

#### https://www.fns.usda.gov/tn/serving-myplate-yummy-curriculum

These lessons are based on the United States Department of Agriculture's Team Nutrition Serving Up MyPlate Curriculum that introduces the importance of eating from all five food groups using the new MyPlate icon and a variety of hands-on activities.

The Extra Helpings sections are optional activities that can be completed if time allows or an optional for the teacher to lead on their own to extend the lesson if they are interested.

Lesson	Taste Testing Items
MyPlate	Pomegrantes
Who Am I?	Jicama and Cherry Tomatoes
You be the Chef	Avocados
Measuring Up MyPlate	Tangelos
Sometimes Foods (Solid Fats)	Spinach leaves w/oil based dressing
Sometimes Foods (Added Sugars)	Infused water & whole grain crackers



# MyPlate

In this lesson students are introduced to MyPlate and the importance of eating from the five food groups through interactive and engaging activities.



# Learning Objectives:

- Identify the five food groups and name a variety of nutritious foods in each.
- Explain how MyPlate serves as a reminder of how to eat a healthier meal.
- Create and describe a healthy meal containing a food from each group.



## Core Connections:

- Aligned with Health Literacy:
  - O Demonstrate behaviors that foster healthy active lifestyles for individuals and the benefit of society (21.3-5.HL.5). *Choose healthy foods.*
  - O Demonstrate critical literacy/thinking skills related to personal, family, and community wellness (21.3-5.HL.3). *Develop goals to enhance health status.*
- Building Towards English Language Arts:
  - Speaking and Listening Standards (SL.4.1) (DOK 1,2,3): Engage effectively in a range of collaborative discussions with diverse partners, building on others' ideas and expressing their own clearly.



# Supplies

- Set of food model cards
- CD player and Serving Up MyPlate Song CD
- MyPlate Poster
- Eat Smart Play Hard Poster (to leave in classroom)
- One paper plate per student
- Tasting Rules Poster

• Taste test items - Pomegranate, small plates, napkins, small cups for water

## What is MyPlate?

- 1. Begin by asking students to think about the word "health" and what it means to them. Next ask them about the word "choice." What do they think it means to make a healthy choice? What do they think a healthy food choice would be?
- 2. Ask students if they have heard of *MyPlate*. Introduce students to *MyPlate* and the five food groups (Fruit, Vegetable, Grain, Protein Foods, and Dairy) by displaying the *MyPlate* poster.
  - a. Can they identify and give examples of foods they think belong in each of the five food groups? Do they notice any differences in the food groups shown on the *MyPlate* icon?
    - i. The portion sizes of each are slightly different because we need different amounts from each food group. For example, we need more vegetables than fruit. Students should also notice that our plates should be half fruits and vegetables.
  - b. Put a variety of food model cards into a bag and have students pull out items and identify what food group they go in to.
    - i. Include some combination foods to demonstrate that a food item can sometimes provide nutrients from more than one food group (sandwich grain and meat).
    - ii. FYI. Tomatoes are technically a fruit, however in 1893 the U.S. Supreme Court ruled the tomato as a vegetable.
  - c. Explain that the *MyPlate* icon serves as a reminder that a person should eat foods from the five food groups each day. By eating a variety of foods from each food group, we give our bodies what they need to be and stay healthy. Ask what other behavior can help us stay healthy? (Being physically active at least 60 minutes a day).
  - d. Foods like candy bars, soda, butter, jelly, and cream cheese do not belong to any of the food groups because they are mostly sugar or fat and contain few nutrients. They are considered "sometimes" foods.

#### Activity Break

3. Play the song Alive With 5 Food Groups for the class. Start with students sitting in their chairs. Every time they hear the word "five" or a food group "fruits," "vegetables," "dairy," and "grains" have them stand. It will be important that they listen closely to the words as the words go fast and standing up and sitting down will go fast! (uses CD or song is online at: <a href="https://www.fns.usda.gov/sites/default/files/tn/alivewithfive.mp3">https://www.fns.usda.gov/sites/default/files/tn/alivewithfive.mp3</a>)

#### Engage

4. Distribute paper plates for students to create their own MyPlate. Have them think of their favorite meal and put the food items in each of the food groups. Have a couple students share their plates

and highlight the food they selected for each food group. Attach a paper circle to the plate to represent the milk group or they can write the milk group items on the back of the plate.

