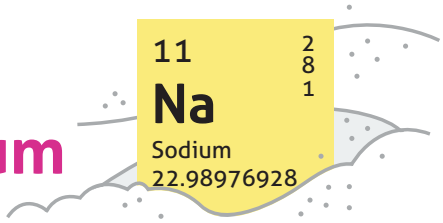
8TH GRADE | LESSON PLAN ↘

The Truth About Snacking and Sodium



Lesson Components

DIGITAL ACTIVITIES:

- ***Smart About Sodium*** video
- ***Shake Off the Salt*** digital interactive

WORKSHEETS:

- **Turn Down the Sodium** Worksheet (p. 15)
- **Snack Healthy Challenge** Worksheet (p. 26)

INFORMATIONAL TEXT ARTICLES:

- ***Sodium and Your Health*** (p. 5)
- ***Choosing Healthy Snacks*** (p. 18)

READING ASSESSMENTS:

- ***Sodium and Your Health: Student Assessment*** (p. 9)
- ***Choosing Healthy Snacks: Student Assessment*** (p. 22)

EXTENSION ACTIVITIES:

- **Healthy Snacks Electronic Cookbook** (p. 27)
- **Daily Meal Plan Activity** (p. 27)
- **Set Healthy Eating Goals** (p. 27)
- **My Healthy Future Public Service Announcement** (p. 27)

READING ACTIVITIES:

Ideas to enhance reading instruction in the lesson (p. 28)

DIGITAL BADGES:

Motivate students to complete tasks and adopt healthy habits with badges that recognize individual student achievement.

Lesson Overview

In this lesson, students will explore how to choose a healthy meal and snack options, and how sodium affects the human body. Students will then be able to use their learning from these activities to identify foods that are high in sodium and choose healthy alternatives to decrease their overall sodium intake.

TIME REQUIRED:

Three sessions of 60 minutes, with a short warmup and wrap-up

SUPPLIES:

- Classroom projector
- Computers or tablets with internet access

SUBJECT CONNECTIONS:

English Language Arts and Health

Lesson Structure

The ***Truth About Snacking and Sodium*** lesson is divided into three sessions, each approximately 60 minutes long.

1. The first session hooks students in with the ***Smart About Sodium*** video that talks about the long-term effects of an eating pattern that is high in sodium. Students read the ***Sodium and Your Health*** informational text article to learn more about sodium and which foods contribute most to their sodium intake.
2. In the second session, students look at what's really in their snacks with the fun ***Shake Off the Salt*** digital interactive. They then research popular snacks and beverages and create infographics or brochures to teach which snacks and beverages are high in sodium, which ones are low in sodium, and how to make a healthier choice.
3. In the third session, students analyze the connection between sodium and snacking. After reading the ***Choosing Healthy Snacks*** informational text article, they examine the Nutrition Facts labels of favorite snacks to find healthier snack alternatives.

Learning Objectives

Students will be able to:

- Compare different snack options and make recommendations based on their sodium, added sugars, and saturated fat.
- Identify ways in which high sodium intake can affect their long-term health.
- Identify dietary changes that could help reduce sodium intake, including cooking at home more often, consuming fewer processed foods, and evaluating food labels.

Enduring Understandings

- Evaluating foods and labels before you eat can help you make better choices.
- Choosing healthier snacks can make a difference in your health and how you feel.

Essential Questions

- *How does healthy snacking affect my life?*
- *Why does what we eat matter in the long run?*

Standards

Lesson plan activities are aligned with National Health Education Standards and International Society for Technology in Education Standards. The informational text articles and student assessments are aligned with national education standards (Common Core) for English Language Arts. Work with your school's English teacher on how they may be able to help reinforce health lessons using these articles.

Digital Badges

The ***Fueling My Healthy Life*** badges motivate students to learn and adopt healthy habits by recognizing students who demonstrate an understanding of the key learning objectives for each lesson.

CHALLENGE CHAMPION

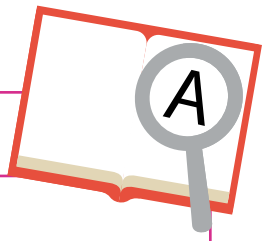
Students accomplished their goal to make healthier food and/or beverage choices.

STAR ACHIEVER

Students used *MyPlate* as a guide to include at least three of the five food groups at each meal.

SUPER SLEUTH

Students know how to identify foods and/or beverages that are low in added sugars, sodium, and/or saturated fat by reading the Nutrition Facts label.



KEY VOCABULARY

Added Sugars: Sugars and syrups that are added to foods or beverages when they are processed by food companies or prepared by you.

Calorie: A unit used to measure the energy the body receives from foods and beverages. Calories are also used to measure the energy used by the body.

Curing Meat: The process of preserving meat, which often includes adding sodium. Examples of cured meat are salami, sausage, and jerky.

Hypertension: Blood pressure is a measurement of the force exerted against the walls of your arteries as your heart pumps blood to your body. Hypertension is the term used to describe high blood pressure.

Nomadic: Roaming about from place to place.

Preserve: To prevent food from spoiling.

Portion Size: A "serving" is the amount of food recommended in consumer education materials such as MyPlate. A "portion" is the amount of food you choose to eat at any one time—which may be more or less than a serving.

Refined Grains: Grains that contain only the endosperm because they have been milled, which removes the bran and germ, and important nutrients. Examples of refined grains include white flour, white bread, and white rice.

Saturated Fat: Fat that is usually solid at room temperature. The amount of saturated fat in a food is shown on the Nutrition Facts label, which is located on the food package. Eating too much saturated fat may raise blood cholesterol levels and increase the risk of heart disease.

Snack: A small amount of food eaten between meals.

Sodium: A mineral generally consumed in the form of salt (sodium chloride) that your body needs in small amounts to work properly. However, when consumed in excessive amounts, sodium may raise the risk of high blood pressure (hypertension).

SESSION 1

Warmup (10 minutes)

1. **THINK-PAIR-SHARE:** Have students discuss the following question: *What kind of snacks do you usually eat? How do you choose when and what to snack on?* Invite students to share what they discussed with the entire class. As students share their responses, write down their answers on the board.

