

## Healthy Eating: Are We What We Eat?

## Unit Summary

Have you ever heard the saying, you are what you eat? In this health unit, students learn the importance of planning and eating a healthy diet. Students learn the food pyramid and how to categorize foods within each category. They also learn about healthy eating habits, and most importantly, they learn how choosing healthy habits will affect how they grow and learn. Students create their own slideshow presentations to show how they make healthy food choices and how those choices affect them. They also create posters to show a menu of a meal of their choice.

## Curriculum-Framing Questions

## - Essential Question

 Are we really what we eat?- Unit Questions

How do healthy eating habits help me grow bigger and live longer? How do advertisements help us make our food choices?

- Content Questions

What are the food groups?
What is the food pyramid?
What foods belong in a healthy diet?

## Assessment Processes

View how a variety of student-centered assessments are used in the Healthy Eating: Are We What We Eat? Unit Plan. These assessments help students and teachers set goals; monitor student progress; provide feedback; assess thinking, processes, performances, and products; and reflect on learning throughout the learning cycle.

At a Glance<br>Grade Level: K-2<br>Subjects: Science, Math<br>Topics: Food Pyramid, Food<br>Groups, Healthy Eating<br>Higher-Order Thinking<br>Skills: Analysis, Decision<br>Making<br>Key Learnings: Data<br>Analysis, Graphing<br>Time Needed: 3 weeks, 45<br>minutes per day

## Things You Need

Assessment
Standards
Resources

## Instructional Procedures

## Getting Started

Start the unit with a picture of two cereal boxes. One of the boxes should be a sugar-filled cereal with a picture of a character on it. Another box of cereal should be a healthy cereal with a plain cover with no characters. Take a poll by having students place a sticky dot under the cereal box they would rather buy and eat. After everyone has voted, begin a class discussion posing questions about why they chose the cereal they did, if they have ever eaten one of the cereals before, and if they would try the one they did not choose. Pose the Essential Question, Are we really what we eat? Elicit student answers around this question. Ask for examples about foods they eat and how the foods make them healthy. Chart student responses and post the chart for students to refer to throughout the unit.

Show the unit introduction slideshow to involve students in identifying healthy food. This slideshow will help to assess students' prior knowledge of healthy foods and gauge students' needs.

## Learning the Food Pyramid

To answer and explore the Content Questions, What are the food groups? and What is the food pyramid? go over the Food Pyramid chart with students. Point out each of the food groups. Have students give examples of each and add foods that they may not come up with. Be sure to point out that the meat group contains nuts and eggs as well. Once students get an idea of how the food pyramid is set up, read the book The Edible Pyramid: Good Eating Every Day, by Loreen Leedy. Use the MyPyramid.gov* Web site to explore activities and facts about the food pyramid.

## Examining Student Lunches

Before beginning the next activity, send a letter home to parents asking them to pack a sack lunch for their children as part of a classroom activity. As a backup plan, have a few school sack lunches on hand for students who do not bring one.

To begin exploring the idea of healthy foods versus unhealthy foods, have students take out the lunch they brought to school. Make sure the food pyramid is out and viewable by all students. Have students attempt to group their foods according to what they have learned during the food pyramid activity. Students use the tally food pyramid sheet to keep track of their lunch items. After students tally their lunch items, have them look at how well-planned their lunch is. Post the following guiding questions for students to see:

- Did you have food from different food groups?
- Did you have too much of one food group or too little?
- Do you think your lunch is healthy?
- What could you get rid of that would make your lunch healthier if it is not healthy?

Hold a whole-class discussion around these questions. Have students fill out the How Healthy Is Your Lunch? assessment to document their understanding of the food pyramid and healthy eating. Some students may need help dictating information to a volunteer or aide. Others may draw pictures and/or write words.

## Collecting Data

To help reach a broader audience and gain insight, create a survey with input from students about healthy eating. Tell each pair of students to survey at least five other students in the school or classroom. Have students then analyze and put the data into a graph. Have students interview other students about important topics related to healthy eating. Share the survey questions with students and walk through an example with them by showing students how to ask the survey questions and tally responses. Make sure students bring along a small food pyramid example so the students answering the questions have a visual aid to refer to. Show students the survey example. Ask for questions and check for understanding. Next, have students create graphs using the data collected and post them around the room. Students can create the graphs using a spreadsheet program or graph paper. Give students an opportunity to do a gallery walk so they can see what other graphs look like. Hold a whole-class discussion around the graph findings and record student observations on chart paper. Students refer to the results later when they create their advertisements. Before moving on, have students fill out the graph assessment.

## Creating Slideshow Presentations

In a whole-class discussion, brainstorm a list of fats and sweets that could be placed in the top triangle of the food pyramid. Record students' ideas on chart paper using a brainstorming cluster or other graphic organizer. Keep this chart up for future reference. After students have brainstormed these foods, ask students to explain why fats and sweets are not considered healthy foods. Facilitate a class discussion about what happens when unhealthy foods are eaten. Prompt students with related questions, such as:

- What happens to your body when you eat unhealthy foods?
- How does too much sugar make your body feel?
- Why do you think fats and sweets are at the top of the pyramid with very little servings?

