variety of food.
- Ask your child to name the food group and to tell you the color that corresponds with that food group for foods he/she eats during the week.

With the information your child learned today and these at home activities, we hope that your child will eat foods from each of the five food groups on *MyPlate* every day. For more information about *MyPlate* and to determine how much food you and your child need daily, visit www.ChooseMyPlate.gov.

Sincerely,

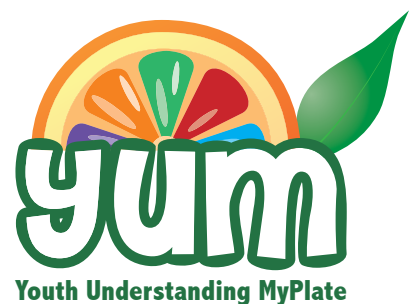
LESSON 2



The Goods on Grains

Concept

Foods from the Grains group should make up a large proportion of the diet. Although whole grains provide most of the nutritional benefits, most children do not get the recommended amounts. This lesson will introduce children to the Grains group with a focus on whole grains and fiber. Children will be encouraged to consume more whole grains as part of a healthy diet.



Background

The Grains group is signified on MyPlate by the color orange. Grains are an important part of a healthy diet and, as indicated by MyPlate, should make up one quarter of the plate. All grains provide important nutrients for the body, but whole grains provide even more of certain nutrients such as fiber, vitamins, and minerals, that keep children and adults healthy. Teaching children the importance of whole grains and how to recognize different types of whole grains can help them to make better food choices that are good for their bodies.

There is a big difference between whole grains and refined grains. Whole grains are grains that have not been processed and have all three parts: the germ, the endosperm, and the bran. The germ is found inside the grain kernel and has lots of nutrients. The endosperm makes up most of the kernel but doesn't have as many nutrients as the germ. The bran is the outside of the kernel and has lots of fiber. Refined grains have been processed to remove the bran and the germ, which makes the grain products softer and more appealing to many consumers, but processing also removes most of the fiber, vitamins, and minerals (1). Since certain vitamins and minerals are lost through the refining process, food companies are required to add thiamin, niacin, riboflavin, and iron back through the process of enrichment (2). Choosing whole grain foods will provide children with these vitamins and minerals as well as the fiber needed to help them stay healthy.

Caregivers can visit www.choosemyplate.gov to get nutrition information for their kids. The amount of grains each child needs will depend on the child's age, sex, and physical activity level. For example, a five-year-old girl who is active for at least 60 minutes a day needs at least five ounces of grains every day. It's important to make sure that half of the recommended amount of grains are whole grains, so this five-year-old girl should get 2 ½ ounces of whole grains every day (3). Examples of whole grains include: whole wheat flour, oatmeal, whole cornmeal, brown rice, barley, and popcorn (2). Sometimes it can be confusing for caregivers to choose whole grain products. One way to determine if a food has whole grains is to look at the ingredients list. If the first ingredient has the word "whole" it likely is mostly whole grain. But if it's the second ingredient then there is no way to tell for sure. The Whole Grains Council has made it easier for families to find whole grain products by labeling different foods with the Whole Grain Stamp (4). There are two kinds of stamps available: the Basic Stamp and the 100% Stamp.



Buying food with either stamp guarantees at least some whole grain is in it, but foods with the 100% Stamp have even more.

Eating whole grains provides many health benefits. The extra fiber helps keep the digestive system working properly and can help lower cholesterol. In fact, studies have shown that people who eat more whole grains have a lower risk of developing heart disease and diabetes than people who do not (5). The extra fiber in the diet also helps people stay full longer, which can help them eat less and manage their weight (5, 6).

In summary, choosing whole grains over refined grains provides children and adults with more fiber, which is important for good health. Although it may seem difficult to find foods that have whole grains, reading the ingredients list and looking for the Whole Grain Stamp can make it easier to choose whole grain products. Making sure children get enough whole grains every day and teaching them to choose whole grain products will help them live a healthier life and maintain a healthier weight.

REFERENCES

1. Whole Grains Council. What is a whole grain? Available at: <http://www.wholegrainscouncil.org/whole-grains-101/what-is-a-whole-grain>. Accessed April 29, 2011.
2. US Department of Agriculture. MyPlate. Grains. Available at: <http://www.choosemyplate.gov/foodgroups/grains.html>. Accessed June 23, 2011.
3. US Department of Agriculture. MyPlate. Available at: <http://www.choosemyplate.gov/index.html>. Accessed June 23, 2011.



1. Whole grains Council. Whole grain stamp. Available at:
<http://www.wholegrainscouncil.org/whole-grain-stamp>.
Accessed April 29, 2011.
2. Slavin J. Whole grains and human health. *Nutr Res Rev*. 2004;17:99-110.
3. Liu S, Willett WC, Manson JE, Hu FB, Rosner B, Colditz G. Relation between changes in intakes of dietary fiber and grain products and changes in weight and development of obesity among middle-aged women. *Am J Clin Nutr*. 2003;78:920-927.

Pre K/K Lesson

LEARNING OBJECTIVE

The students will:

- recognize foods that belong to the Grains group on MyPlate.

BEHAVIORAL OBJECTIVE

The students will try new foods from the Grains group.

RECOMMENDED BOOK

Macaroni and Rice and Bread by the Slice by Brian P. Cleary

FLORIDA STANDARDS

HEALTH EDUCATION

HE.K.C.1.1: The student will recognize healthy behaviors.

HE.K.P.1.1: The student will identify health practices and behaviors to maintain or improve personal health.

READING

LA.K.1.1.1: The student will locate a printed word on a page.

LA.K.1.1.4: The student will match print to speech.

LA.K.1.6.1: The student will use new vocabulary that is introduced and taught directly.

PHYSICAL EDUCATION

PE.K.C.1.2: The student will recognize physical activities that have safety rules and procedures.

PE.K.C.1.8: The student will recognize movement concepts.

PE.K.L.2.6: The student will differentiate between healthy and unhealthy food choices.

PE.K.R.1.1: The student will treat others with respect during play.

PE.K.R.2.3: The student will continue to participate when not successful on the first try.



Learning Activity: Grain Exploration

MATERIALS

- One medium brown bag
- Resealable plastic bags
- Five whole grain foods
- OR food models of whole grain foods
- Grains Activity Sheet, provided
- Orange crayon or marker (each child should have their own crayons and/or markers at their desk)
- MyPlate Poster

PRIOR TO ACTIVITY

Fill multiple resealable plastic bags with samples of whole grains. Examples: slice of whole grain bread, popcorn, whole grain pasta, uncooked oatmeal, whole grain tortilla, and whole grain crackers. Food models may be used in place of real food. Fill the brown bag with the resealable bags or food models. Make enough copies of the Grain Activity Sheet.

ACTIVITY INTRODUCTION

[Gather the class into a circle on the floor.] *Today we are going to talk about whole grains and learn about different foods that belong in the Grains group of MyPlate. Raise your hand if you know what a grain is.* Call on children to give guesses. Set aside one sample of each type of whole grain for you to use during the activity. Pass the brown bag that contains the sample grains to the students and tell them to pick a food from the bag. *Every person has a grain, hold on to your grain until it's your turn. The Grains group is the orange group on MyPlate.* Point to the orange group on the MyPlate poster. *Foods in the Grains group are made of oats, wheat, rice, cornmeal, barley and other cereal grains. Can you say Grains? We are going to look at some examples of whole grain foods. When I introduce your whole grain, everyone who has the same whole grain food in their bag should hold it up for everyone to see.* Review each whole grain sample and ask the students who have the same whole grain to hold it up for everyone to see. Tell them the name of the whole grain and ask them to repeat the name aloud. Then have the kids describe one way to eat each grain.

EXAMPLES

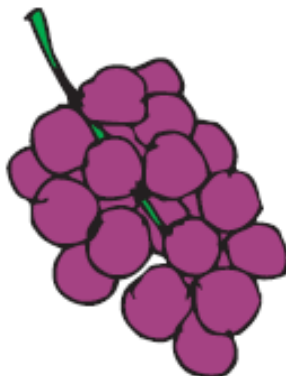
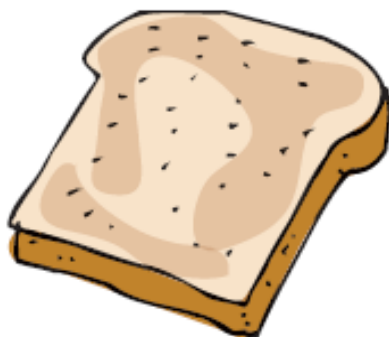
This is a piece of bread. Can you say bread? Bread is a food in the Grains group. How do you like to eat your bread? You can use bread to make sandwiches or French toast. Whole wheat bread is the healthiest choice.

This is dry oatmeal. Oats belong in the Grains group. Can you say Oats? Oats are in the oatmeal you eat for breakfast.

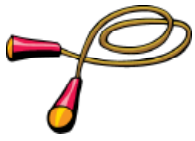
This is pasta. Pasta belongs in the Grains group. Can you say pasta? How do you like to eat your pasta? Pasta is what goes in your spaghetti at dinner time.

This is popcorn. Popcorn is belongs in the Grains group. Can you say popcorn? Where do you like to eat popcorn? Popcorn is fun to eat at the movie theater.

I hope you have enjoyed learning about the different grains in the Grains group. Now we are going to do another activity to help you remember the different grain foods. Have the children return the grain samples to the brown bag and return to their desks. *Please take out an orange crayon.* Hand out the Grains Activity Sheet to each child. *This is a Grains Activity Sheet. You'll notice that there are grain foods and other foods on the sheet. First, I want each of you to trace the word grains with your orange crayon. Does anyone know why we are using an orange crayon?* Let the children guess. *That's right. The Grains group is the orange group on MyPlate.* Pull one of each grain sample from the bag and hold it up for all to see. *Please circle the [INSERT GRAIN NAME] on your sheet.* Walk around to make sure all of the children are getting the answers correct. *Great job circling all of your foods from the Grains group. Now we are going to play the Great Grains Relay Race.*



Grains



Physical Activity: The Great Grains Relay Race

PRIOR TO ACTIVITY

Print the Grains and Other Foods signs (2 sets of each). Print the Go Fish cards and cut them out. Use the cards that show pictures of the same grain foods that are on the Grains Activity worksheet because these are the foods with which the children will be most familiar. You will also need cards that show pictures from the other food groups as well. Make sure you have enough cards for each child in the class. Place all of the cards in the brown bag. Put four chairs (two sets of two, one for each team) next to each other on one side of the room. Put the Grains sign on one chair and the Other foods sign on the second chair for each team.

ACTIVITY INSTRUCTIONS

Tell the children that you are going to divide them into two teams for the Great Grains Relay Race.

Have each team form a line opposite the chairs.

Tell the students that they will have a chance to pick a food card from a bag. Explain that some cards will have pictures of grains and some will have pictures of other foods such as fruits, vegetables, dairy, and protein foods. When they pick their card, they will need to decide if it is a picture of a grain food or another food and then run to the chairs and put their card on the correct chair. If it is a grain food they will need to put it on the chair with the sign that says grains (show them). If it is not a grain food they will need to put it on the chair that says other foods (show them).

After they place the food in the pile, they will run back and tag the next child in line who will then draw a card from the bag and decide where to put the card. The activity continues until all of the cards have been used.

The team that finishes and has sorted the most cards correctly wins and is the Great Grains Relay Race Champion group of the day.

To start the activity, stand between the two lines holding the brown bag and start the race by yelling Go!

NOTE: SPACE LIMITING ACTIVITY

If you have limited space. Have students stay at their desk. If the food card shown is a Grains Group card - Run in place. If the food card shown is an Other Food card - Hop on one foot.

SUMMARY

Which food group did we learn about today? Allow the children to shout the answer or have them raise their hands. *That's right...the Grains group. What color is the grains group on MyPlate? Yes. Orange. What kinds of foods are in the Grains group? Whole wheat bread, whole wheat crackers, pasta, popcorn, and oatmeal.* The children may include other grain foods that were not discussed in the lesson. Correct them if they say the names of foods that do not belong in the Grains group. *Make sure you get plenty of foods from the Grains group every day so you have lots of energy to play with your friends.*

MATERIALS

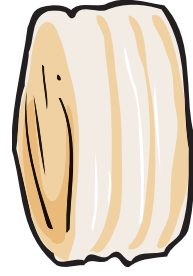
- Go Fish cards, provided
- Grains sign, provided
- Other Food sign, provided
- Tape
- Brown bag
- Four chairs

