

Local Seeds

Frozen Corn, Dried Beans

GRADE
2-3

Month: March

Time Required: 30 minutes

Tasting: Locally grown and preserved sweet corn or black beans

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 give examples of staple foods.
- Students will be able to identify corn as a seed and staple food.

Materials

- 1-2 copies of ingredient cards for “From Soil to Staple Food” activity
- Tasting materials (plates, napkins, etc.)
- Seedy Sweet Corn Salsa with corn tortillas or tortilla chips
- Printed recipe cards

Preparation

- Print 1-2 sets of ingredient cards for “From Soil to Staple Food” activity and cut into cards (13 cards per set/sheet, print number of cards depending on class size).
- Prepared Salsa: make 1-2 days prior to your lesson using the Seedy Sweet Corn Salsa recipe attached - adapt it or use your own!
- Print recipe cards, 1 per student.
- Review image slideshow linked within this lesson plan.

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-LS2-1](#).
LS2.A: Interdependent relationships

Third grade - [3-LS1-1](#).
LS1.B: Growth and development

Lesson Checklist

- Physical Activity
- Tasting
- Voting
- “Asking” Discussion
- Newsletters, Bingo cards, Stickers, Incentives
- Science Connection: plants depend on soil, water, air, and sun (2nd) & seeds and plant life cycles (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.

2. Engage Activity: 6 minutes

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

Gather students in a circle. *We're going to start today learning about **staple foods**. Staple foods are foods that we eat often because they can be stored for a long time and eaten all year. Different kinds of staple foods are eaten in different parts of the world.*

Tell students, *Think about a food that you eat with your family often. When you see a picture of a staple food you eat with your family, stand up.* Flip through images of staple foods and have students stand when they see a food that their family eats. Do students have other examples from their families that are not pictured on the slides?

Stand Up for Staple Foods: [Link to Image Slideshow](#) (use slides 2-6)

Examples include:

- Beans (dried beans, baked beans, edamame, lentils)
- Rice (brown rice, white rice, rice flour)
- Wheat (bread, noodles, dumplings, naan)
- Potatoes (roasted, baked, mashed, boiled, fried, sweet potatoes)
- Corn (tortillas, chips, cornbread, corn kernels (on the cob, frozen, canned))

All around the world, people eat staple foods in many different forms. We'll taste some of these today, but first, let's explore where staple foods come from.

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.

From Soil to Staple Food: [Link to Image Slideshow](#) (use slides 7-14)

With all students seated at the carpet, explain, *It takes a lot of ingredients to make it happen, but all of these staple foods - our noodles, lentils, tortillas - all come from the soil. Let's figure out how it works by using tortillas as an example.*

With the teacher's help, pass out an ingredient card to each student (or 1 card per pair of students). Tell students, *Look at the ingredient on your card and decide where it fits. Is the ingredient on your card needed to make soil? Does it go into making corn? Or does it go into making tortillas?* After students have had time to think or discuss, advance slides on the doc-cam to talk through the ingredients needed for soil, corn and tortillas.

- Starting with soil - ask students who think their ingredient goes into soil to stand up and share the ingredient on their card. Show soil ingredient list (rocks, worms and bugs, trees, water, wind and air). Seat students.
- Next, ask students who think their ingredient goes into corn to stand up and share the ingredient on their card. Show ingredient list (soil, corn seeds, sun, air, water). Explain that a corn seed grows into a stalk that holds the corn cob. We need soil to grow corn. Seat students.
- Lastly, ask students who think their ingredient goes into corn tortillas to stand up and share the ingredient on their card. Show tortilla ingredient list [corn (Masa Harina is corn flour), salt, water]. We need corn to make tortillas. Seat students.

Excellent! So we can see how corn tortillas come from the soil with the help of lots of other ingredients-like corn. If time allows, some interesting follow-up questions might ask if anyone had an ingredient that was used more than once, or where would a farmer or chef come into the process?

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").

Seedy Sweet Corn Salsa

For our tasting today, we're going to try sweet corn. Corn is a seed. What is corn? (choral response - "a seed") Seeds are the plant part that can grow a new plant. Sweet corn grows in the summer in Iowa, and this corn has been frozen to preserve it since then (recall last months vocab word: preserve!). We're going to taste sweet corn in a recipe called seedy sweet corn salsa. We'll taste it with a tortilla (or tortilla chip). The recipe on the card attached to this lesson plan can be adapted to your needs (if using local black beans, be sure to note that they are also seeds!)

As you pass out samples, explain to students that *we're going to taste a bite of just the sweet corn first. Then we'll try it all together!* Be sure to review your brave tasting rules (for example, don't yuck my yum, we all try together, etc.). Ask students to use their senses while they wait until the entire class is ready to taste the salsa together.

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 salsa, 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."