Introduction to Sodium (50 minutes)

1. **WATCH:** ***Smart About Sodium*** video **(1:30 minutes)**

   DISCUSS: *Why should people pay attention to the amount of sodium that they eat or drink? Why is it important to think about how what we eat now will affect our health later? What are some ways people could eat less sodium?* **(10 minutes)**

2. **PRE-READING:** ***Sodium Talk*** **(10 minutes)**

   Create a concept map that begins with the word "Salt" in the middle of a circle on the board or chart paper. Ask students to brainstorm what comes to mind when they think of salt. Next, write the words: "sodium," "preserve," "curing meats," and "nomadic" next to the brainstorm. Review the definitions in the Vocabulary Box. Then, ask students how these words might be connected to other words from the brainstorm. Draw a line connecting the vocabulary words to the words from the brainstorm.

3. **READ:** ***Sodium and Your Health*** informational text article **(30 minutes)**

   Have students answer the reading comprehension questions and then discuss as a group.

SESSION 1: Education Standards

Common Core English Language Arts, Grades 6–8
CCSS.ELA-LITERACY.RST.6-8.1: Cite specific textual evidence to support analysis of science and technical texts. **CCSS.ELA-LITERACY.RST.6-8.2:** Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
National Health Education Standards, Grades 6–8
5.8.7: Analyze the outcomes of a health-related decision. **8.8.2:** Demonstrate how to infuence and support others to make positive health choices. **FN1.8.14:** Summarize the benefits of limiting the consumption of saturated fat, trans fat, added sugar, and sodium.

8TH GRADE | SESSION 1 INFORMATIONAL TEXT ↘

Sodium and Your Health

Vocabulary words are in **bold** and **underlined**
See definitions on p. 8

11 2 8 1
Na
Sodium
22.98976928

Preserving Our Food

Early humans were typically **nomadic**, traveling from place to place rather than settling. They often only hunted and gathered enough food for each day. However, once people began creating settlements and farming the land, they began to experiment with ways to **preserve** their food over longer periods of time. Preserving the food they grew and harvested allowed humans to farm during the warmer months and still have enough food to survive the winter.

The element **sodium** (Na) has long played an important role in food preservation. When combined with other elements like chloride (Cl), nitrogen (N), or oxygen (O), sodium helps prevent food from spoiling quickly and reduces the growth of dangerous bacteria. People most commonly associate sodium with table salt or sodium chloride (NaCl). However, you may be surprised to learn that much of the sodium in our food comes from food processing and not from the salt shaker.

Sodium is added to some packaged foods during processing such as in **curing meat**, baking, thickening, enhancing flavor, as a preservative, or to keep foods moist. It can be found in many foods, from potato chips to breakfast cereal to hot dogs to soups.

Sodium is an essential nutrient that helps with the function of nerves and muscles. It also helps to keep the right balance of fluids in our bodies. Our bodies need small amounts of sodium to work properly, but ingesting too much can lead to health problems.

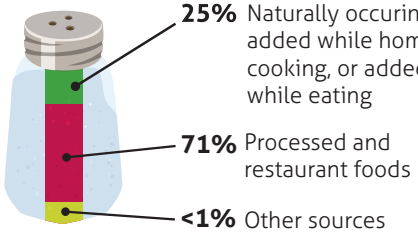
Most of us consume a lot more sodium than we need, which may contribute to health problems like high blood pressure (hypertension).

How is Sodium Consumed?

While it is important to be aware of how much salt you add to your food, most of the sodium you consume is already in your food by the time it is on your plate.

Only a small proportion of total sodium intake—just 25 percent—is from sodium naturally present in foods or from table salt added while cooking or at the table.[1]

Sources of Sodium Intake

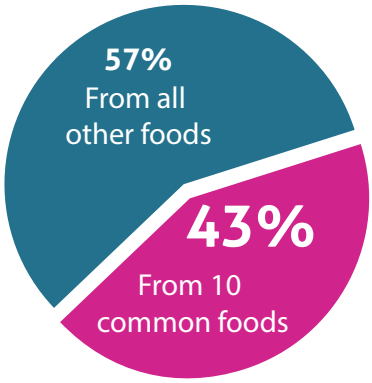


Most sodium consumed in the United States comes from salt added during the commercial food processing and preparation of packaged and restaurant foods, such as burgers, sandwiches, and tacos; rice, pasta, and grain dishes; pizza; meat, poultry, and seafood dishes; and soups.

Top Sources of Sodium in Children's Diets

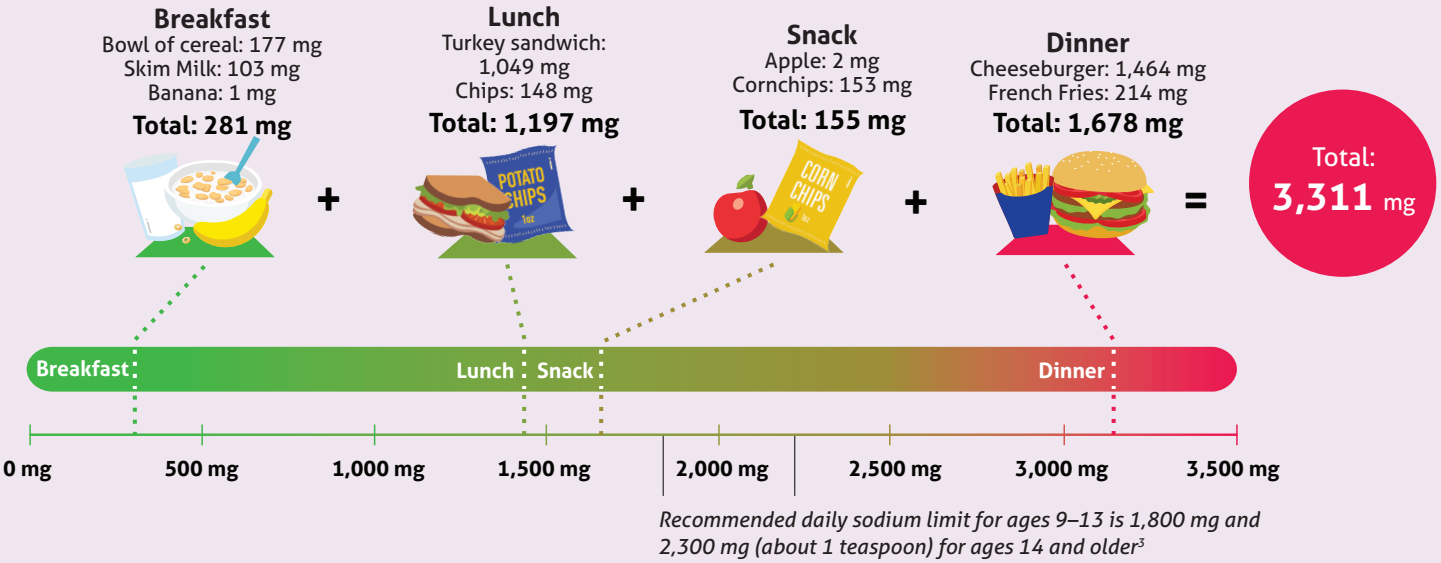
- Children ages 6 to 18 eat about 15 percent of sodium at breakfast, 30 percent at lunch, 39 percent at dinner, and 16 percent at snacks. Snacks alone account for a lot of children's sodium intake. Remember, foods can be high in sodium even if they don't taste salty.
- About 43 percent of sodium eaten by children comes from just 10 common food types:[2]