Vegetables



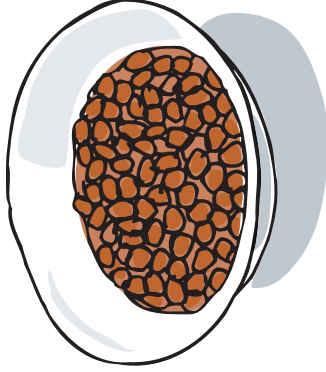
Baked Potato

Grains



Biscuit

Meat & Beans



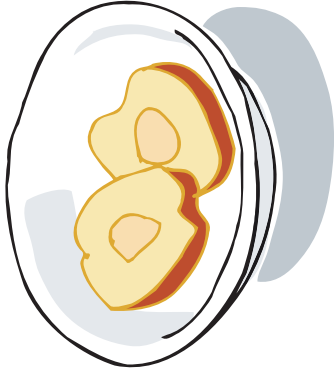
Baked Beans

Meat & Beans



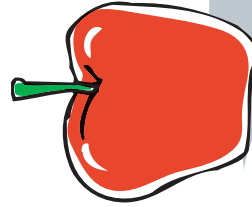
Beef Jerky

Fruits



Baked Apple

Fruits



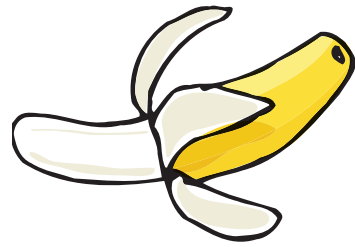
Apple

Grains



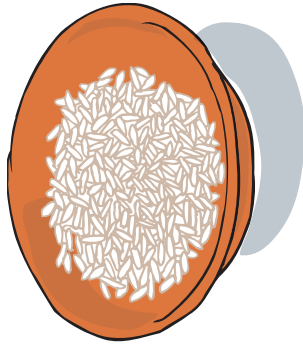
Bagel

Fruits



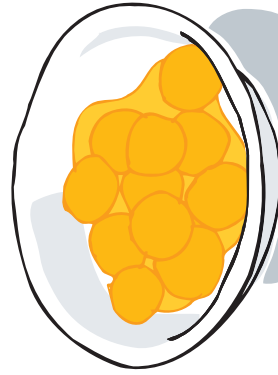
Banana

Grains



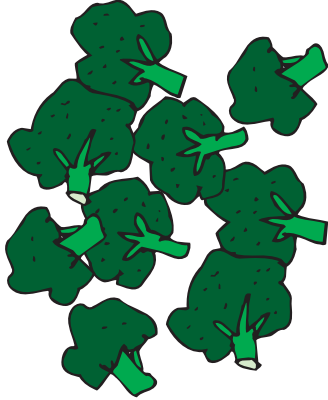
Brown Rice

Fruits



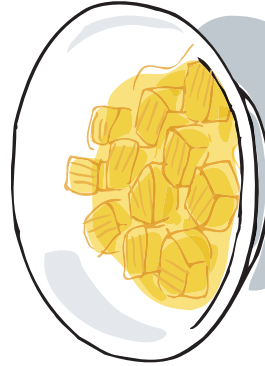
Cantaloupe

Vegetables



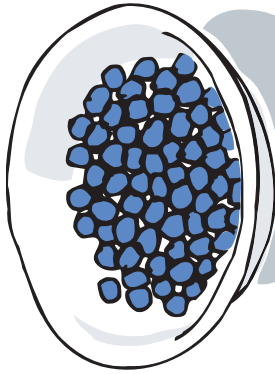
Broccoli

Fruits



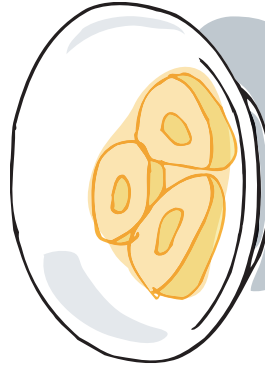
Pineapple

Fruits



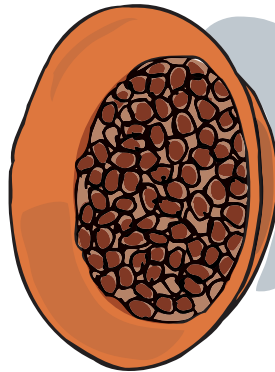
Blueberries

Fruits



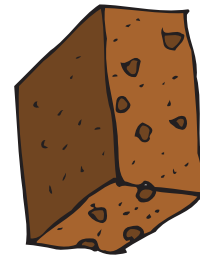
Pears

Meat & Beans



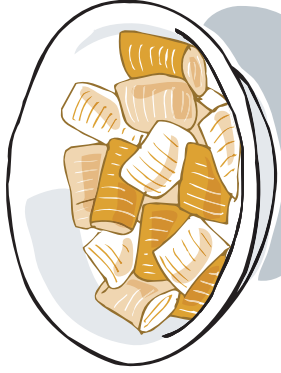
Black Bean Soup

Grains



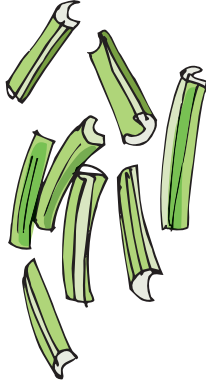
Brownie

Grains



Cereal

Vegetables



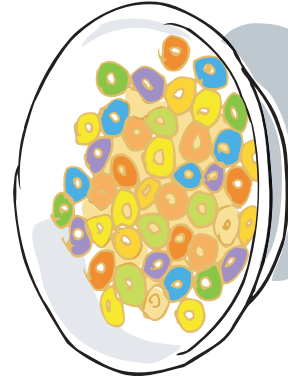
Celery

Grains



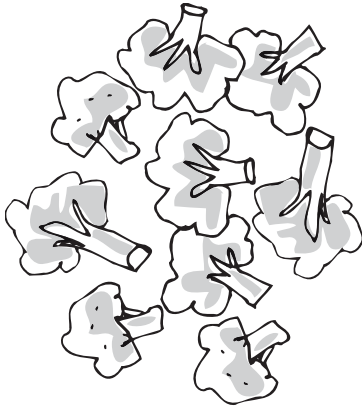
Cereal

Grains



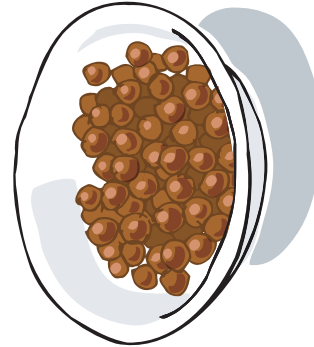
Cereal

Vegetables



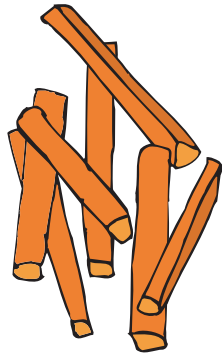
Cauliflower

Grains



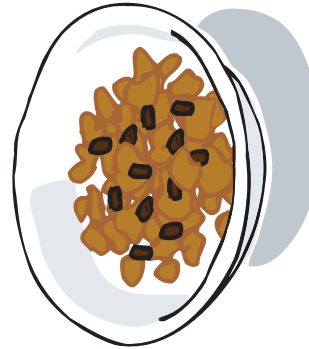
Cereal

Vegetables



Carrot Sticks

Grains



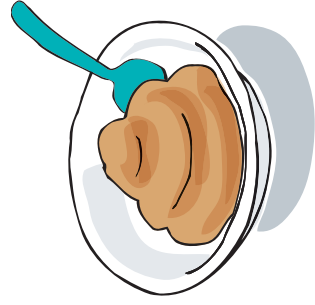
Cereal

Grains



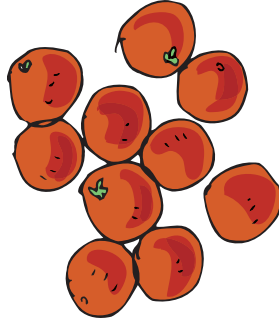
Chex Mix

Milk



Chocolate Pudding

Vegetables



Cherry Tomatoes

Grains



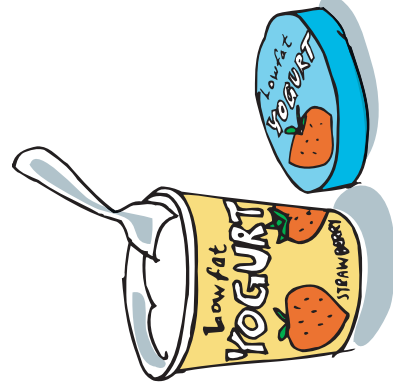
Chocolate Chip Muffin

Vegetables



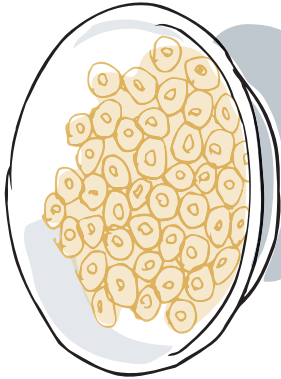
Chef Salad

Milk



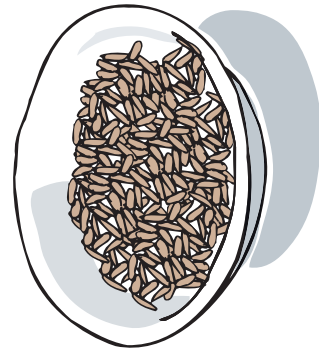
Yogurt

Grains



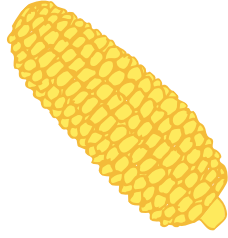
Cereal

Grains



Wild Rice

Vegetables



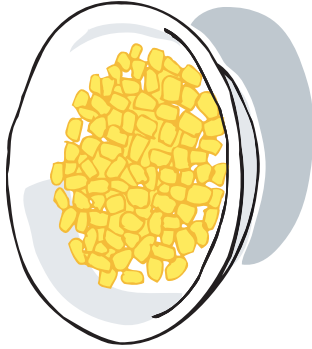
Corn

Fruits



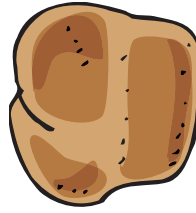
Dried Apricots

Vegetables



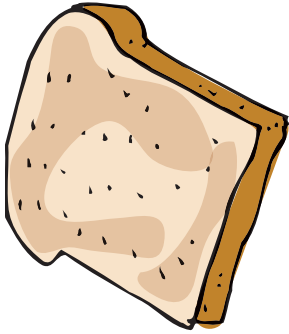
Corn

Grains



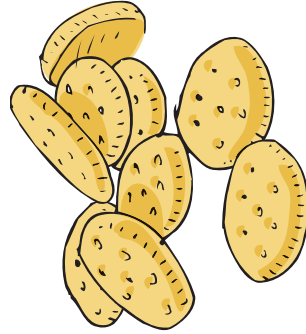
**Whole Wheat
Dinner Roll**

Grains



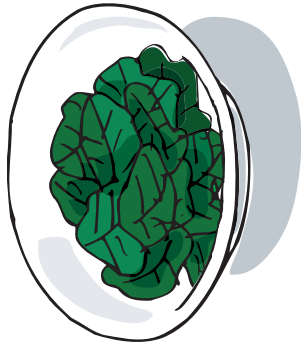
**Whole Wheat
Toast**

Grains



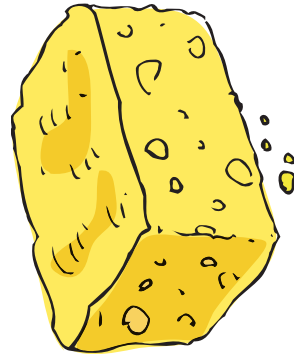
Crackers

Vegetables



Collard Greens

Grains



Cornbread

Grains



English Muffin

Fruits



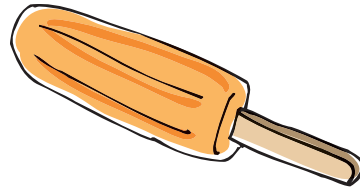
Applesauce

Vegetables



French Fries

Fruits



**Frozen Fruit
Juice Bar**

Meat & Beans



Fried Chicken

Milk



Frozen Yogurt

Fruits



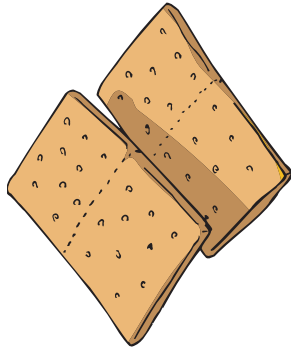
Fried Plantains

Fruits



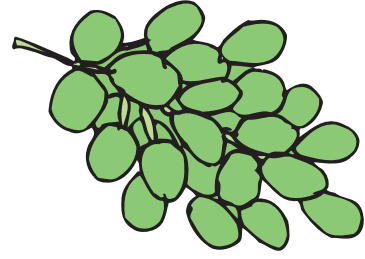
Fruit Salad

Grains



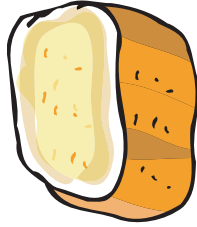
Graham Crackers

Fruits



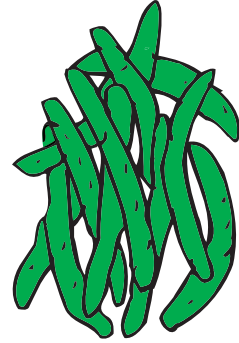
Green Grapes

Grains



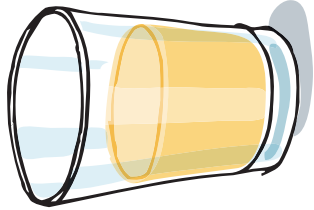
Garlic Bread

Vegetables



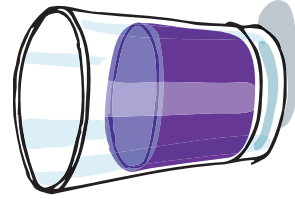
Green Beans

Fruits



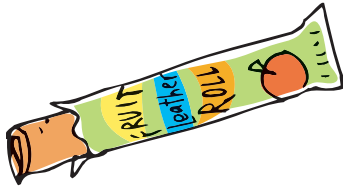
Apple Juice

Fruits



Grape Juice

Fruits



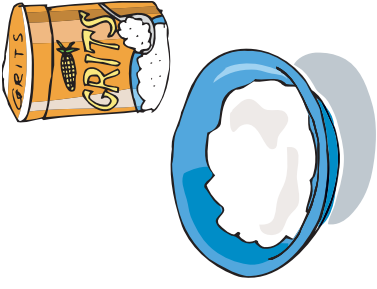
Fruit Leather

Grains



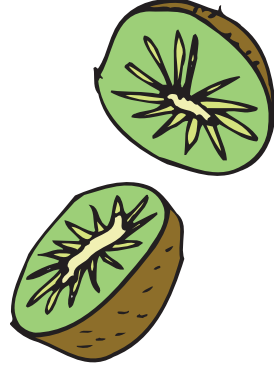
Granola Bar

Grains



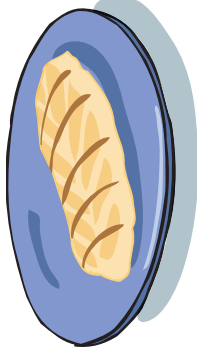
Grits

Fruits



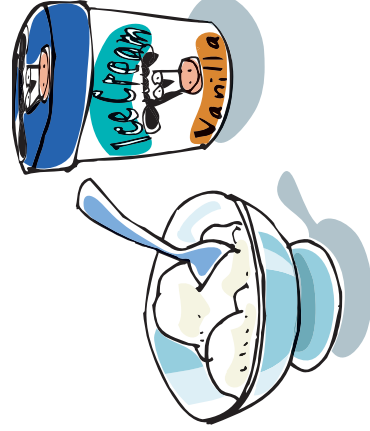
Kiwi

Meat & Beans



Grilled Fish

Milk



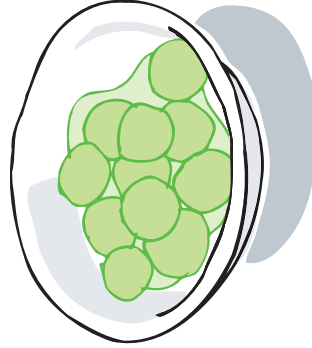
Ice Cream

Meat & Beans



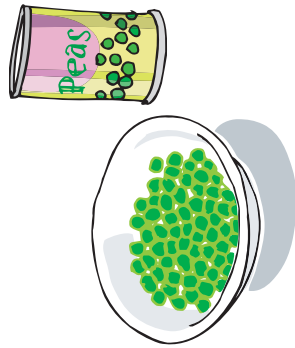
Grilled Chicken

Fruits



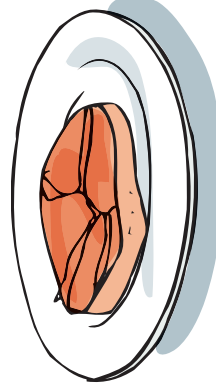
Honeydew

Vegetables



Green Peas

Meat & Beans



Ham

Milk



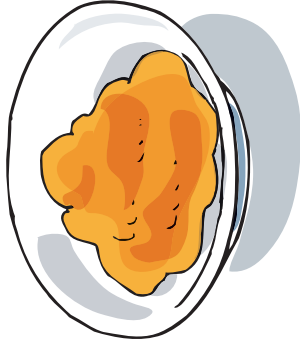
2% Milk

Milk



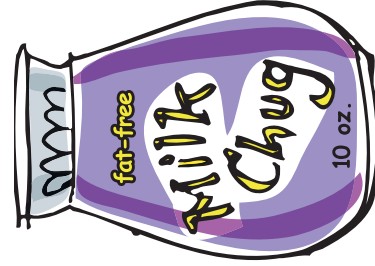
Fat Free Milk

Vegetables



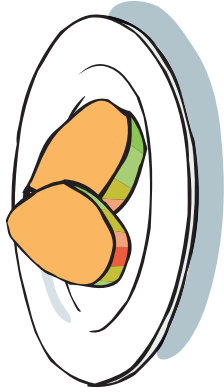
Mashed Sweet
Potatoes

Milk



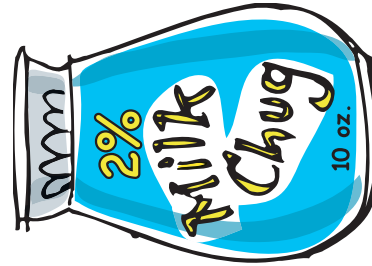
Fat Free Milk

Fruits



Mango

Milk



2% Milk

Milk



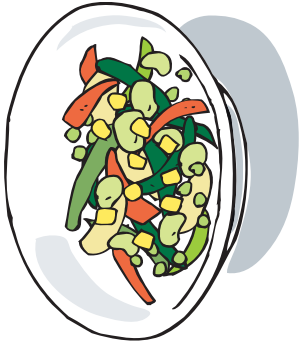
Cottage Cheese

Milk



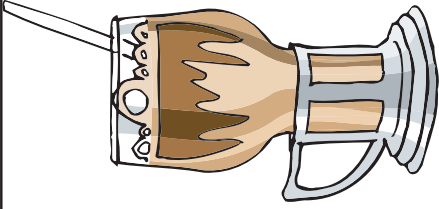
Chocolate
Fat Free Milk

Vegetables



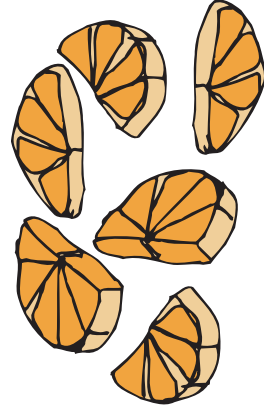
Mixed Vegetables

Milk



Milkshake

Fruits



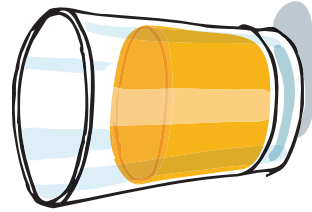
Orange Slices

Milk



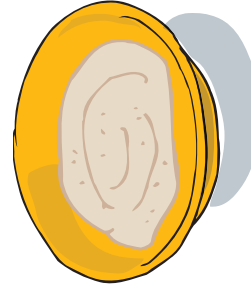
Whole Milk

Fruits



Orange Juice

Grains



Oatmeal

Milk



**Strawberry
Fat Free Milk**

Grains



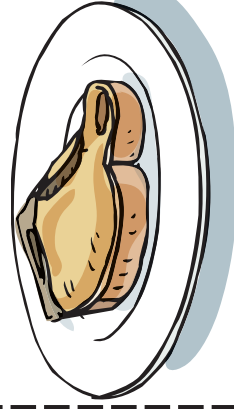
Animal Crackers

Meat & Beans



Peanuts

Meat & Beans



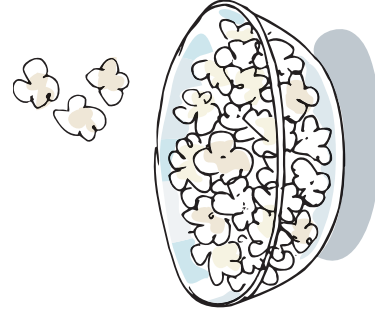
Pork Chop

Fruits



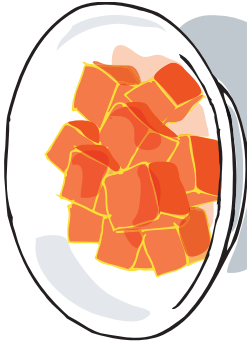
Peaches

Grains



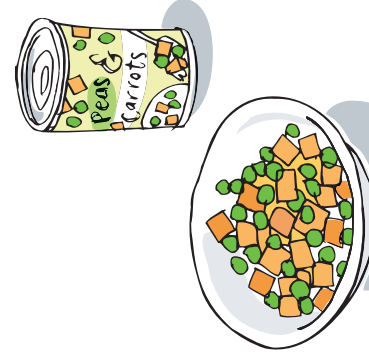
Popcorn

Fruits



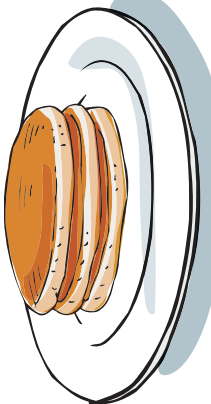
Papaya

Vegetables



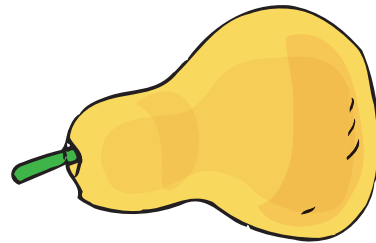
Peas & Carrots

Grains



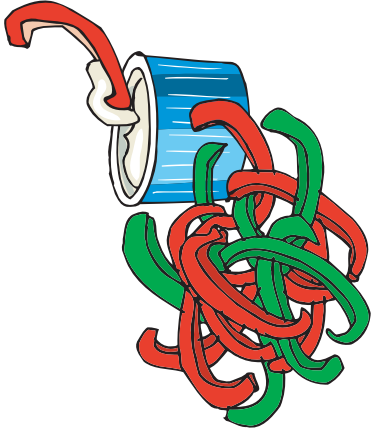
Pancakes

Fruits



Pear

Vegetables



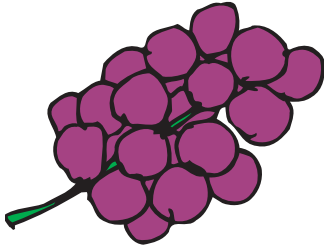
**Red & Green
Pepper Slices**

Vegetables



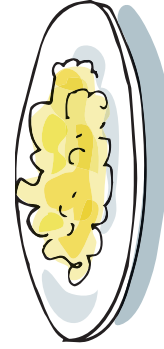
Side Salad

Fruits



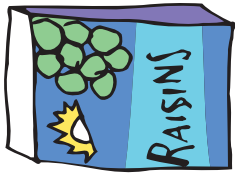
Red Grapes

Meat & Beans



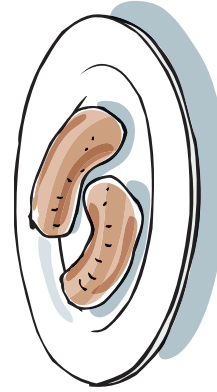
Scrambled Eggs

Fruits



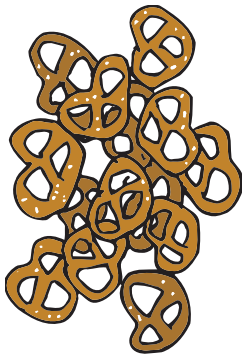
Raisins

Meat & Beans



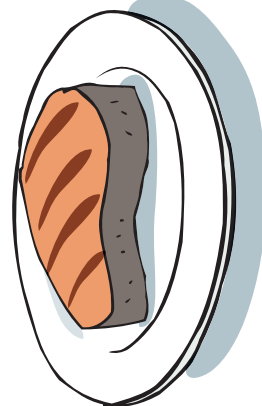
Sausage Links

Grains



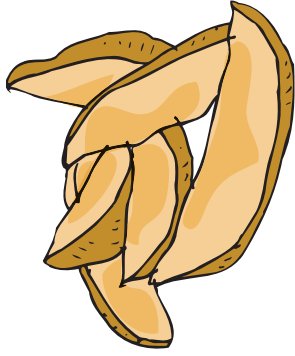
Pretzels

Meat & Beans



Salmon

Vegetables



Steak Fries

Vegetables



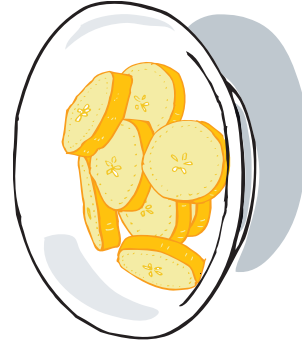
**Baked
Sweet Potato**

Meat & Beans



Steak

Vegetables



Summer Squash

Vegetables



Spinach Salad

Milk



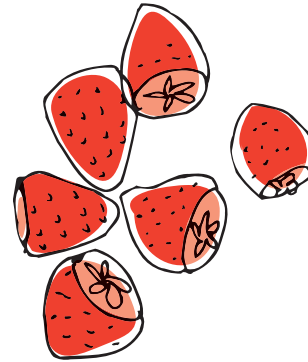
String Cheese

Grains



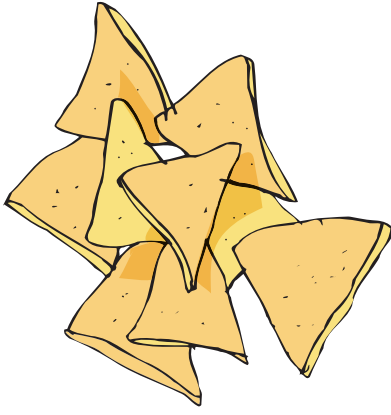
Soft Pretzel

Fruits



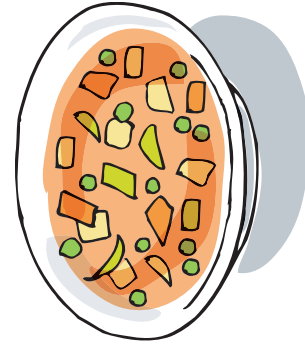
Strawberries

Grains



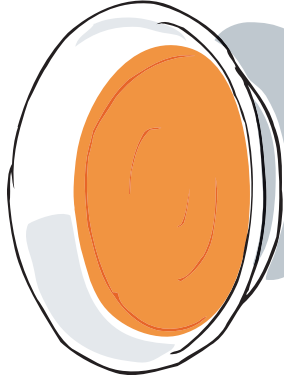
Tortilla Chips

Vegetables



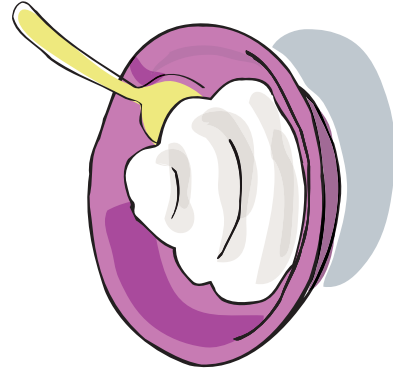
Vegetable Soup

Vegetables



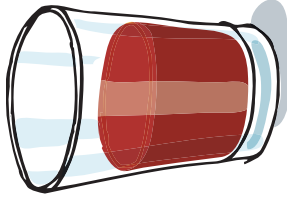
Tomato Soup

Milk



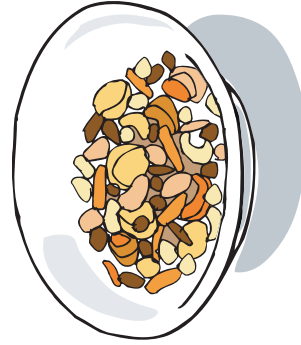
Vanilla Pudding

Vegetables



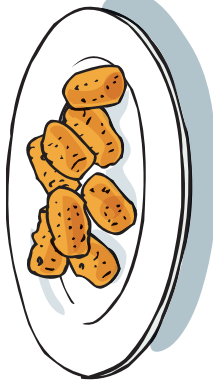
Tomato Juice

Meat & Beans



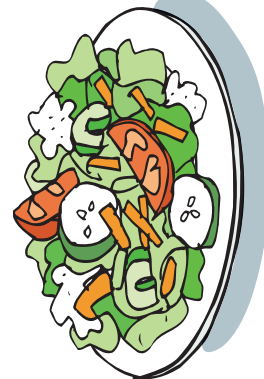
Trail Mix

Vegetables



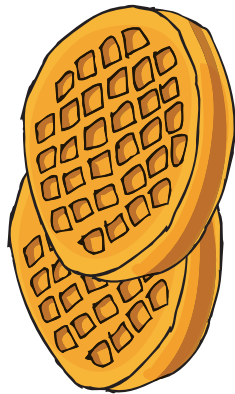
Tater Tots

Vegetables



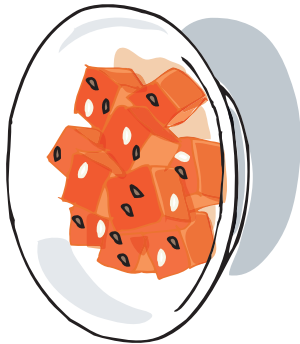
Tossed Salad

Grains



Waffles

Fruits



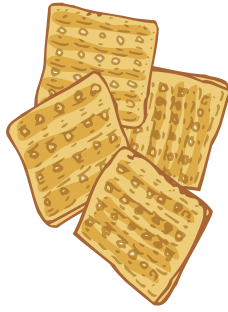
Watermelon

Grains



**Whole Wheat
Bagel**

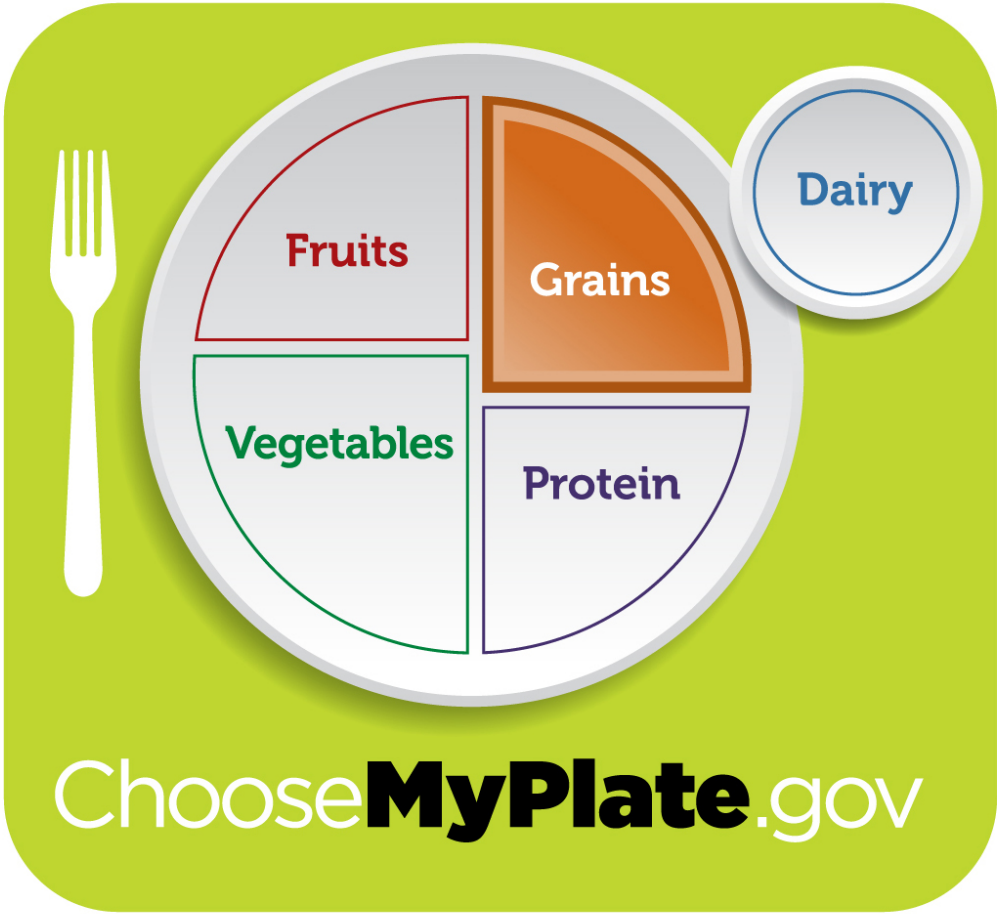
Grains



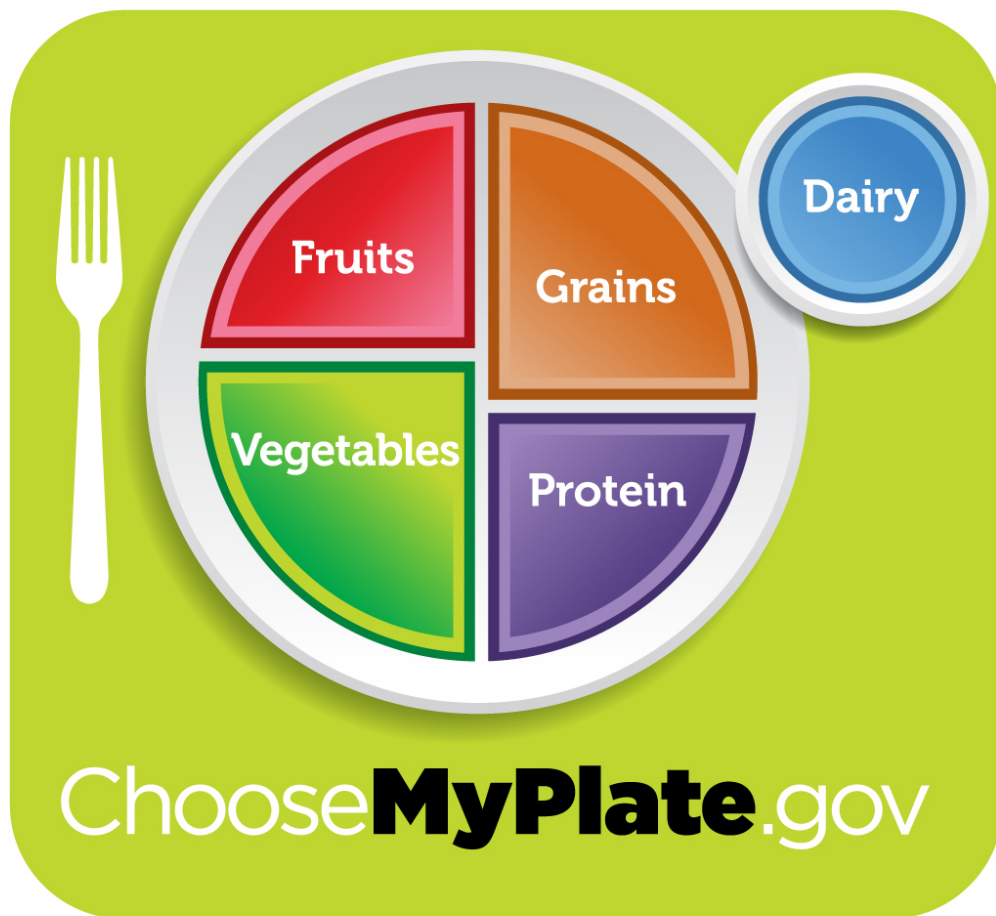
**Whole Wheat
Crackers**



GRAINS



OTHER FOODS





COMMONLY ASKED QUESTIONS

Q: *What are the grain recommendations for children?*

A: MyPlate recommends that children between the ages of 2 and 5 consume 3–5 ounces of grains every day, depending on age and activity level, which includes 1 ½ to 2 ½ ounces of whole grains. Children between the ages of 6 and 11 need 6 ounces of grains every day, which includes 3 ounces of whole grains every day. For a personalized recommendation, visit www.choosemyplate.gov.

Q: *What are other examples of whole grains?*

A: Other grains include amaranth, barley, brown rice, bulgur (cracked wheat), whole-wheat pasta or couscous, flaxseed, millet, oats, quinoa, rye, spelt, wheat berries, and wild rice

Q: *What is celiac disease?*

A: Celiac disease is an inherited, autoimmune disease in which the lining of the small intestine is damaged from eating gluten and other proteins found in wheat, barley, rye, and possibly oats. People with celiac disease can still eat grains, but they must be gluten free.

Q: *What can children with celiac disease eat?*

A: Children with celiac disease can eat the following foods:

- Ready-made breads, bagels and English muffins ONLY IF they are made with rice, potato, bean, soy, corn, sorghum, teff or other gluten-free flours and ingredients
- Frozen, gluten-free waffles
- Gluten-free pizza crust made from a mix or frozen ready-made
- Homemade breads, biscuits, pancakes, waffles, muffins or quick breads made from gluten-free flours
- Corn tortillas (check ingredients label to make sure the tortillas are not dusted with wheat flour)
- Brown rice
- Corn products (check ingredients; some corn-based products like some ready-to-eat cereals may contain gluten-containing ingredients)
- Quinoa
- Flax
- Millet

Dear Parent or Caregiver,

Today your child learned about foods in the Grains group using a “Grain Exploration” activity. During this activity, your child had a chance to see and touch different kinds of foods in the Grains group such as whole wheat bread, pasta, popcorn, oatmeal, and crackers. These foods are important because they provide your child with different vitamins, minerals, and fiber.

You play a big part in helping your child develop good eating habits. Children need around 5 to 6 ounces of grains every day. An ounce of grains is equal to 1 slice of bread, 1 cup of ready-to-eat cereal or ½ cup cooked rice, cooked pasta, or cooked cereal. Half of the grain foods they eat should be whole grains. You can start providing whole grains to your child with the snack recipe on the back of this letter. The following tips from www.ChooseMyPlate.gov can also help you provide your child with more whole grains at meals and snacks:

- Choose brown rice or whole wheat pasta for dinner.
- Make sandwiches using whole-grain bread.
- Provide ready-to-eat whole grain cereal such as toasted oats as a snack.
- Serve plain popcorn as a healthy snack.
- Buy foods with the following names listed as the first ingredient: brown rice, buckwheat, bulgur, millet, oatmeal, quinoa, rolled oats, whole-grain, barley, or whole wheat.
- Set a good example by eating whole grain foods with your child.

Making sure your child gets enough whole grains is a great way to keep them healthy and active. If you would like to learn more about the Grains group and whole grain foods, visit www.ChooseMyPlate.gov.

Sincerely,

LESSON 3



Fun with Fruits and Vegetables

Concept

Most children do not consume the recommended amounts of fruits and vegetables. To get the optimal health benefits from fruits and vegetables, it is important to consume a variety of foods from these two food groups. This lesson focuses on teaching children about the importance of eating a variety of fruits and vegetables and their health benefits in a way that is fun and engaging.



Background

The Fruits group is the red group and the Vegetables group is the green group on MyPlate. Children today are consuming too many calories and not enough of the nutrients their growing bodies need (1). Fruits and vegetables are an important part of a healthy diet because they are naturally cholesterol-free, low in fat and calories (2) and contain a variety of vitamins, minerals and fiber (3). Most children do not consume the daily recommended amount of fruits and vegetables (1). School-based nutrition education programs that focus on fruit and vegetable consumption have been well received, and children who participate in these programs have responded with a willingness to consume more fruits and vegetables (4). The focus of this lesson is to teach students about the Fruits and Vegetables groups on MyPlate as well as why these groups are essential for good health.

VITAMINS

Some of the key nutrients found in fruits and vegetables are vitamins A, E and C. Vitamin A is important for maintaining skin and eye health, and it plays a role in immunity, reproduction, bone growth and cell function (5). Vitamin E reduces cell damage, which is harmful to the body (6). Vitamin C is important for wound healing, teeth and gum health and for growth and repair of tissues (7). Vitamins A, E and C are considered antioxidants. Antioxidants protect cells from the negative effects of free radicals, which cause damage to human cells. Free radical damage can increase the risk for developing heart disease and cancer (8). A study published in the *Journal of the American Dietetic Association* found that increased consumption of fruits and vegetables consistently lowered the risk of certain cancers like lung, mouth, stomach and colon (9).

Folate is a B vitamin needed for making red blood cells and other types of cells. Folate is extremely important for women of childbearing age. Women, adolescents and young girls who can become pregnant need to get enough synthetic folic acid, a type of folate, before pregnancy and throughout their pregnancy to reduce the chance of having a baby with a serious type of birth defect (10). It is important for a pregnant woman to have a healthy diet, as her diet has a direct impact on the developing fetus. A child's health begins before it is even born (1).

MINERALS

Some fruits and vegetables contain important minerals such as iron, potassium and calcium (11). Like folate and other nutrients, iron is important in the development of red blood

cells because it carries oxygen throughout the body (12). An iron deficiency can lead to anemia, which can decrease red blood cell concentrations and increase fatigue, headaches and chest pain. Potassium helps to maintain a healthy blood pressure. Getting enough potassium may decrease the development of kidney stones and bone loss (2). Calcium is essential for the development and maintenance of healthy bones and teeth (11).

FIBER

Consuming fiber-rich fruits and vegetables helps to reduce constipation by maintaining proper bowel function, and it promotes satiety (2). Diets rich in fiber also may reduce the risk for cardiovascular disease (2), the leading cause of death in the United States. Evidence from multiple studies suggests that dietary fiber at intakes ranging from 12 to 33 grams per day may lower blood pressure and improve serum lipid levels (13).


DIABETES

Every year more young children are showing risk factors for diabetes. This trend is reflected in the number of teens who are actually diagnosed with this disease. Studies have shown a correlation between consumption of dark green leafy vegetables and vitamin C rich fruits and vegetables and a decrease in developing type 2 diabetes (14, 15). Studies also show a correlation among fruit and vegetable consumption, weight status and diabetes. People who eat enough fruits and vegetables are more likely to have a healthy weight status, which reduces their chances for developing diabetes (16).

RECOMMENDATIONS

Eating an adequate amount of fruits and vegetables has been shown to have numerous health benefits, but how many fruits and vegetables must be consumed to be considered adequate? The MyPlate website (www.choosemyplate.gov) provides recommendations based on age, sex and activity level (17).

The general recommendation for fruit intake in children is 1 to 1½ cups per day. For vegetables, children need 1½ cups per day (17). It's important to eat a variety of fruits and vegetables to supply the body with different nutrients (3). Additional guidelines include the recommendation to consume vegetables from each of the five subgroups every week. The subgroups include dark green vegetables, red and orange vegetables, beans and peas, starchy vegetables and other vegetables that don't fall into the other four subgroups



(1). The recommendations are provided in cups. One cup of a fruit or vegetable is defined as: 1 cup raw or cooked fruits or vegetables, 1 cup fruit or vegetable juice, ½ cup dried fruit, or 2 cups raw leafy greens (17).

In summary, it is important for children to eat enough of a variety of fruits and vegetables every day for good health. Fruits and vegetables contain numerous nutrients the body needs to function normally and to protect against chronic diseases. Including enough fruits and vegetables in the diet also will help children maintain a healthy weight.

