Local Summer Crops
Tomatoes, Eggplant, Cucumbers

Month: September
Time Required: 30 minutes
Tastings: Tomatoes, Eggplant, Cucumbers

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 list conditions for growing summer crops.
- Students will be able to identify tomatoes, eggplant and/or cucumbers as summer crops.

Materials
- 4 prepared “healthy habit” signs to post in the room; tape
- Image of tomato plant and sun (included in lesson)
- Locally-grown summer crop of your choosing: Tomatoes (fun varieties like cherry, sungold, roma, heirloom), cucumber, or eggplant
- Knife (for educator to demonstrate cutting)
- Napkins or paper plates

Preparation
- Write or draw on 4 pieces of paper to create “healthy habit” signs.
- If using, print Healthy Habit All Star coloring page or activity sheet.
  - Coloring Sheet: Print page 2, Healthy Habit All Stars Coloring Book, Glen with his tomato plant
  - Activity Sheet: Print, Healthy Habit All Stars Awesome Activity Guide

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.

In each of the four corners of the room, post a paper sign, denoting each of the themes related to 5-2-1-0 Healthy Choices Count.

1. Eating fruits and vegetables
2. Drinking water
3. Playing and moving my body
4. Limiting recreational screen time. Choose to read or play.

If this is your first lesson of the year, introduce yourself to the class and to Pick A Better Snack. Share with students, *When I come to your classroom every month, we’re going to have fun trying foods together and learning about each other. So let’s start today with an activity.*

### 2. Engage Activity: 10 minutes

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

#### 4 Corners Activity:

Around the room, there are four examples of things we can do to help our bodies grow and stay healthy. Maybe you did some of these things this summer! Pointing to each sign and location in the room, say, *To help our bodies grow and stay healthy, we can 1) eat fruits and vegetables, 2) drink water, 3) play and move our body, and 4) limit recreational screen time (read or play instead).*

Think in your head - which one of these did you do this summer? Did you eat fruits and vegetables? Did you drink plenty of water? Did you play outside and move your body? Did you find things to do that didn’t involve a screen? When I say the magic word, “tomato,” I want you to quietly walk to the spot of your choice. When you get to your spot, take turns sharing what you did to help your body grow and stay healthy this summer. For example, I [share a personal example and show which spot you would move to].

- Give students time to think and make a decision; instruct them to move to their preference and pair-share with others in their group.
- Remind students to make the decision for themselves and to not be swayed by where others stand.

After students have had time to share in their group, say, *We’re going to watch a video about a kid named Hannah who learns about ways to help her body grow and stay healthy. At the end of the video, we’re going to have a dance party. Ready?*

Watch 5-2-1-0 Video (5-minutes)

Link here: [Hannah Stays Healthy, “Screen Time: How much it too much?”](#)
3. Experiential Learning: 5 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 return to their desks (opportunity for 3 deep breaths). The Healthy Habit All Stars and all of you shared about some ways you helped your bodies grow and stay strong this summer. Hannah learned that screen time is ok, just not too much, and Glen grew a tomato plant to eat. Today, we're going to taste a vegetable that grew this summer in Iowa - tomatoes!

Vegetables that grow during the summer are called warm-season crops. Tomatoes, cucumbers, eggplant - these are some examples of warm-season crops. To grow, they need special things that only happen in the warm season. Summer crops need warm soil, lots of sunlight, and high temperatures to grow. Show image of tomato plant and sun (below in this document) on the doc cam. Read the words on the image together as a class. These three things make summer crops grow. Demonstrate cutting open a tomato (using doc-camera), showing students the skin, seeds, and inside.

4. Tasting Activity: 6 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 tomato - a practice that you’ll encourage every month during PABS lesson time.

Summer Crops Taste Test Ideas:
1. Offer classrooms 2 types of tomatoes to sample (ex: different sizes, varieties, colors).
2. Offer classrooms 2 types of summer crops (ex: cucumber and tomato - a summer crop salad!)
3. Use all 5 senses to compare and contrast the tomatoes or different summer crops.
4. Discuss flavors, textures, colors, seed shapes, etc., as a class.

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.

5. Voting Activity: 3 minutes
This is a time for students to give their opinion on what they tried!

Introduce the tradition of voting with your thumb. As students taste the summer crop(s), 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.
Reflect (cont’d)

6. Reflection: 4 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, “tomato,” you can say your answer aloud. Let’s practice…
- What month is it? (September)
- Whose class am I in?
- What vegetable did we try today? (Tomatoes)
- What season do warm-season crops, like tomatoes, grow during? (Summer)
- Where can tomatoes grow well in the summer? (places with hot weather like Iowa)

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

*Leave newsletters, incentives, stickers, and BINGO sheets with the teachers to pass out.
Summer crops need:

- Lots of Sunlight
- High Temperatures
- Warm Soil
### 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](https://idph.iowa.gov/inn/play-your-way/brain-breaks).

### What You Need to Know About Summer Crops
- Look for firm and fully-colored tomatoes and avoid those that are brown or wrinkled.
- Store tomatoes out of direct sunlight at room-temperature and rinse under cool water before preparing. Use within 1 week of purchase.
- Look for cucumbers that are small in size, firm, and dark green and avoid those that are soft or have yellow spots.
- Cucumbers can be stored in the refrigerator for up to 1 week. Rinse under cool water and trim off the ends before eating.
- Look for eggplants that are firm, glossy, and heavy with no breaks in the skin.
- Eggplants can be stored whole in the refrigerator for 1 week or 3-5 days if cooked. Rinse under cool water prior to cooking.
- The skins of tomatoes, cucumbers, and eggplants are edible!

### Facts About Summer Crops
- Tomatoes are in season in Iowa July-September.
- Common varieties of tomatoes include heirloom, beefsteak, roma, cherry, and grape, and tomatoes come in every color of the rainbow.
- Tomatoes grow on a vine and are the fruit part of the plant; however, they are considered a vegetable when eaten.
- Cucumbers are in season in Iowa July-August.
- Cucumbers are in the gourd plant family, which also contains squash and melons.
- Cucumbers are about 96% water, and the phrase “cool as a cucumber” is based on the fact that the inside of a cucumber is 20° cooler than the outside!
- Eggplants are in season in Iowa August-September.
- Different varieties of eggplants include Japanese, Chinese, and the globe or American eggplant.
- Eggplants belong to the nightshade family and are classified as the berry part of the plant.

### Health Connection
- Tomatoes provide vitamin C, vitamin A, and potassium. Tomatoes also contain the antioxidant lycopene, which helps keep our eyes and heart healthy!
- Cucumbers provide vitamin C and are a great source of fiber.
- Eggplants are a good source of fiber.
- Vitamin C helps heal our skin and helps our bodies fight off illness! Fiber is good for our digestive systems and our hearts.

### References and Resources
- [https://spendsmart.extension.iastate.edu/cook/produce-basics/](https://spendsmart.extension.iastate.edu/cook/produce-basics/)
- [https://www.iowafarmtoschoolearlycare.org/choose-iowa-campaign](https://www.iowafarmtoschoolearlycare.org/choose-iowa-campaign)