Next, tell students that they will create slideshow presentations about healthy eating. Have each student think about one unhealthy food and one healthy food. After students have thought about their two foods, tell students to write the food names on strips of paper, so they can use them to create their slideshow presentations. Show students the Instead Of... slideshow example to ensure they understand the project expectations. Model self-direction by using the slideshow assessment with students as you show them the example. You may want to have a parent volunteer or aide available to assist students while they complete their computer work. Some students may need to dictate their words and point to the clip art they would like to use. Have students fill out the slideshow assessment independently or with an adult while viewing their finished product. Have students invite a peer to watch their finished slideshow and give positive feedback using the partner form.

## Creating Healthy Menus

Students create a menu for the meal of their choice. Show students the healthy menu checklist and the menu example. Check for student understanding. Place students into pairs and have them choose a name for their restaurant and for which meal they would like to plan a healthy menu. Using the food pyramid, students must choose at least one food from each of the food groups and list which group the food belongs to. Give students a blank pyramid to draw pictures, write words, or cut out pictures from magazines that match the food groups. After students have chosen the foods necessary for their menu, have students work at the computers to create their menus. Provide a template so students can fill in their information. If possible have parent volunteers or aides help students as needed. Monitor progress by meeting with each pair and reviewing their menu scoring guide with them. Collect the menus and make a class book for the class and others to read.

Discuss the question, How do healthy eating habits help me grow bigger and live longer? Elicit a whole-class discussion by choosing different menus and asking questions regarding how choosing certain foods from each of the menus can make us healthy and live long lives. Prompt students to think about how unhealthy choices can affect us in a bad way and why choosing healthy foods affects us in a good way.

## Understanding How Advertising Can Influence Food Choices

Cut out several advertising campaigns related to food, healthy and unhealthy. If possible, bring television advertisements to class as well. Have students brainstorm ideas about what would make them buy the food or not. List the reasons on chart paper. Pose the question, How do advertisements help us make our food choices? Conduct a wholeclass discussion around the question and elicit student ideas. Have students take the survey results from the previous

Collecting Data activity to help them decide what healthy food to target in the advertisement. For example, if their results showed that many people are not eating enough vegetables, they would choose a vegetable to target in their advertisement poster. After students choose the target food from one of the food groups, have them create individual advertisements using the techniques in the advertisement examples viewed in class. On a sheet of construction paper, have students create their advertisements. As a class, brainstorm key components that the advertisements should have and list them on a chart for students to refer to while creating their posters. Post the advertisement posters around the school to provide recognition of student learning and to help other students make healthy eating choices.

## Wrapping Up the Unit

Revisit the Essential Question, Are we really what we eat? Have students write words, draw pictures, or dictate to you their answer to the question. Record anecdotal notes as you talk with students about this question to gain insight on their learning during their unit.

## Prerequisite Skills

- Basic computer skills
- Basic keyboarding skills


## Differentiated Instruction

## Resource Student

- Make modifications as dictated in the student's IEP
- Pair the student with a more able buddy
- Have the student work with parent volunteers or teacher's aides
- Provide templates and scaffolding
- Allow for more oral work and less written work, as appropriate


## Gifted Student

- Encourage broad and deep research
- Have students work as "project helpers" or "computer assistants" when appropriate


## English Language Learner

- Encourage support from first language speakers who are more proficient in English
- Provide extra time for completing the assignments
- Have parent volunteers or teacher's aides provide assistance
- Offer teacher-created templates and graphic organizers for the student to fill in
- Use visuals, manipulative learning tools, and illustrated text


## Credits

A teacher participated in the Intel $®$ Teach Program, which resulted in this idea for a classroom project. A team of teachers expanded the plan into the example you see here.

## Assessment Plan



Before project work begins

Assessment Timeline


After project work is completed complete tasks


The introduction slideshow is shown to gauge student needs, help students access their prior knowledge, and encourage discussion about healthy eating. The use of formal and informal questioning occurs throughout the unit to tap students' prior knowledge and spark discussion. Anecdotal notes taken periodically throughout the unit can be used to document student understanding and thinking. The How Healthy Is Your Lunch? assessment assesses students' understanding of how well they understand the importance of making healthy eating choices. The assessment can be used as an indicator to identify concepts that may need to be readdressed in class. The slideshow assessment, Healthy Menu checklist, and graph assessment are used to assess students' products. Students use the partner form to give and receive feedback. Student growth can be assessed while students do a final reflection on the Essential Question.

Designing Effective Projects: Healthy Eating Content Standards and Objectives

## Targeted Content Standards and Benchmarks <br> Oregon Health Standards

- Identify the food groups in the current USDA recommended guidelines.
- Recognize the importance of variety and moderation in food selection and consumption.
- Identify how healthful eating habits can lead to wellness.
- Distinguish the impact advertising has on food choices.


## Oregon Mathematics Standards

Collect and Display Data:
Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.