REFERENCES

1. US Department of Health and Human Services, US Department of Agriculture. Dietary Guidelines for Americans, 2010. Available at: <http://www.cnpp.usda.gov/DGAs2010-PolicyDocument.htm>. Accessed May 19, 2011.
2. US Department of Agriculture. MyPlate. Vegetables: Health benefits and nutrients. Available at: http://www.choosemyplate.gov/foodgroups/vegetables_why.html. Accessed June 23, 2011.
3. US Department of Agriculture. Fabulous fruits...versatile vegetables. Available at: <http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2000/2000DGBrochureFabulousFruits.pdf>. Accessed May 19, 2011.
4. Centers for Disease Control and Prevention. Fruit and vegetable consumption among adults—United States, 2005. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5610a2.htm>. Accessed May 19, 2011.
5. National Institutes of Health, Office of Dietary Supplements. Vitamin A and carotenoids. Available at: <http://ods.od.nih.gov/factsheets/VitaminA-HealthProfessional/>. Accessed May 19, 2011.
6. National Institutes of Health, Office of Dietary Supplements. Vitamin E. Available at: <http://ods.od.nih.gov/factsheets/VitaminE-HealthProfessional/>. Accessed May 19, 2011.
7. National Institutes of Health, Office of Dietary Supplements. Vitamin C. Available at: <http://ods.od.nih.gov/factsheets/VitaminC-HealthProfessional/>. Accessed May 19, 2011.
8. US National Library of Medicine. Antioxidants. Available at: <http://www.nlm.nih.gov/medlineplus/antioxidants.html>. Accessed May 19, 2011.
1. Steinmetz KA, Potter JD. Vegetables, fruit, and cancer prevention: a review. *J Am Diet Assoc.* 1996;96:1027-39.
2. National Institutes of Health, Office of Dietary Supplements. Folate. Available at: <http://ods.od.nih.gov/factsheets/Folate-HealthProfessional/>. Accessed May 19, 2011.
3. Produce for Better Health. Key nutrients in fruits & vegetables. Available at: http://www.fruitsandveggiesmorematters.org/?page_id=53. Accessed May 19, 2011.
4. National Institutes of Health, Office of Dietary Supplements. Iron. Available at: <http://ods.od.nih.gov/factsheets/iron/>. Accessed May 19, 2011.
5. Josphipura KJ, Hu FB, Manson JE, Stampfer MJ, Rimm EB, Speizer FE, Colditz G, Ascherio A, Rosner B, Spiegelman D, Willett WC. The effect of fruit and vegetable intake on risk for coronary heart disease. *Ann Intern Med.* 2001;134:1106-14.
6. Carter P, Gray LJ, Troughton J, Khunti K, Davies MJ. Fruit and vegetable intake and incidence of type 2 diabetes mellitus: systematic review and meta-analysis. *Bmj.* 2010;341:c4229.
7. Harding A-H, Wareham NJ, Bingham SA, Khaw K, Luben R, Welch A, Forouhi NG. Plasma vitamin C level, fruit and vegetable consumption, and the risk of new-onset type 2 diabetes mellitus: the European prospective investigation of cancer-Norfolk prospective study. *Arch Intern Med.* 2008;168:1493-1499.
8. Buijsse B, Feskens EJ, Schulze MB, Forouhi NG, Wareham NJ, Sharp S, Palli D, Tognon G, Halkjaer J, Tjonneland A, Jakobsen MU, Overvad K, van der AD, Du H, Sorensen TI, Boeing H. Fruit and vegetable intakes and subsequent changes in body weight in European populations: results from the project on Diet, Obesity, and Genes (DiOGenes). *Am J Clin Nutr.* 2009;90:202-9.
9. US Department of Agriculture. MyPlate. Available at: <http://www.choosemyplate.gov/index.html>. Accessed June 23, 2011.

Pre K/K Lesson

LEARNING OBJECTIVE

The students will:

- identify foods that belong to the Fruits and Vegetables groups of MyPlate.

BEHAVIORAL OBJECTIVES

The students will:

- eat more fruits and vegetables.
- try new fruits and vegetables.

RECOMMENDED BOOK

The Fish Who Wished He Could Eat Fruit by Kathleen Stefancin, MS, RD

FLORIDA STANDARDS

HEALTH EDUCATION

HE.K.B.2.2.: The student will demonstrate listening skills to enhance health.

HE.K.C.1.1.: The student will recognize healthy behaviors.

HE.K.C.1.Pa.a.: The student will associate a behavior with health, such as brushing teeth (eating fruits and vegetables).

HE.K.C.1.Su.a.: The student will recognize a healthy behavior, such as brushing teeth or covering mouth for a cough or sneeze (eating fruits and vegetables).

SCIENCE

SC.K.N.1.in.c.: The student will observe, explore, and create a visual representation of real objects.

READING/LANGUAGE ARTS

LA.K.5.2.3.: The student will repeat auditory sequences (e.g., letters, words, numbers, rhythmic patterns).

PHYSICAL EDUCATION

PE.K.C.1.1.: The student will recognize locomotor skills.

PE.K.R.1.2.: The student will practice specific skills as assigned until the teacher signals the end of practice.

DANCE

DA.K.F.3.1.: The student will follow classroom instructions given by the teacher.

DA.K.S.3.2.: The student will imitate simple exercises for strengthening and stretching the body.



Learning Activity: Eat A Rainbow Full of Fruits and Vegetables

MATERIALS

- “Eat a Rainbow Full of Fruits and Vegetables” master, provided
- Rainbow coloring sheet, provided
- 5 fruit and vegetable colored food picture sheets, provided
- Scissors
- Laminating paper
- Markers or crayons (each student should have their own crayons and/or markers at their desks)
- Sticky tack
- MyPlate Poster

PRIOR TO ACTIVITY

Enlarge the color version of “Eat a Rainbow Full of Fruits and Vegetables” master to 24” X 36” and laminate. Cut out each individual fruit and vegetable picture from the five fruit and vegetable colored picture sheets. Once the fruit and vegetable pictures are cut out, laminate all the individual pictures. There are a total of thirty fruit and vegetable picture cards. Copy the rainbow coloring sheet for each student in the class.

ACTIVITY INTRODUCTION

Today we are going to learn about fruits and vegetables. Look at the MyPlate poster. The Fruits group is the red group (point to the red group) and the Vegetables group is the green group (point to the green group). Raise your hand if you like to eat fruit. Allow the students to raise their hands. *What is your favorite fruit to eat?* Allow students to answer. If a student names a vegetable, correct their answer by stating, “that is a vegetable, not a fruit.” *Raise your hand if you like to eat vegetables.* Allow the students to raise their hands. *What is your favorite vegetable to eat?* Allow students to answer. If a student names a fruit, correct their answer by stating, “that is a fruit, not a vegetable.” Note: For this lesson plan, tomatoes are categorized as vegetables. Although tomatoes are actually a fruit because they contain seeds, it is common to use them in salads and to refer to them as vegetables.

ACTIVITY DIRECTIONS

Place the “Eat a Rainbow Full of Fruits and Vegetables” poster at the front of the room. Give each student a rainbow coloring sheet. *Does anyone know what this is?* Let students answer: *a rainbow.*

What are the colors of the rainbow? Review the colors of the rainbow with the students using the poster:

- First band: **RED**
- Second band: **ORANGE**
- Third band: **YELLOW**
- Fourth band: **GREEN**
- Fifth band: **BLUE**
- Sixth band: **PURPLE**

Instruct the students to take out their markers or crayons. *Let’s color the first band on your rainbow red.* Show them on the sample rainbow. *Now, let’s color the second band orange.* Show them on the sample rainbow. Continue until all of the bands have been colored. Walk around the room giving assistance to students who need help. When students are done coloring, ask them to hold up their colored rainbows. *Did you know that fruits and vegetables come in every color of the rainbow? To be healthy, it’s important to eat fruits and vegetables from every color of the rainbow. That means*



we should eat red fruits and vegetables like apples and tomatoes, orange fruits and vegetables like oranges and carrots, yellow fruits and vegetables like bananas and corn, etc...

Spread all of the laminated fruit and vegetable picture cards on a table in front of the classroom. *There are lots of yummy fruits and vegetables in this pile. When it's your turn, I want you to pick a card and stick it on the color of the rainbow that matches the fruit or vegetable you have selected. If it is a fruit, put it on this side of the rainbow (point). If it is a vegetable, put it on this side of the rainbow (point). Let me show you. I have a red apple. What color band should it go on? Red. Is it a fruit or a vegetable? That's right, it is a fruit, so it goes on this side of the rainbow (stick on rainbow). How about broccoli? What color band of the rainbow should I put it on? Green. Yes, that's great, the green band. Now, is it a fruit or a vegetable? Very good! It is a vegetable, so it goes on this side (stick on rainbow). Now it is your turn. Let's form a line. When it's your turn, pick a card from the pile and put it where it goes on the rainbow.* Use sticky tack to stick the food onto the poster. Assist students needing help. Continue until you run out of food cards or out of time.

If there are too many students and not enough time, select a few students to participate. In this situation, show the students one of the picture cards. *Raise your hand if you can tell me what this is?* Call on one student and ask them to stick the picture in the correct spot on the rainbow. Have the students continue until you run out of food cards or time.

Rainbows have many different colors. What kinds of foods that we learned about today come in many different colors? Fruits and vegetables. The children may name different types of fruits and vegetables. If they do, remind them that they are examples of fruits and vegetables. *Remember it's important to eat fruits and vegetables every day and to eat fruits and vegetables from every color of the rainbow. Eating enough fruits and vegetables of different colors every day keeps us healthy, so we can have fun and learn new things.*

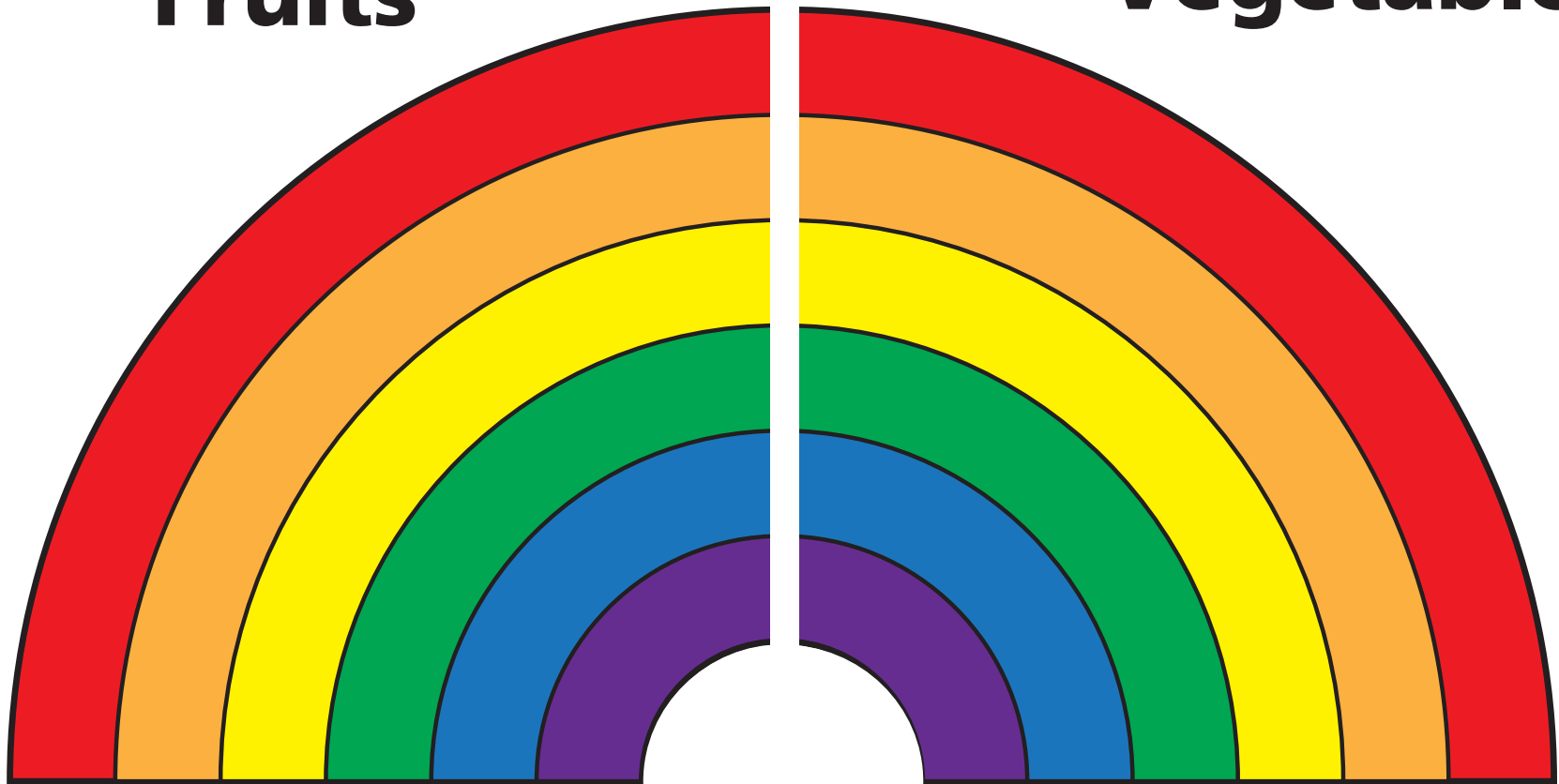
Note: If there's enough time, have the students name red fruits and red vegetables, orange fruits and orange vegetables, yellow fruits and yellow vegetables, etc. This activity will help students distinguish fruits from vegetables, allow students to name fruits and vegetables that aren't on the picture cards, and reinforce the concept that fruits and vegetables come in a variety of colors.



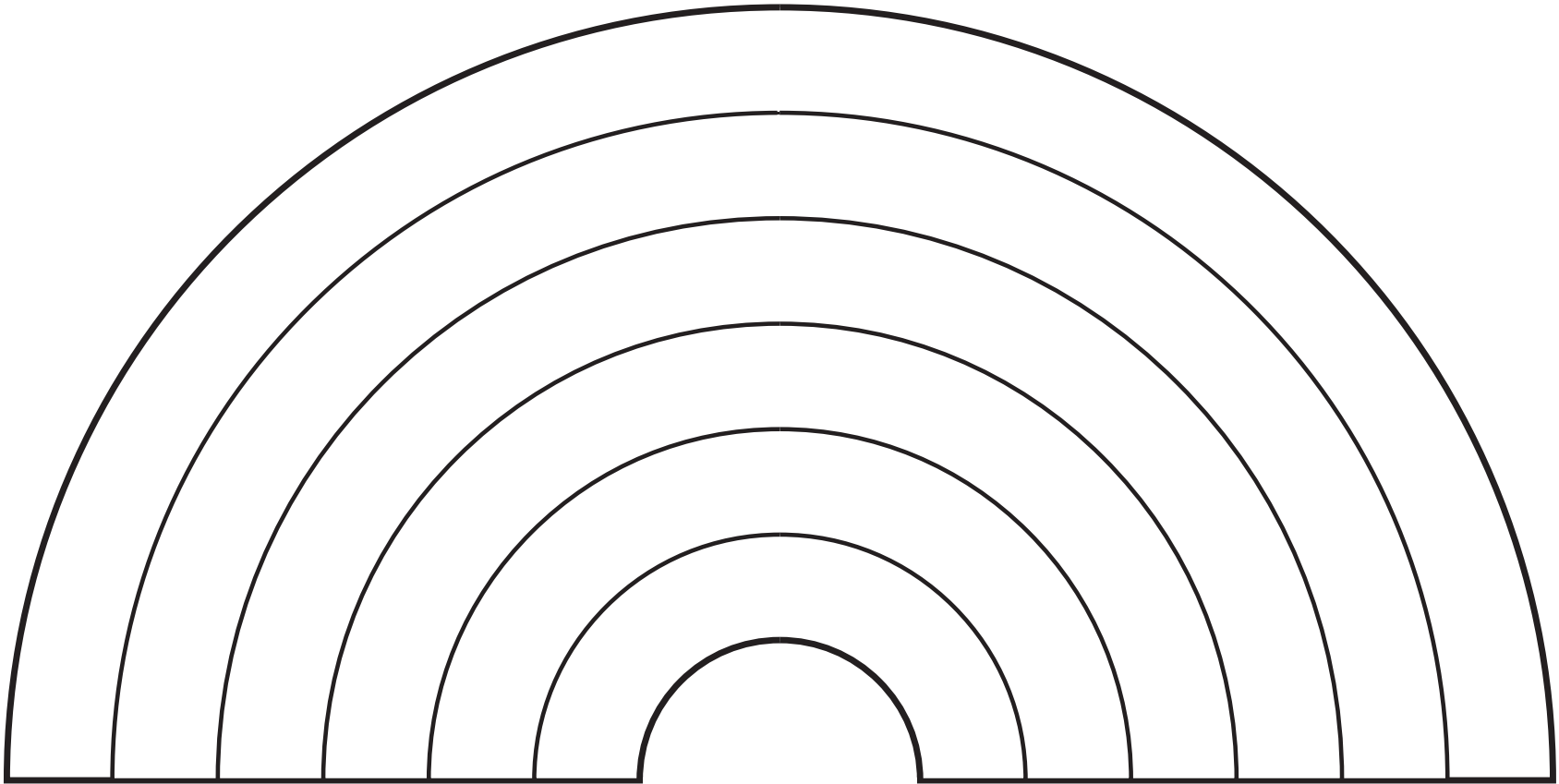
Eat A **Rainbow** Full of Fruits and Vegetables

Fruits

Vegetables

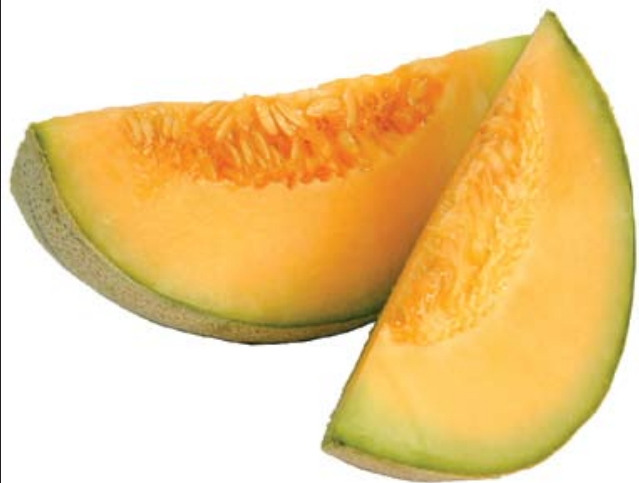


Eat a Rainbow Full of Fruits and Vegetables





Green Asparagus



Orange Cantaloupe



Yellow Bananas



Orange Carrots



Blue Blueberries



Green Celery



Red Cherries



Yellow Corn



Purple Eggplant



Purple Grapes



Green Kiwi



Yellow Lemon



Green Lettuce



Orange



Yellow Peach



Green Pear



Green Peas



Red Pomegranate



Red Raspberries



Purple Plums



Red Strawberry



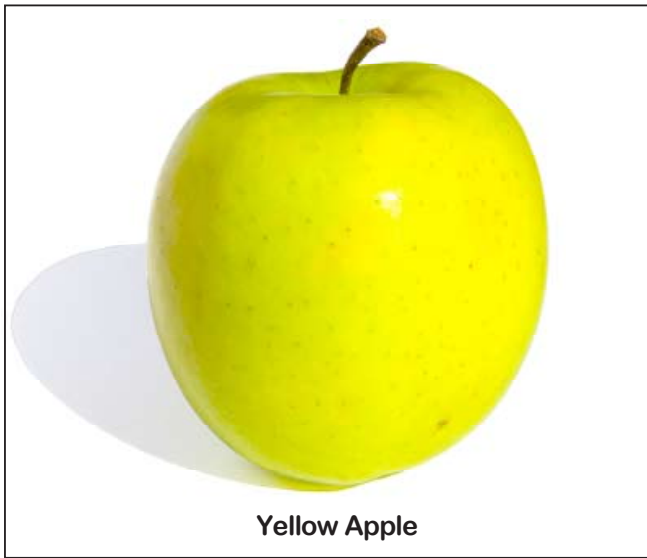
Red Tomato



Red Watermelon



Yellow Pepper



Yellow Apple



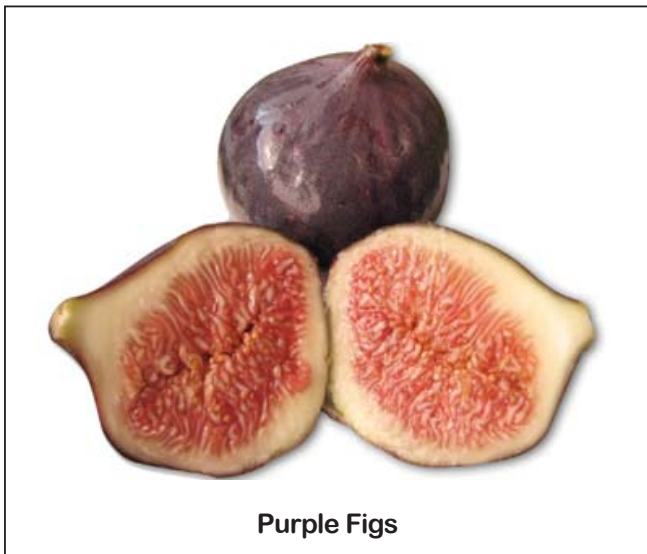
Orange Persimmons



Orange Pumpkin



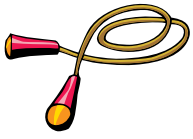
Orange Papaya



Purple Figs



Purple Raisins



Physical Activity: Fruit and Veggie Follow the Leader

MATERIALS:

- Laminated fruit and vegetable picture cards from learning activity
- Sticky tack

PRIOR TO THE ACTIVITY

Choose one red fruit or vegetable picture card. Choose one orange fruit or vegetable picture card. Choose one yellow card, one green card, etc. There should be a total of six fruit and vegetable picture cards (one card for each color of the rainbow). Make sure to have a good mix of fruit and vegetable pictures. Place sticky tack on the side of the card with the picture. Do this for the six picture cards. Stick the cards, blank side up, on different walls around the room.

ACTIVITY INSTRUCTIONS

Has anyone played Follow the Leader? Today we are going to play Fruit and Veggie Follow the Leader. I'm going to be the leader, and I want everyone to line up behind me. Instruct the students to form a single file line. If the class is too large have the students line up in pairs. *Together we are going to find the fruits and vegetables around the room. I'm going to do a movement, and I want everyone to follow what I'm doing. Is everyone ready? Okay, let's go.*

Since there are six picture cards around the room, you will be doing six different movements. Use a different movement to get to each picture card. There are six movements listed below, but feel free to be creative and change any of the movements.

MOVEMENTS

1. March
2. Bunny hop
3. Walk while doing arm circles Note: If the students are lined up in pairs, have them do arm raises – arms are bent at your chest, straighten them above your head, bring them back down to your chest, and repeat.
4. Lunges
5. Skip
6. March with high knees

We are going to start out by marching. March to any card posted on the wall, but try to pick the one furthest away from the starting point. This allows the students to have a longer marching distance. *Here is our first picture.* Show the picture card to the students. *Can anyone tell me what this picture is?* The name of the fruit or vegetable. For example, tomato. *What color is this picture?* The color of the fruit or vegetable. For example, red. *Is it a fruit or a vegetable?* It is a vegetable. *Now I want everyone to do five jumping jacks, and I want everyone to count with me. Ready... 1, 2, 3, 4, 5. Good job, now we are going to find the next fruit or vegetable.* Note: If the next picture card is too close, keep doing the movement while the students are answering the questions.

Use another movement from the six listed above to get to the next fruit or vegetable picture card. When you reach each picture card you will ask these three questions. *What is this picture? What color is this picture? Is it a fruit or vegetable?*



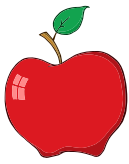
After you have asked the three questions, you will incorporate more physical activity into the lesson. Because there are six picture cards, you will do six different physical activities at each station. There are six physical activities listed below, but be creative. Feel free to change any of the activities or the number of repetitions completed. Have the students count along with you.

ACTIVITIES

1. 5 jumping jacks
2. 5 sit-ups
3. 5 toe touches - hands are all the way up in the air and you bend down to touch our toes.
4. Run in place for 5 seconds
5. 5 jumps - jump as high as you can
6. 5 squats

SUMMARY

Today we learned that fruits and vegetables come in all colors of the rainbow. What are the colors of the rainbow? (Red, orange, yellow, green, blue, and purple). The main thing I want you to remember when you go home is to eat fruits and vegetables from every color of the rainbow. You might even try some new fruits and vegetables that we learned about today.



Snack: Creamy Dreamy Fruit Pizza

SERVINGS: 2

INGREDIENTS

- 1 whole grain English muffin
- 2 tablespoons reduced fat strawberry cream cheese
- ¼ of one small banana, sliced (about 7 to 8 slices)
- ¼ cup mandarin orange sections, canned in light syrup or water and drained
- ¼ cup fresh strawberries, sliced
- 2 tablespoons blueberries

UTENSILS AND SUPPLIES

- Knife
- Cutting board
- Toaster or toaster oven
- ¼ cup dry measuring cup
- 1 Tablespoon measuring spoon
- Plate

DIRECTIONS

1. Slice English muffin in half and toast until golden brown.
2. Spread 2 tablespoons of strawberry cream cheese evenly on both halves of the toasted English muffin.
3. Top English muffin halves with banana slices, mandarin orange sections, blueberries and strawberry slices.

NOTE TO EDUCATOR

When making this recipe in class, slice each English muffin half in quarters. This is the class snack size, which will serve eight students.



ALTERNATIVE FRUIT COMBINATIONS

Each alternative recipe still contains 1 whole grain English muffin and 2 tablespoons of reduced fat strawberry cream cheese, but the fruits can be changed. Try these different fruit combinations.

Combination 1:

- ¼ cup pineapple chunks, canned in light syrup and drained
- ¼ cup mandarin orange sections, canned in light syrup or water and drained
- ½ of one small banana, sliced
- 1 tablespoon dried, shredded coconut

Combination 2:

- ½ of one small banana, sliced
- ¼ cup mandarin orange sections, canned in light syrup or water and drained
- 2 tablespoons blueberries

Combination 3:

- ¼ cup strawberries, sliced
- ½ of one small banana, sliced
- ¼ cup green, seedless grapes, sliced
- 2 tablespoons granola

NUTRITION ANALYSIS PER SERVING

Nutrition Facts

Serving Size (111g)
Servings Per Container

Amount Per Serving	
Calories 120	Calories from Fat 25
% Daily Value*	
Total Fat 2.5g	4%
Saturated Fat 1.5g	8%
Trans Fat 0g	
Cholesterol 10mg	3%
Sodium 140mg	6%
Total Carbohydrate 24g	8%
Dietary Fiber 6g	24%
Sugars 9g	
Protein 4g	
Vitamin A 10%	• Vitamin C 35%
Calcium 8%	• Iron 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

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4



COMMONLY ASKED QUESTIONS

Q: What is the difference between fruits and vegetables?

A: A fruit is the part of a flowering plant that contains the seeds and a vegetable is the other part of the plant (root, leaf and stem) not including the fruit. This definition classifies squash, pumpkins, cucumbers, tomatoes, peas, beans, corn, eggplants, sweet peppers and avocados as fruits. However, the culinary world defines fruits and vegetables a little differently. They classify a fruit as any part of the plant with a sweet flavor and a vegetable as any part of the plant with a savory flavor. In this lesson, we will be using the culinary definition to classify fruits and vegetables. However, do not explain to the students that fruits are sweet and vegetables are savory. This may cause the students to only eat fruits and to avoid vegetables even though vegetables can be sweet like sweet peppers.

Q: Is corn a vegetable or a grain?

A: Corn can be classified as a vegetable or a grain. The Whole Grains Council explains that fresh corn is usually considered a vegetable and dried corn, including popcorn, is considered a grain.

Q: Are dried beans and peas vegetables or protein foods?

A: Dried beans and peas can be classified as vegetables or protein foods. Typically, individuals who eat meat count dried beans and peas as vegetables. Individuals who don't eat meat (vegetarians) count dried beans and peas as protein foods because they are an excellent source of protein.

Q: Why is there only one blue fruit?

A: In this lesson, we classified fruits and vegetables using the color pattern of the rainbow. Usually blue and purple fruits and vegetables are classified together. When the two colors were split there became fewer blue fruits and vegetables.

Q: What about the white and brown fruits and vegetables?

A: In this lesson, we classified fruits and vegetables using the color pattern of the rainbow. However, this color pattern excluded white and brown fruits and vegetables including potatoes, cauliflower, mushrooms and onions. Also, we categorized a banana as a yellow fruit, but it's really a white fruit. Usually, fruits and vegetables are categorized by these colors: red, yellow/orange, white or tan/brown, green, and blue/purple.

Q: What other major nutrients do fruits and vegetables contain?

A: This lesson only focuses on vitamin A and vitamin C, but fruits and vegetables also may contain vitamin E, calcium, fiber, folate, potassium, magnesium and/or iron.

Q: How else does vitamin A help the body?

A: This lesson explains that vitamin A helps our eyes so we can see. However, vitamin A is needed for skin health, immunity, bone growth, reproduction and proper cell function.

Q: How else does vitamin C help the body?

A: This lesson explains that vitamin C aids in healing our cuts and scrapes. However, vitamin C is also important for teeth and gum health, growth and repair of tissues and iron absorption.

Dear Parent or Caregiver,

Today your child learned about the Fruits and the Vegetables groups. We learned that fruits and vegetables come in all colors of the rainbow. In order to be healthy, it's important to eat fruits and vegetables from all the colors of the rainbow and to eat fruits and vegetables every day.

You play a big part in helping your child develop good eating habits. Children between the ages of 4 to 8 should eat 1½ cups of vegetables and 1 to 1½ cups of fruits every day. The snack recipe on the back of this letter can help you get started. Doing the following activities with your child is another way that you can help your child learn about fruits and vegetables and improve your child's eating habits.

