



**SOUTH DAKOTA STATE
UNIVERSITY EXTENSION**

In season:



Summer

Sweet Corn

Dakota: Wagneza

Lakota: wagnéza

Lesson Plan

Objectives

Participants will:

- identify corn as a vegetable and the part of a plant it originates from, nutrients provided and serving size.
- describe how to choose, cook and store fresh corn.
- identify available forms of corn and advantages of each.
- prepare a recipe using corn as a main ingredient.
- increase knowledge in reading Nutrition Facts labels.

Items Needed for the Lesson

- MyPlate poster
- Parts of a Plant visual
- Regional chart of in season fruits and vegetables
- Sweet Corn Nutrition Information sheet

Handouts or Take Home Items

- Pick It! Try It! Like It! Preserve It! fact sheet

Recipe Choices

- Boiled Corn on the Cob with Dried Herb Butter
- Corn Salad

Cooking and Food Safety Skill Sheets

- Handwashing
- Washing Fruits and Vegetables
- Knife Safety and Cutting Boards
- Stove Top Safety

Other Cooking and Food Safety Skills

- Cooking term – boil

Supplies for Sweet Corn Lesson

- Boiled Corn on the Cob with Dried Herb Butter
 - » Measuring spoon
 - » Knife
 - » Cutting board
 - » Measuring cups
 - » Bowl
 - » Spoon
 - » Large pot
 - » Tongs
 - » Stove or electric burner
- Corn Salad
 - » Knives
 - » Cutting boards
 - » Measuring cups
 - » Large bowl
 - » Spoon
 - » Liquid measuring cup
 - » Scraper

Corn-original to South Dakota prior to European settlement.

- Dakota name – Wagneza
- Lakota name – wagnéza

Corn was a very versatile and important food source for the Dakota and Lakota people. It was often dried on the cob and stored for hundreds of years. It was also popped on the coals of a fire and eaten, which we refer to as popcorn today. Hominy is created by Wapapa, the Dakota name, by placing the kernels into ashes of a fire for a short time. It was also crushed to a coarse powder and added to finely shredded, dried meat, along with rendered bone marrow and fat and then formed into bite sized balls call Wasna. You can also add dried berries for flavor.

Dakota word translation and perspective provided by a member of Hunkapti Dakota.
Lakota word translated by Jeshua Estes.

What You Say:	What you do:
<p>Every class we are going to learn about a different fruit or vegetable. I am going to give you some clues and I want you to try to think of what it is. After each clue, raise your hand if you think you know what it is.</p> <ul style="list-style-type: none"> • This vegetable was once considered so valuable that it was used as money. • It is high in fiber and can be steamed, microwaved, baked, boiled or barbequed. • Pick it when the silky threads become brown or black. • This vegetable is called maize by most countries. (Answer: Sweet corn.) 	<ul style="list-style-type: none"> • Name off each clue; allow a few guesses before moving on to the next clue. • After someone guesses the answer, or you tell them, show them visuals of sweet corn.
<p>Sweet Corn is a vegetable. It is from the "starchy" vegetable subgroup. Different vegetables come from different parts of the plant. They may be the root, stem, fruit, seed, leaf or flower. What part of the plant do you think sweet corn is? (Answer: Seed.)</p> <p>Why are seeds important parts of the plant? (Answer: They take root to grow into a new plant.)</p>	<ul style="list-style-type: none"> • Show the Vegetable Subgroups visual. • Show the Parts of a Plant visual.
<p>MyPlate shows us how to eat healthier. If we notice, ½ of the MyPlate diagram is fruits and vegetables. Depending on your age and gender, we should be eating between 1-4 cups of vegetables a day.</p> <p>One half cup of raw sweet corn (about 1 ear) counts as ½ cup in the MyPlate vegetable group.</p> <p>Why would we want to eat sweet corn? Sweet Corn is a good source of dietary fiber. Dietary fiber helps keep our intestinal track running smoothly. Dietary fiber from foods like vegetables also helps us to feel full longer.</p>	<ul style="list-style-type: none"> • Point to the MyPlate poster. • Show a ½ cup measuring cup. • Show the Sweet Corn Nutrition Information sheet.