Top Sources of Sodium



- Pizza
- Bread and rolls
- Cold cuts/cured meats
- Sandwiches, such as cheeseburgers
- Soup
- Snacks, such as chips
- Pasta mixed dishes, such as spaghetti with sauce
- Mexican mixed dishes, such as burritos and tacos
- Chicken patties, nuggets, and tenders
- Cheese

Sodium Adds Up Quickly. Not all foods are high in sodium. But when you combine foods of varying levels as part of your daily eating pattern, sodium can add up quickly.



Recommended daily sodium limit for ages 9–13 is 1,800 mg and 2,300 mg (about 1 teaspoon) for ages 14 and older[3]

[1] Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. (2021, February 26). *Sodium and Food Sources.* https://www.cdc.gov/salt/food.htm.
[2] Centers for Disease Control and Prevention. National Center for Chronic Disease Control and Health Promotion, Division for Heart Disease and Stroke Prevention. (2014, September 9). *Reducing Sodium in Children's Diets.* https://www.cdc.gov/VitalSigns/pdf/2014-09-vitalsigns.pdf.
[3] U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2020, December). *Dietary Guidelines for Americans, 2020–2025.* 9th Edition. https://dietaryguidelines.gov.

How Does Sodium Affect Your Body?

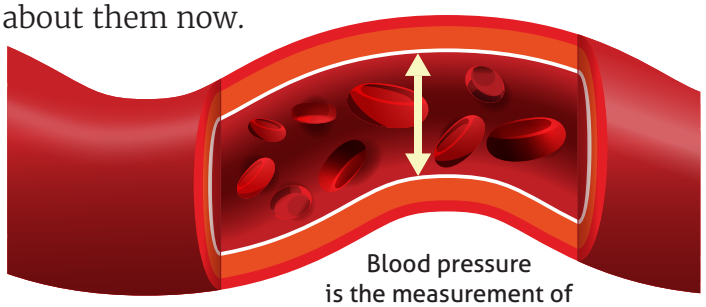
Sometimes when you eat certain foods, you can feel their impact on your body right away. For example, drinking a lot of carbonated drinks might make you burp a few seconds later, and eating a lot of potato chips might make you very thirsty. Some of the effects of consuming too much sodium can take much longer to show up, but they are still very serious. It can be strange to think about what your life will be like in 5 or 10 or 20 years when you're not even sure what your plans are for this weekend.

Making lower sodium choices now can help you stay healthy and active for the rest of your life.

Most Americans ages 9–18 consume too much sodium.[3] On average, **as sodium intake increases, the risk of developing high blood pressure also increases.**[4]

Your blood needs a certain amount of pressure to move through your blood vessels and bring oxygen and nutrients to all of your organs. However, if that pressure increases too much, it can put stress on your blood vessels and make it harder for your heart to pump blood where it needs to go. This is a condition known as high blood pressure or hypertension.

Over the long term, hypertension can increase the risk of heart attack, stroke, heart failure, vision loss, and kidney disease later in life. The effects of high blood pressure (hypertension) may develop slowly, but they can be very serious. Although these problems take years to develop, it's important to start thinking about them now.



Blood pressure is the measurement of force applied to artery walls.

Consequences of High Blood Pressure

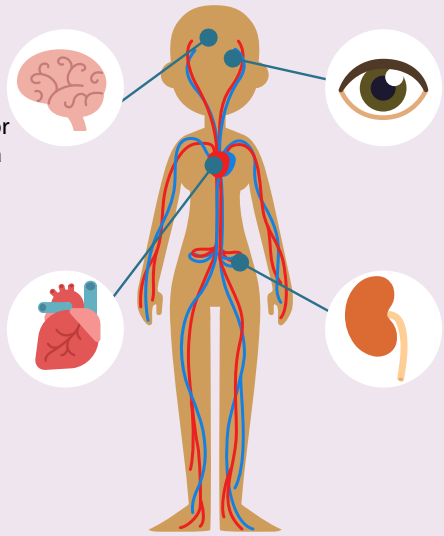
Over time, high blood pressure can damage your body and lead to illness or even death.

STROKE

High blood pressure can damage your blood vessels and cause them to clog or burst. About 8 in 10 people who have a first stroke have high blood pressure.[4]

HEART ATTACK

High blood pressure can result in blocked blood vessels. About 7 in 10 people who have a first heart attack have high blood pressure.[4]



VISION LOSS

High blood pressure can strain the blood vessels in the eyes and result in blindness.

KIDNEY DISEASE OR FAILURE

The kidneys' job is to filter your blood. High blood pressure can damage blood vessels near your kidneys and make it harder for them to do their job.

[3] See footnote 3 on p. 6.
[4] Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion. (2020, October 7). *Heart Disease and Stroke.* https://www.cdc.gov/chronicdisease/resources/publications/factsheets/heart-disease-stroke.htm.

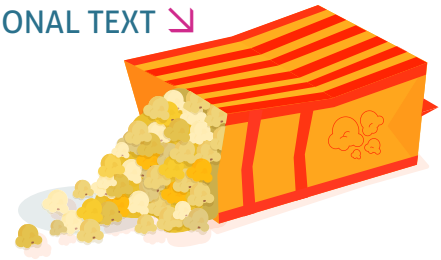
Picking Low Sodium Foods

Sodium is present in many foods, but if you know what to look for, choosing lower sodium options can be easy!