- Ask everyone in your home to state their favorite fruit and vegetable. The next time you shop for food, buy some of your family's favorites.
- Let your child help with the grocery shopping. He or she can pick out fruits and vegetables for the family to eat. When children help pick fruits and vegetables they are more likely to try eat them.
- Ask everyone in your household to name different fruits and vegetables that match the color bands of the rainbow (purple, blue, green, red, orange, and yellow). For example, red apples, red peppers, red cherries, and red tomatoes all belong in the red band. Be creative and see how many fruits and vegetables your family can name.
- Ask your child to name all of the fruits and vegetables he/she ate during the week. This allows your child to see if he/she ate fruits and vegetables from every color of the rainbow and what colors they should eat more of next week.

If you would like to learn more about the Fruits and the Vegetables groups, visit www.ChooseMyPlate.gov.

Sincerely,

LESSON 4



Delicious Dairy

Concept

Foods from the Dairy group provide children with important nutrients such as calcium, which is needed for strong bones and teeth. This lesson introduces children to the foods in the Dairy group and teaches them how much they need and why dairy foods are important for their bodies.

Background

The Dairy group is the blue group on the MyPlate symbol. It is important for children to consume the recommended amount of Dairy group foods every day for a healthy body. This group includes milk, yogurt, cheese, pudding and ice cream (1).

Dairy group foods provide nutrients such as calcium, vitamin D, potassium and magnesium. These nutrients are important for developing and maintaining strong bones and teeth in young children (2-5). Low-fat and fat-free Dairy group foods provide the health benefits without adding extra fat and calories in the diet. It is important to teach children how much they need and to choose lower fat varieties of Dairy group foods so they can stay within their calorie needs and maintain a healthy body weight.

The recommended amount of Dairy group foods varies depending on a child's age. Children between the ages of 4 and 8 need two and one-half cups per day (6). These intake recommendations can be achieved by consuming fluid milk or by consuming varying amounts of other Dairy group foods. Even though flavored milk, such as chocolate or strawberry milk has added sugar, it is one way to provide calcium to children who do not like white milk. While one cup of milk is easy to measure, knowing how much other Dairy group foods count as 1 cup of milk is more difficult. Each of the following foods counts as 1 cup of Dairy group foods (1):

yogurt	8 ounce container
shredded cheese	1/3 cup
non-processed cheese slices	2
low-fat ice cream or frozen yogurt	1/2 cup

It is important to note that some foods that have milk in their name are not Dairy group foods. For example, soy milk and almond milk are not Dairy group foods unless they are fortified with calcium and vitamins A and D. Some foods made from milk do not have enough calcium to be included in the Dairy group. These include butter, sour cream, and cream cheese (1).


The main reason for including the Dairy group on the MyPlate symbol is because milk is a great source of calcium, vitamin D, potassium and magnesium. Calcium is needed to make and maintain strong bones and teeth in children. This nutrient is especially important for children because they are growing rapidly at this age. Eating enough calcium early in life has been shown to decrease the risk for osteoporosis (os-tee-oh-puh-ROH-sis) later in life. Osteoporosis is a disease in which the bones become brittle. This makes bones more susceptible to breakage (2). Vitamin D promotes calcium

absorption and maintains the right amount of calcium in the blood (3). Potassium and magnesium are minerals. Potassium is important for reducing and controlling blood pressure (5), and magnesium is needed for strong bones and blood pressure control (4). While Dairy group foods provide other nutrients, these four are the most noteworthy.

When encouraging children to consume Dairy group foods, the focus should be on low-fat and fat-free milk sources. Saturated fat is naturally found in Dairy group foods like whole milk and foods made with whole milk. Saturated fat is a type of fat that should be limited. Choosing low-fat and fat-free Dairy group foods is a good way to reduce calorie and fat intake. As the incidence of childhood obesity continues to rise, finding ways to cut excess fat and calories from the diet is increasingly important.

Although a large portion of the population can eat and drink Dairy group foods without any problems, some people must limit or avoid their intake of Dairy group foods because of milk allergies and/or lactose intolerance. Understanding the differences between these conditions and what can be done to ensure a proper intake of calcium in those who have either or both of these problems is essential. A milk allergy is caused when the body has a negative reaction to the protein found in Dairy group foods. The allergic response can range from minor symptoms, such as a rash, to more deadly symptoms, such as shock or a blockage of the airway. Before encouraging children to try Dairy group foods, it is important to ensure that no students have a milk allergy. If a child has a milk allergy, urge them to consume other foods rich in calcium, such as fortified juices (100% fruit juice) and certain vegetables like spinach, in place of Dairy group foods. Lactose intolerance, on the other hand, is not as harmful as a milk allergy. Individuals with lactose intolerance cannot digest lactose, a sugar found in milk, which leads to cramping, bloating, and gas (7). Unlike children with a milk allergy, children who are lactose intolerant are able to eat milk products low in lactose or free of lactose such as yogurt, cheese and lactose-free milk (8).

In summary, the amount of Dairy group foods needed every day to help ensure an adequate intake of nutrients such as calcium, vitamin D, potassium and magnesium varies based on age. Children between the ages of 4 and 8 need two and one-half cups per day (6). Choosing low-fat and fat-free Dairy group foods is a great way to get the nutritional benefits associated with these products without the extra fat and calories. Dairy group foods may not be an option for those who have a milk allergy or are lactose intolerant. It is important to promote other foods rich in calcium if a child has a milk allergy.



Children who are lactose intolerant can choose foods low in lactose or drink lactose-free milk.

REFERENCES

1. US Department of Agriculture. MyPlate. Dairy. Available at: <http://www.choosemyplate.gov/foodgroups/dairy.html>. Accessed June 23, 2011.
2. National Institutes of health, Office of Dietary Supplements. Calcium. Available at: <http://ods.od.nih.gov/factsheets/Calcium-HealthProfessional/>. Accessed May 19, 2011.
3. National Institutes of health, Office of Dietary Supplements. Vitamin D. Available at: <http://ods.od.nih.gov/factsheets/VitaminD-HealthProfessional/>. Accessed May 19, 2011.
4. National Institutes of health, Office of Dietary Supplements. Magnesium. Available at: <http://ods.od.nih.gov/factsheets/Magnesium-HealthProfessional/>. Accessed May 19, 2011.
5. National Institutes of health, Office of Dietary Supplements. Potassium. Available at: <http://ods.od.nih.gov/factsheets/Potassium-HealthProfessional/>. Accessed May 19, 2011.
6. US Department of Agriculture. MyPlate. Available at: <http://www.choosemyplate.gov/index.html>. Accessed June 23, 2011.
7. National Institutes of Health. National Institute of Allergy and Infectious Diseases. Food Allergy. Available at: <http://www.niaid.nih.gov/topics/foodallergy/documents/foodallergy.pdf>. Accessed June 23, 2011, 2011.
8. US Department of Agriculture. MyPlate. Dairy. Tips for making wise choices. Available at: http://www.choosemyplate.gov/foodgroups/dairy_tips.html. Accessed June 23, 2011, 2011.

Pre K/K Lesson

LEARNING OBJECTIVES

The students will:

- identify foods from the Dairy group on the MyPlate symbol.
- state that foods from the Dairy group are important for healthy bones and teeth.

BEHAVIORAL OBJECTIVE

The students will:

- consume two and one-half cups of Dairy group foods every day.

RECOMMENDED BOOK

Carlos and Clarice Mooove to Lowfat Milk! by K. Reeves

FLORIDA STANDARDS

MATHEMATICS

MA.K.G.2.2.: The student will identify, name, describe and sort basic two-dimensional shapes such as squares, triangles, circles, rectangles, hexagons, and trapezoids.

READING/LANGUAGE ARTS

LA.K.1.1.6.: The student will move top to bottom and left to right on the printed page.

LA.K.1.6.4.: The student will identify and sort common words into basic categories (e.g., colors, shapes, food).

Physical Education:

PE.K.C.1.6.: The student will recite cues for a variety of movement patterns and skills.

PE.K.R.1.2.: The student will practice specific skills as assigned until the teacher signals the end of practice.



Learning Activity: Dairy group Activity Sheet

MATERIALS

- Dairy Group Activity Sheet, provided
- Crayons (each child should have their own crayons at their desks)
- MyPlate Poster

PRIOR TO ACTIVITY


Make enough copies of the Dairy Group Activity Sheet for each student in the class.

ACTIVITY INTRODUCTION:

Raise your hand if you drink milk every day. Allow students to raise their hands. *Can someone tell me where the milk you drink at school comes from?* Cows. *The Dairy group is the BLUE group on the MyPlate symbol.* Point to the blue group on the MyPlate poster. *Milk and things made from milk are in this group. Raise your hand if you can name a Dairy group food.* Allow students to answer. Answers include milk, ice cream, pudding, yogurt and cheese. *Now, raise your hand if you drink milk or eat yogurt or cheese every day. Good! If you raised your hand, you are getting Dairy foods every day! Now, point to your teeth. Why do you need your teeth?* Allow the children to point to their teeth and list reasons we need our teeth. *Dairy group foods are important to keep your teeth strong so you can eat. Dairy foods also are important for building strong bones. Raise your hand if you can tell me where your bones are.* Allow students to answer. *Children and adults need Dairy group foods for strong bones, but because you are still growing and so are your bones, it is VERY important that you eat enough Dairy group foods every day. Are you ready to do a fun Dairy group activity?*

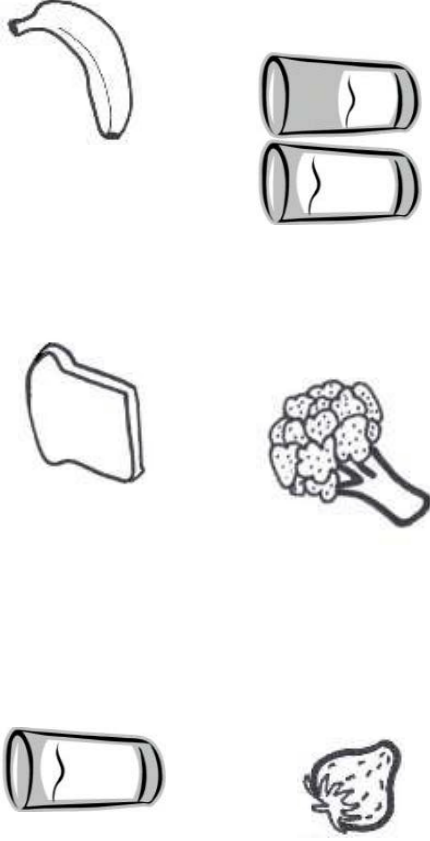
ACTIVITY DIRECTIONS

1. Distribute a Dairy Group Activity Sheet to each student and tell them to find their blue crayon. *Look at the sheet I just gave you. It is a puzzle. We will work through each piece together and learn more about the Dairy group.*
2. *Look for the puzzle piece with the number 1.* Point to the top left piece. *This is the piece we will start with. Circle the cups of milk using your blue crayon. We are using a blue crayon to remind you that the Dairy group is the blue group on the MyPlate symbol. How many cups of milk did you circle? Two and one-half. This is how much you need every day. You need AT LEAST two and one-half cups of milk every day. If you drink more than two and one-half cups, that is okay. How many of you drink a carton of milk when you eat breakfast at school?* Allow students to respond. A carton the size of what you get at school is equal to one cup. *How many of you drink another carton of milk with your lunch? How many of you drink a cup of milk with your dinner, or as a snack? If you raised your hand three times, then you are getting at least two and one-half cups of milk every day Remember, milk is not the only food in the Dairy group. Who remembers the names of other foods that are in the Dairy group?* Allow the students to raise their hands and tell you - ice cream, pudding, yogurt, and cheese.
3. *Look for the puzzle piece with the number 2. Use your blue crayon to to circle each food that belongs in the Dairy group. Why did we choose blue?* This is the color of the Dairy group on the MyPlate symbol. *Do chocolate milk and chocolate ice cream count as Dairy group foods? Yes! Educator side note: The foods pictured that are not included in the Dairy group are eggs, banana, carrots, and bread.*

- 
4. *Like the other food groups on MyPlate, the Dairy group is important because of how it helps our bodies. Now look at puzzle piece number 3. Point to the number 3 on the activity sheet. We are going to draw a circle around the two main ways Dairy group foods help our bodies. Does anyone remember the two ways Dairy group foods help our bodies? Does milk help build strong muscles (the arm showing his muscle)? No. Does milk help build strong bones (the skeleton)? Yes. Does milk help fight colds (the person with the box of tissues)? No. Does milk give you strong teeth (the mouth)? Yes. Make sure the students only draw a circle around strong bones and teeth.*
 5. *Now, in box 4, draw and color a picture of your favorite Dairy group food. It can be a glass of milk, ice cream, pudding, yogurt or cheese. I will come to your desk and write the name of the food on the line in the box when you are finished.*
 6. *Great job! No we are going to do a fun activity using what we just learned about the Dairy group.*

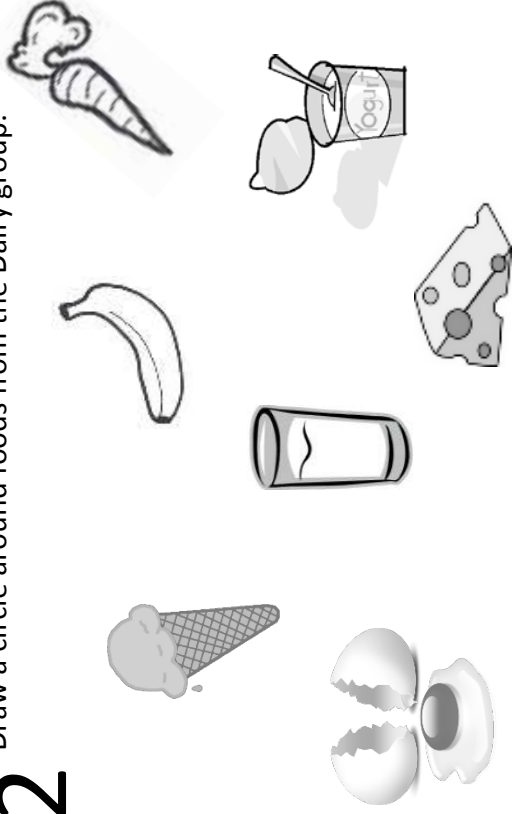
1 Draw a circle around the glasses of milk. How many did you circle?

1



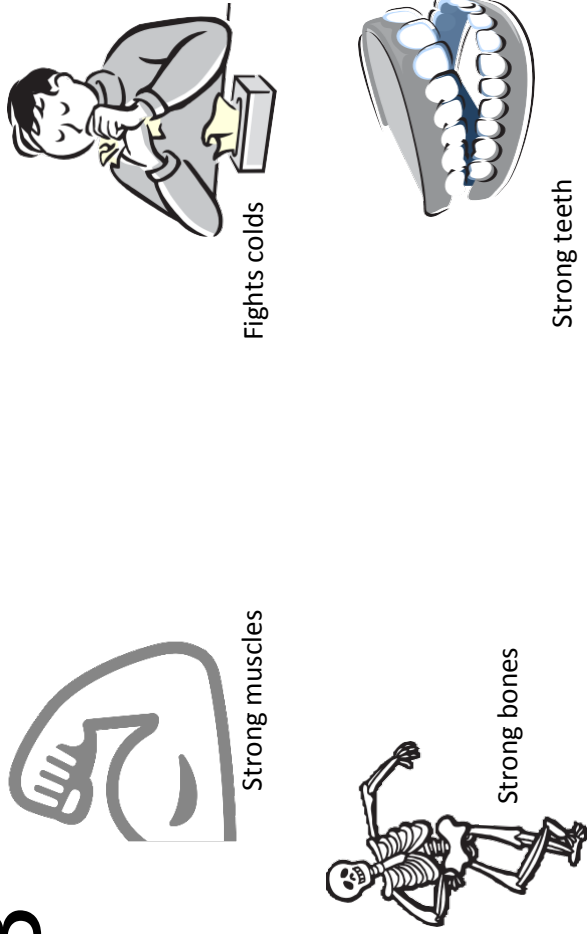
2 Draw a circle around foods from the Dairy group.

2



3 Draw a circle around the two main ways Dairy group foods help the body.

3



Strong muscles

Fights colds

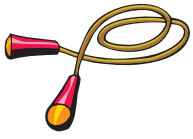
Strong bones

Strong teeth

4 Draw and color a picture of your favorite Dairy group food

4

My favorite Dairy group food is



Physical Activity: Dairy group “Stop and Go” game

MATERIALS

- No materials needed

NOTE TO EDUCATOR

Dairy group Stop and Go is played like “Red Light, Green Light”, but instead of saying red light, green light, the educator calls out Dairy group foods (green light) and non-Dairy group foods (red light). The educator serves as the Dairy group food caller and alternates between calling out the names of Dairy group foods (milk, yogurt, pudding, ice cream, cheese) and foods from other food groups. When the educator calls out Dairy group foods, the children should move forward. When the names of foods from other food groups are called out (apples, oranges, chicken, etc.), the children should freeze. The key to this game is to choose foods the children will recognize. If a child moves while they are supposed to be frozen, the child must go back to the starting line. The first child to reach the educator is the winner.

ACTIVITY INTRODUCTION

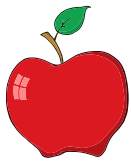
Tell the children to line up in a straight line across the front of the room. *The goal of this game is for you to get from the starting line to me. When I say the name of a Dairy group food you can walk toward me. When you hear the name of a food that is not from the Dairy group, you must freeze right where you are and stay frozen until you hear me say the name of a Dairy group food. If you move when you are supposed to be frozen, you will have to go back to the starting line. Any questions? Before we start let’s review the names of Dairy group foods. They are: milk, ice cream, pudding, yogurt, and cheese. Examples of foods that are not in the Dairy group are: grains such as bread, pasta or cereal; fruits such as apples and oranges; vegetables such as carrots and broccoli, or meats such as chicken or turkey. Remember, you can only move when I say the name of a Dairy group food.*

ACTIVITY DIRECTIONS

1. Line the students side to side across on one end of the room.
2. Stand approximately 15 feet away from the students.
3. Call out the names of Dairy group or non-Dairy group foods in random order. The children are allowed to walk toward you when you call a Dairy group food, but must freeze when non-Dairy group foods are called out. If they move they must go back to the starting line.
4. The first child to tag the educator is the winner.

SUMMARY

Let’s review what we have just learned. Who can tell me how many cups of milk you need each day? Two and one-half. If you drink two and one-half glasses of chocolate milk, would that be enough for one day? Yes. What other foods aside from milk and chocolate milk are included in the Dairy group? Allow children to answer ice cream, pudding, cheese and yogurt. Dairy group foods help your body in two main ways. Who can tell me one of them? Allow children to answer. And the other? Strong teeth and strong bones. And finally, why did we use the blue crayon to fill out the worksheet? Because the Dairy group is the blue group on the MyPlate symbol.



Snack: Yogurt Parfait



NUTRITIONAL ANALYSIS

Nutrition Facts

Serving Size (194g)
Servings Per Container

Amount Per Serving		% Daily Value*	
Calories 120	Calories from Fat 5		
Total Fat 0.5g			1%
Saturated Fat 0g			0%
Trans Fat 0g			
Cholesterol 5mg			2%
Sodium 75mg			3%
Total Carbohydrate 25g			8%
Dietary Fiber 2g			8%
Sugars 17g			
Protein 6g			
Vitamin A 10%	Vitamin C 60%		
Calcium 15%	Iron 2%		

*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

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

SERVING SIZE: 1 serving

INGREDIENTS

- Non-fat vanilla yogurt – ½ cup
- Fresh strawberries – 2 each
- Fresh blueberries – 2 Tablespoons
- Granola – 2 Tablespoons

Substitutions:

- Frozen fruits, thawed beforehand

Utensils (Serving Size):

- Bowl
- ½ cup measuring cup
- Measuring spoon – 1 Tablespoon
- Knife
- Cutting board

DIRECTIONS (SERVING SIZE)

1. Measure ½ cup yogurt into a bowl.
2. Wash and cut (in half or quarters) 2 strawberries and add to the bowl of yogurt.
3. Wash and measure out 2 heaping tablespoon of blueberries and add to the bowl.
4. Top each parfait with 2 tablespoon of granola.
5. Enjoy!

NOTE TO EDUCATOR

When making this recipe in class, divide the recipe in half and serve in 4 oz soufflé cups. This is the class snack size, which will serve two students.



COMMONLY ASKED QUESTIONS:

Q: I've heard ice cream is bad for you. Is that true?

A: Ice cream is part of the Dairy group because it is made with milk and has calcium in it. Regular ice cream has a lot of fat and sugar so you should only eat it sometimes. There are types of ice cream with less fat and sugar that your family can buy.

Q: Are strong bones and teeth the only reason we drink milk?

A: No, and other dairy foods contain other important vitamins and minerals needed to keep your body healthy.

Q: What is osteoporosis?

A: Osteoporosis is a disease that affects the bones. The bones of people with osteoporosis become weak and can break easily. It is important to develop strong bones when you are young like you are now so you have less chance of getting osteoporosis.

Q: Does everyone need 2½ glasses of milk per day?

A: No, children between the ages of 4 and 8 need at least 2½ cups per day. Children under 4 years need 2 cups per day and everyone 8 years and older needs at least 3 cups a day.

Q: It is bad to drink more than 2½ cups of milk per day?

A: No. Having more than 2½ cups of low-fat or fat-free milk or other low fat or fat-free dairy foods is not bad. Children between the ages of 4 and 8 years need AT LEAST this much every day.

Q: What if I cannot drink milk because it makes my stomach hurt (lactose intolerant)?

A: You can drink something called "lactose-free" milk. This type of milk should not make your stomach hurt.

Q: I have a milk allergy, so how can I make sure my bones and teeth stay strong if I cannot eat or drink milk products?

A: There are many products available that are fortified with calcium. If you are not getting enough calcium from foods then you should talk to your doctor about taking a calcium supplement.

Q: How much of the other dairy foods is equal to 1 cup of milk?

A: Two slices of non-processed cheese (3" x 3 ½"), ½ cup frozen yogurt, 8 oz yogurt, 1/3 cup shredded cheese, ½ cup of ice cream, and 8 oz of milk (carton served in schools).

Q: Is soy milk, rice milk or almond milk in the Dairy group?

A: No. While these foods have milk in their name, they do not naturally have the nutrients needed to build strong bones and teeth, or the other benefits milk and other dairy foods provide. If you drink soy milk, rice milk or almond milk instead of cow's milk, look for ones that are fortified with calcium.

Dear Parents or Caregiver,

Today your child learned about the Dairy group. We learned that milk, cheese, yogurt, pudding, and ice cream are all great Dairy group foods and that they need two cups of dairy foods every day. Ask your child how these foods help their body, and they should tell you that it makes their bones and teeth strong. You can use the Dairy Group Puzzle that your child completed during our lesson to review each of these topics. They can even cut out the pieces as they talk to you about the different sections.

Choosing low-fat and fat-free dairy products is a great way to make sure your child gets enough calcium without getting a lot of fat. Snacks are a great way to include dairy in the diet throughout the day. Here are some ideas for Dairy group snacks:

- Fruit smoothie made with yogurt or milk
- Cheese and crackers
- Pudding
- Frozen yogurt
- Fruit and yogurt dip
- String cheese

Another great snack is a fruit and yogurt parfait. Look on the back of this letter for the yogurt parfait recipe that your child sampled today. This snack is easy to make and is a great low-fat source of calcium.

To reinforce the key points from today's lesson, encourage your child to eat and drink two cups of dairy each day, especially low-fat and fat-free dairy products. For more information regarding the Dairy Group and other MyPlate food groups, please visit

www.ChooseMyPlate.gov.

Sincerely,

LESSON 5



The Power of Protein Foods

Concept

Although most children consume enough protein on a daily basis, many have never learned what foods provide protein and where those foods come from. This lesson teaches children about the sources of protein foods and why protein foods are an important part of the diet.



Background

The Protein Foods group is represented by the color purple on MyPlate. It includes foods such as lean cuts of beef, pork, chicken, turkey, fish, eggs, nuts, seeds and beans. These foods are grouped together because they are the main sources of protein in the diet. The MyPlate website has helpful tips for choosing and preparing foods from the Protein Foods group. In order to get the most nutritional benefit from protein foods, it is important to choose lean cuts of meat, eat a variety of foods, use low-fat cooking methods and practice safe methods for handling, storing and cooking these foods (1).

The Protein Foods group is unique because it is the main source of protein in the diet. Protein is made from subunits called amino acids. Amino acids are needed by the body to build different types of proteins that have different functions. Every protein that is made from amino acids is unique and plays a special role in the body to maintain health. Some amino acids are actually made in the body, but other amino acids must come from the diet (2). Each food from the Protein Foods group contains different combinations of amino acids, and this is the reason that MyPlate suggests eating a variety of foods (3).

Children grow at a rapid rate, and they need the right nutrition to keep their bodies healthy while they are growing. Protein plays lots of roles in the body, but it is best known for building healthy muscles (4). Muscles are built from the amino acids that come from foods in the Protein Foods group. Eating different kinds of food from this group provides the body with the building blocks for healthy muscle growth in a developing child.

The Protein Foods group is a good source of protein, vitamins and minerals. Meats can also be a source of unhealthy types of fat, which is why it is important to choose lean cuts of meat. Fat from animal products is considered unhealthy because it has high levels of saturated fat and cholesterol. High intakes of these fats can lead to weight gain and heart disease. Choosing lean cuts of meat is the first step toward avoiding too much animal fat. In addition, the 2010 Dietary Guidelines for Americans recommends replacing some meat and poultry with seafood to decrease the amount of fat consumed (5). When it is time to cook, extra fat should be cut off the meat and a low fat cooking method should be used. Using low fat cooking methods such as baking and grilling means that less oil will be added, which also helps to limit the fat content of the meal. Choosing and preparing low-fat


meats ensures that the health benefits from the Protein foods group will not be overshadowed by the harmful effects of eating too much fat.

Some people choose a vegetarian diet, which means that they may not eat meat or animal products. These people can still get plenty of protein by including beans, nuts and seeds in their diets. Protein that does not come from animals may have low amounts of some amino acids and nutrients, so it is especially important for vegetarians to eat a wide variety of foods (6). Children that do not eat animal products may not be getting enough of certain nutrients such as iron, zinc, calcium and B vitamins (7–9). Most of these nutrients are found in small amounts in most plant foods, so by combining a variety of foods in the diet, the body can get most of the nutrition that it needs. A possible exception is vitamin B12. Children who eat a vegan diet (a type of vegetarian diet that includes only plant foods, that is, no milk, cheese, eggs, etc.) will not get enough vitamin B12 unless they consume cereals, bars, soy milk or other foods fortified with vitamin B12 or take a vitamin B12-containing supplement. If a child who is a vegetarian is not eating a good variety of foods, it may be wise to talk to a doctor and to find out if a multi-vitamin and mineral supplement is needed.

MyPlate recommends that children between the age of four and eight consume three to four ounces of food from the Protein Foods group every day (1). Children in America usually eat more than enough protein, so getting the recommended amount is not a big concern. It is most important to make sure that children are eating a variety of foods from the Protein Foods group so they get all of the amino acids, vitamins and minerals their bodies need. Children should learn that it is fun to try new foods, and if they want to keep their growing bodies healthy, they should eat the recommended amount of a variety of foods from the Protein Foods group.

REFERENCES

1. US Department of Agriculture. MyPlate. Available at: <http://www.choosemyplate.gov/index.html>. Accessed June 23, 2011.
2. Gropper SS, Smith JL, Groff JL. Protein. *Advanced Nutrition and Human Metabolism*. 5th ed. Belmont, CA: Wadsworth, 2005:179–245.
3. US Department of Agriculture. MyPlate: Protein foods. Available at: <http://www.choosemyplate.gov/foodgroups/proteinfoods.html>. Accessed June 23, 2011.

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1. Aubertin-Leheudre M, Adlercreutz H. Relationship between animal protein intake and muscle mass index in healthy women. *Br J Nutr.* 2009;102:1803-10.
 2. US Department of Health and Human Services, US Department of Agriculture. Dietary Guidelines for Americans, 2010. Available at: <http://www.cnpp.usda.gov/DGAs2010-PolicyDocument.htm>. Accessed May 19, 2011.
 3. Young VR, Pellett PL. Plant proteins in relation to human protein and amino acid nutrition. *Am J Clin Nutr.* 1994;59:1203S-1212S.
 4. Gibson RS. Content and bioavailability of trace elements in vegetarian diets. *Am J Clin Nutr.* 1994;59:1223S-1232S.
 5. Hunt JR. Bioavailability of iron, zinc, and other trace minerals from vegetarian diets. *Am J Clin Nutr.* 2003;78:633S-639S.
 6. Higdon J, Drake VJ. Micronutrient Information Center: Zinc. Available at: <http://lpi.oregonstate.edu/infocenter/minerals/zinc/>. Accessed May 19, 2011.