#### Taste

- Discuss Tasting Rules using the poster.
- Pomegranate
- Have them share what food group pomegranate belongs in (fruit). Have them vote using thumbs up or thumbs down. What are other fruit that they enjoy? Pomegranate Fact Sheet: <a href="https://dpi.wi.gov/sites/default/files/imce/school-nutrition/pdf/fact-sheet-pomegranate.pdf">https://dpi.wi.gov/sites/default/files/imce/school-nutrition/pdf/fact-sheet-pomegranate.pdf</a>

# Extra Helpings (Optional)

Have students give an impromptu performance of *Alive with 5 Foods Groups* for other students and staff during lunch.



# Who Am I?

In this lesson students will expand on their vocabulary and awareness of different foods in each food group.



# Learning Objectives:

- Identify what foods belong in each food group.
- Create and describe a healthy meal containing a food from each group.
- Classify vegetables into vegetable subgroups.



## Core Connections:

- Aligned with *Health Literacy*: Demonstrate behaviors that foster healthy, active lifestyle for individuals and the benefit of society (21.3-5.HL.5). *Choose healthy foods*.
- Builds towards English Language Arts:
  - Vocabulary Acquisition and Use (L.4.5) (DOK 1,2,3): Demonstrate understanding word relationships and nuances in word meanings.
    - Speaking and Listening Standards (SL.4.1) (DOK 1,2,3): Engage effectively in a range of collaborative discussions with diverse partners, building on others' ideas and expressing their own clearly.
    - o Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. (RI.4.7) (DOK 2,3)



# Supplies

- Vegetable sub-group food models (see examples on Vary Your Veggies Handout)
- Vegetable Subgroup Handout (display on board)
- Food Cards: https://fns-prod.azureedge.net/sites/default/files/tn/dmp\_foodcards.pdf

- Masking tape or string
- Food group name cards (create by writing the following on paper: Fruit, Vegetables, Grains, Meat/Protein, and Milk
- Taste test items Jicama and Cherry Tomatoes, napkins, small cups for water

## MyPlate Recap

- 1. Ask students to share something new he or she learned so far about *MyPlate*. List their responses on the board.
- Display the Vegetable Sub-Group handout on the board. https://dpi.wi.gov/sites/default/files/imce/school-nutrition/pdf/vegetable-subgroups.pdf
  Explain that most people need to eat more vegetables from the Dark-Green, Red and Orange, and
  Beans and Peas subgroups.
  - Dark-Green: (e.g. broccoli, spinach, romaine, lettuce, bok choy, collard greens)
  - Red and Orange: (e.g. acorn or butternut squash, carrots, pumpkin, red peppers, sweet potatoes, tomatoes)
  - Beans and Peas: (e.g. chickpeas, lentils, black, kidney, navy, or pinto beans)
  - Starchy: (e.g. corn, green peas, jicama, plantains, potatoes)
  - Other: (e.g. celery, cucumbers, green beans, iceberg lettuce, zucchini)
- 3. Have food models of the vegetable sub-groups and show one at a time. Have students volunteer to identify which sub-group the vegetables belongs in. Remind them the most nutritious vegetables are found in the dark-green, red/orange, and beans and peas and are vegetables we need to eat more of.
- 4. Have them share their favorite vegetable in each sub-group.

## Activity Break

- 1. To expand on students' vocabulary and awareness of different foods in each food group, play the Who Am I? game utilizing the food cards, one per student. The cards can worn like a necklace with string (hanging on their back) or taped to their back.
  - a. Explain to students that they will play the game *Who Am I?* and they will need to guess what food they are by asking classmates. Share some questions to get them started.
    - i. Am I a vegetable?
    - ii. Am I a protein food?
    - iii. Am I round?
    - iv. Am I green?
    - v. Am I made from wheat?
    - vi. Do I grow on a tree?

- vii. Do I live in the sea?
- viii. Am I juicy?
- ix. Do I have seeds?
- x. Do I sound crunchy when you eat me?
- 2. Place food group name cards on the floor on the outer perimeter. Give students 8-10 minutes to play the game to guess what food item they are. Tell students to walk around the room to ask each other questions. If they receive a "no" as an answer, they should move on to a new person. Once they guess their food correctly, have students sit down near the food group name card they belong in.