Skip higher sodium fast food meals and prepare foods at home so you can control the amount of salt and the ingredients that go into your food. With your family, try recipes that use salt-free herbs and spices instead of prepackaged sauces or salty seasonings. Condiments and sauces can also be high in sodium so add sauces like ketchup and salad dressing in moderation.

Choose unsalted, lower sodium, or lightly salted snack foods instead of regular versions.

Look for snacks that have less than 200 milligrams of sodium per serving.



Popcorn (popped in oil and buttered)

Nutrition Facts

1 serving per container

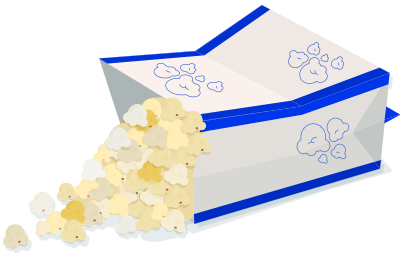
Serving size: 2 cups (208g)

Amount per serving

Calories 151

	% Daily Value*
Total Fat 9g	**19%**
Saturated Fat 4g	**19%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 200mg	**9%**
Total Carbohydrate 16g	**12%**
Dietary Fiber 3g	**11%**
Total Sugars 1g	
Includes 0g Added Sugars	
Protein 2g	
Vitamin D	0%
Calcium	0%
Iron	3%
Potassium	3%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.



Popcorn (air-popped, no butter or oil added)

Nutrition Facts

1 serving per container

Serving size: 2 cups (208g)

Amount per serving

Calories 62

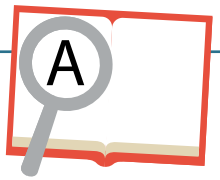
	% Daily Value*
Total Fat 1g	**0%**
Saturated Fat 0g	**19%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 1mg	**0%**
Total Carbohydrate 12g	**10%**
Dietary Fiber 2g	**9%**
Total Sugars 0g	
Includes 0g Added Sugars	
Protein 2g	
Vitamin D	0%
Calcium	0%
Iron	0%
Potassium	3%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Conclusion

Choosing lower sodium foods is an important part of a healthy lifestyle. Sodium is added to all kinds of foods, so it's important to know how to choose lower sodium options. Making healthier food choices may help you live a healthier life for many years to come.

VOCABULARY



Curing Meat: The process of preserving meat, which often includes adding sodium. Examples of cured meat are salami, sausage, and jerky.

Hypertension: Blood pressure is a measurement of the force exerted against the walls of your arteries as your heart pumps blood to your body. Hypertension is the term used to describe high blood pressure.

Nomadic: Roaming about from place to place.

Preserve: To prevent food from spoiling.

Sodium: A mineral generally consumed in the form of salt (sodium chloride) that your body needs in small amounts to work properly. However, when consumed in excessive amounts, sodium may raise the risk of high blood pressure (hypertension).

8TH GRADE | STUDENT ASSESSMENT ↘

Sodium and Your Health

Follow the directions to answer the questions below.

IF YOU ARE USING ACROBAT X OR PRO:

1. Open the form
2. Fill the form out
3. Go to File, Save As, choose where you would like to save the file, and then press Save

IF YOU WANT TO SAVE IN ADOBE READER:

1. Select File, Save As, Reader Extended, Enable Additional Features
2. This will allow users with the free Reader to save form data in an existing fillable PDF form
3. Click Save Now
4. Go to File, Save As, choose where you would like to save the file, and then press Save

1. What ideas in this article confirmed, challenged, or changed your thinking about sodium and your health?

2. Sodium is added to foods for various reasons. What are three ways that sodium affects our food?

1. _____

2. _____

3. _____

3. At your upcoming student health fair, you are asked to present to your peers about the impact of sodium on health. Provide three important pieces of information that you feel should be shared in order to motivate changes in their eating behaviors.

1. _____

2. _____

3. _____

4. Reflecting on your own food intake, what are three food items you eat that contain a high level of sodium?

1. _____

2. _____

3. _____

5. Look up the Nutrition Facts labels for one of the foods you listed in Question 4 and complete the blank label on the left. Then, find an alternative that is lower in sodium and complete its Nutrition Facts label on the right. Write the name of the food for each Nutrition Facts label.

FAVORITE FOOD ITEM: _____

LOWER SODIUM ALTERNATIVE: _____

Nutrition Facts

serving per container
Serving size

Amount per serving
Calories

	% Daily Value*
Total Fat	
Saturated Fat	
Trans Fat	
Cholesterol	
Sodium	
Total Carbohydrate	
Dietary Fiber	
Total Sugars	
Includes ___ g Added Sugars	
Protein	
Vitamin D	
Calcium	
Iron	
Potassium	

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Nutrition Facts

serving per container
Serving size

Amount per serving
Calories

	% Daily Value*
Total Fat	
Saturated Fat	
Trans Fat	
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Sodium	
Total Carbohydrate	
Dietary Fiber	
Total Sugars	
Includes ___ g Added Sugars	
Protein	
Vitamin D	
Calcium	
Iron	
Potassium	

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

6. List three changes that you can make to reduce the amount of sodium you consume.

1. _____

2. _____

3. _____

7. Imagine your friend or family member doesn't understand why choosing lower sodium foods is an important part of a healthy lifestyle. How would you convince them? Write a paragraph explaining your opinion.

SESSION 2

The Truth About Snacking and Sodium (60 minutes)

1. EXPLORE: *Shake Off the Salt* digital interactive **(15 minutes)**

Students can explore the digital interactive activity as a group or individually. Either set up students individually on the computers or tablets or put up the digital interactive on a projector and complete the activity together as a class. For this second option, you can facilitate participation in a few ways:

- Have the whole class vote at each snack selection point by having them raise their hands or put up cards (e.g., green for the snack on the left, or blue for the one on the right).
- Structure the choice at each selection point as a "human barometer" activity. In a "Human Barometer" activity, students express their attitudes and opinions by taking a stance on a topic and walking to the side of the room that matches how they feel about a statement. Have students walk to the side of the room representing the snack that is lowest in sodium. Have a few volunteers explain their reasoning, and pick the snack that has the most votes.
- Create a more competitive game by dividing the class into two groups and having each group go through the digital interactive. Whichever group chooses the least amount of sodium wins. You can even create a split-screen with the interactive in two different browser windows and alternate between the two, so the groups are taking turns between choices rather than waiting for the whole activity to be completed before getting to participate.