Pre K/K Lesson

LEARNING OBJECTIVES:

The students will:

- identify foods in the Protein Foods group.
- recognize sources of protein foods.

BEHAVIORAL OBJECTIVE

The students will:

- try new foods from the Protein Foods group.

RECOMMENDED BOOK

Acorn Healthy Eating: Meat and Protein by Nancy Dickmann

FLORIDA STANDARDS

READING/LANGUAGE ARTS:

LA.K.1.6.4.: The student will identify and sort common words into basic categories (colors, shapes, food).

HEALTH EDUCATION:

HE.K.C.1.1.: The student will recognize healthy behaviors.

HE.K.B.2.2. The student will demonstrate listening skills to enhance health.

HE.K.B.2.In.b.: The student will use selected listening skills to enhance health, such as listening quietly, not interrupting, and making eye contact.

HE.K.B.2.Su.b.: The student will use selected listening skills to enhance health, such as making eye contact or not interrupting.

HE.K.2.Pa.b.: The student will attend to selected communications to enhance own health.

PHYSICAL EDUCATION:

PE.K.M.1.1.: The student will use a variety of locomotor skills to travel in personal and general space.

PE.K.M.1.In.a.: The student will perform locomotor skills to travel in personal and general space.

PE.K.M.1.Su.a.: The student will perform locomotor skills to travel in general space.

PE.K.M.1.Pa.a.: The student will perform guided locomotor skills.

PE.K.R.1.2.: The student will practice specific skills as assigned

(continued on next page)



until the teacher signals the end of practice.

PE.K.R.1.In.b.: The student will practice assigned skills until the teacher signals the end of practice.

PE.K.R.1.Su.b.: The student will practice until teacher signals the end of practice.

PE.K.R.1.Pa.b.: The student will practice and recognize the teacher's signal to end practice.

PE.K.R.2.4.: The student will enjoy participation alone and with others.

PE.K.R.2.In.d.: The student will enjoy playing alone and with others.

PE.K.R.2.Pa.d.: The student will enjoy playing in guided activities.



Learning Activity: Farm Food Match

PRIOR TO ACTIVITY

Glue the Farm Food Match pictures to the poster board. Tape the posters to a wall, chalkboard or dry erase board at the front of the classroom.

ACTIVITY INTRODUCTION

Today we are going to talk about the MyPlate Protein Foods group! It's the purple group on MyPlate. Point to the purple group on the MyPlate poster. Raise your hand if you know any foods from the Protein Foods group. Allow students to raise their hands and answer. The Protein Foods group has lots of yummy foods like chicken, steak, ham, fish, baked beans, peanuts, seeds (trail mix) and eggs! Can you say 'Protein'? Allow students to repeat after you. Your body needs lots of different kinds of foods from the Protein Foods group to help build healthy muscles! Some people don't eat meat, so they eat beans, nuts and seeds instead. Clap once if you like peanuts or peanut butter! Allow students to clap once. Clap twice if you like black beans, red beans or pinto beans! Allow students to clap twice. Nuts, beans and seeds come from plants and are also part of the Protein Foods group. Where do protein foods come from? Allow students to answer. Do you know the Old MacDonald song? What are some animals that Old MacDonald has on his farm? Sing the first line of the song. Children may sing along. Old MacDonald has chickens, cows, pigs, turkeys plants and maybe even some fish on his farm, if he has a pond. Point to the large pictures on the board. Protein foods come from different kinds of animals plants and fish! Today we are going to do a fun activity that will teach you where the different protein foods come from.

ACTIVITY DIRECTIONS

1. I will ask two of you to come up at a time. Each of you will get a card like this (show a card) that has a picture of a food from the Protein Foods group. We will talk about each food. Then I will ask you to look at the poster and stick the food picture on the spot that matches where the food you have comes from. Each food comes from a cow, pig, chicken, plant or water!
2. Call the students to the front of the room two at a time. Give each student their own food card. As each student picks up a card, ask them what they have and to show the card to the class. Ask each student where the food comes from, assisting if necessary, and direct them to the posters to place their cards under the appropriate source. *Please tell us what your food is and where it comes from.* Student says, "My food is _____, and it comes from a (the) _____!"
3. Allow the entire class to interact and answer questions.

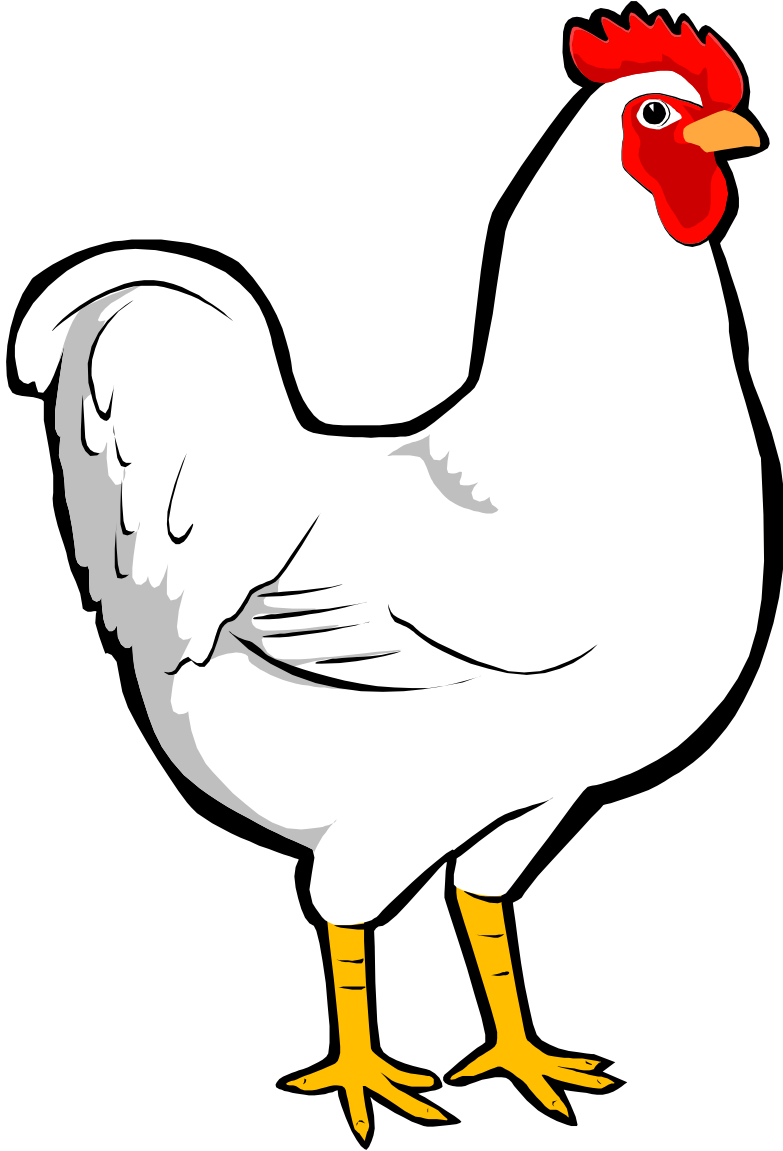
SUMMARY

Great job everyone! Let's talk about all of these yummy foods! Point to the chicken on the board. Chickens give us foods like grilled chicken and chicken legs! Do you know what else comes from chickens, aside from meat? Eggs! Let's all make a chicken noise! The meat that comes from cows is called beef. Point to the cow on the board. Do you like to eat hamburgers or steak? Hamburgers and steak both come from cows! Let's all moo like a cow! Point to the pig on the board. Pigs give us pork chops, ham and sausage! Let's all oink like a pig! Point to the plant on the board. Plants give us nuts, seeds and beans! Let's all stretch our arms up to the sky like a plant! Yummy foods like fish and shrimp live underwater in ponds, lakes and oceans! Point to the pond on the board. Let's all make a fishy face! So don't forget! Foods from the Protein Foods group build healthy muscles and taste great, too!

MATERIALS

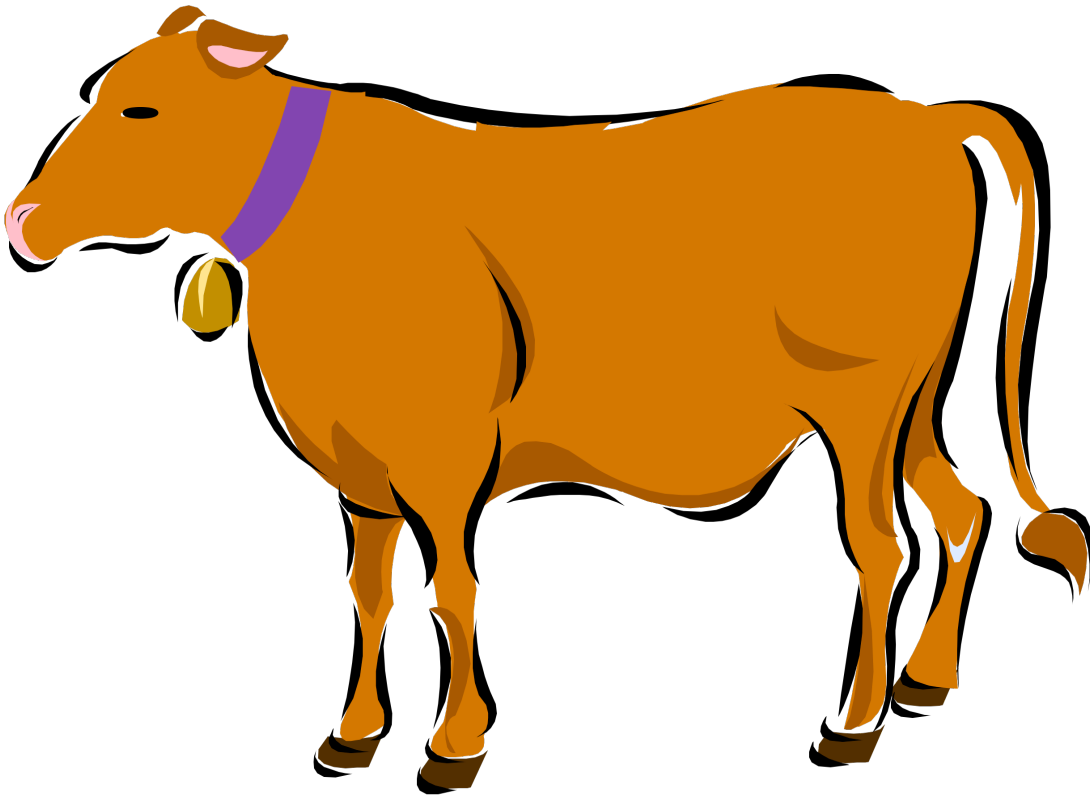
- Non-permanent adhesive (sticky tack) for posters and cards
- Farm Food Match, provided
- Poster board, 2 pieces
- MyPlate Poster
- "Go Fish" Food Cards from the Protein foods group, provided:
 - Chicken foods: fried leg, grilled breast, scrambled eggs
 - Beef foods: steak, beef jerky
 - Pork foods: ham, pork chop
 - Plant foods: baked beans, black bean soup, trail mix (seeds), peanut
 - Seafood: grilled fish, salmon

CHICKEN



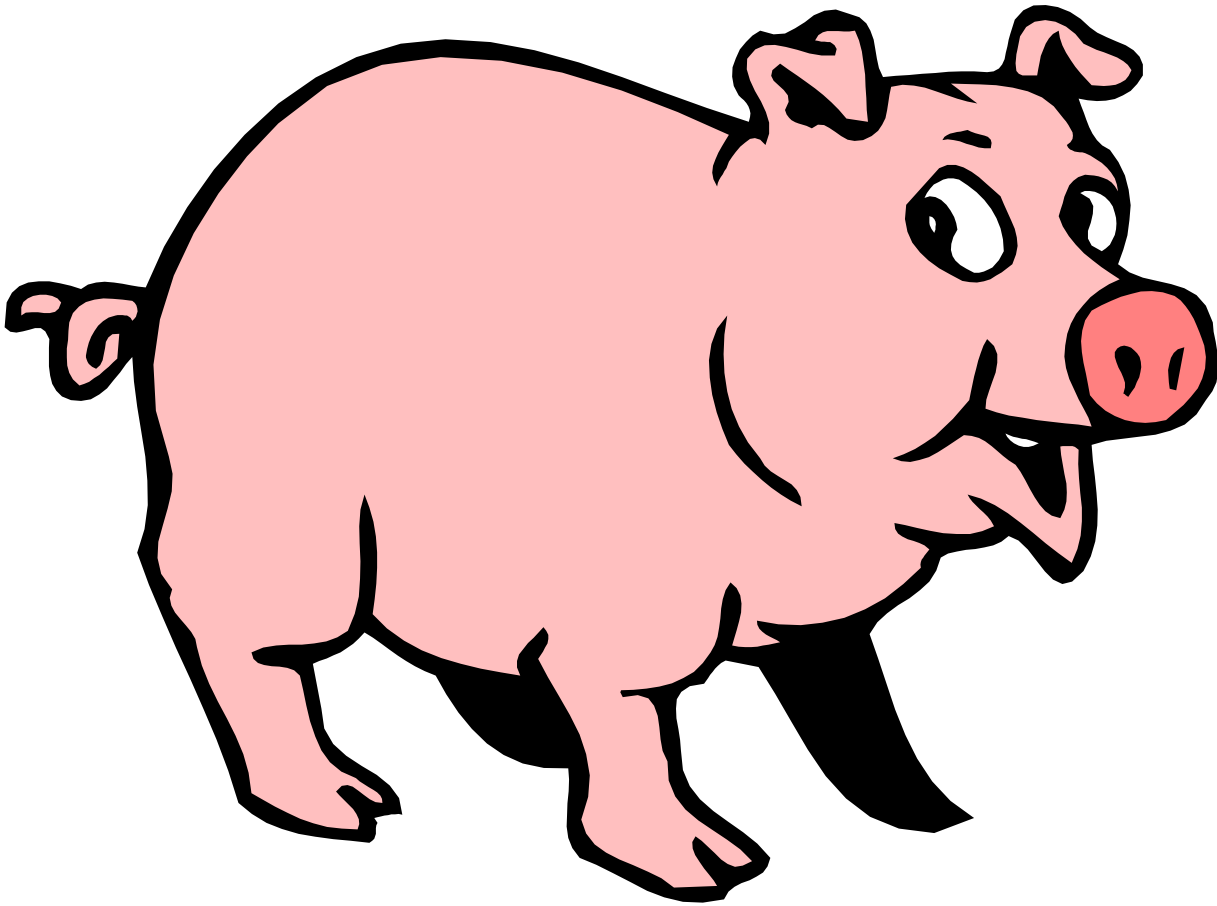
"This institution is an equal opportunity provider and employer. The Supplemental Nutrition Assistance Program provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact [1-888-762-2237]. This material was funded by USDA's Supplemental Nutrition Assistance Program."

COW



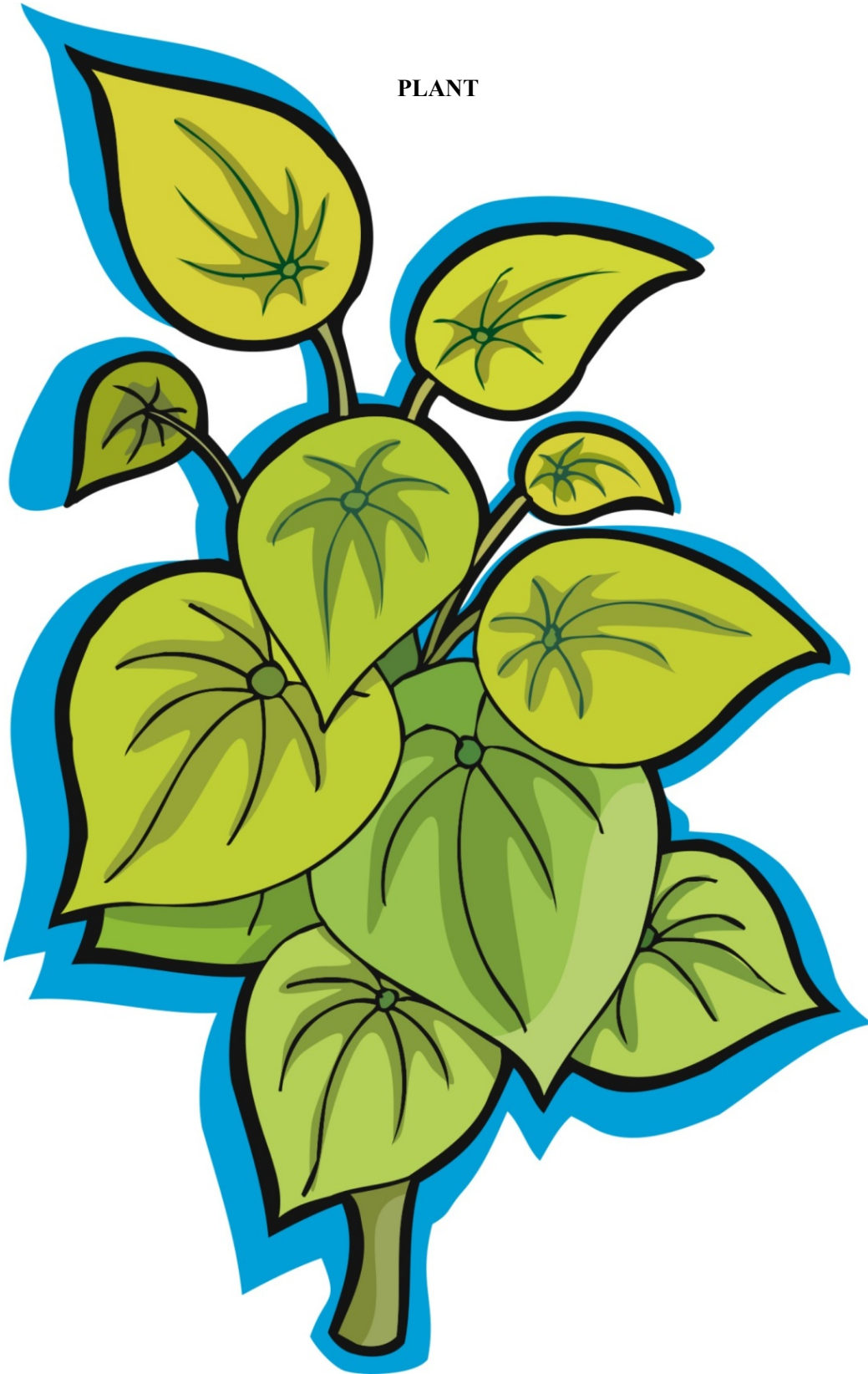
"This institution is an equal opportunity provider and employer. The Supplemental Nutrition Assistance Program provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact [1-888-762-2237]. This material was funded by USDA's Supplemental Nutrition Assistance Program."

PIG



"This institution is an equal opportunity provider and employer. The Supplemental Nutrition Assistance Program provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact [1-888-762-2237]. This material was funded by USDA's Supplemental Nutrition Assistance Program."

PLANT



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UNDERWATER



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Protein Foods



Baked Beans

Protein Foods



Black Bean Soup

Protein Foods



Ham

Protein Foods



Peanuts

Protein Foods



Pork Chop

Protein Foods



Beef Jerky

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Protein Foods



Trail Mix

Protein Foods



Grilled Chicken

Protein Foods



Steak

Protein Foods



Fried Chicken

Protein Foods



Scrambled Eggs

Protein Foods



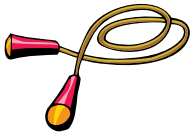
Salmon

Protein Foods



Grilled Fish

"This institution is an equal opportunity provider and employer. The Supplemental Nutrition Assistance Program provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact [1-888-762-2237]. This material was funded by USDA's



Physical Activity: Barnyard Yoga

MATERIALS

- Barnyard Yoga story and movements, provided

NOTE TO EDUCATOR

Barnyard Yoga is a stretching activity with specific movements set to a story. The story follows protein source animals and plants as they awaken at dawn. Each movement mirrors that of one of the protein sources (see pages 10–11 for pose instructions). Narrated video also available upon request.

PRIOR TO ACTIVITY

Familiarize yourself with the Barnyard Yoga script and movements so you know the story. Pictures showing each of the poses are included in the curriculum for your reference.

ACTIVITY INTRODUCTION

Today we are going to do Barnyard Yoga! We have learned that foods from the Protein Foods group come from the farm, and that these foods build strong muscles. Now we're going to use our muscles to stretch into the shapes of the farm animals and plants! Listen to my story and follow my lead.

ACTIVITY DIRECTIONS:

Ask the students to spread out enough so that they have room to stretch. Read the script below and ask the students to imitate the stretches that you perform.

(Sun pose) *It is early morning on the farm, and the sun is just coming up. Stand with your feet spread apart. Stretch your arms high above your head, and then slowly lower your arms down to your sides, stretching your arms out wide. Breathe deeply. Pretend that your arms are the rays of sun that are shining down on the farm!*

(Plant pose) *Now that the sun is shining, the plants are waking up. Stand on one foot, and put your other foot on the inside of your ankle or calf. Pretend that the leg you are standing on is the stalk of a plant. Now slowly stretch your arms as high as you can above your head, like the leaves of a plant reaching for the sunlight!*

(Chicken pose) *When the sun comes up, the chickens wake up and the rooster crows! Put both feet on the ground and bend your knees like you're sitting in a chair. Form "wings" with your arms by bending your elbows and placing hands at your armpits. "Flap" your "wings" and cluck like a chicken.*

(Cow pose) *All of that noise from the chickens has woken up the cows! Lower yourself down so that your hands and knees are on the ground, like a cow. Sink your lower back and drop your belly down toward the floor as you look up to the sky. Pretend that you are a cow looking and listening for the chickens. Now suck in your belly and arch your back. Let your head and neck relax. Stretch your back and pretend that you are a cow that is stretching first thing in the morning!*

(Bean/Nut/Seed pose) *The cows and chickens are getting hungry for breakfast and want to eat some seeds, beans and nuts. Now pretend that you are the bean! Sit back onto your heels and stretch your arms in front of you so that your hands are on the floor. Now sweep your arms out and around to your sides, so that your hands reach your feet. You look like a round little bean! The cows and chickens can't wait to gobble you up!*

(Fish pose) *The sun is getting hotter and warming up the water in the pond. Stretch out on the ground, face down, with your arms stretched out in front of you and your legs stretched out behind you. You are a fish waking up and taking a morning swim. Lift your head. Lift your arms and legs off of the floor so that only the middle of your body is touching the ground. Move your arms and legs up and down. You are swimming through the water, little fish! Everybody make a fish face!*



(Pig pose) *The pigs are getting hot in the sun, and they want to cool off with a roll in the mud. Lie on your back and bring your knees into your chest. Wrap your arms around your knees and gently rock from side to side. The nice cool mud is cooling you off, little pig! Oink like a pig!*

Now stand up! You're finished with Barnyard Yoga, and all of the plants, animals and fish are awake and ready for their day!

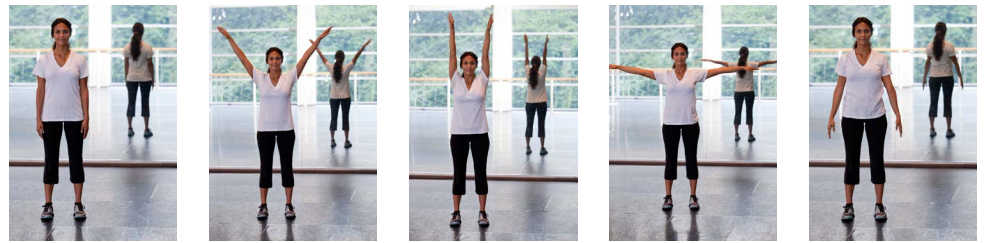
SUMMARY:

Wiggle your arms, legs and your whole body. Do your muscles feel long and loose? Stretching is a great way to keep your muscles healthy. Do you remember what else builds healthy muscles? Foods from the Protein Foods group!



The following poses are performed throughout the course of the story:

1. Sun pose– Stand with feet shoulder-width apart. Reach arms up above your head and bring them slowly down to your sides, stretching them wide.



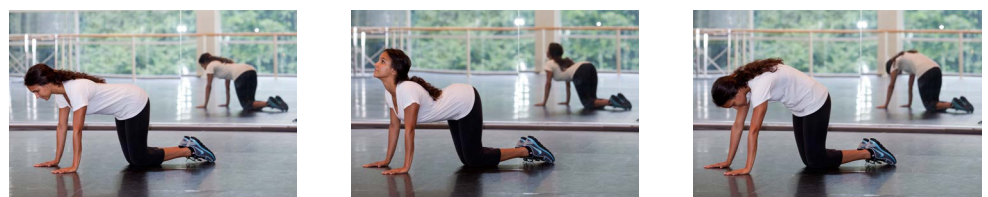
1. Plant pose– Stand on one foot, with the other foot placed on your ankle or calf. Stretch arms high above your head.



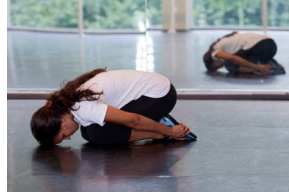
1. Chicken pose– Stand with feet together and bend your knees so that you are lowered into a sitting position. Form “wings” with your arms by bending your elbows and placing hands at your armpits. “Flap” your “wings” and cluck like a chicken.



1. Cow pose– Kneel on the floor with your hands down in front of you. Sink your lower back and drop your belly down toward the floor as you look up to the sky. Next suck in your belly and arch your back. Let your head and neck relax. Moo like a cow.



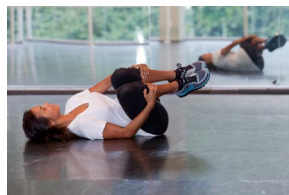
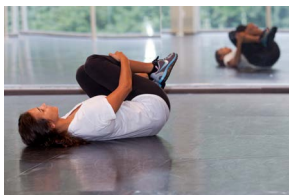
1. Bean/Nut/Seed pose– Sit back onto your knees and stretch your arms out in front of you on the ground as you lower your forehead to the ground. Sweep your arms around behind you and hold on to your feet.

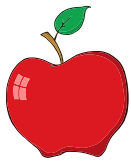


1. Fish pose– Lie flat on your belly. Stretch your arms in front of you. Lift your arms, legs and head off of the ground and paddle your left and right arms and legs up and down. Make a fishy face by puckering your lips.



1. Pig pose– Lie on your back and pull your knees to your chest. Wrap your arms around your knees and hold on to your legs or ankles. Gently rock from side to side. Oink like a pig.





Snack: Protein Pinwheels

SERVINGS: 3

SERVING SIZE: 2 pinwheels

INGREDIENTS

- Whole wheat tortilla - 1
- Hummus - 2 Tablespoons
- Low-sodium turkey slices - 3
- Fresh spinach leaves (thoroughly washed and dried) - 6 to 8
- 1 medium carrot (shaved, shredded, or matchstick-cut)
- Optional: Can of garbanzo beans, used only to illustrate during explanation of hummus

UTENSILS

- Plates
- Toothpicks or popsicle sticks
- Serrated knife
- Cutting board

Optional: vegetable peeler to shave carrots

DIRECTIONS

1. Spread 2 Tbsp. hummus on one tortilla.
2. Lay 6 to 8 leaves of spinach on the hummus, covering the surface evenly.
3. Place three slices of turkey on spinach, covering the surface evenly.
4. Pile carrots in a line about 3 inches from the edge of the tortilla.
5. Take the tortilla end closest to the carrots, and roll the



NUTRITIONAL ANALYSIS

Nutrition Facts

Serving Size (68g)
Servings Per Container

Amount Per Serving

Calories 80 Calories from Fat 15

% Daily Value*

Total Fat 1.5g 2%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 5mg 2%

Sodium 270mg 11%

Total Carbohydrate 13g 4%

Dietary Fiber 2g 8%

Sugars 3g

Protein 5g

Vitamin A 60% • Vitamin C 10%

Calcium 8% • Iron 8%

*Percent Daily Values are based on a diet of other people's secrets. 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

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

COMMONLY ASKED QUESTIONS:

Q: *Why is it important for children to eat the recommended amounts of protein?*

A. Children are growing every day at a faster rate than adults, so their bodies need protein to support healthy development and growth.

Q: *Why is it important to eat different foods from the Protein foods group?*

A. Each food from the Protein Foods group provides different amounts of nutrients that your body needs. If you eat the same kind of food all of the time, then your body gets lots of some nutrients and may be lacking in others. Eating a variety of protein foods gives your body lots of different types of nutrients, which keeps you healthy.

Q: *Can vegetarians eat enough protein to stay healthy?*

A. Vegetarians that eat a variety of beans, nuts and seeds can get plenty of protein in their diets. Vegetarian protein sources may lack certain nutrients and amino acids, so a diet with a variety of foods is important to maintain good health.

Q: *What amount of protein foods is recommended for children to eat every day?*

A. MyPlate recommends that children between the ages of four and eight eat three to four ounces of foods from this food group every day.

