Local Spring Veggies
Turnips, Radishes

Month: May
Time Required: 30 minutes
Tasting: Turnips, Radishes

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 identify spring crops like turnips and radishes.
- Students will be able to describe how to build brain power.

Materials
- Prepared image of PABS tastings (example included)
- Tasting materials: Consider the multiple options for exploring and sampling local spring crops! Two described within the lesson are making Spring Crop Crackers and Spring Rolls.

Preparation
- Use familiar images of fruits and vegetables from PABS lessons throughout the year to create a colorful image for the memory game.
- If planning to make Spring Crop Crackers or Spring Rolls, pre-chop an assortment of local spring veggies, including turnips and radishes.

Recommended Books
(Send book suggestions to suzy.wilson@idph.iowa.gov.)

Standards Connection
This lesson supports the following Iowa Core standards.

Health Education Standards 1, 2, 3, 4, 5, 7, 8

Science
Second grade - 2-LS4-1.
LS4.D: Biodiversity
Third grade - 3-LS4-3.
LS4.C: Adaptation

Lesson Checklist
- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, stickers, Incentives
- Science Connection: Biodiversity (2nd) & the effect of weather on plants (3rd)
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.

   If leading any hands-on cooking, assemble your materials so that they are organized and accessible for you and the students.

2. **Engage Activity:** 6 minutes
   The “Engage Activity” section has two purposes: 1) to activate students’ prior knowledge and 2) to engage every student.

   Today we’re going to learn about building brain power. Let’s start off by using our brain power to think. Have students touch their brain buttons (temples). **Think in your head, what is something you learned this year in Pick a better snack?** Have students share all at once as a choral response, or lead students through a think-pair-share. Once students have thought and shared, say, **Wow, we have learned so much this year!**

   Now, let’s use our brain power to play a memory game. I’m going to show a picture on the screen for 15 seconds. **Without saying anything, use your brain power and try to remember the names of all the things you see.** Using the doc-cam, display a colorful image of the foods you’ve sampled in PABS this year. (example below). Hide the image after 15 seconds. **Now, I’m going to say the name of a food and if you saw it on the screen, spring up into the air.** Read through the names of PABS foods you’ve sampled that were on the picture along with some things that you didn’t try during PABS, allowing students to use their memory and respond with jumping. **Excellent brain power!**

   Display the image of PABS foods again. **Our brain is the part of our body that helps us learn about, try, and remember all of the foods we tried together this year.** Your brain is very hungry because it’s working and growing all the time. **When is your brain working and growing?** (Choral response: “all the time!”). **Colorful fruits and vegetables like these contain vitamins and nutrients that help build our brain power by feeding our brain.**
Explore

3. Experiential Learning: 12 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.

Seat students at their desks. Opportunity for 3 deep breaths.

Today, we’re going to build our brain power and feed our brain by tasting radishes (and/or other local spring crops). Show students a whole radish (or other spring crops you will taste), or denote spring crops on the picture from the memory game. Radishes are a colorful root vegetable that grow in the spring. Foods that grow in the spring are called spring crops. During the spring season, they get the conditions they need to begin to grow; warm spring rain, and longer, warmer days make them able to grow. When the hot summer comes, these crops do not grow well. They love spring weather! Spring crops are special because they’re the first foods we can grow outdoors after winter ends!

Sampling Local Spring Crops
There are several ways to sample local spring crops:

- Decorate Spring Crop Crackers. Bring prepared ingredients into the lessons: chopped or shredded spring crops (turnips, radishes, cabbage, carrots), multigrain crackers, cream cheese. Students can spread cream cheese on a cracker and decorate it with spring crop toppings.

- Make Spring Rolls. Bring prepared (chopped or shredded) spring roll ingredients (turnips, radishes, cabbage, carrots, rice paper, herbs, sauce) into the lesson and work with students to make their own spring roll. Check out FoodCorps' lesson, Rolling into Spring, for inspiration.

- Raw: Cut spring crops into sticks or half-moons and serve with a dip.

- Air fryer: Before the lesson, chop crops into smaller pieces. During the 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.

- Electric Skillet: Before the lesson, chop crops into smaller pieces. During the lesson, heat 2 tablespoons olive oil over medium heat, leaving uncovered. Add your spring crops to the skillet and season with optional spices (ex: salt, garlic, pepper, paprika).

4. Tasting Activity: 5 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 share your brave tasting rules (for example, don’t yuck my yum, we all try together, etc.). As students receive their samples, talk the class through using their senses to explore the tasting.

Local Food Facts! If you’re tasting local food, be sure to share information about where it came from: Iowa farm/farmer, location, distance from the school (a map is a great visual here!), when it was harvested, how did you get it, etc.
Reflect

5. Voting Activity: 2 minutes
This is a time for students to give their opinion on what they tried!

As students taste the spring crops, 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: 3 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.”

Choral Response:
I’m going to ask a question and you’re going to quietly think to yourself. When I say our magic word, “radish,” you can say your answer aloud. Let’s practice…
- What month is it? (May)
- What spring crop(s) did we try today? (turnips, radishes)
- What’s one thing spring crops need to grow? (water, sunshine)
- What do the nutrients in colorful foods give our brains? (brain power)
- What are some other colorful foods we can eat for brain power? (display attached visual if students need help coming up with colorful food)

Asking Discussion:
Raise your hand if you’re excited to go home and tell your family about tasting spring crops.
- Ask a student with a raised hand: if you wanted to try spring crops like turnips or radishes at home, how might you ask your grown-ups?
- You might also ask additional questions like, where could you buy spring crops like turnips or radishes?
- What else do you know about turnips or radishes?

*Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.*
Physical Activity
Choose a physical activity to incorporate into the lesson. Ideas for physical activities are available at https://idph.iowa.gov/inn/play-your-way/brain-breaks.

What You Need to Know About Spring Root Veggies
- Look for turnips that are heavy, pearly, and have fresh leaves with no soft spots. Smaller turnips taste sweeter.
- Look for radishes that are brightly colored and smooth with green tops.
- Turnips and radishes can be stored in the refrigerator for 7 days.
- Scrub radishes and turnips with a vegetable brush under cool water before eating.
- Remove radish and turnip tops and store the veggie in the refrigerator for up to 1 week. Radish and turnip tops are edible; store them in the fridge like other salad greens and eat within a couple of days.
- Raw radishes have a peppery flavor, while cooked radishes have a slightly sweet flavor.

Facts About Spring Root Veggies
- Turnips are in season late spring and late fall. Radishes are in season May-October. Radishes are one of the first spring vegetables available.
- Turnips are a root that grows underground and a member of the mustard plant family.
- Originating in Asia, turnips are now grown all over the world in mild climates.
- Different types of turnips include purple-top white-globe, scarlet queen, and Tokyo cross. Turnips are usually purple or white in color.
- Radishes are a root in the mustard plant family and come in a variety of sizes and colors, although most commonly red.
- The shape of radishes range from spherical to cylindrical and less common color varieties include white, purple, yellow, and black.
- There are both summer and winter varieties of radishes grown all over the world.

Health Connection
- Turnips and radishes are high in vitamin C. They also give us fiber and potassium.
- Vitamin C helps heal our skin and helps our bodies fight off illness!
- Potassium helps keep our hearts and muscles healthy.
- Fiber is good for our digestive systems and our hearts.

References and Resources
https://fruitsandveggies.org/fruits-and-veggies/
https://bit.ly/3x1ZWcz
https://www.iowafarmtoschoolearlycare.org/june-radish