2. PROJECT: *Salty Snacks* Infographic **(45 minutes)**

PREPARATION NOTE: *Before the activity, identify digital tools and platforms to use in your classroom. Prepare instructions in advance to help students create infographics or brochures and publish completed projects. Alternatively, projects can be completed offline and shared through a "gallery walk" where the infographic or brochures are displayed around the classroom.*

Students will use digital tools and the **Turn Down the Sodium** Worksheet **(p. 15)** to complete this project. They will work in small groups to create a brochure or infographic about the sodium content in five popular snacks and beverages in school. Begin by asking students to list popular snacks and beverages and then survey at least 10 classmates to find out which snacks are most popular among their peers. Ask students to conduct research online or use the Nutrition Facts label on the package to find out how much sodium each snack contains per portion. If doing online research, instruct students to use the search terms "Nutrition Facts" and the name of the product, and use information from the company or manufacturer's website whenever possible. Finally, review the rubric with the class to make sure the groups understand the requirements for the project and how their work will be graded. Award a **Super Sleuth** badge to recognize students' ability to read the Nutrition Facts label.*

DISCUSS: *What information on the Nutrition Facts labels can help you choose a healthy snack? What are some examples of healthy snacks? Where can kids get this snack?* **(10 minutes)**

** For more information on how to read the Nutrition Facts label, visit: https://www.fda.gov/food/new-nutrition-facts-label/how-understand-and-use-nutrition-facts-label.*

Improvements (areas that need work)	Standards	Enhancements (evidence of Exceeding Standards)
	Provides connections to the USDA articles.	
	Organizes ideas, concepts, and information that engages and orients the audience.	
	Establishes context, point of view, and purpose for their campaign.	
	Supports each claim with relevant, reliable, and specific well-chosen evidence (facts, quotes, details).	
	Uses digital tools and text features to present findings to an audience.	
	Works collaboratively with other group members to persuade students to make healthy eating choices.	

SESSION 2: Education Standards

Common Core English Language Arts, Grades 6–8
CCSS.ELA-LITERACY.RST.6-8.9: Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
National Health Education Standards, Grades 6–8
5.8.6: Choose healthy alternatives over unhealthy alternatives when making a decision. **7.8.2:** Demonstrate healthy practices and behaviors that will maintain or improve the health of self and others.
International Society for Technology in Education Standards for Students
6. CREATIVE COMMUNICATOR: Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats, and digital media appropriate to their goals. **6A.** Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

Turn Down the Sodium

Work with your group to create a brochure or infographic about the sodium content in five popular snacks and beverages in your school. Survey at least 10 classmates. Then conduct research online or use the Nutrition Facts label on the package to find out how much sodium each snack contains per portion. Make sure to include this information in your infographic or brochure. Review the rubric with your group to understand how your work will be graded.

1. How much sodium do the five popular snacks and/or beverages contain per portion?

Snack or Beverage	Portion Size (amount you eat or drink)	Milligrams (mg) of Sodium

2. Which snacks and/or beverages are highest in sodium?

_____

3. Which snacks and/or beverages are lowest in sodium?

_____

4. How can students choose snacks and/or beverages that are low in sodium at school?

_____

Improvements (areas that need work)	Standards	Enhancements (evidence of Exceeding Standards)
	Provides connections to the USDA articles.	
	Organizes ideas, concepts, and information that engages and orients the audience.	
	Establishes context, point of view, and purpose for their campaign.	
	Supports each claim with relevant, reliable, and specific well-chosen evidence (facts, quotes, details).	
	Uses digital tools and text features to present findings to an audience.	
	Works collaboratively with other group members to persuade students to make healthy eating choices.	

SESSION 3

Choosing Healthy Snacks (55 minutes)

1. PRE-READING: Reading Predictions (10 minutes)

Give students a couple of minutes to find the Vocabulary Box and review the vocabulary words. Tell students they will read the ***Choosing Healthy Snacks*** informational text article. Ask students to discuss the title with a partner and make predictions based on the title and the vocabulary words.

2. READ: *Choosing Healthy Snacks* informational text article **(25 minutes)**

Have students answer the reading comprehension questions and then discuss as a group.

3. INVESTIGATE: Snack Healthy Challenge (20 minutes)

Distribute the **Snack Healthy Challenge** Worksheet **(p. 26)**. Assign students to work with a partner to create a healthy snack plan for 5 days. Ask students to find five snacks to try either at home or in school that are low in sodium or have no sodium. For healthy snack ideas, direct students to page 20 (student p. 3) of the ***Choosing Healthy Snacks*** informational text article. Students who use *MyPlate* as a guide can be awarded the **Star Achiever** badge if they include at least three of the five food groups in their plan.

Wrap-Up (10 minutes)

1. REFLECT: Ask students to reflect on these questions individually, and then discuss as a group: *Why is it important to limit the amount of sodium you consume? How can you make healthier snack choices? If you were to share one message from these activities with a family member or friend, what would it be?* Discuss as a class and record student responses on the whiteboard or chart paper.

SESSION 3: Education Standards

Common Core English Language Arts, Grades 6–8
CCSS.ELA-LITERACY.RST.6-8.1: Cite specific textual evidence to support analysis of science and technical texts.
National Health Education Standards, Grades 6–8
5.8.7: Analyze the outcomes of a health-related decision. **6.8.2:** Develop a goal to adopt, maintain, or improve a personal health practice. **FN1.8.19:** Describe major chronic diseases and their relationship to eating and physical activity patterns.
International Society for Technology in Education Standards for Students
3. KNOWLEDGE CONSTRUCTOR: Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others. **3A.** Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits. **6. CREATIVE COMMUNICATOR:** Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats, and digital media appropriate to their goals. **6A.** Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

8TH GRADE | SESSION 3 INFORMATIONAL TEXT ↘

Choosing Healthy Snacks

Soon you'll be starting high school. It's an exciting time. Things are not the same as they used to be. You have more independence, but also more responsibilities at school and home. You also make more decisions on your own about what and when to eat. You get to listen to your body and explore your taste preferences. You probably already know what foods and beverages are your favorites.