- Pose questions and gather data about themselves and their surroundings.
- Sort and classify objects according to their attributes and organized data about the objects into categories.
- Represent data using concrete objects and pictographs.

CCG: Data Analysis and Predictions:
Develop and evaluate inferences and predictions that are based on data.

- Answer simple questions related to data displayed in pictographs, including which result occurred the most or least often.


## Student Objectives

Students will be able to:

- Recognize and identify the food groups in the food pyramid
- Categorize healthy and unhealthy foods related to each of the food groups
- Plan a healthy diet
- See how advertising impacts our food choices in positive and negative ways
- Gather data and represent data in graphs

Designing Effective Projects: Healthy Eating

## Resources

## Materials and Resources

## Printed Materials

- Leedy, L. (1996). The edible pyramid: Good eating every day. New York: Holiday House.


## Supplies

- Food Pyramid poster
- Cereal boxes
- Food advertisements


## Internet Resources

- USDA
www.mypyramid.gov/kids*
Activities and materials about the food pyramid designed for children ages 6 through 11


## Technology-Hardware

- Computers for creating slideshows and menus and to access resources
- Printer for printing student products
- Internet connection to enable research
- Television for viewing advertisements
- VCR for videotaped advertisements


## Technology-Software

- Database or spreadsheet software for graphing activities
- Web browser to research and complete activities throughout the unit
- Word processing to create menus
- Slideshow software to create slideshow presentations

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## Healthy or Not Healthy?

Bell Peppers


YES
NO

## Good Try!

- Bell peppers are definitely a healthy food to eat. They are in the vegetable food group!
- Keep trying!

Try again!

## Hooray!

- Bell peppers are a healthy food and are in the vegetable food group!


Click to continue!

## Healthy or Not Healthy?

- Soda



## Good Try!

- Most sodas have tons of sugar in them. Too much sugar is not healthy for you. Many sodas contain caffeine too.
- Choose water, milk, or fruit juice instead.

Try again!

## Hooray!

- Soda is a sugary drink. What are some other drinks you could choose instead of soda?


How Healthy Is Your Lunch?

Name $\qquad$

Use your tally sheet to help you answer the questions.

1. Did you have food from different food groups? ..... YES
NO2. Did you have too much of one food group?YESNO
2. Did you have too little of one food group?YESNO
3. Do you think your lunch is healthy?YESNO
4. What food could you get rid of that would make your lunch healthier?
5. What food could you add to your lunch to make it healthier?
6. What makes a healthy lunch? Draw a picture of a healthy lunch below:

Name:
l chose one
unhealthy food.
I chose clip art to
match my healthy
food.
mase clip art to
unhealthy food.
I phos the food group
my healthy food healthy
belongs in.
() $=1$ did my very best.
$\theta=1$ did oleay. I could have tried harder.
: $:$ I need to improve and worle much harder.

## Healthy Eating Menu Checklist

|  | Check When <br> Complete |
| :--- | :---: |
| We chose at least one food from each of the food groups. |  |
| We listed which food group each food belongs in. |  |
| We chose a name for our restaurant. |  |
| We included at least two clip art pictures that match our <br> foods. |  |
| We followed directions and put our words and pictures in the <br> right places. |  |
| We asked another group for feedback on our draft. We used <br> their suggestions to make our menu better. <br> Suggestions: | Group Members: |

## Analyzing My Graph

Name $\qquad$

1. Which food group has the most?
$\qquad$
2. Which food group has the least?
3. Are any of the food groups the same? If so, which ones?
$\qquad$
4. What does your graph tell you?
$\qquad$
$\qquad$
5. Does your graph show that the people you asked are healthy eaters? How do you know this?
$\qquad$
$\qquad$
6. Does your graph show that the people you asked choose unhealthy foods to eat? How do you know this?
$\square$ I listened to my friend's ideas.

$\square$ We worked together as a team.


## $\square$ We talked about our work in a polite way.

$\square$ We did our best!


What is for lunch today?

## Healthy Foods Survey

How many of each of the food groups have you eaten today? Ask at least 5 people and tally their answers in the table.

|  |  |
| :--- | :--- |
| Fruits |  |
| Vegetables |  |
| Dairy |  |
| Breads <br> and <br> Grains |  |
| Meat |  |
| Fats and <br> Sweets |  |

* After you collect all of the data, create a graph to show what you have learned.*


## Healthy Foods Survey

How many of each of the food groups have you eaten today? Ask at least 5 people and tally their answers in the table.

|  | Tally Marks |
| :---: | :---: |
| Fruits (d) | WK IIII |
| Vegetables Tis Thill |  |
| Dairy 0 |  |
| Breads and Grains |  |
| Meat | THe The TiN |
| Fats and Sweets |  |

* After you collect all of the data, create a graph to show what you have learned.*


## An example graph using the data collected:



## Instead Of...

Cookies


Diana

## I Choose... <br> Strawberries



They are in the fruit group. I need 2 servings a day.

## Healthy Foods...

- Help me grow bigger
- Be smarter
- Run faster



