May – Lesson Plan Grades 2-3

FOCUS ON FRUITS

Begin each nutrition education lesson with a short physical activity break from the card set provided by IDPH. Have fun and get active with your students!

Objectives
Explore the taste and appearance of strawberries and rhubarb.

Learn that fruits such as strawberries and rhubarb are good sources of vitamin C.

Identify multiple ways to eat strawberries and rhubarb.

Background
Strawberries are thought to have originated with the Romans, maybe as far back as the Greeks. The name “strawberry” may have resulted from children in the 19th century, who threaded the berries on straw and sold them.

Strawberries are grown on a small, perennial (survives more than one growing season) plant that must be harvested by hand. Strawberries can be grown in Iowa during the spring. They are the first fruit to ripen in the spring. Over three-fourths of the nation’s strawberries are grown in California. The growing season for strawberries in California lasts almost year-round.

After strawberries are harvested, they are taken to refrigerated facilities within 24 hours. California strawberries are shipped to Iowa by refrigerated trucks. Hand picking and refrigerating immediately ensures good quality to far-away locations. California also ships strawberries to Japan, Mexico and Canada.

We eat the “fruit” part of the plant. The red fruit grows after a small white blossom blooms. Each strawberry has about 200 seeds on the outside skin. In Iowa, we harvest the fruit in June.

Strawberries contain vitamin C, folic acid, potassium and fiber. Eight fresh strawberries provide approximately the same amount of vitamin C as an orange.

Rhubarb is a very old plant that dates back to ancient China in 2700 BC. At that time, it was used for medicinal purposes. The roots of the Chinese variety are still used in medicine today.

Marco Polo is thought to have influenced the introduction of rhubarb to Europe. The first record of rhubarb as a food was in 1778 in Europe (used as a filling for tarts and pies). Rhubarb was thought to have come to the United States in

Supplies Needed
May
Pick a better snack™ & Act bingo card

2nd Grade: “Strawberries and Rhubarb” worksheet

3rd Grade: “Strawberry Fun Facts” worksheet

Tasting Opportunities
Featured Fruits:
Strawberries
Rhubarb
Rhubarb is a perennial plant that we usually eat and harvest in the spring, when the stalks are tender. It can be grown in Iowa. Only the stalks (petioles) should be eaten because the leaves contain moderately poisonous oxalic acid.

Rhubarb can be eaten raw, but you may want to dip it in sugar because it is very sour. It can also be made into fillings for breads and cakes, as well as into pies, jams and jellies.

**Web Site Resources**

- www.idph.state.ia.us/pickabettersnack
- www.fruitsandveggiesmorematters.org
- www.choosemyplate.gov
- www.fns.usda.gov/eatsmartplayhard
- www.rhubarbinfo.com

### Do the Activity:

<table>
<thead>
<tr>
<th>2nd Grade</th>
<th>3rd Grade</th>
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<tr>
<td>Distribute a “Strawberries and Rhubarb” worksheet to each student.</td>
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<tr>
<td>Divide the students in groups of 3-4. Distribute the “Strawberry Fun Facts” worksheet. Did any of the groups answer all of the questions correctly? Another option would be to turn it into a game by dividing into teams using a format such as Jeopardy or Who Wants To Be a Millionaire? This could be done using an overhead projector.</td>
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### Talk It Over:

- What part of the strawberry plant do we eat? *(the fruit)*
- What part of the rhubarb plant do we eat? *(the stalk; we do not eat the leaves because they contain moderately poisonous oxalic acid)*
- Can strawberries and rhubarb be grown in Iowa? *(yes)*
- Do we need to grow new rhubarb and strawberry plants each year? *(No, they are perennial plants)* Bring a strawberry plant to show the class, if available.
- Has anyone picked strawberries at home or at a farm? Has anyone picked rhubarb?

### Apply:

When might you eat strawberries? *(for breakfast, lunch, snack, anytime)*
Tasting Opportunity

There are many ways to eat strawberries. Raise your hand if you have eaten strawberries in any of the following ways:
- Fresh, holding the leaves and eating from the bottom all the way up to the leaves
- Fresh, cut up on cereal
- In a fruit salad
- In a smoothie
- In muffins

How many of you have eaten fresh rhubarb? Is it sweet or sour? (It is very sour and can be dipped in sugar.)

Have you eaten rhubarb that has been baked or cooked as a filling in breads, cakes, or pie?

Can you think of other ways to eat rhubarb or strawberries?

Strawberries provide us with vitamin C. Vitamin C helps cuts heal and fight infections. Rhubarb also has vitamin C, along with fiber to help food move through our bodies.

Do you think you would get more strawberries in a strawberry smoothie made with strawberries, bananas, ice, yogurt, and orange juice, or from strawberry soda pop? (You were right if you thought you would get more strawberries in the strawberry smoothie. Strawberry pop doesn’t actually have strawberries in it. It just has flavor of strawberries.)

Have students wash their hands. Wash the strawberries for the students to sample. Have the students hold the stem and eat!