Vocabulary words are in **bold** and **underlined**
See definitions on p. 21

By now, you probably choose the types of foods you eat and the drinks you have between meals.[1] These seemingly simple choices can make a big difference in how you feel and your health. Think about the kinds of foods you snack on. Do you choose lots of sweet or salty **snacks**? Or do you reach for healthier options like whole grains, low-fat dairy, lean proteins, fruits, and vegetables?

Changing Snack Patterns

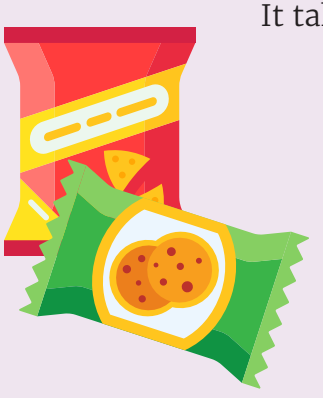
Kids today are snacking a lot more than they did in the 1970s. The amount of daily **calories** children consume from snacks has increased by almost 200 calories since then.[2] You would have to walk for about 1 hour and 20 minutes to burn off this many calories.[3]

It's important to choose snacks that will provide your body with the nutrients to move and be healthy, without too many extra calories from **added sugars** and **saturated fat**.

In the late 1970s, American children consumed an average of only one snack a day. Today, they snack about three times a day.[2]

How long will it take you to use up extra calories?

It takes about 1 hour and 20 minutes to burn off 200 extra calories.*



200 EXTRA CALORIES = 1 HOUR 20 MIN

OF WALKING TO BURN OFF EXTRA CALORIES

*Estimates are based on average weights of children ages 12–14. Those who weigh more than average will burn more calories. Those who weigh less than average will burn fewer calories. Calculations are based on the walking speed of 3 miles per hour.

[1] U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2020, December). *Dietary Guidelines for Americans, 2020–2025*. 9th Edition. https://dietaryguidelines.gov.

[2] Piernas, C., & Popkin, B. M. (2010). Trends in snacking among U.S. children. *Health affairs (Project Hope)*, 29(3), 398–404. https://doi.org/10.1377/hlthaff.2009.0666.

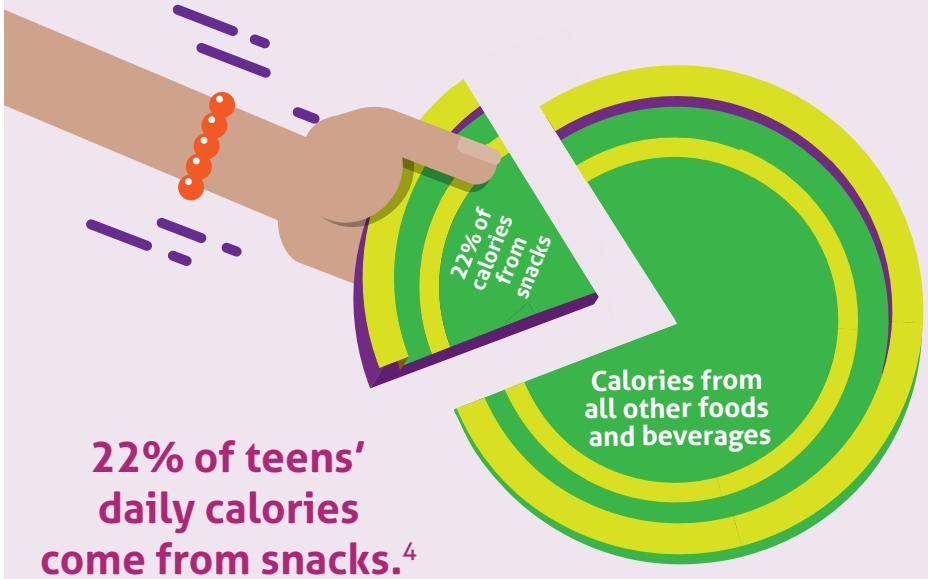
[3] Wang, Y.C., Hsiao, A., Orleans, C.T., Gortmaker, S.L. (2013). The caloric calculator: Average caloric impact of childhood obesity interventions. *American Journal of Preventative Medicine*, 45(2), e3–e113. https://doi.org/10.1016/j.amepre.2013.03.012.

The Impact of Our Snacking Choices

Our snack choices matter and can help us establish a healthy eating pattern for life. A healthy eating pattern limits saturated fat, added sugars, refined grains, and sodium, which are often found in snack foods that many middle school students choose. Eating too many unhealthy snacks with saturated fat, added sugars, refined grains, and sodium can have consequences. Choosing healthier snacks can help you create an eating pattern that is associated with positive health outcomes including reduced risk of obesity, heart disease, Type 2 diabetes, high blood pressure (hypertension), and some cancers.

Teens ♥ Snacks

Snacks may seem small and insignificant because they are not main meals. However, your snack choices really add up:



22% of teens' daily calories come from snacks.[4]

Snack Choices Add Up

Make sure you pay attention to what snacks you're choosing. The extra calories, added sugars, saturated fat, and sodium can add up through the day.

Comparing Snack Choices

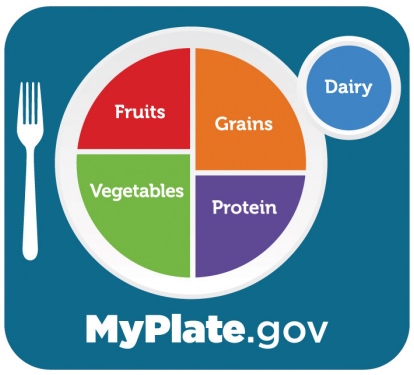
SNACK A	calories	added sugars (grams)	saturated fat (grams)	sodium (milligrams)
1 bag of potato chips (1 ounce)	152	0 g	1 g	126 mg
1 package of cookies (1 ounce)	397	25 g	6 g	249 mg
TOTAL:	**549**	**25 g**	**7 g**	**375 mg**

SNACK B	calories	added sugars (grams)	saturated fat (grams)	sodium (milligrams)
1/2 cup carrot sticks with 2 tbsp hummus	25	0 g	0 g	115 mg
1 medium banana	53	0 g	0 g	1 mg
TOTAL:	**78**	**0 g**	**0 g**	**116 mg**

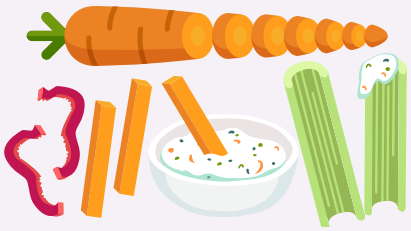
[4] U.S. Department of Agriculture, Agricultural Research Service. (2020). Snacks: Percentages of Selected Nutrients Contributed by Food and Beverages Consumed at Snack Occasions, by Gender and Age, *What We Eat in America*, NHANES 2017–2018. https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/1718/Table_25_SNK_GEN_17.pdf.