1. As a class, put together a meal using students from each food group. What are some foods that might taste good together? Is there any food that belongs to a food group that they are surprised about? Were they any new foods they learned about?

#### Taste

- Discuss Tasting Rules using the poster.
- Jicama and Cherry Tomatoes
- Share facts about Jicama and tomatoes!
  - Fact Sheet:
     <a href="https://idph.iowa.gov/Portals/1/userfiles/94/School%20Grant%20Program/Fact%20Sheets/Jicama%202015.pdf">https://idph.iowa.gov/Portals/1/userfiles/94/School%20Grant%20Program/Fact%20Sheets/Jicama%202015.pdf</a>
- Have them share what food group Jicama and tomatoes belongs in (vegetable subgroup: starchy
   – Jicama and red/orange Tomatoes). Tomatoes are technically a fruit, but USDA classifies them
   as a vegetable as they are often served and eaten as a vegetable.
- Have them vote using tallies on a board. "Tried it," "Liked it", or "Loved it."

## Extra Helpings (Optional)

In small groups have students analyze the school lunch menu for one week. Have them identify the food groups each items belongs in.



# You Be the Chef

In this lesson, students will build upon their understanding of healthy eating and plan snack menus.



# Learning Objectives:

- Explain that nutrients in food help us grow and stay healthy.
- Name at least three reasons why it is important to eat a variety of foods for a healthy diet.
- Apply their knowledge of healthy foods and food groups to create a healthy meal or snack



## Core Connections:

- Aligned with Health Literacy:
  - O Utilize interactive library and social skills to establish personal, family, and community goals (21.3-5.HL.1): Demonstrate how to influence and support others to make positive health choices.
  - Obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health (21.3-5.HL.1): Describe the impact of personal health behaviors on the functioning body systems.
- Builds towards English Language Arts:
  - o Speaking and Listening Standards (SL.4.1) (DOK 1,2,3): *Participate in Collaborative conversations with diverse partners*.
  - o Speaking and Listening Standards (SL.4.5) (DOK 2,3): Add audio records and visual displays to presentations when appropriate to enhance the development of main ideas or themes.



# Supplies:

- Set of food model cards
- CD player and Serving Up MyPlate Song CD
- 7 Copies of *Snack of Champions* handout (one per group)

- Nutrient Knowledge Flash Cards
- Taste test items Avocados, napkins, forks, small cups of water
- Begin by playing the song Do/Be (from CD or online:
   https://www.fns.usda.gov/sites/default/files/tn/doandbe.mp3) and ask students to listen to it carefully. Ask them to share what they learned from the song. List answers on the board in two columns under "Do" and "Be." The song lyrics give us examples of benefits the nutrients in foods can give us. (Giving us energy to play hard, strengthening our bones and muscles, keeping us healthy, keeping our skin glowing, etc.)
- 2. Write the word "nutrient" to the board and ask students to explain what they think it means. Explain that a nutrient is something found in food that your body uses to grow and stay healthy. Different nutrients do different things for our bodies and help us be healthy. (Giving us energy to play hard, strengthening our bones and muscles, keeping us healthy, keeping our skin glowing). Under the word nutrient write examples of nutrients: Folate, Vitamin C, Vitamin A, Carbohydrate, Iron, Potassium, Fats, Protein, and Fiber. Read the clues on the flash cards and have the class guess which nutrient you are describing.
- 3. How can we get a variety of nutrients? Remind students to think back to the first lesson? How can they make a nutritious meal?
  - a. By making healthy choices from all five food groups, we are more likely to get the nutrients we need to help us do what we want and need to do, better. Different foods give us different nutrients, so it's important to eat a variety of foods.

