

Sweet Potato

GRADE
K-1

Month: November

Time Required: 30 minutes

Alternative Tastings: Carrot, Radish, Jicama, Potato

Lesson Goals

- Students will increase their knowledge of fruits and vegetables.
- Students will learn to try new fruits and vegetables and increase their preference for them.
- Students will learn that their peers like to eat fruits and vegetables.
- Students will learn how to ask their parents/caregivers for the fruits and vegetables tasted in class.

Lesson Objectives

- Students will be able to describe characteristics of root vegetables.
- Students will be able to identify root vegetables as grown underground.

Materials

- One fresh sweet potato
- Variety of at least four fresh root vegetables (Ex: one carrot, one radish, one beet, one potato)
- Cooking/tasting materials

Preparation

- Consider any food prep that should be completed before the lesson rather than during the lesson.

Recommended Books

“Oliver’s Vegetables” by Vivian French

“The Vegetables We Eat” by Gail Gibbons

“Strega Nona’s Harvest” by Tomi de Paola

Standards Connection

This lesson supports the following Iowa Core standards.

Health Education

[Standards 1, 2, 3, 4, 5, 7, 8](#)

Science

Kindergarten - [K-LS1-1](#).
LS1.C Plant needs

First grade - [1-LS1-1](#).
LS1.A: Structure and function

Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science Connection: Roots

Engage

1. Introduction: 2 minutes

The “Introduction” section is a time to introduce yourself, recap previous lessons, establish norms, or introduce the day's lesson.

2. Engage Activity: 8 minutes

The “Engage Activity” section has two purposes: 1) to activate students' prior knowledge and 2) to engage every student.

Gather students in a large circle. *Today we'll be talking about a vegetable that lives in a very special place. But first, I'd like to know something special about where you live.* As an example, share your favorite thing about where you live.

Pass the Potato:

- Ask the question, *what is your favorite thing about where your family lives?*
- *Think to yourself quietly.* Have students close their eyes, put their fingers to their temples, and think real hard.
- Then, pass a sweet potato around the circle, while you play music. Stop the music randomly. Whomever has the sweet potato will share their answer aloud.
- Physical Activity: After a student shares, the class will celebrate them with a “firework clap”. All students crouch down, then together you slowly reach for the sky, making a firework noise. When you reach the top, everyone will jump and clap their hands together, making a “shhhhh” noise.
- Repeat several times.

Explore

3. Experiential Learning: 10 minutes

This is a time for students to familiarize themselves with what you'll be tasting. The best way to do this is through a hands-on or exploratory activity.

Have students sit (opportunity for 3 deep breaths).

Today we're going to try sweet potatoes. Sweet potatoes are a type of vegetable called a “root vegetable.” There is something very special about where root vegetables live - they grow underground! There are many types of root vegetables that grow underground and a sweet potato is one kind that we will taste today.

Split students into four smaller groups and give each group one root vegetable (Ex: carrot, radish, beet, potato). Ask students to observe the root vegetable using their senses and compare it to a sweet potato with describing words. As a group, they will come up with three words to describe the root vegetable. Classroom teacher should work with two small groups as PABS educator works with the others. *Option: split the class into two small groups (rather than four) and the classroom teacher can work with one group.*

Once each group has come up with their three words, compare the words as a class. Consider writing the description words on the white board. Did some of the groups come up with similar words? Discuss common traits of root vegetables: hard, solid, bumpy, dirty.

Explore (cont'd)

4. Tasting Activity: 3 minutes

The “Tasting Activity” section is when students get to try the fruit or vegetable. Don’t forget to review your food tasting norms (for example, “don’t yuck my yum”).

Before you pass out any samples, be sure to review your brave tasting rules (for example, don’t yuck my yum, we all try together, etc.). As students receive their samples, ask them to use their senses while they wait.

There are several ways to try sweet potatoes:

Raw: Spiralize the sweet potatoes and serve with a dip.