Five Ways to Snack Healthy

You can use MyPlate (see https://www.myplate.gov) as a guide to help you choose snacks that are part of a healthy eating pattern. MyPlate illustrates the five food groups (Fruits, Vegetables, Grains, Protein Foods, and Dairy) that are the building blocks for a healthy eating pattern using a familiar image—a place setting for a meal. Here are some tips for choosing snacks that are part of a healthy eating pattern.

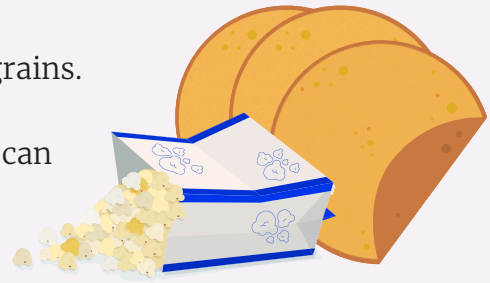


1 **Plan ahead.** Make a plan so healthier snack choices are quick and easy. You can save time by slicing up vegetables so they're ready when hunger strikes. Store sliced vegetables in the refrigerator to eat with healthier dips like hummus or low-calorie dressing.



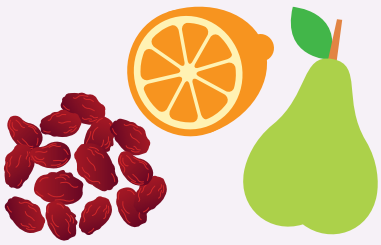
2 **Drink smart.** Grab a cup of low-fat (1 percent) or fat-free milk or calcium-fortified soymilk. Milk is high in calcium which helps keep your bones and teeth strong. Or try seltzer water with a splash of 100 percent fruit juice instead of sugar-sweetened beverages.

3 **Go for great whole grains.** Steer clear of snacks with refined grains. Instead, choose unsalted popcorn, whole-wheat crackers, or whole-grain tortillas. These snacks are higher in fiber, which can help you feel fuller longer than refined grain foods.



4 **Nibble on lean protein.** Choose lean protein foods such as hummus, a hard-boiled egg, beans, or unsalted nuts to fuel your day. Try dipping apple slices in peanut butter, or carrot sticks in bean dip. A little protein with your snack can help you feel fuller longer.

5 **Consider convenience.** Fresh, frozen, dried, or canned fruits can be easy "grab-and-go" options that need little preparation. Enjoy a pear, grab a handful of dried cranberries, or peel an orange to satisfy your cravings.



REMEMBER: Whole, unprocessed foods—like fruits and vegetables—are often not labeled, but they are also easy healthy snacks.

Comparing Snack Options

Food labels tell you the nutritional content of a food. You may already use the Nutrition Facts label in some way—maybe to check calories. But, the more familiar you are with the information, the more you'll want to use it daily to ensure the choices you make are healthy and balanced.

The Food and Drug Administration has presented a new Nutrition Facts label that is now used on packaged foods and beverages nationwide. This new label makes it easier to identify Calories, Serving Size, Saturated Fat, Sodium, Added Sugars, and Nutrients. Look to the right to see how to read both the old and new labels.

OLD LABEL

Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container 2

Amount Per Serving	
Calories 250	Calories from Fat 110
	% Daily Value*
Total Fat 12g	**18%**
Saturated Fat 3g	**15%**
Trans Fat 3g	
Cholesterol 30mg	**10%**
Sodium 470mg	**20%**
Total Carbohydrate 31g	**10%**
Dietary Fiber 0g	**0%**
Sugars 5g	
Proteins 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
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

NEW LABEL

Nutrition Facts

2 servings per container
Serving size 1 cup (228g)

Amount per serving	
Calories	**250**
	% Daily Value*
Total Fat 12g	**18%**
Saturated Fat 3g	**15%**
Trans Fat 3g	
Cholesterol 30mg	**10%**
Sodium 470mg	**20%**
Total Carbohydrate 31g	**10%**
Dietary Fiber 0g	**0%**
Total Sugars 5g	
Includes 0g Added Sugars	**0%**
Protein 5g	
Vitamin D 0mcg	0%
Calcium 260mg	20%
Iron 6mg	4%
Potassium 0mg	0%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Conclusion

Snacks are a big part of your day, so plan them wisely! You can feel good, grow, and stay healthy by using MyPlate as a guide to choosing your snacks.

VOCABULARY

Added Sugars: Sugars and syrups that are added to foods or beverages when they are processed by food companies or prepared by you.

Calorie: A unit used to measure the energy the body receives from foods and beverages. Calories are also used to measure the energy used by the body.

Portion Size: A "serving" is the amount of food recommended in consumer education materials such as MyPlate. A "portion" is the amount of a food you choose to eat at any one time—which may be more or less than a serving.

Refined Grains: Grains made of only the endosperm part of the grain kernel. Milling has removed the bran and germ part of the kernel, as well as some nutrients. Examples of refined grains include white flour, white bread, and white rice.

Saturated Fat: Fat that is usually solid at room temperature. The amount of saturated fat in a food is shown on the Nutrition Facts label, which is located on the food package. Eating too much saturated fat may raise blood cholesterol levels and increase the risk of heart disease.

Snack: A small amount of food eaten between meals.

Sodium: A mineral generally consumed in the form of salt (sodium chloride) that your body needs in small amounts to work properly. However, when consumed in excessive amounts, sodium may raise the risk of high blood pressure (hypertension).

8TH GRADE | STUDENT ASSESSMENT ↘

Choosing Healthy Snacks

Follow the directions to answer the questions below.