What You Say:	What you do:
<p>How many of you have grown sweet corn? When planting sweet corn, make sure the soil is warm (above 55 degrees) for germination to take place. Plant the kernels 9-12 inches apart. Plant 2 or more rows side by side for good pollination and ear growth. Lack of water can reduce the yield and quality of sweet corn. Each cornstalk should produce at least 1 large ear of sweet corn.</p> <p>In South Dakota, sweet corn is usually ready to be picked throughout the month of August. Sweet corn should be picked when the silk, or hairy threads at the end of the ear, turn dark and start to shrivel. The kernels should be bright and plump and should squirt a milky sap when popped.</p> <p>To pick an ear of ripe sweet corn, one should snap off the ear by holding onto the ear, pushing downward on the stalk quickly, then twist and pull.</p> <p>Leave the husk, or outer covering, on the ear until just before cooking. Keep the corn cool. As it warms, the sweetness decreases. Prepare the corn within 1-2 days.</p>	<ul style="list-style-type: none"> • Show an ear of sweet corn if available, naming the parts: silk, husk, kernel. • Demonstrate the popping of a kernel and the milky sap that result.



= for adults or older youth

What You Say:	What you do:
<p>What are some different ways that you can prepare sweet corn?</p> <p>Sweet corn can be steamed, microwaved, baked, broiled or barbequed. Before preparing, wash the ears under cool running water and rub off any silks.</p> <p>To boil: Bring water in a medium pot to a boil. Add the corn, cover and cook 5-7 minutes. Drain.</p> <p>To microwave: Place 2-3 ears of sweet corn in a microwave safe dish with 2 Tablespoons of water. Cover with a lid and microwave on High for 4-6 minutes.</p> <p>To freeze: Boil the corn, rinse in cold water and store in tightly closed plastic bags at 0 degrees F.</p> <p>To remove the corn kernels, place the ear of corn in a shallow bowl with the stem end inside of the bowl. Hold the corn firmly and with a sharp knife, cut the kernels from the cob. Kernels off the cob can be used in casseroles, soups, stews, salads and salsa.</p>	<ul style="list-style-type: none"> • Discuss different ways to prepare sweet corn. • Demonstrate removing kernels from the ear if possible.
<p>Are you ready to try out a recipe using sweet corn?</p> <p>What is the first thing we always do before preparing food?</p> <p>(Answer: Wash hands.)</p>	<ul style="list-style-type: none"> • Call on someone for the answer. • This is a good time to review the Handwashing skill sheet.

Use this page if you are going to prepare Boiled Corn on the Cob with Dried Herb Butter

Equipment List

- Measuring spoon
- Knife
- Cutting board
- Measuring cups
- Bowl
- Spoon
- Large pot
- Tongs
- Stove

What You Say:	What You Do:
<p>Today we are going to make Boiled Corn on the Cob with Dried Herb Butter.</p> <p>This recipe will allow us to practice boiling corn as well as to make an herb butter to compliment it.</p> <p>What is the first thing that we have to do before preparing food. (Answer: Wash our hands.)</p>	<ul style="list-style-type: none"> • Pass out the recipe. • Review Handwashing skill sheet.
<p>The first thing that we will do is bring the water to a boil, in a large pan on the stovetop. We will add the corn to this water and set the timer for 4 minutes. We will then remove the corn carefully with the tongs and let it cool for a few minutes.</p> <p>What needs to be done to the corn prior to boiling it? (Answer: Wash the corn under cool running water and remove any silks.)</p>	<ul style="list-style-type: none"> • Go over Stove Top Safety skill sheet. • Review the term "boil". • Review Washing Fruits and Vegetables skill sheet.
<p>While the water is boiling and the corn is cooking, we will prepare the Dried Herb Butter.</p>	<ul style="list-style-type: none"> • Review Measuring Liquid and Dry Ingredients skill sheet. • Demonstrate measuring dry ingredients.
<p>Let's look at the recipe and see how many servings of Dried Herb Butter it makes. This helps us to serve the correct portion size.</p>	<ul style="list-style-type: none"> • Refer to the Nutrition Facts per serving for Dried Herb Butter on the recipe card.