Wash and cut the rhubarb for the students to sample. They may want to dip it in sugar.

They can then put an "X" through the bingo square of the fruit that they sampled.

How would you get a strawberry ready to eat as a snack?
- Strawberry – Wash. Eat. (How easy is that?)

How would you get rhubarb ready for a snack?
- Rhubarb – Wash. Slice. Eat. (How easy is that?)

On the back of the Pick a better snack™ & Act bingo card for
each month, there is information for their parents and grandparents. There is a family snack recipe, too!

<table>
<thead>
<tr>
<th>Extend the Activity</th>
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<tbody>
<tr>
<td><strong>Art, Music &amp; PE</strong></td>
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<tr>
<td>Read <em>Eating Fractions</em> (Bruce McMillan, Scholastic Press, 1991). Use colored paper or newspaper to create food fractions based on examples from the book.</td>
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<tr>
<td><strong>Language Arts &amp; Reading</strong></td>
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<tr>
<td><strong>Math</strong></td>
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<tr>
<td>Make strawberry smoothies for the class to enjoy as a healthy snack. Have the students measure the ingredients. (1 cup fresh or frozen strawberries, 1 cup low-fat milk, ½ cup low-fat vanilla yogurt, 4 ice cubes; mix in blender until smooth; enjoy!!)</td>
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<tr>
<td><strong>Science &amp; Health</strong></td>
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<tr>
<td>Grow a strawberry patch. Research instructions online.</td>
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<td><strong>Social Studies</strong></td>
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<tr>
<td>Read <em>From Seed to Plant</em> by Gail Gibbons, Holiday House, 1991.</td>
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<tr>
<td>Conduct class research to find out what type of climate is appropriate for growing strawberries. Use the information collected to determine what states are best suited to grow strawberries.</td>
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<tr>
<td>The Berry Book by Gail Gibbons, Holiday House, 2002 contains historical and scientific facts about a wide variety of berries.</td>
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Strawberries and Rhubarb

Use the following words to fill in the blanks on the statements below. Then find the words in the puzzle.

California    Iowa    spring    vitamin C
birds    perennials    stalks    jam
sour    two hundred

1. Strawberries and rhubarb can be grown in ______________, but most of the ones we buy at the store are grown in ______________.

2. Rhubarb has a ______________ taste if sugar is not added.

3. A strawberry has about ______________ tiny seeds on the outside.

4. Strawberries and rhubarb are harvested in the ______________ in Iowa.

5. Rhubarb and strawberries can be made into jelly and ______________.

6. We eat the ______________ of rhubarb.

7. Strawberry and rhubarb plants come up every year. These kinds of plants are called ______________.

8. The seeds on the outside of the strawberry and its red color are attractive to ________.

9. Strawberries are a good source of ______________.
Answer Key
Strawberries and Rhubarb

Use the following words to fill in the blanks on the statements below. Then find the words in the puzzle.

California    Iowa    spring    vitamin C
birds    perennials    stalks    jam
sour    two hundred

1. Strawberries and rhubarb can be grown in ___Iowa________, but most of the ones we buy at the store are grown in __California____.

2. Rhubarb has a ___sour_________ taste if sugar is not added.

3. A strawberry has about ____two hundred___ tiny seeds on the outside.

4. Strawberries and rhubarb are harvested in the ____spring_____ in Iowa.

5. Rhubarb and strawberries can be made into jelly and ____jam_________.

6. We eat the ___stalks________ of rhubarb.

7. Strawberry and rhubarb plants come up every year. These kinds of plants are called ___perennials____.

8. The seeds on the outside of the strawberry and its red color are attractive to ___birds____.

9. Strawberries are a good source of _vitamin C_____.
Strawberry Fun Facts

Eight strawberries have more vitamin C than an orange.  

- True
- False

How many towns in the United States are named Strawberry?  

- 3
- 30
- 300
- 3,000

How much did the biggest strawberry in history weigh?  

- 1 ounce
- 8 ounces
- 14 ounces

How long does it take for a strawberry to mature from a flower to fruit?  

- 7 days
- 14 days
- 30 days

How many pounds of strawberries does California produce each year?  

- 1,000
- 1 million
- 1 billion

How many strawberries would it take to fill the Titanic?  

- 7,000
- 700,000
- 7 billion

Strawberries cannot grow in Iowa.  

- True
- False

Strawberry plants are perennial.  

- True
- False
Answer Key

Strawberry Fun Facts

Eight strawberries have more vitamin C than an orange. True

How many towns in the United States are named Strawberry? 3
Strawberry, AR; Strawberry, AZ; Strawberry, CA

How much did the biggest strawberry in history weigh? 8 ounces

How long does it take for a strawberry to mature from a flower to fruit? 30 days

How many pounds of strawberries does California produce each year? 1 billion

How many strawberries would it take to fill the Titanic? 7 billion

Strawberries cannot grow in Iowa. False

Strawberry plants are perennial. True

Fun Facts from the California Strawberry Commission