IF YOU ARE USING ACROBAT X OR PRO:

1. Open the form
2. Fill the form out
3. Go to File, Save As, choose where you would like to save the file, and then press Save

IF YOU WANT TO SAVE IN ADOBE READER:

1. Select File, Save As, Reader Extended, Enable Additional Features
2. This will allow users with the free Reader to save form data in an existing fillable PDF form
3. Click Save Now
4. Go to File, Save As, choose where you would like to save the file, and then press Save

1. Why are your snack choices an important decision for you to consider? Cite evidence from the article to support your answer.

2. How have snack habits changed since the 1970s and why do you think Americans snack differently?

3. How can snacks be helpful and/or harmful to your eating pattern and health?

4. Of the Five Ways to Snack Healthy listed on p. 20 (student p. 3), which one is the "best fit" for your daily life? Why?

5. Of the Five Ways to Snack Healthy listed on p. 20 (student p. 3), which one is the **hardest** for you to do? Why?

6. Look at the Nutrition Facts labels for these two snacks. Use these labels to complete the chart below.

CHOCOLATE CHIP COOKIES

Nutrition Facts

1 serving per container
Serving size 1 cookie

Amount per serving	
Calories	**108**
	% Daily Value*
Total Fat 6g	**5%**
Saturated Fat 3g	**13%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 62mg	**3%**
Total Carbohydrate 13g	**10%**
Dietary Fiber 0g	**0%**
Total Sugars 9g	
Includes 8g Added Sugars	**17%**
Protein 1g	
Vitamin D 0mcg	0%
Calcium 9mg	1%
Iron 0mg	0%
Potassium 42mg	1%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

WHOLE WHEAT CRACKERS (LOW SODIUM)

Nutrition Facts

1 serving per container
Serving size 4 crackers

Amount per serving	
Calories	**71**
	% Daily Value*
Total Fat 3g	**0%**
Saturated Fat 1g	**2%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 30mg	**1%**
Total Carbohydrate 11g	**8%**
Dietary Fiber 2g	**7%**
Total Sugars 0g	
Includes 0g Added Sugars	**0%**
Protein 1g	
Vitamin D 0mcg	0%
Calcium 9mg	1%
Iron 0mg	0%
Potassium 42mg	1%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

	Chocolate Chip Cookies	Whole Wheat Crackers
Sodium (mg)		
Added Sugars (g)		
Saturated Fat (g)		
Calories		

Based on the information provided above, circle the healthier snack.

Snack Healthy Challenge

Work with a partner to create a healthy snack plan of low sodium or no sodium snacks for 5 days. Find five snacks to try either in school or at home each day of the challenge. Use the Nutrition Facts labels on the packages or research nutritional information online to complete the table.

For healthy snack ideas, see page 20 (student p. 3) of the ***Choosing Healthy Snacks*** informational text article. Use *MyPlate* as a guide and receive an additional badge for including at least three of the five food groups in your plan.

Day	Name of Snack	Portion Size	Amount of Sodium (mg)	%DV of Sodium	Food Groups
1	Carrot sticks and hummus	1/2 cup of carrot sticks with 2 tablespoons of hummus	115 mg	6%	Vegetable
2					
3					
4					
5					

1. Which of these snacks would you like to have at snack time? Why?

_____

2. Review "Five Ways to Snack Healthy" **(p. 20/student p. 3)** in the ***Choosing Healthy Snacks*** informational text. Write your snack goal inside the badge area below.

Set a Healthy Snack Goal

How can you choose healthier snacks? Achieve your goal and earn a badge!

I will _____ in order to have healthier
(choice)

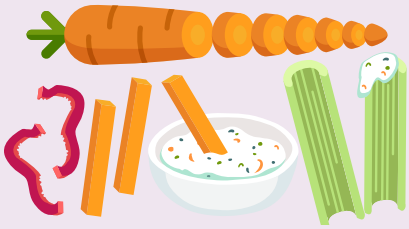
snacks _____ days this week.
(number)

Badge awarded on: _____

EXTENSION ACTIVITIES

Healthy Snacks Electronic Cookbook

Students will create a presentation slide for a healthy classroom snacks electronic cookbook, using presentation software or an online presentation tool. The slide must include a drawing or photo of the snack, the recipe, and a description that explains what makes their snack recipe a healthy option. Invite each student to add the finished slide to a classroom slide deck.



Daily Meal Plan Activity

Ask students to generate their own customized Daily Meal Plan at https://www.myplate.gov/myplate-plan and then examine how much snack choices alone contributed to the day's limit on sodium.

Set Healthy Eating Goals

Ask students to set daily food goals using the Start Simple with MyPlate app at https://www.myplate.gov/resources/tools/startsimple-myplate-app and invite students to share their goals and progress.

My Healthy Future Public Service Announcements

Ask students to work in small groups to create a video PSA or podcast that explains the long-term effects of an eating pattern that is high in sodium and the consequences of high blood pressure. The message of the PSA is intended to motivate children to adopt healthy habits for the future.

SUPPLEMENTAL READING ACTIVITIES

Before reading...

Building Background Knowledge

Begin the reading activity with anticipation questions to activate background knowledge. For this reading, students can discuss or journal about the choices they make every day or what influences their snack choices.

As a group, brainstorm words associated with a concept discussed in the reading. For this lesson, you can brainstorm the concept of "healthy choices." Circle the words that are related to the main ideas and ask students to predict the content.

During Reading...

Model Reading

Select a passage to read aloud. At the end of each sentence, pause and think of a question or comment you have about the text. Brainstorm and write down your question or comment on the board. This exercise shows students how to read a text closely.

Word Study

Encourage students to keep a personal dictionary. Each entry can include the following information. Below is an example:

Word	Definition	In A Sentence	Analogy: Below is an Example
Sodium	A mineral generally consumed in the form of salt (sodium chloride) that your body needs in small amounts to work properly. An eating pattern that is too high in sodium may raise the risk of high blood pressure.	Canned foods can be high in sodium.	Sodium is like soap detergent. Using the right amount helps clean your clothes, but using too much can cause the washing machine to malfunction.

After Reading...

Formative Assessment

If the reading comprehension exercise is assigned for homework or completed at a different time, use an exit slip to check quickly for understanding of the reading. It takes a few minutes to complete and can help identify struggling students and the areas in which to provide further explanation and clarity.

3-2-1 Exit Slip

Three important words from the reading:_____

Two facts I learned:_____

_____

One question I have:_____

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