Use this page if you are going to prepare Corn Salad

Equipment List

- Knives
- Cutting boards
- Measuring cups
- Large bowl
- Spoon
- Liquid measuring cup
- Scraper

What You Say:	What You Do:
<p>Today we are going to make Corn Salad.</p> <p>What is the first thing that we have to do before preparing food? (Answer: Wash our hands.)</p>	<ul style="list-style-type: none"> • Pass out the recipe and read aloud together. • Review Handwashing skill sheet.
<p>This recipe has several vegetables as ingredients.</p> <p>How many vegetables are there? (Answer: 5.)</p> <p>There are 5 subgroups of vegetables: dark green, red and orange, beans and peas, starchy and others. Which subgroups are represented in this recipe? (Answer: Corn - starchy. Tomato - red and orange. Celery, pepper and onion - other.)</p>	<ul style="list-style-type: none"> • Allow time to read the recipe and answer. • Show the vegetable sub-groups chart and allow discussion.
<p>The recipe also calls for whole kernel corn – fresh or frozen – cooked and drained. If we are using fresh corn, we want to use corn that has been cooked and removed from the cob. This is a good use of leftover corn on the cob. From the lesson, we learned that to remove the kernels, we should place the ear of corn in a shallow bowl with the stem end inside the bowl. Holding the ear firmly cut the kernels off from the cob.</p> <p>If we are using canned corn, what steps do we need to take? (Answer: Clean the top of the can, open the can with a can opener and drain using a colander or strainer.)</p>	<ul style="list-style-type: none"> • Demonstrate removing the kernels from the ear if possible. • Call on participants that want to answer. • Discuss the reasons for cleaning the can.
<p>What else do we need to do before preparing the other vegetables? (Answer: Wash them under cool running water, remove seeds from the pepper and outer skin of the onion.)</p>	<ul style="list-style-type: none"> • Allow discussion of the vegetable preparations.
<p>We will be using knives and cutting boards to do the chopping of the vegetables for this salad. Remember to use knife safety.</p>	<ul style="list-style-type: none"> • Review Knife Safety and Cutting Boards skill sheet.

Visuals



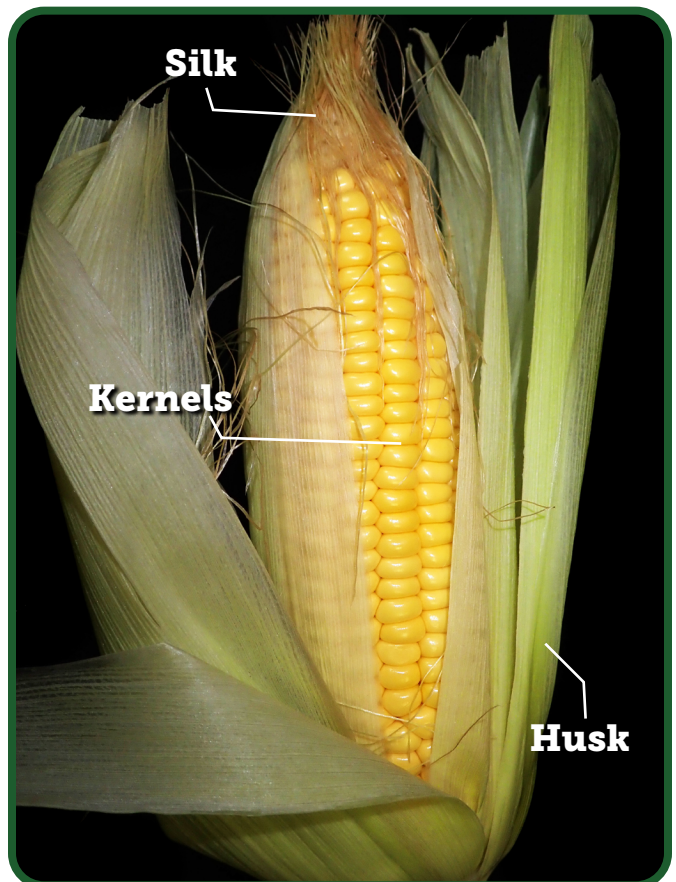
Corn field



Corn growing on the stalk



Popcorn kernels



Sweet Corn Nutrition Information

Type	Serving Size/Weight in grams	Calories	Fiber (g)	Vitamin A (% Daily Value)	Vitamin C (mg)	Potassium (mg)	Folate (mcg)
Corn on the cob, Yellow cooked	1 med cob/82	59	1.8	146	3	158	20
Corn, Yellow cooked	½ cup/82	89	2.3	216	5	204	38
Daily Recommendations RDA=Recommended daily allowance AI=Adequate intake	1-4 cup servings of vegetables per day depending on age	Varies according to age and activity level	AI (depending on age) ranges from 14-33.6 g	Daily Value based on a 2,000 calorie per day diet	RDA (depending on age) ranges from 25-90 mg	AI (depending on age) ranges from 3,000-4,700 mg)	RDA (depending on age) ranges from 150-400 mcg)