## Chefs Challenge

- 4. Explain that today they must imagine they are all professional chefs. Their challenge it to create a fun and healthy *Snack of Champions* for members of the U.S. Olympic team! They will have to create a recipe for a snack that will not only be healthy and nutritious, but taste good too!
- 5. Divide the class into teams of 4 by giving each student a fruit or vegetable name. Carrot, Pea, Apple, Banana. All the carrots go into a group, all the peas go into a group, etc. Pass out the *Snack of Champions handout* (one per group). Explain that each team will use the foods in the chart to create a recipe, come up with a creative name and be able to explain why they chose the foods that they did. Layout food model cards to help generate ideas of healthy options to build a healthy snack with (only display healthy options, avoid items for the others category).
  - a. Example: PB Power Fruit-Wich (one slice of whole wheat bread, 2 T. of peanut butter, ¼ apple thinly sliced and ½ banana thinly sliced. Top with grated carrot and serve with ice cold milk!

6. Have each group create radio ad promoting their snack and include at least 3 reasons why the Olympic team should choose their snack. Reasons can include: convenience, taste, "cool" factor, energy boosting, etc. Ask each group to share their ad and snack recipe with the class.

## Physical Activity Break

Sports Galore – call out the following skills for the students to mimic for 10 seconds. Encourage them to be creative!

- Shooting a jump shot
- Running through tires
- Downhill skiing
- Juggling a soccer ball
- Swimming underwater
- Field a ground ball and throwing it to first based
- Swinging a golf club

#### Taste

- Discuss Tasting Rules using the poster.
- Avocado
- Have them share what food group avocado belongs in (fruit). Have them vote using thumbs up or thumbs down or a sticker on a paper.
- Share facts about Avocado
  - o Fact Sheet: <a href="http://idph.iowa.gov/Portals/1/Files/INN/Avocaco.pdf">http://idph.iowa.gov/Portals/1/Files/INN/Avocaco.pdf</a>
- Ask the class how they have seen avocados being served at home or at a restaurant. They are
  often found in Mexican dishes such as guacamole.

## Extra Helpings (Optional)

Bring in empty boxes and packages of grain items from home. Divide the items between groups and have them determine if the product is a whole grain or refined grain. More information on identifying grains can be found at: https://www.choosemyplate.gov/grains



# Measuring Up MyPlate

Students will continue in their roles as chefs and work in groups of four. Their next challenge is to figure out a full day of meals for Lucia, a moderately active (30 to 60 minutes per day) 9 year old girl.



# Learning Objectives:

- Explain how to plan a menu with a variety of foods from each food group.
- Understand the difference between volume and weight.
- Identify food items in a menu plan and how much of each item is to be consumed using math skills.



## Core Connections:

- Aligned with *Health Literacy*: Obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health (21.3-5.HL.1). *Describe preventive physical and mental health measures, including proper diet, nutrition, exercise, risk avoidance, and stress reduction*.
- Builds towards *Mathematics*: Measurement and Data: Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. (4.MD.A).
  - Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. (4.MD.A.2) (DOK 1,2)
- Builds towards Engage Language Arts: Speaking and Listening Standards (SL.4.1) (DOK 1,2,3): Engage effectively in a range of collaborative discussions with diverse partners, building on others' ideas and expressing their own clearly.



## Supplies:

• Dry measuring cups

- Measuring Up MyPlate handout (one per group)
- Taste test items Tangelos, napkins, plates, small cups of water
- Schedule visit from Food Service Director

#### Lucia's Menu

- 1. Pull out 2-3 food models from each food group and explain what the portion size is of each food item to give them an idea on quantity/portion (examples: yogurt, hamburger, broccoli, strawberries, muffin, etc. Ask them if they think the quantities are what people normally eat (most often people eat much larger portions!).
- 2. Lucia needs to eat the following amounts of food from each food group every day to give her the energy and nutrients to do what she needs and wants to do.
  - a. Write this information on the board for students to see. This information is also on the *Measuring Up MyPlate handout*:

Vegetables	2 cups
Fruits	1.5 cups
Grains	5 ounces
Protein	5 ounces
Dairy	3 cups

Volume: bring measuring cups to remind them of portion sizes.

**Weight:** an ounce is a measure of weight, 1 slice of bread or ½ cup of cooked pasta or rice typically weights 1 ounce.

- 3. Divide students into small groups. Distribute the Measuring up MyPlate handout to each group. Students will use this to create a meal and snack plan for Lucia, identifying what she will eat and how much. Layout food model cards to help students brainstorm. Students will need to work together to ensure that:
  - a. Lucia gets the right amount of food in each food group.
  - b. Lucia gets a variety of foods from all of the food groups.