Q: *What is considered an ounce from the Protein Foods group?*

A. Each of the following foods from the Protein Foods group are considered to be equivalent to an ounce: one ounce of meat, poultry or fish, $\frac{1}{4}$ cup cooked dry beans, one egg, one tablespoon of peanut butter, and $\frac{1}{2}$ ounce of nuts or seeds.

Q: *Why is bacon considered to be an unhealthy meat?*

A. Bacon has a large amount of fat and cholesterol per serving, so it is not a very good source of protein. Too much fat in the diet puts people at risk for heart disease and weight gain. For this reason, bacon should not be eaten as a regular source of protein.

tortilla around the carrots (the carrots will be at the center of the pinwheel).

6. Continue rolling the tortilla until it is completely rolled up.
7. Place one toothpick or popsicle stick through the tortilla, about 2 inches from the end of the roll.
8. Continue placing toothpicks approximately 2 inches apart (6 toothpicks per tortilla).
9. Use the knife to cut between the toothpicks.
10. Serve on plates.
11. The snack size for each child will be two pinwheels, which is $\frac{1}{3}$ rd of a tortilla. Each tortilla yields 3 servings.
12. The toothpicks will hold each pinwheel together, but it is recommended that you remove them prior to serving the snack.
13. If serving to students, each student will receive one pinwheel. Make enough tortilla rolls so that there are enough pinwheels for each student to have a sample.

NOTE TO EDUCATOR

When making this recipe in class, serve each student one pinwheel. This is the class snack size, which will serve six students.

Dear Parent or Caregiver,

Today, your child learned about the Protein Foods group. The Protein Foods group contains foods such as chicken, beef, pork, fish, beans, nuts, and seeds. Eating a variety of these foods as a part of a balanced diet is important because they provide the body with protein that helps build healthy muscles. In the lesson, we used a Farm Food Match game to teach your child about the different types of protein foods and their plant and animal sources. Ask your child where their protein foods come from and they should be able to tell you which foods come from cows, chickens, the water, or a plant!

Your child even learned some yoga moves today with Barnyard Yoga where we told a story about early morning on the farm using stretching poses that imitate farm animals and plants. Ask your child to show you the cow stretch or the pig stretch. These are just a couple of the fun stretches they learned.

Parents and caregivers play a big part in making sure their children eat healthy foods. You can provide a healthy protein food snack to your child by making the recipe for Protein Pinwheels printed on the back of this letter. The Protein Pinwheels contain turkey and hummus - two different healthy protein foods. Below are some tips to help your child eat a variety of healthy protein foods:

- Try choosing lean protein foods and cooking them with low-fat methods like grilling or baking.
- Allow your child to choose less familiar protein foods at the grocery store.
- Try serving vegetarian options like beans or nuts as parts of meals and snacks.
- Visit a local farm with your child to see the animals and plants that are used to make protein foods.

If you are interested in learning more about the Protein Foods Group and other MyPlate food groups, visit www.ChooseMyPlate.gov.

Sincerely,

LESSON 6



Create Your Plate

Concept

In addition to eating healthier foods, it is important for children to eat the right amount of foods from each food group. Children and caregivers are often unaware of how much food children actually need. This lesson teaches children to eat the right amount of foods from each food group at every meal.

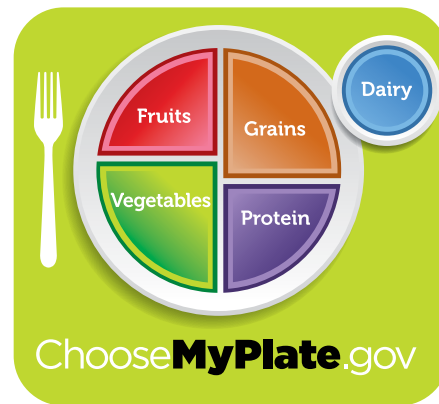
Background

The incidence of obesity has increased over the last 40 years across all classifications of age, sex, race and ethnicity. This increase in overweight and obesity in children can be attributed to many causes, but genetics and the environment are two broad factors that play a role (1). Since genes are inherited from parents and do not change quickly enough to be the main culprit, the environment must be the focus of lifestyle changes to promote a healthy weight. The environment includes everything that affects how, when and what children eat. Children in the United States are consuming too many empty calories – calories that have few essential nutrients, and they are not getting enough exercise (2). The three top sources of calories for children and adolescents ages 2 to 18 years are grain-based desserts, pizza and soda/energy drinks/sports drinks (2). Children do not have much control over their environment, but what little they have is an important place to start in order to foster healthy eating habits. Although www.ChooseMyPlate.com recommends specific child-sized serving equivalents of foods from each food group, the concept is not easy for younger children to understand, so a simpler approach is needed to educate this age group.

According to the Dietary Guidelines for Americans, 2010, children consume less than the recommended amounts of fruits and vegetables, whole grains and lean protein sources (2). Each of these food groups are important because they contain essential nutrients that cannot be found in other food groups. Fruits and vegetables are high in fiber and antioxidants and do not contribute many calories. Whole grains are high in fiber and certain minerals. Lean protein sources are high in protein and many vitamins and minerals (2). Eating the correct amounts of these foods can help maintain a healthy weight, which can decrease the risk of type 2 diabetes, certain cancers and other diseases (3).

In order to help Americans meet their needs for fruits and vegetables, the Dietary Guidelines for Americans, 2010, recommends filling half the plate with fruits and vegetables at every meal (2). To help Americans visualize this recommendation, the US Department of Agriculture recently released the newest food guide: MyPlate, which replaces MyPyramid as the nation's symbol for proper nutrition (4). The MyPlate symbol is a plate containing the Grains, Vegetables, Fruits, and Protein Foods groups and a cup representing the Dairy group. According to the MyPlate symbol half of the plate should be filled with vegetables and fruits with more vegetables than fruits. The other half of the plate is divided

between the Grains and Protein Foods groups. This visual representation of nutrition recommendations can be useful to help children consume the correct amounts of foods from the food groups included on MyPlate at every meal. Although MyPlate is informative it is one component of the USDA's food guidance system, which also incorporates the ChooseMyPlate.gov website that provides nutrition recommendations, as well as a variety of other evidence-based information and tools that consumers can use to make better food and physical activity choices (4).




Research has shown that the amount of food on a person's plate influences the amount of food consumed (5-7). If fruits and vegetables make up the largest part of a child's plate, then they will be consumed in the greatest amount. Whole grains and lean protein sources each make up a quarter of the plate, so in general children should eat more fruits and vegetables than grains or lean protein sources during each meal. To ensure that all food groups are represented on the MyPlate symbol, the Dairy group is depicted as a smaller circle to the top right of the plate. This emphasizes the importance of consuming foods from this group as well.

Learning to eat the right amount of food in school can help children know what to do at home. Following the MyPlate guidelines may help to reduce the caloric content of meals and increase the variety of foods consumed. These healthy changes can help to decrease the percentage of overweight and obese children in the United States today.

REFERENCES

1. Centers for Disease Control and Prevention. Overweight and obesity: causes and consequences. Available at: <http://www.cdc.gov/obesity/causes/index.html>. Accessed May 19, 2011.

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1. US Department of Health and Human Services, US Department of Agriculture. Dietary Guidelines for Americans, 2010. Available at: <http://www.cnpp.usda.gov/DGAs2010-PolicyDocument.htm>. Accessed May 19, 2011.
 2. Atkinson R. *The Management of Eating Disorders*. 2nd ed. Totowa, NJ: Humanan Press Inc, 2005.
 3. US Department of Agriculture. MyPlate. Available at: <http://www.choosemyplate.gov/index.html>. Accessed June 23, 2011.
 4. Orlet Fisher J, Rolls BJ, Birch LL. Children's bite size and intake of an entree are greater with large portions than with age-appropriate or self-selected portions. *Am J Clin Nutr*. 2003;77:1164-1170.
 5. Wansink B. *Mindless Eating: Why We Eat More Than We Think*. New York, NY: Bantam Dell, 2006.
 6. Wansink B, Painter JE, North J. Bottomless bowls: why visual cues of portion size may influence intake. *Obes Res*. 2005;13:93-100.

Pre K/K Lesson

LEARNING OBJECTIVES

The students will:

- assign foods from each of the food groups to the proper section of the plate.
- recognize how much of their plate should be used for foods from each of the food groups.

BEHAVIORAL OBJECTIVE

The students will:

- choose appropriate amounts of a variety of foods.

RECOMMENDED BOOK

Gregory, the Terrible Eater by Mitchell Sharmat.

FLORIDA STANDARDS

HEALTH EDUCATION

HE.K.P.1.1.: The student will identify healthy practices and behaviors to maintain or improve personal health.

HE.K.P.1.In.a: The student will recognize healthy practices to maintain or improve personal health at school, such as staying within a safe environment, following directions, seeking help, and following universal precautions.

HE.K.P.1.Su.a.: The student will recognize a healthy practice to maintain or improve personal health in the classroom, such as following directions, seeking help or following universal precautions.

HE.K.P.1.Pa.a.: The student will associate an activity with a healthy practice, such as following directions or seeking help with a health behavior.

PHYSICAL EDUCATION

PE.K.C.1.1.: The student will recognize locomotor skills.

PE.K.C.1.In.a.: The student will recognize more than two locomotor skills, such as walk, run, skip, leap, jump and gallop.

PE.K.C.1.Su.a.: The student will recognize more than one locomotor skill such as walk, run, skip, leap, jump and gallop.

PE.K.C.1.Pa.a.: The student will associate movement with a locomotor skill, such as walk, run, skip, leap, jump or gallop.



Learning Activity: Explore Your Plate

MATERIALS

- Explore Your Plate Master, provided
- Your Plate coloring sheet, provided

PRIOR TO ACTIVITY

Enlarge Explore Your Plate “master” copy to 16” X 20” and laminate it for use as a visual aid throughout the activity. Make enough copies of Explore Your Plate Master for each student to use as a coloring sheet.

ACTIVITY INTRODUCTION

Today we will learn about the amount of foods you should eat from different food groups at each meal. If there is a lot of food on our plate and we eat too much, our tummies feel too full. Who has ever eaten so much that their tummy felt too full? Have students hold their tummies and wiggle in their seats if they have. Choose one or two students to tell the class about their experience. Eating the right amount of foods from each food group helps us make sure we don't eat so much that our tummies feel too full. That will help us to be healthy so that we can run, jump, play and learn new things. Stand up and jump up and down if you like to run, jump and play. If we learn how food should look on our plate and we only eat until we do not feel hungry, then we will be healthy so that we can run, jump and play. Our activity today will show us how we should put food on our plate so that we can stay healthy.

ACTIVITY DIRECTIONS

1. Distribute one copy of the Your Plate coloring sheet to each student. *The big circle on your paper is like a plate that you eat dinner on. Can you point to the plate like me?* Hold up your enlarged master copy and point to the big plate. All students should point to their plate to indicate that they know where it is. *Our plate has four parts. When you eat at home half of your plate should be filled with foods from the Fruits group and the Vegetables group, just like the plate on our paper.*
2. *Who can show me where the apple is?* Choose one student and ask them to point to the apple so that everyone can see where the apple is located. *That's right! What color would you color your apple?* Allow the student to answer.
3. *On which part of the plate does the apple belong?* Allow the students to answer. *That's right! The apple is in this part of the plate.* (Point to Fruits and Vegetables section of the plate.) *Who can think of another fruit that we could put in this part of the plate?* Allow students to name different fruits. It is okay if students say fruits other than those depicted on the plate. Be sure to discuss the color of that fruit and, if there is time, ask the other students if they have tried this kind of fruit before. Allow two or three responses to the types of fruit that can be included in this section of the plate before moving on.
4. *Now, who can show me where the broccoli is?* Choose one student and ask them to point to the broccoli so that everyone can see where the broccoli is located. *What color would you color your broccoli?* Allow the student to answer.
5. *Where does the broccoli belong on the plate?* Allow the students to answer. *That's right! The broccoli is in this part of the plate.* (Point to Fruits and Vegetables section of the plate.) *Remember, half your plates should be filled with*

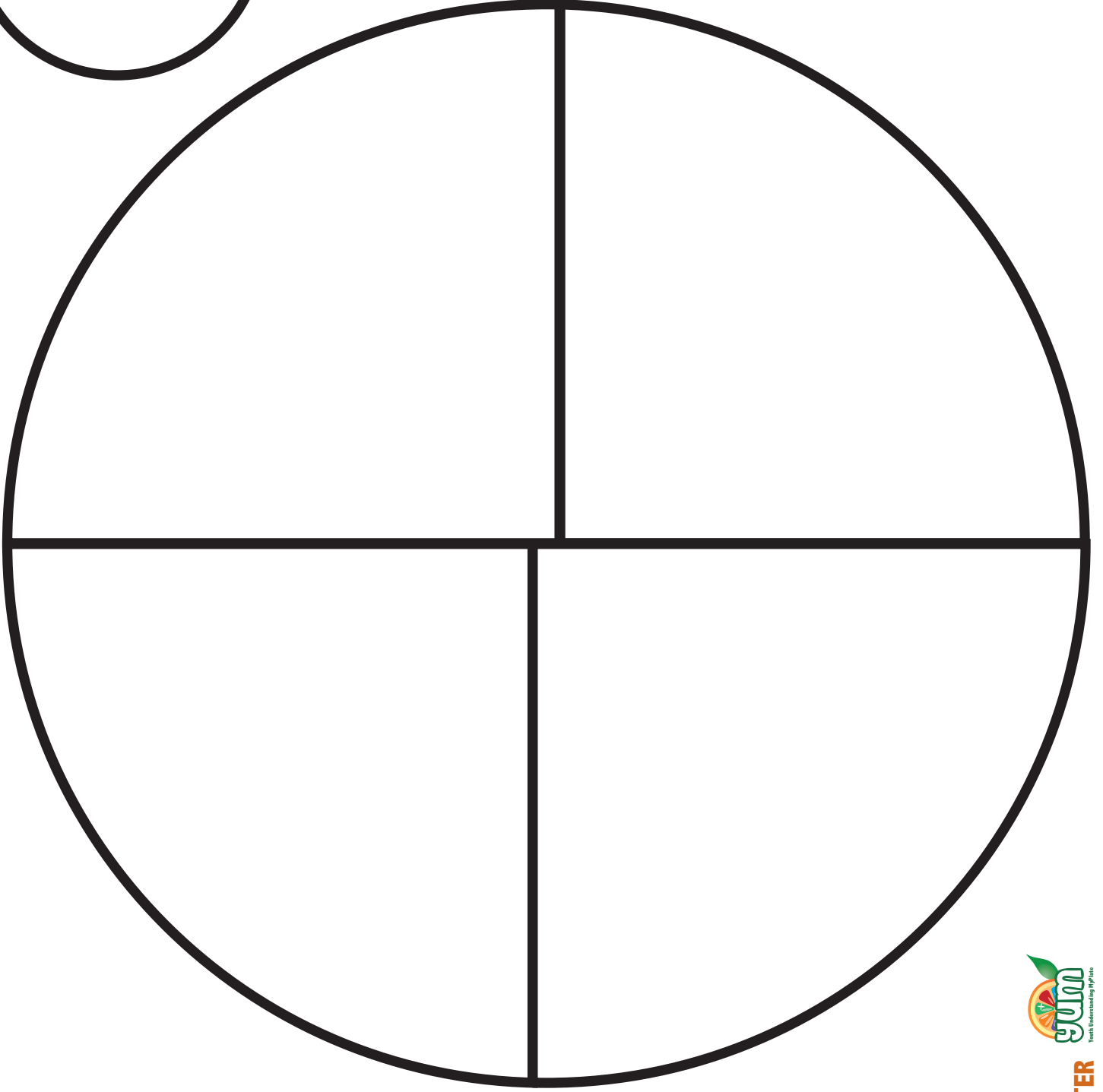
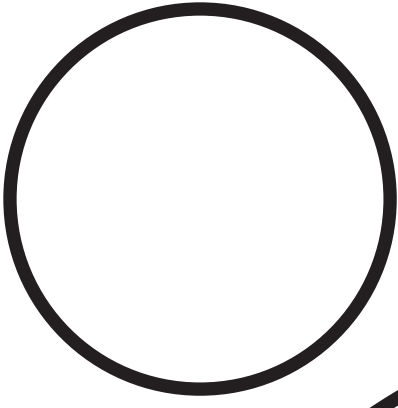


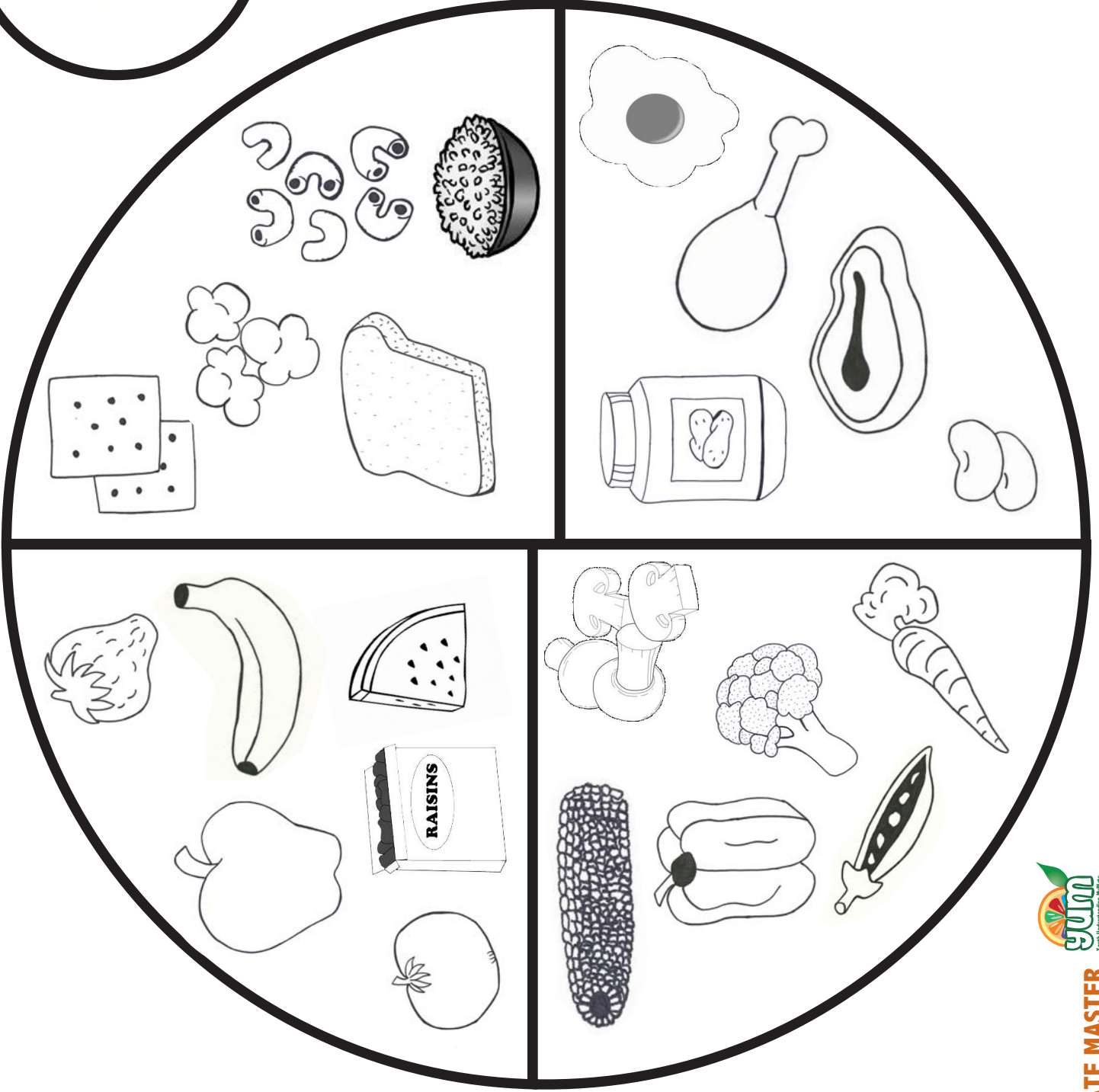
1. **fruits and vegetables.** *Who can think of another vegetable that we could put in this part of the plate?* Allow students to name different vegetables. It is okay if students say vegetables other than those depicted on the plate. Be sure to discuss the color of that vegetable and, if there is time, ask the other students if they have tried this kind of vegetable before. Allow two or three responses to the types of vegetable that can be included in this section of the plate before moving on.
2. **Now we need to look at the other side of the plate.** *This half of the plate also has two parts. One part should only have food from the Grains group, and the other part should only have foods from the Protein Foods group.*
3. **Who can show me where the chicken is?** Choose one student and ask them to point to the chicken leg so that everyone can see where the chicken is located. **What color would you color your chicken?** Allow the student to answer.
4. **Where does the chicken belong on the plate?** Allow the students to answer. **That's right! The chicken is on this part of the plate.** (Point to Protein Foods section of the plate.) **Who can think of another protein food that we could put in this part of the plate?** It is okay if students say protein foods other than those depicted on the plate. If there is time, ask the other students if they have tried this kind of protein food before. Be sure to mention that peanut butter, dried beans, seeds and nuts are found in the protein foods section of the plate if no students do so. Allow two or three responses to the types of meat that can be included in this section of the plate before moving on.
5. **Now, who can show me where the bread is?** Choose one student and ask them to point to the bread so that everyone can see where the bread is located. **What color would you color your bread?** Allow the student to answer.
6. **Where does the bread belong on the plate?** Allow the students to answer. **That's right! The bread is in this part of the plate.** (Point to Grains section of the plate.) **Who can think of another grain that we could put in this part of the plate?** It is okay if students say grains other than those depicted on the plate. Be sure to discuss the color of that grain and, if there is time, ask the other students if they have tried this kind of grain before. Allow two or three responses to the types of grains that can be included in this section of the plate before moving on.
7. **There is one more thing that we should remember on our placemats.** *Can you point to the little circle on the placemat like me?* Hold up your placemat and point to the small circle, all students should point to the small circle to indicate that they know where it is. **This is where foods from the Dairy group belong. If you like to drink milk, say "mooooo!"**
8. **Great job everyone! Remember, eating the right amounts of food from the different food groups will help us stay healthy so that we can run, jump, play and learn new things.** **Remember, foods from the Vegetables group and the Fruits group should take up half of our plate.** Point to the fruits and vegetables section on your placemat for students to follow. **We should eat foods from the Grains group, the**

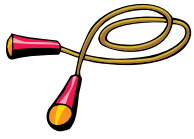


Protein Foods group and the Dairy group every day, but in smaller amounts. That is why they take up less space on our placemat. Point to each section of the plate as you refer to it so that students can follow. You can color the foods on your placemat at home.

Optional in-class activity: If there is time hand each student another Your Plate. Let the students color and cut out the foods and paste them onto the original Your Plate.







Physical Activity: Your Plate Conga

PRIOR TO ACTIVITY

Make copies of the food necklace graphics so there is enough for each child. It is okay to copy the food necklaces on white paper, but if possible, copy the food necklace pictures on the appropriately colored paper to match the food group. Laminate the food necklace pictures and attach a piece of yarn to each one so the children can wear one around their neck like a necklace. Give each student a food necklace. Set up the Plate Area with the nylon rope:

1. Make a large circle on the floor with the 27-foot section of rope.
2. Divide the plate in half with the 8 ½-foot section of rope.
3. Divide the left half of the plate in half again, with one of the 4-foot sections of rope.
4. Divide the other half of the plate in half again, with the remaining 4-foot section of rope.
5. To the top right of the plate, make a smaller circle with the 6-foot section of rope (this is for the foods from the Dairy group).
6. Check the MyPlate symbol in the background section of lesson to make sure Your Plate area looks the same.

ACTIVITY INTRODUCTION

It is now time for another fun activity! I made a great big plate on the floor just like Your Plate. Does everyone see it? Jump up and down if you do! I will give each of you a food necklace to wear. Distribute the food necklaces. Your job is to decide what kind of food is on your food necklace: a fruit, a vegetable, a protein food, a grain or a dairy food. Ask each student the following:

What food is on your necklace? Good! If student does not know what their food is, see if someone else knows the answer.

Where does your food belong on the plate? Great job!

If you need help, you can ask a friend! Does everyone know what food they have? Great! Now, let's form a conga line. When you hear the music, we will conga around the classroom, but when the music stops, you must freeze. Then I will call out the name of a food group. If the name of the food group matches the kind of food on your necklace, you will DANCE CRAZY to the part of the plate where you belong. Review the different parts of the plate. Are there any questions? Great! Let's get started!

ACTIVITY DIRECTIONS

1. Once you have determined that all students know what food is on their necklace, they should form a conga line at the edge of the room.
2. Turn on the conga music and have students conga around the classroom. Pause the music randomly so that the students freeze, and call out either: fruits, vegetables, dairy foods, protein foods, or grains. Students that have food

MATERIALS

- Food necklace pictures, provided
- Yarn, any color
- Nylon rope (50 feet), cut into four sections; clothesline diameter
 - One 27-foot section
 - One 8 ½ -foot section
 - Two 4-foot sections
 - One 6-foot section
- A Tisket, A Tasket CD (play Conga song): ASIN: B0001Z92AS, available on Amazon.com for \$14.97 (optional)

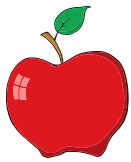


necklaces matching whatever group you call should dance crazy to the correct part of the plate.

3. *Is (student's name) food (say the name of the food on necklace) in the right part of the plate? Clap really loud if (he/she) is!*
4. Be sure to discuss the results with the students, and if a student is not in the correct part of the plate, see if some of the other students can help them out.
5. Continue the activity until each food group has been called. You can create variations by having the students “walk slowly like turtles” or “frog hop” to the correct part of the plate. It is also acceptable to call out more than one group at once.
6. When the conga music is turned back on, students in the plate should move back to the conga line and the process repeats itself.

SUMMARY

Great job! Remember, eating the right amounts of food will help you stay healthy so you can run, jump and play. Give yourself a big hug if you think you can eat foods on your plate like this at home!



Snack: MyPlate Pitas



NUTRITIONAL ANALYSIS

Nutrition Facts

Serving Size (140g)
Servings Per Container

Amount Per Serving	
Calories 260	Calories from Fat 15
% Daily Value*	
Total Fat 2g	3%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 380mg	16%
Total Carbohydrate 58g	19%
Dietary Fiber 9g	36%
Sugars 14g	
Protein 9g	
Vitamin A 80%	Vitamin C 4%
Calcium 15%	Iron 15%

*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	Less than	300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

SERVING SIZE: 1 Pita

INGREDIENTS



- Small (6") whole wheat pita - 1
- Fat-free vanilla or plain yogurt* - 2 Tablespoons
- Carrot rounds (depends on size of carrot) - 12-16
- Raisins - 24
- Cinnamon - 1/2 Teaspoon

*Substitute hummus dip if there are students with milk allergies in the class.

UTENSILS

- Knife
- Cutting board
- Measuring spoons
- Popsicle sticks

DIRECTIONS

1. Cut carrots into rounds.
2. Spread yogurt on top of pita with popsicle stick and decorate with desired combination of fruits and vegetables.
3. Serve and enjoy!

NOTE TO EDUCATOR

When making this recipe in class, cut the pita into fourths. This is the class snack size, which will serve four students.

OTHER POSSIBLE COMBINATIONS

Use yogurt or hummus with any of these combinations:

- Red pepper, pineapple and black beans
- Mandarin oranges, cucumber and red pepper
- Celery, hardboiled egg, red grapes
- Blueberries, cantaloupe and celery
- Small pieces of ham, tomato and spinach leaves
- Strawberries, carrots and raisins
- Apples, carrots and celery



COMMONLY ASKED QUESTIONS

Q: Are there any recommendations for the amounts of food we should eat?

A: Yes. The Dietary Guidelines for Americans, 2010, recommend that you make half your plate fruits and vegetables.

Q: Are recommended amounts different for children and adults?

A: Yes. The recommended amounts needed from each food group for adults are larger than those for children. For more information and to get personalized recommended amounts, visit www.choosemyplate.gov.

Q: Do children need to fill the sections of the plate completely with foods from the groups that are represented for that section of the plate every time they eat?

A: Absolutely not. Children are the best judges of how hungry they are, so allowing them to choose how much food should fill each section of the plate is perfectly acceptable; and they don't have to fill up any one section if they don't want to. Children should eat a variety of foods from each section of the plate every day, while maintaining the proper amounts of each food.

Q: How can children remember how much food from each food group they should eat every day?

A: If you access www.choosemyplate.gov, you can print and hang a MyPlate mini-poster on the wall. This will help children remember how much from each group they should be eating every day.