Recipe Card: Seedy Sweet Corn Salsa

As students are tasting their salsa, pass out recipe cards and instruct them to fill in the blanks. *You can take this recipe card home and make Seedy Sweet Corn Salsa with your family.*

Asking Discussion:

Raise your hand if you're excited to go home and tell your family about tasting local seeds!

- Ask a student with a raised hand: *if you wanted to try local seeds like sweet corn at home, how might you ask your grown-ups?*
- You might also ask additional questions like, *where could you buy local sweet corn or other kinds of seeds? What else do you know about seeds?*

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

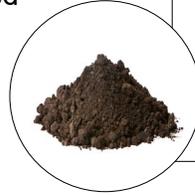
Educator, copy 1-2 sets of these ingredient cards depending on the class size. Cut into single cards, one per student or pair of students. Note, the ingredients for soil are in the first column, the ingredients for corn are in the second column, and the ingredients for tortillas are in the third column.

Rocks	Soil	Corn (called Masa Harina)
Worms and bugs	Corn Seeds	Salt
Trees	Sun	Water
Water	Water	
Wind and air	Air	

Seedy Sweet Corn Salsa

Ingredients (makes 4 cups):

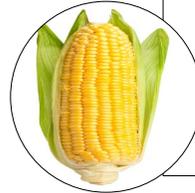
- 3 cups sweet corn
- 1 cup of cooked or canned black beans, rinsed and drained
- ¼ cup fresh cilantro, chopped
- ¼ cup lime juice (about 2 limes)
- ¼ cup red onion, chopped
- salt to taste



List the ingredients that are needed for soil.

Directions:

- In a bowl, combine all of the ingredients.
- For the best flavor, allow the salsa to sit for 20 minutes before eating.
- The salsa keeps well in the refrigerator, covered, for 3-4 days.
- Eat with corn tortillas, tortilla chips, tacos, etc.



List the ingredients that are needed for corn.

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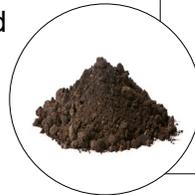
This material was funded by USDA's Supplemental Nutrition Assistance Program – SNAP. It was developed by the Iowa Department of Public Health in partnership with the Iowa Department of Human Services. August 2021



Seedy Sweet Corn Salsa

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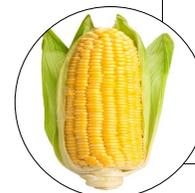
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Additional Materials

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 Seeds We Eat

- Look for corn on the cob with a bright green husk (outer leaves) and evenly spaced, plump kernels.
- Store corn in the refrigerator with the husk on or wrapped in plastic for 3-4 days.
- Break off the corn stalk, remove the husk and silky strings, and rinse under cool water before preparing.
- Look for canned corn or beans with reduced sodium or no sodium added.
- Look for dried beans that are clean, dry, and firm. Avoid beans that are irregularly colored or shriveled. One cup of dried beans becomes 2-3 cups when cooked.
- Store unopened dried and canned beans at room temperature. Refrigerate canned beans once opened and use them within 2-3 days.
- Rinse beans under cool water before cooking and eating. Dried beans must be soaked in water and cooked before they are edible.

Facts About Seeds We Eat

- Corn is in season July - September. It is a seed and a member of the grass plant family. It grows on stalks above the ground encased in husks.
- The first corn crop began in Mexico about 10,000 years ago. It is now a staple crop in many countries around the world. Corn is the #1 produced crop in Iowa!
- Depending on when corn is harvested, its use and nutritional value varies. Corn harvested with soft kernels full of liquid is a vegetable (corn on the cob, frozen corn, canned corn). Corn harvested at full maturity is dry and is processed as a grain (corn flour, corn meal). Popcorn is considered a whole grain.
- Corn comes in a variety of colors including yellow, white, red, pink, black, blue, and even striped!
- Beans are in season June - September. They are in the Fabaceae (pea) family and can grow on a bush or climbing plant. Beans are the seeds of plants, and grow in pods.
- There are many different varieties of beans including black, navy, pinto, white, kidney, soybeans, and chickpeas! Beans come in a variety of shapes too.
- Soybeans are the 2nd largest produced crop in Iowa!

Health Connection

- Corn provides the antioxidant lutein, which is good for our eyes. It also provides fiber and B vitamins. B vitamins help our bodies use the energy we get from food!
- Beans are high in protein and fiber. Fiber is good for our digestive systems and our hearts!

References and Resources

<https://spendsmart.extension.iastate.edu/produce-item/corn-on-the-cob/>

<https://spendsmart.extension.iastate.edu/pantry-picks/beans/>

<https://fruitsandveggies.org/fruits-and-veggies/>

<https://bit.ly/3xlZKzc>

<https://www.iowafarmtoschoolearlycare.org/choose-iowa-campaign>

<https://www.britannica.com>

https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=IOWA

<https://www.fns.usda.gov/usda-foods/household-product-information-sheets-and-recipes>

<https://ask.usda.gov/s/article/Is-corn-a-grain-or-a-vegetable>

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