Sweet Corn Sources

Recipe

- myplate.gov/recipes/supplemental-nutrition-assistance-program-snap/corn-salad-fat-free-ranch-dressing

South Dakota Harvest Calendar

- pickyourown.org/SDharvestcalendar.htm

How long to store

- foodsafety.gov/keep/foodkeeperapp/index.html

How to store

- hgic.clemson.edu/factsheet/selecting-storing-fruits-vegetables/

Cooking Glossary

- reallifegoodfood.umn.edu/kitchen-skills-and-tips/cooking-terms-glossary

Fruit and Vegetable Nutrition Facts Chart

- static.macalester.sidearmsports.com/custompages/Deno_Videos/nutrition/Fruit_and_Vegetable_Chart.pdf

Daily Nutrition Goals

- health.gov/our-work/nutrition-physical-activity/dietary-guidelines/current-dietary-guidelines

Dakota translation and perspective

- Provided by a member of Hunkapti Dakota.

Lakota translation

- Translated by Jeshua Estes

This material was funded by USDA's Supplemental Nutrition Assistance Program–SNAP.

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SOUTH DAKOTA STATE
UNIVERSITY EXTENSION

In season:



Summer

Sweet Corn

Dakota: *Wagmeza*

Lakota: *wagméza*

Pick it!

Choose large, green, stalks with tightly folded husks covering the cob of kernels.

Kernels should be bright yellow and white with a square shape.

The hairy silk should be very pale white with dry brown ends.

Storing warm decreases the sweetness.

Refrigerate in perforated plastic bag within 1-2 days of picking.

Leave the husk on until ready to cook.

Sweet corn can be boiled, steamed, grilled, roasted or microwaved.

Try it!

Shuck before cooking, by pulling the husks down the ear and breaking at the stem. Run cold water over the ear and rub the silk off.

Avoid salting during cooking as it toughens the kernels.

You may remove the corn from the cob using a paring knife, cut from top to bottom with the ear propped on a plate.



Types of Sweet Corn

Standard: Traditional sweet corn flavor, yellow or white kernels

Sugar-enhanced: High sugar content, keeps longer, tender kernels

Shrunken: Yellow kernels, highest sugar content, longest storage, kernels shrunken and tougher



Did you know...

Starch, a complex carbohydrate found in fruits and vegetables, gives food moist, gel-like texture. The body digests most starch into energy used by every cell in body.

Like it!

Boiled Corn on the Cob with Dried Herb Butter

Ingredients

- As many ears of corn as desired to eat
- 4 Tablespoons paprika
- 1 teaspoon cayenne pepper
- 1 Tablespoon black pepper
- 1 Tablespoon garlic powder
- ½ teaspoon salt
- 1 teaspoon thyme
- ½ cup butter

Directions

1. Mix paprika, cayenne pepper, black pepper, garlic powder, salt and thyme in a bowl. Add butter and mix well.
2. Remove husks and silks of the corn and wash the cob.
3. Carefully drop the corn into boiling water. Boil for 4 minutes.
4. Spread herb butter on corn right before eating.

Yields 8 servings

Nutrition Facts per Serving:
Calories 270; Fat 15g; Cholesterol 30mg; Sodium 229mg;
Carbohydrates 29g; Fiber 9g; Sugar 10g; Protein 6g

Corn Salad

Ingredients

- 2 cups whole kernel corn, fresh or frozen, cooked and drained
- ¾ cup tomato, chopped
- ½ cup green green pepper, chopped
- ½ cup celery, chopped
- ¼ cup onion, chopped
- ¼ cup fat-free ranch dressing

Directions

1. Combine vegetables in a bowl.
2. Stir in dressing.
3. Cover and refrigerate until ready to serve.

Yields 6 servings

Nutrition Facts per Serving:
Total Calories 74; Total Fat 1; Saturated Fat 0g;
Cholesterol 0mg; Sodium 119mg; Carbohydrates 16g,
Dietary Fiber 2g, Total Sugars 4g, Added Sugars included
0g; Protein 2g

Source: myplate.gov/recipes/supplemental-nutrition-assistance-program-snap/corn-salad-fat-free-ranch-dressing

Dakota Perspective (Corn)

Dakota: Wagmeza

Lakota: waggméza

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**Find more recipes
and videos at
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