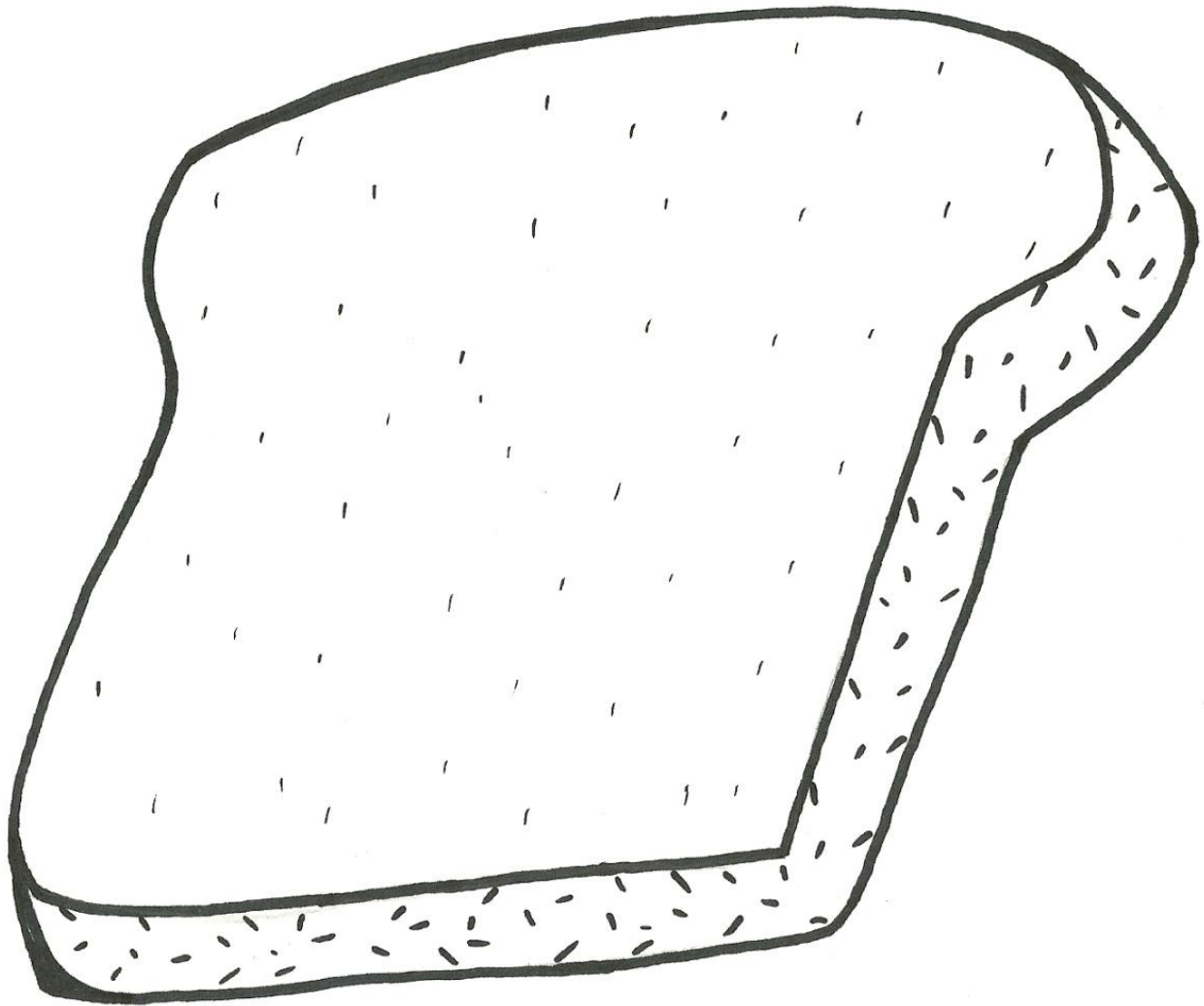
Q: Are items on the "kids' menu" served in amounts recommended for children?

A: Unfortunately they are not. Usually items on the kids' menu exceed the recommended amounts for children. However, because the amount of food in a kids' meal is less than in a regular entrée, ordering from the kids' menu is a better choice for children.

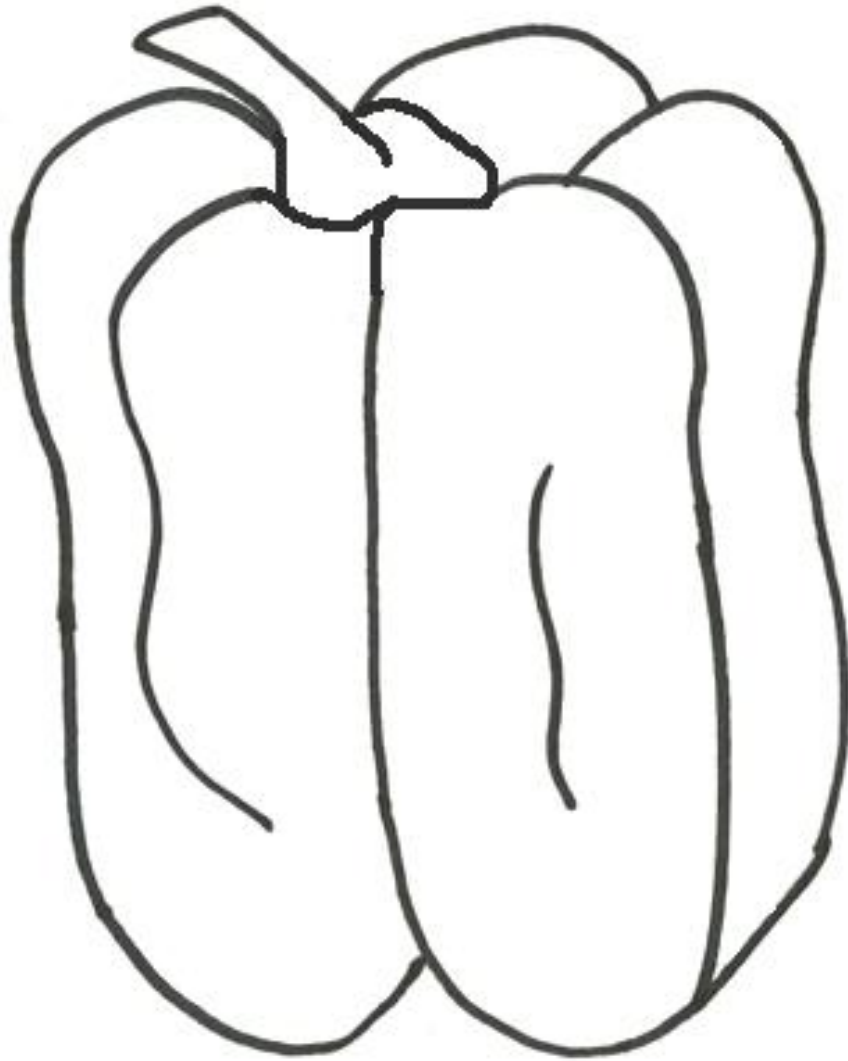
Q: What if children don't like any of the food offered on the kids' menu?

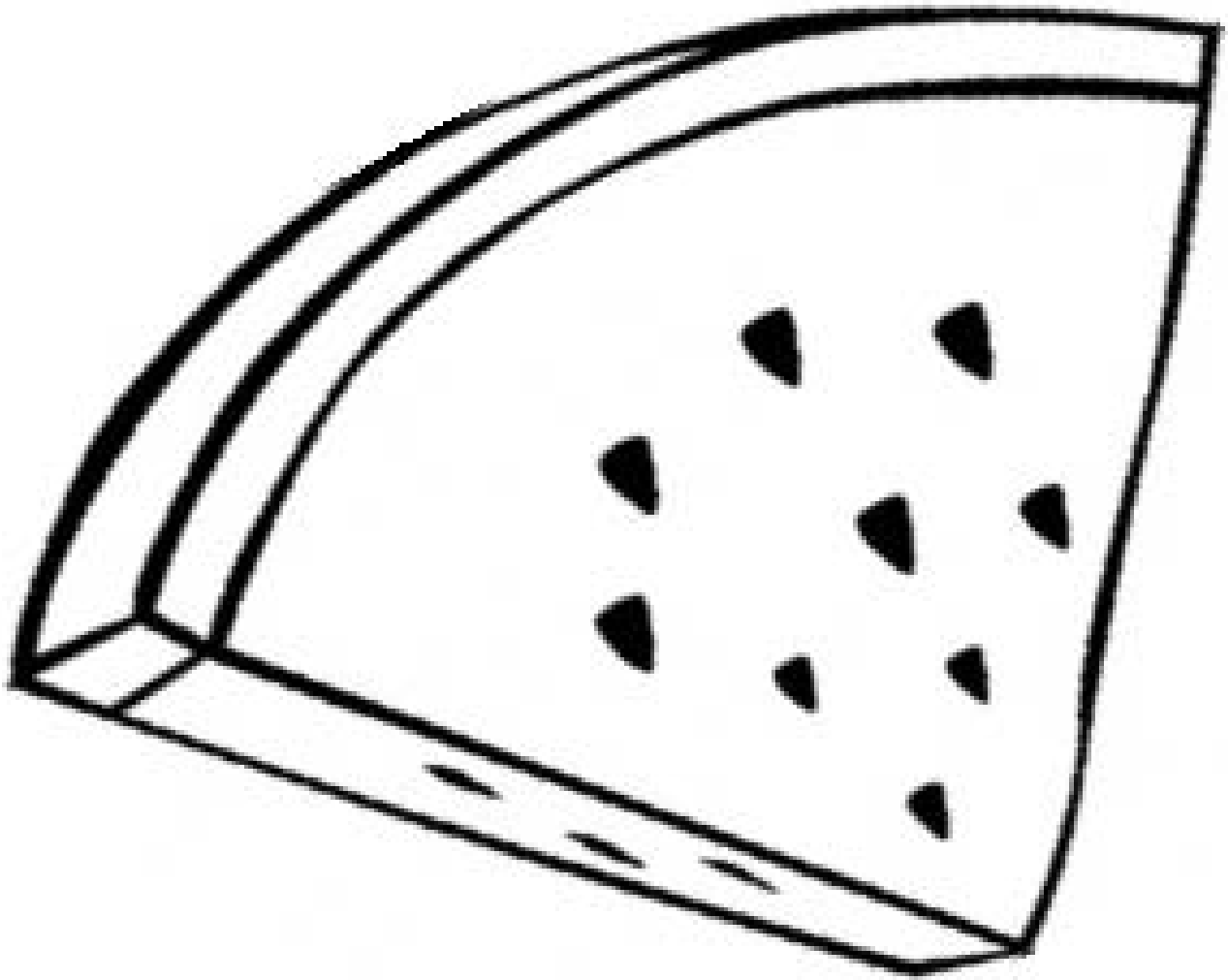
A: They can share an entrée with an adult! Otherwise, they can order an adult-sized entrée and immediately put half of it in a to-go box to bring home for another time. This is also a good strategy for adults trying to control the amount of food they eat.