They will need to use math to calculate the amounts of foods for Lucia's menu.

## Engage

- 4. Have a couple groups present the daily menu they created for Lucia. Ask each group to explain how they chose her foods and why. While presenting, make sure the groups explain how the meals meet Lucia's food needs using MyPlate. Have them share what they learned.
  - a. Was there anything that surprised them? (They may have been surprised by how many fruits and vegetables are needed).

- 5. Explain to students that, depending on their age, gender, and level of physical activity, they may need more or less of a food than Lucia does each day.
- 6. Ask the school nutrition director or manager to visit the classroom and talk about the planning that goes into a school lunch menu, similar what they just did for Lucia. Allow for student feedback on the menus. What they like, what they may not want to see as often and what they would like added to the menu, remembering schools meals need to include nutrient rich foods. If the school nutrition director or manager is not able to attend, lead the discussion and report back.

## Physical Activity

Give Me Five – Have students stand and lead them through exercises:

- 5 jumping jacks
- 4 toe touches
- 3 twists
- 2 high knees
- 1 spin

Repeat faster. Then have them hold up one hand and with their finger from the other hand outline their fingers. Going up is breathing in and going down is breathing out. Keep repeating until all fingers have been traced.

#### Taste

- Discuss Tasting Rules using the poster.
- Tangelo. Cut into "Smiles" or wedges.
- Share facts about Tangelos:
  - Fact Sheet: <a href="https://www.duplinschools.net/cms/lib/NC01001360/Centricity/Domain/26/Tangelo%20">https://www.duplinschools.net/cms/lib/NC01001360/Centricity/Domain/26/Tangelo%20</a>
     <a href="mailto:Fun%20Fact%20Sheet.pdf">Fun%20Fact%20Sheet.pdf</a>
- Have the class compare tangelos to oranges. How are they the same? Different?

## Extra Helpings (Optional)

Have students come up with creative names for fruits and vegetables on the school lunch menu. Share ideas with the food service director.

- X-ray vision carrots
- Mighty melon
- Festive fruit salad
- Krazy Kale
- Monster mashed potatoes



# Sometimes Foods Solid Fats

Students will learn about foods high in solid fats and added sugars and will make hypotheses and draw conclusions about how they affect our bodies.



# Learning Objectives:

- Identify foods that are high in solid fats.
- Describe the benefits of limiting the consumption of solid fats.
- Explain the concept of eating in moderation



## Core Connections:

- Aligned with *Healthy Literacy:* 
  - Obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health (21.3-5.HL.1). *Identify how personal choices impact health and disease prevention.*
  - o Demonstrate behaviors that foster healthy, active lifestyles for individuals and the benefit of society (21.3-5.HL.5). *Choose healthy foods*.



# Supplies

- Set of food cards for each group
- Taste test items (Fresh spinach and light oil-based dressing), napkins, small cups of water
- 2 straws, 2 Tbsp. butter in plastic container, 2 Tbsp cooking oil
- Cups for taste test vote
- Spinach, light dressing, small cups/bowls, napkins, and cups for water
- 1. A certain amount of fat is an essential part of a healthy balanced diet. We need fat for our nerves, brain and skin cells, to protect vital organs in the body and to help to control our body

temperature. Fat also provides us with energy and adds taste and texture to our food. The problem is when we eat too much fat or too much of the less healthy types of fat.

- 2. We need foods from all food groups to get the nutrients we need to play hard, grow, and be healthy. Some foods within the food groups are healthier choices that we want to eat more often. These foods contain a lot of nutrients but not a lot of added sugars and solid fats. What are some examples of food in each food group that are better choices? Draw MyPlate on board to document answers.
  - a. Vegetables and Fruit (when prepared without adding solid fat or sugar)
  - b. Whole Grains
  - c. Fat-free/low-fat milk, yogurt, and cheese
  - d. Seafood, lean meats, chicken and turkey without skin, eggs, beans/peas, and nuts/seeds
- 3. Explain that in each food group, there are foods that are higher in solid fats or added sugars or both. We call these foods "sometimes" foods because we want to eat these foods only some of the time and in smaller amounts. We want to choose foods lower in solid fats and added sugars most of the time. For example, we want to choose fat-free milk every day and have ice cream only sometimes, or as a special treat.
  - a. Examples of sometimes foods:

i. Grain: cupcakes

ii. Dairy: ice cream

iii. Meat: fried chicken

iv. Vegetables: French fries

v. Fruit: chocolate covered raisins

vi. No Group: lollipops

#### Solid Fats

- 4. Explain that fats are an important nutrient in the body because they provide us with energy, promote healthy skin and growth, and help the body absorb some vitamins. However, there are different kinds of fats. Solid fats and liquid fats.
  - a. Solid (not liquid at room temperature): butter, beef fat, chicken fat, stick margarine, and shortening.
  - b. Liquid (liquid at room temperature): canola, corn, olive, soybean, and sunflower oils.
- 5. Do a demonstration to show the difference between the two kinds of fats. Put a couple of tablespoons of butter in a clear cup and pour oil into another. Dip a straw into the oil, what happens? Try to blow through the straw. What happens? (it's easy to blow through the straw). Now, try the same thing with butter. Dip a straw into butter, what happens? Try to blow through the straw. What happens? (not able to blow or not as easy as the oil).
- 6. Liquid fats are healthier for our hearts than solid fats. Our hearts pump blood through our bodies using little tubes (like straws) called arteries and veins, which carry blood to the rest of our body parts. We need our heart and these tubes to be healthy so that our body functions well.

- 7. Divide students into small groups and provide some *food cards* (examples: regular potato chips, ice cream, butter, French fries, hot dog, chocolate chip cookie, graham crackers, apple, and baked potato, etc). Cover up the nutrition facts label on the back of each item with construction paper.
- 8. Ask students to discuss the food items and predict which food item has the highest fat content and which one has the lowest. Then let them continue to work together for a few minutes to rank the food items based on their fat content.
- 9. Then have them remove the construction paper to see if they had the items in the correct order and then as a class place all items in the correct order. Remind them that higher fat items are "sometimes" foods and they should look for low-fat alternatives towards the bottom of the list as options.
- 10. What conclusions can students draw about their own consumption of food with high fat content? Do they eat high fat foods too often?

## Physical Activity

Memory Lane – Have students pair up and stand together. Call out one task at a time and partners complete that task.

- High five right
- High five left
- Low five right
- Low five left
- High ten
- Backwards then high
- Backwards then low
- Tunnel ten (feet apart, back to back, reach between legs and hit low ten)
- Sole of shoes right
- Sole of shoes left
- Elbow right
- Elbow left
- Both elbows

Have students repeat sequence as fast as they can with accuracy.

#### Taste

• Discuss Tasting Rules using the poster.

- Spinach leaves with a drizzle of light oil-based dressing
- Share facts about Spinach:
  - o Fact Sheet: <a href="http://idph.iowa.gov/Portals/1/Files/INN/Spinach.pdf">http://idph.iowa.gov/Portals/1/Files/INN/Spinach.pdf</a>
- Ask the class what kinds of salads have they tried before that they really like?

# Extra Helpings (Optional)

Ask students to think about what they love about their favorite snack or treat. Is it the taste? (For example, the sweetness of a cookie) Or is it the texture? (For example, the crunch of a potato chip).

If it is a food that has a lot of solid fat, how can they modify it to be healthier but just as delicious? (For example, for crunch, choose a sliced apple or whole-grain cracker, and for sweetness, try fruit).

Have students create a list of 5 of their favorite foods and then have them think of healthier options (if they are not the best choice already!).



# Sometimes Foods Added Sugars



#### Lea

- Identify foods and beverages that are high in added sugars.
- Describe the benefits of limiting the consumption of added sugars.
- Give examples of healthier food options to choose from.



## **Core Connections:**

- Aligned with *Healthy Literacy*:
  - Obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health (21.3-5.HL.1). *Identify how personal choices impact health and disease prevention.*
  - o Demonstrate behaviors that foster healthy, active lifestyles for individuals and the benefit of society (21.3-5.HL.5). *Choose healthy foods.*
- Builds towards Reading Standards for Informational Text:
  - Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. (RI.4.7) (DOK 2,3).