Microwave: Before the lesson, pierce whole potato with a fork several times and microwave for 6 minutes, turning regularly. During the lesson, cut in half lengthwise, then score the inside of the potato making horizontal and vertical lines to create a grid - be sure not to cut through the skin! Then invert the potato skin, revealing perfect cubes to slice off the skin.

Air fryer: Before lesson - prep potatoes (ex: sticks, spiralized strings, small coins). During lesson - toss in an air fryer with olive oil and spice options (ex: garlic, pepper, paprika). You can also use an oven or fry in a skillet.

Reflect

5. Voting Activity: 2 minutes

This is a time for students to give their opinion on what they tried!

As students taste the potato, have them vote with their thumbs. Observe their voting and offer positive reinforcement regarding the Brave Taster Rules. If a student dislikes the tasting, perhaps ask what they would change about it.

6. Reflection: 5 minutes

Reflection is one of the most important processes for students to process and retain new information or experiences. Give students an opportunity to reflect on what they’ve learned or tried in your lesson. This is an excellent place for students to practice the “Asking Discussion”.

Reflection questions:

- *Will someone share what they liked or loved about the sweet potatoes?* Select a couple students to share.
- *Will someone share what they would change about the sweet potatoes?* Select a couple students to share.
- *Potatoes are a type of what kind of vegetable?* Root vegetable
- *Raise your hand if you’re excited to go home and tell your family about tasting sweet potatoes.*
- *Ask a student with a raised hand: if you wanted to try this at home, how might you ask your grown-ups?*

Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.

Additional Materials

Physical Activity

“Potato Sack Races” (adapted from Team Nutrition Sweet Potato Hill)

Show children the picture of a sweet potato sack race. Have children line up on one side of the room in rows and pretend they are in a sack. Ask one row of students to hop to the other end of the room and wait for rest of class to come across. Hop back if time allows.

More ideas for physical activity are available at <https://idph.iowa.gov/inn/play-your-way/brain-breaks>.

What You Need to Know About Sweet Potatoes

- The sweet potato grows underground; it is the root of the plant. Because it grows under the ground, we scrub the outside to remove soil and germs before we cut it open.
- It is very hard when harvested; when you cook it, it becomes soft.
- Sweet potatoes can be long and thin or short and fat, but always taper at the ends.
- Store sweet potatoes in a cool, dry, well-ventilated container. Do not store in the refrigerator as it will produce a hard center and unpleasant taste.
- Sweet potatoes are usually the size of regular white potatoes. The smooth, thin skin can be eaten. Choose firm sweet potatoes with no signs of decay. Look for uniform shape for even cooking. Some sweet potatoes grow in Iowa.
- Find them in the grocery store fresh, canned or frozen.

Facts About Sweet Potatoes

- The Native Americans were growing sweet potatoes when Columbus came to America in 1492. By the 16th century, sweet potatoes were being grown in the southern states.
- North Carolina is the top-producing state of sweet potatoes. They produce 50 percent of the nation’s annual crop.
- Sweet potatoes are “cured” (placed in a newspaper-lined box) after harvest for about two weeks. During this time, the sweet potato starch changes to sweet sugar.
- Sweet potatoes are different from yams. Most “yams” labeled in the U.S. are actually sweet potatoes.

Health Connection

- Sweet potatoes are part of the red/orange group in the MyPlate vegetable group. This group is important for our eyes and skin as it has a lot of Vitamin A. Reinforce with super goggles. (Use your fingers to make goggles for your eyes.)
- Sweet potatoes have a lot of Vitamin C, which is important to help cuts heal and keep us healthy. Reinforce with the Vitamin C shield by crossing arms in front of chest.

References and Resources

<https://www.fns.usda.gov/tn/discover-myplate-student-workbooks>; <https://www.fns.usda.gov/tn/myplate>
<https://snaped.fns.usda.gov/seasonal-produce-guide/sweet-potatoes-yams>
<https://harvestofthemonth.cdph.ca.gov/Pages/default.aspx>
<https://spendsmart.extension.iastate.edu/produce-item/sweet-potato-2/>
https://fns-prod.azureedge.net/sites/default/files/growit_book4.pdf; <https://ncsweetpotatoes.com/>

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