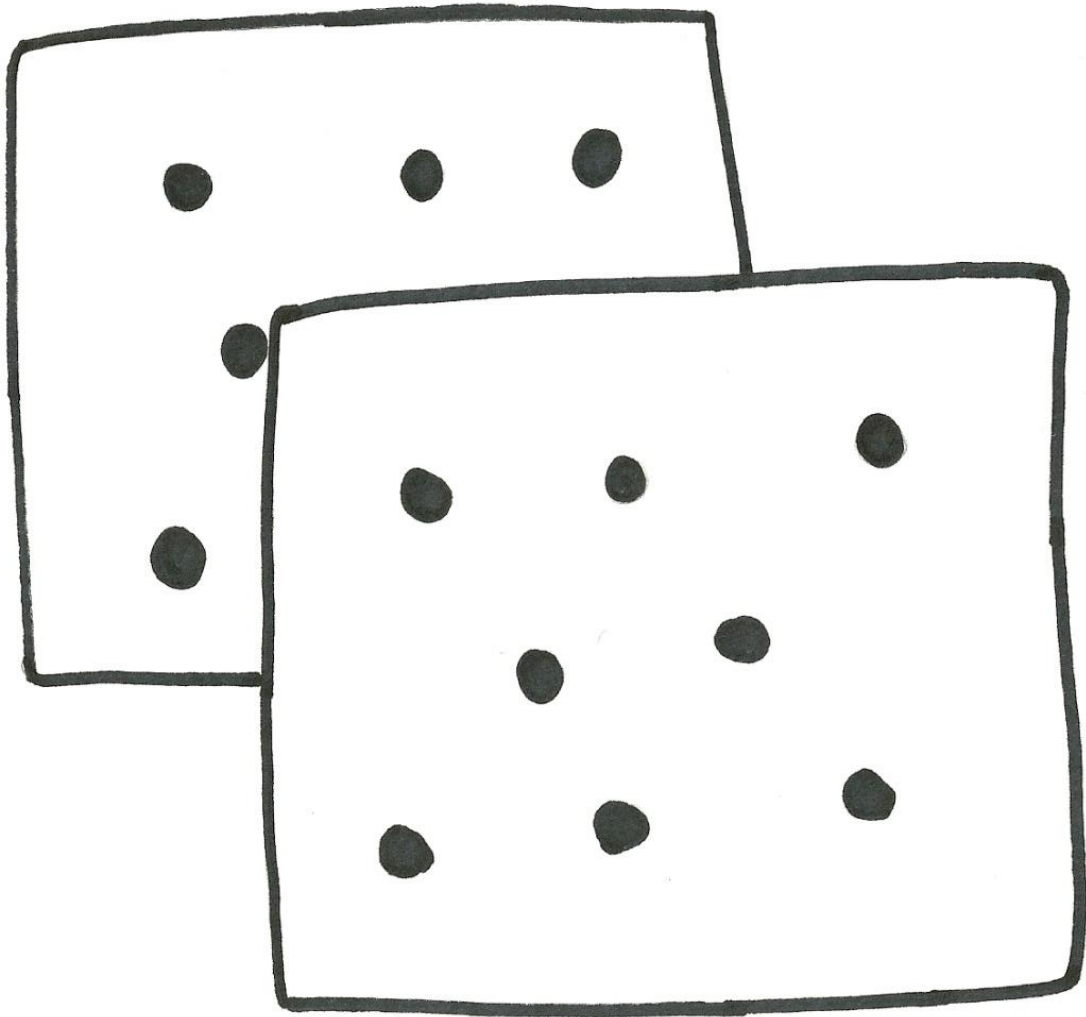




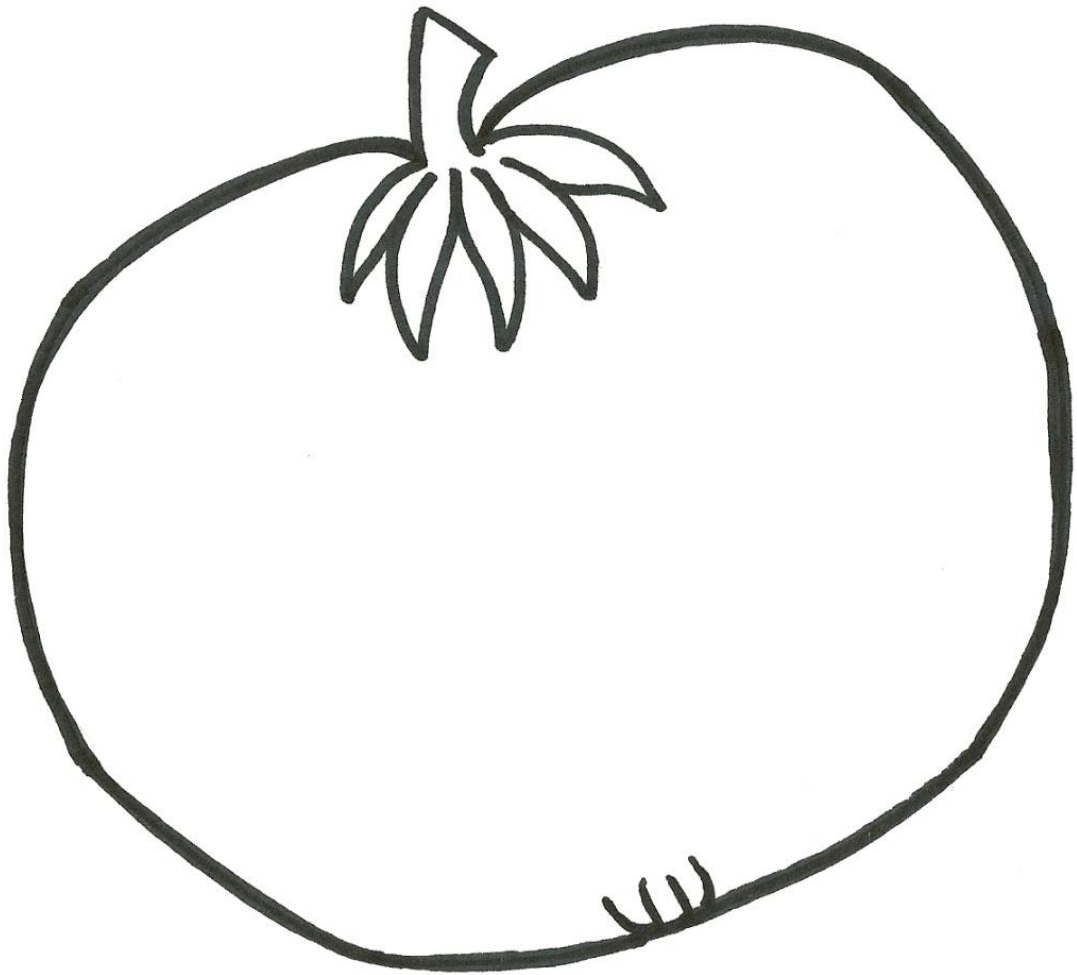


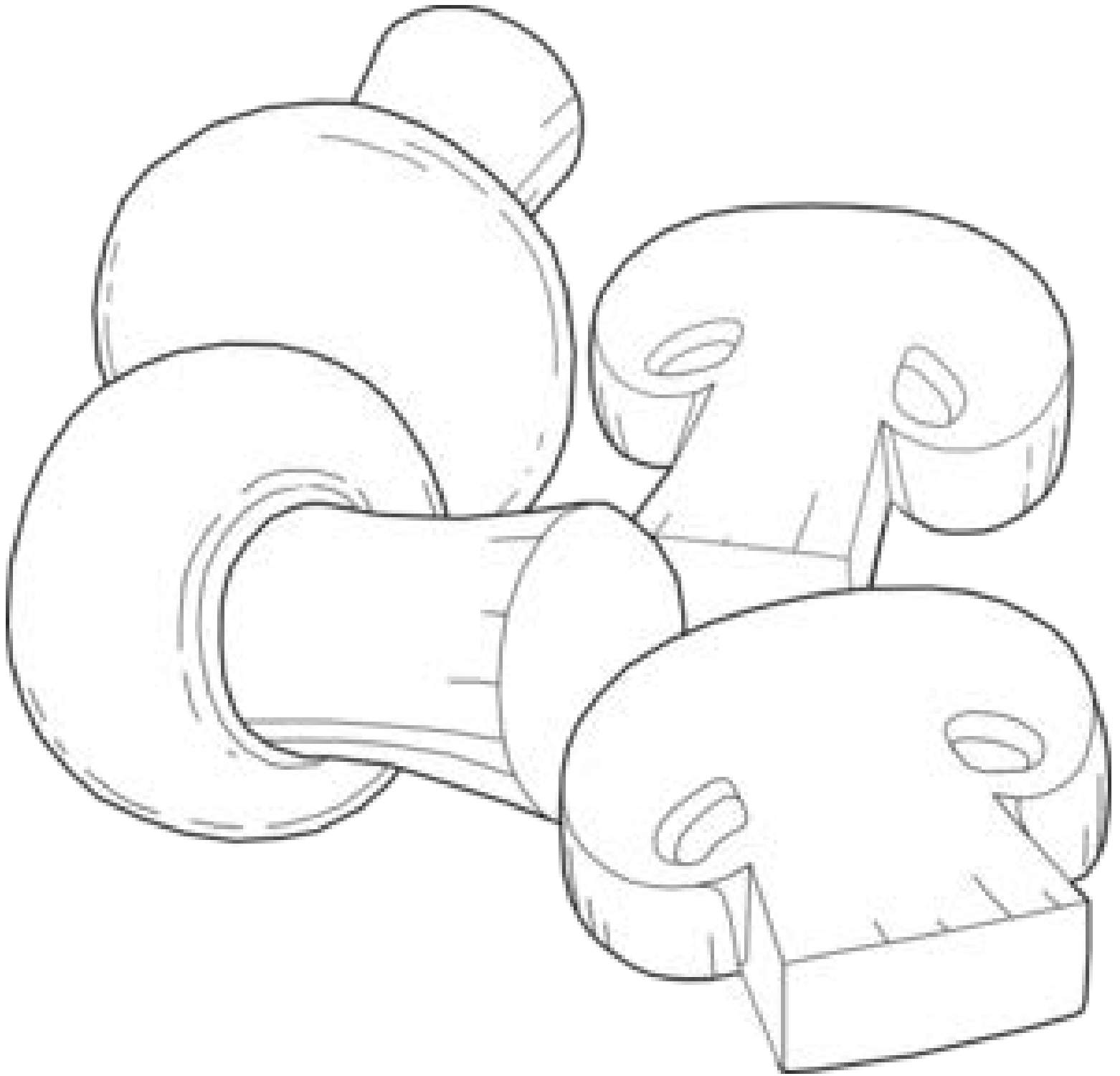


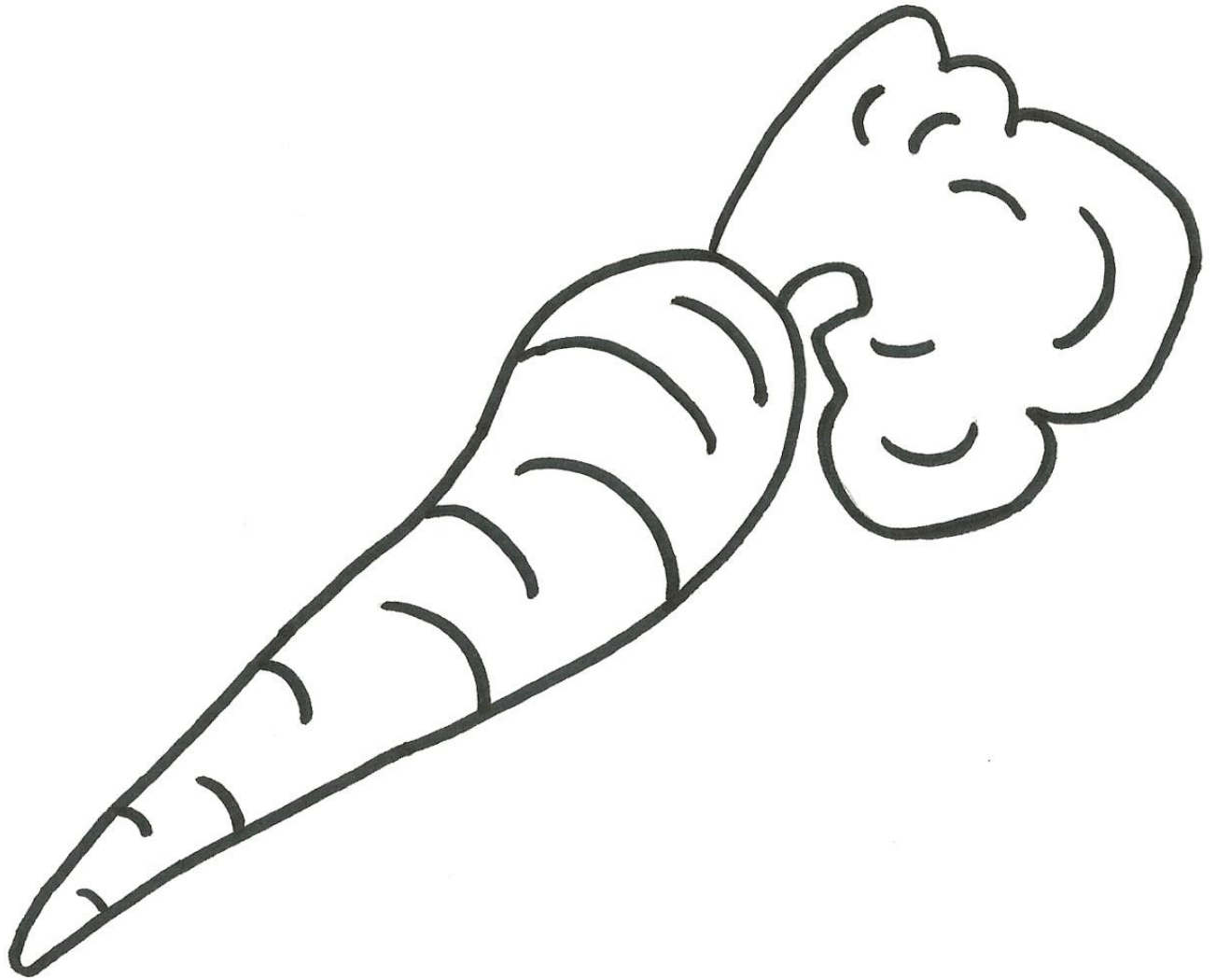


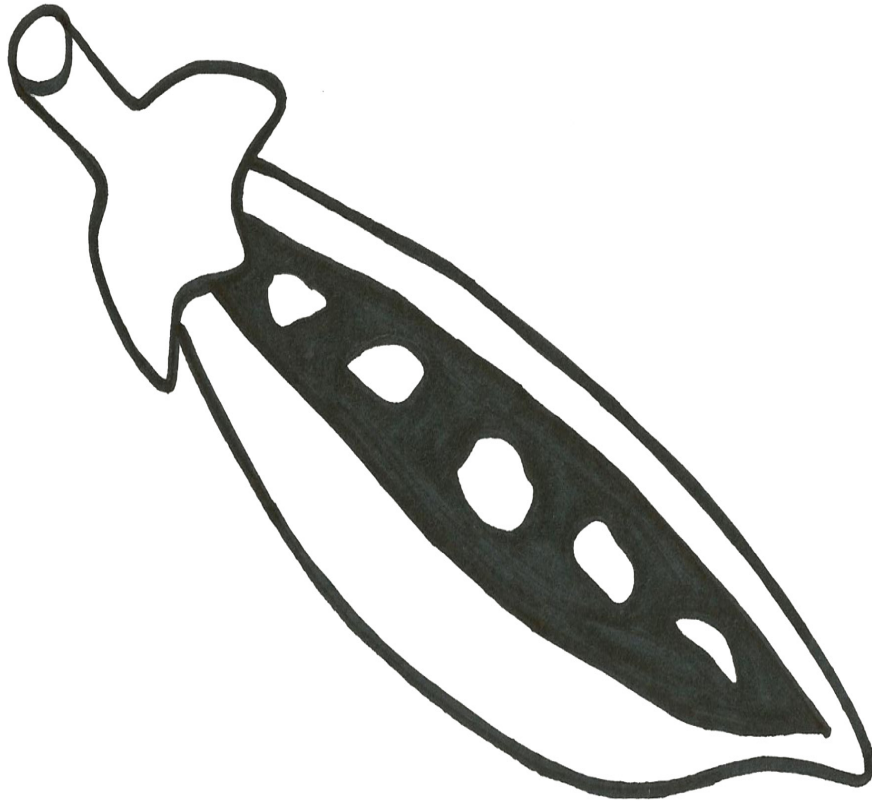


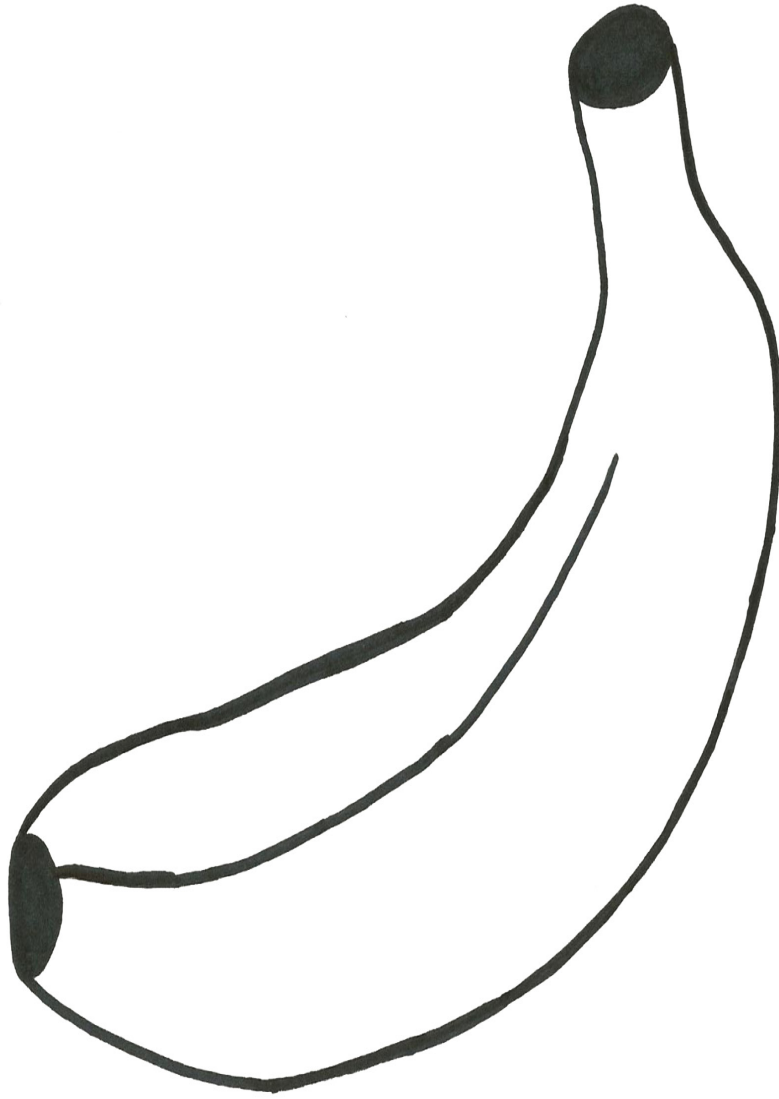


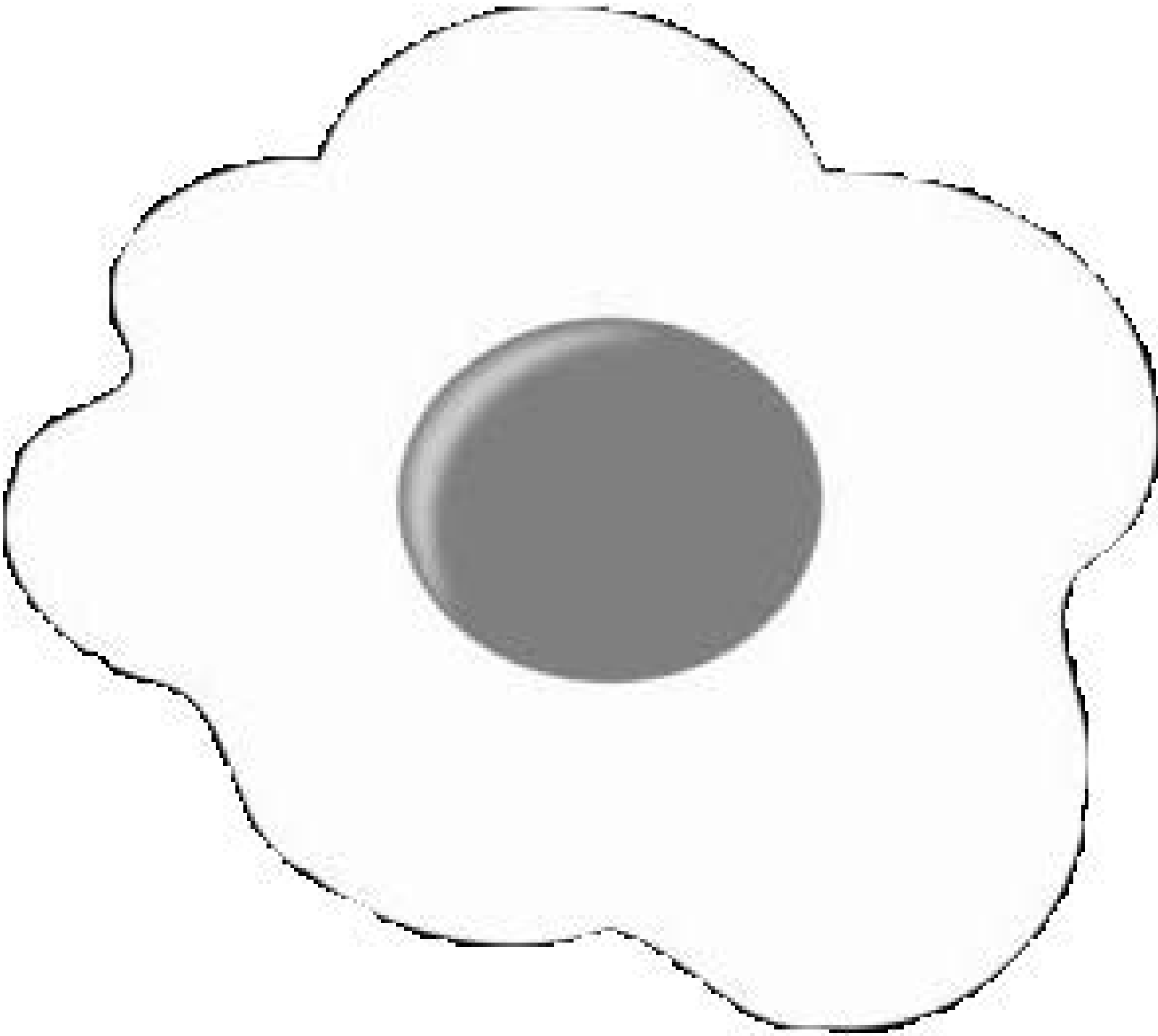


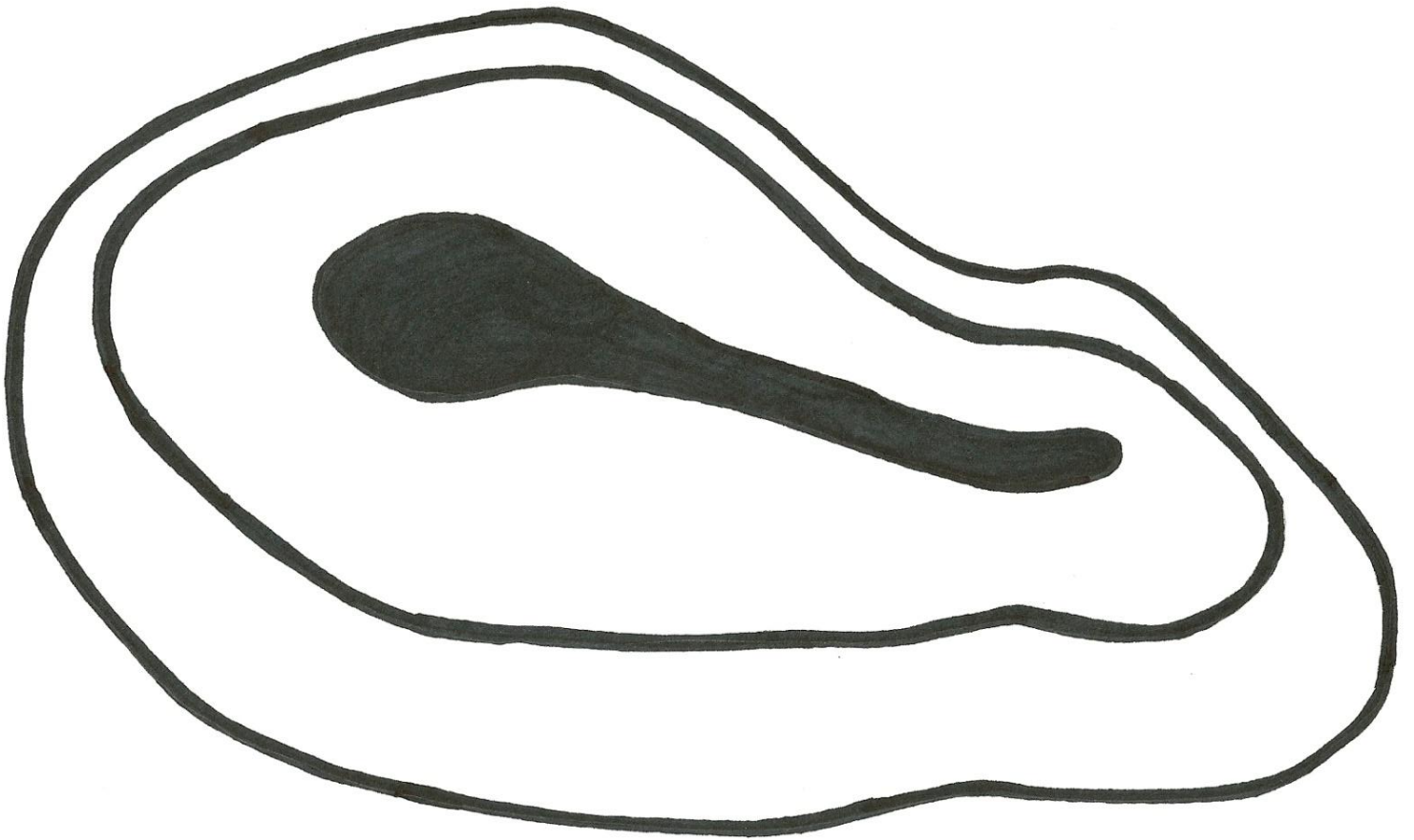


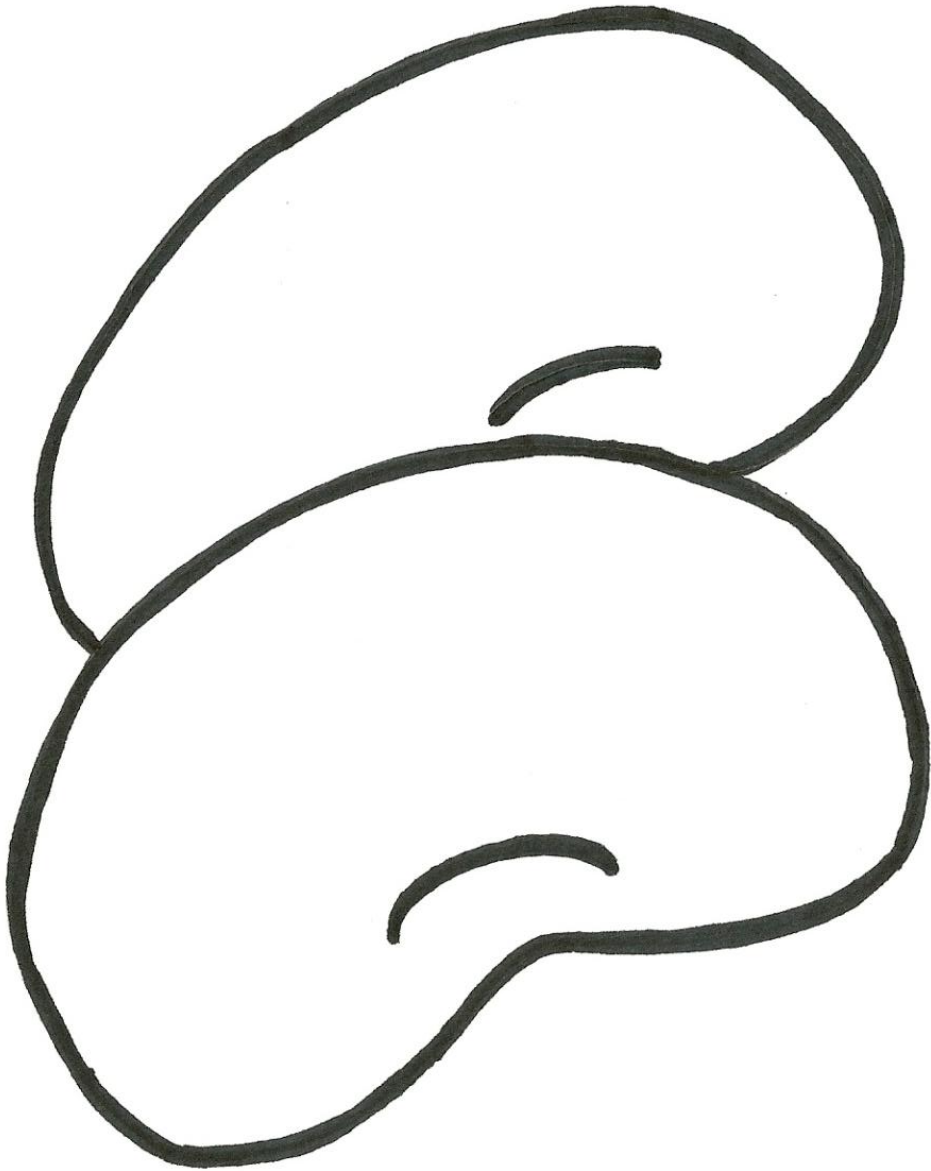


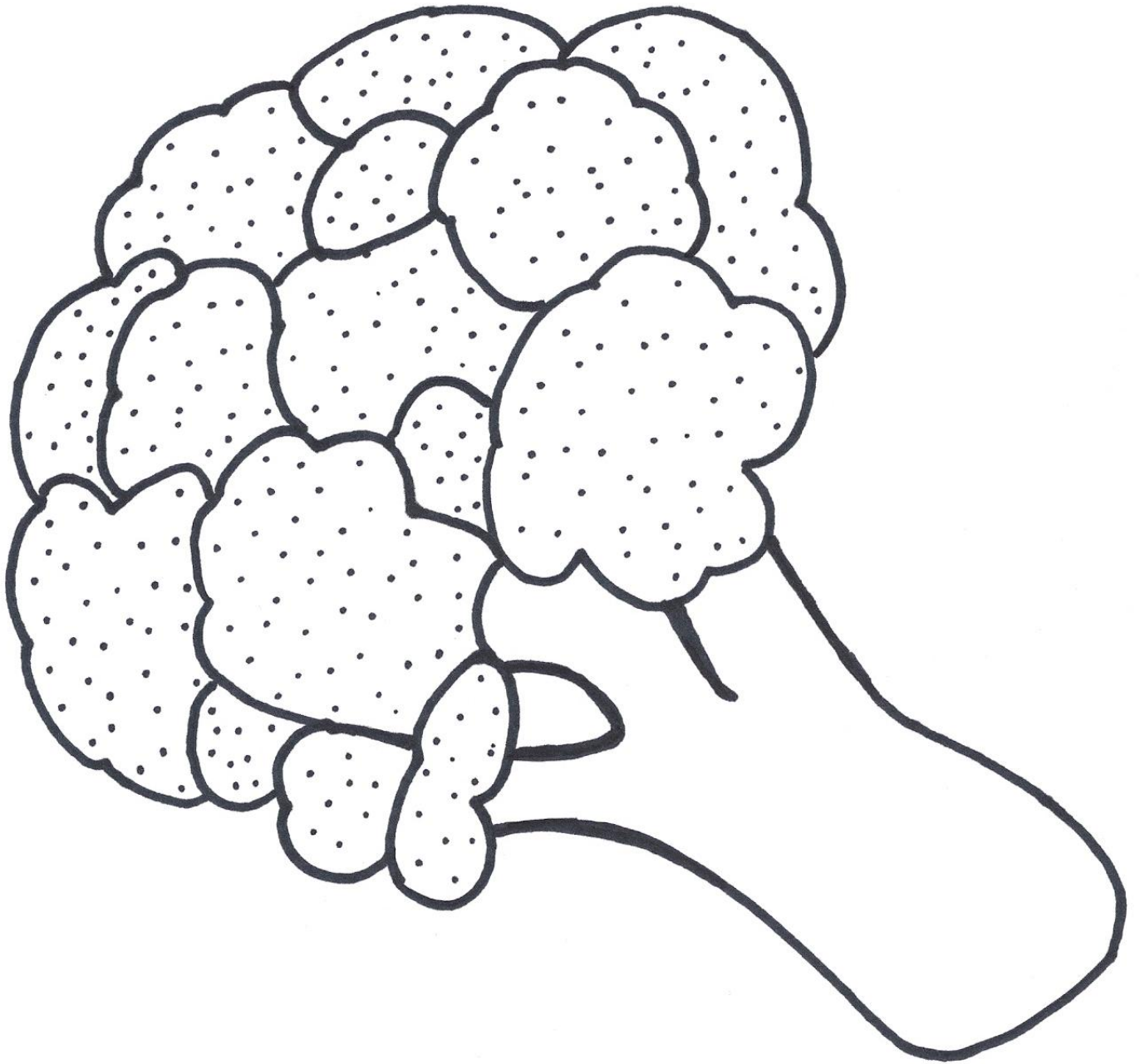




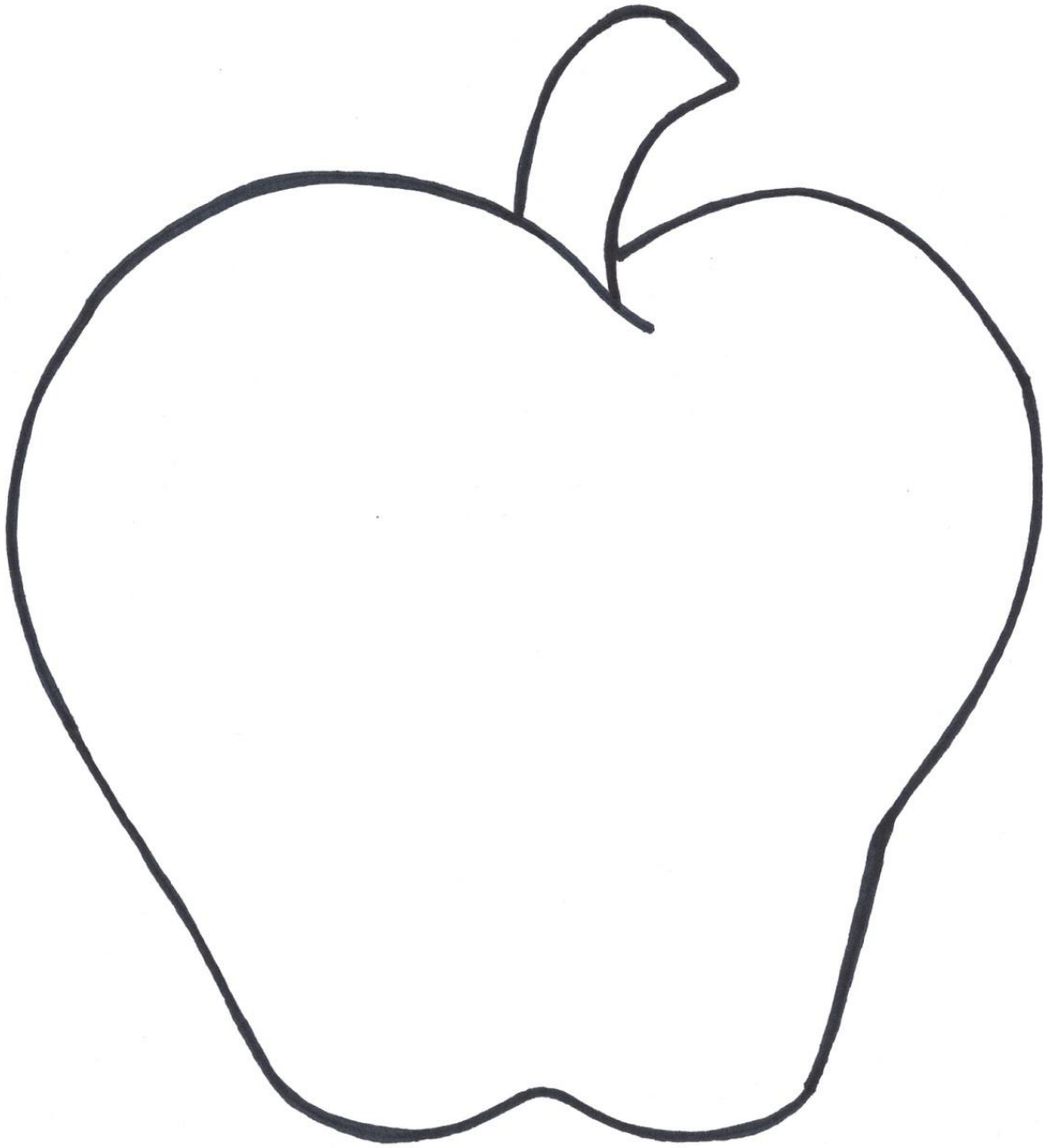


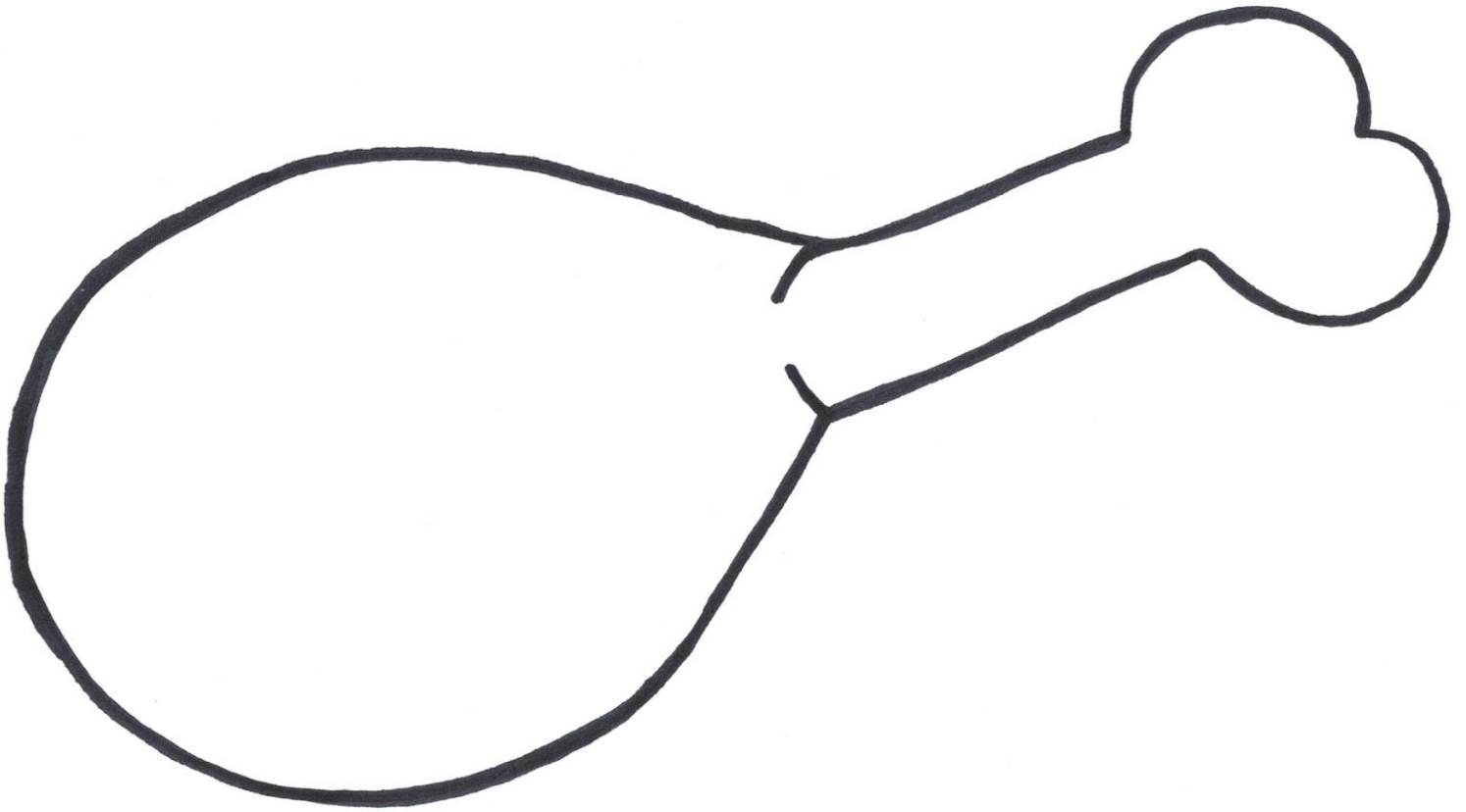




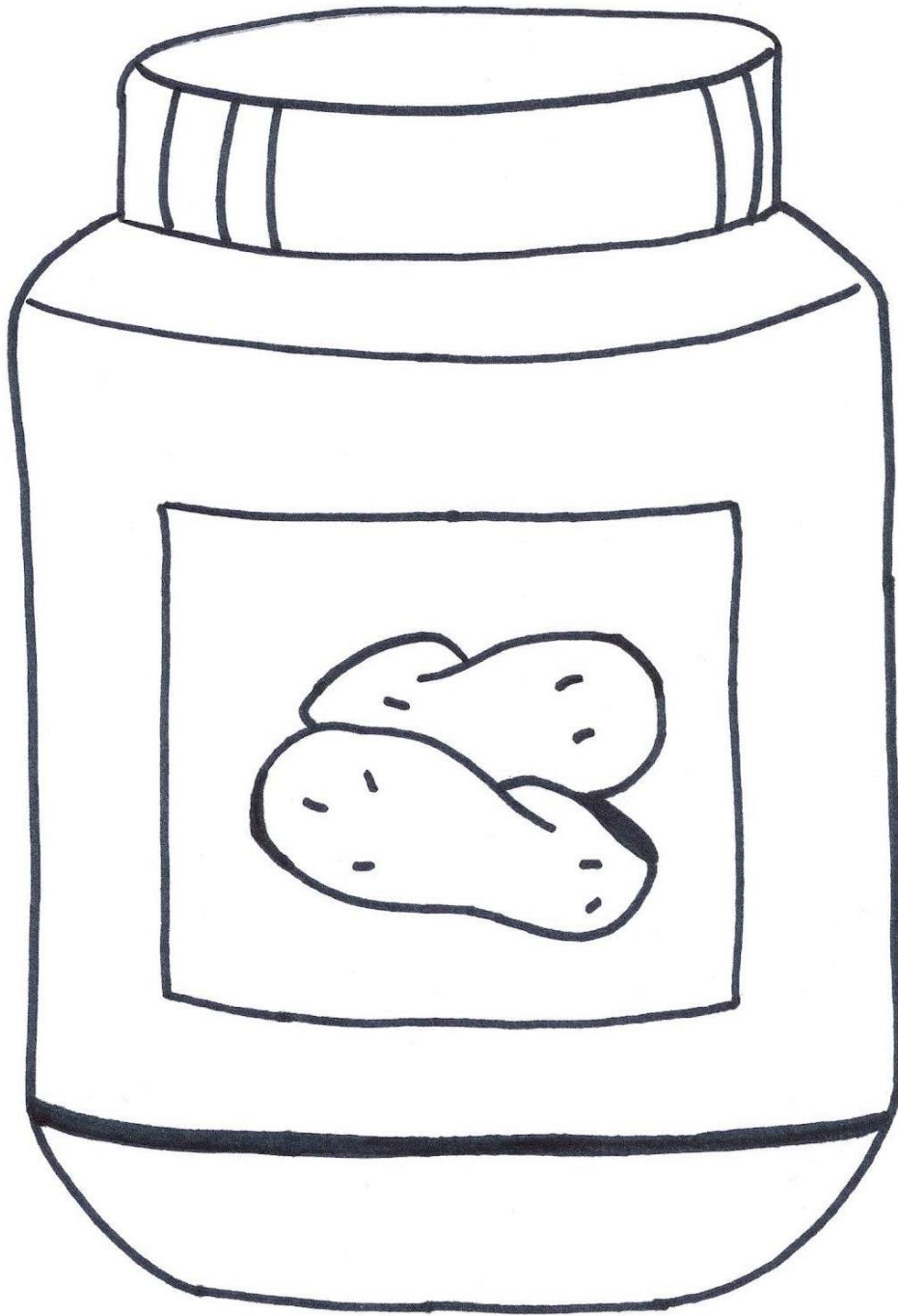






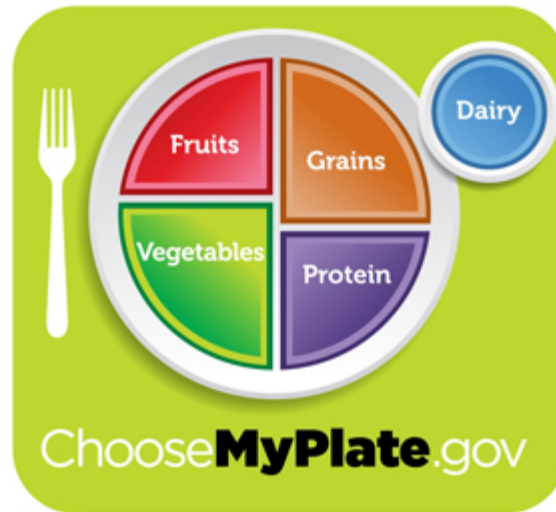






Dear Parent or Caregiver,

Today your child completed the last lesson of the *Youth Understanding MyPlate* nutrition curriculum. This lesson taught your child about eating the right amounts of foods from the different foods groups. Your child learned how to create a healthy plate by adding foods from the different food group on different parts of the plate. The *MyPlate* symbol below is a great reminder of where the foods need to go.



Parents and caregivers play a big part in helping kids eat healthy. Next time you serve your child dinner, think about the *MyPlate* symbol and make sure that half of your child's plate is filled with fruits and vegetables. Making sure that they are getting foods from each food group will help your child get a variety of food, which is important for good health. You can start by trying the recipe on the back of this letter for *MyPlate* Pitas.

For more information about *MyPlate* and the different food groups, or to learn more about what nutrients your child needs, visit: www.ChooseMyPlate.gov.

Sincerely,