# Supplies:

- Beverage food model cards
  - Fruit Punch (10% Juice Drink)
  - 12 oz glass of regular soda
  - 8 oz bottle of 1% Lowfat chocolate milk (1 cup)

- 8 oz glass of fat-free, unflavored milk (1 cup)
- 3/4 cup of orange juice
- 1 cup of water
- Copies of Added Sugars handout (one per student)
- Sugar Cubes
- Taste test items water (lemon, lime, cucumber slices, and mint leaves) and Triscuit crackers, napkins

- 1. Ask the students to share some "sometimes" foods discussed during the previous lesson.
  - a. Grain: cupcakes
  - a. Dairy: ice cream
  - b. Meat: fried chicken
  - c. Vegetables: French fries
  - d. Fruit: chocolate covered raisins
  - e. No Group: lollipops
- 2. Ask students if they can remember why these food should be eaten less.
  - f. Eating too many solid fats and added sugars makes it harder to eat enough of the other foods we need to play, grow, and be healthy. And too many added sugars can also lead to more cavities.
- 3. Ask students what food group do soda and candy belong?
  - a. Explain that these foods are made up almost entirely of added sugars and/or solid fats. They do not contain enough of any nutrients to put them into a food group. Since these foods do not give our bodies what we need to play, grow, and be healthy, it's best to eat them only as a special treat and not every day.
- 4. Explain that sugars are naturally found in fruits and milk. These naturally occurring sugars are part of the overall healthy package of nutrients that these foods provide. Added sugars, however, add calories, but no nutrients to foods. Note: Currently the nutrition facts label only provides total sugars and doesn't list out added sugars. However, you can find added sugars in the ingredient list (high fructose corn syrup, sugar, sucrose, etc). If an added sugar is one of the first three ingredients you can be sure that sugar is a major ingredient in the product.
- 5. Explain that in the activity today the students will answer the question: Which beverage has the most teaspoons of added sugars? Display the following six beverages using food model cards:
  - a. Fruit Punch (10% Juice Drink)
  - b. 12 oz glass of regular soda
  - c. 8 oz bottle of 1% Lowfat chocolate milk (1 cup)
  - d. 8 oz glass of fat-free, unflavored milk (1 cup)

- e. 3/4 cup of orange juice
- f. 1 cup of water (no food model, could display an empty water bottle)
- 6. Have students predict how many teaspoons of added sugars each beverage contains and document on their *Added Sugars handout*. Provide each student a bag of 20 sugar cubes. Show them that one cube of sugar equals 1 teaspoon of sugar.
- 7. Next share the number of <u>added grams</u> of sugar per beverage. Have them document the grams per beverage on their handout.
  - a. Fruit Punch Juice Box (10% Juice Drink) -25 grams of added sugar
  - b. 12 oz glass of regular soda 39 grams of added sugar
  - c. 8 oz bottle of 1% Lowfat chocolate milk (1 cup) 14 grams of added sugar (11 grams of naturally occurring sugar)
  - d. 8 oz glass of fat-free, unflavored milk (1 cup) 0 grams of added sugar, 11 grams of naturally occurring sugar
  - e. 3/4 cup of orange juice 0 grams of added sugar, 20 grams of naturally occurring sugar
  - f. 1 cup of water (0 grams of sugar)
- 8. They will need to calculate the equivalent amount in teaspoons. Give them the formula that 1 teaspoon of *added sugar* equals 4 grams. Therefore, they will need to divide the total amount of *added sugars* in grams by 4.
- 9. Have them stack the amount of sugar cubes per beverage on their worksheet to visually demonstrate the amount of added sugar in beverages.
- 10. Are any of these results surprising? Were any predictions correct? What does this tell them about the amount of sugar they consume?

#### Taste

- Discuss Tasting Rules using the poster.
- Have students create their own flavored water by providing each student a cup of water and the option to add lemon, lime, and/or cucumber slices, or mint leaves.
- Serve with whole grain Triscuit crackers.
- Have them report out what they put in their water and how it tastes. Healthier Beverages fact sheet (page 2): https://www.fns.usda.gov/sites/default/files/tn/sfsm\_t2famguide-print.pdf

## Extra Helpings (Optional)

Make a display or bulletin board about the amount of sugar in beverages.