



**SOUTH DAKOTA STATE
UNIVERSITY EXTENSION**

Brussels Sprout

In season:



**Summer and
Fall**

Lakota: čhammígmigma

Lesson Plan

Objectives

Participants will:

- identify Brussels sprouts as small baby cabbages that grow on large woody stems.
- increase knowledge in growth, selection, storage, nutrition and use of Brussels sprouts.
- prepare and taste a food that includes Brussels sprouts.
- demonstrate use of equipment needed to prepare Brussels sprout recipe.

Items Needed for the Lesson

- Visuals of Brussels sprouts
- Parts of a Plant visual
- MyPlate poster
- Cooking equipment

Handouts or Take Home Items

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

Recipe Choices

- Braised Brussels Sprouts with Mustard Butter
- Brussels Sprouts with Mushroom Sauce

Cooking and Food Safety Skill Sheets

- Handwashing
- Washing Fruits and Vegetables
- Knife Safety and Cutting Boards
- Stove Top Safety
- Measuring Dry and Liquid Ingredients

Other Cooking and Food Safety Skills

- Cooking terms: sauté, roast and blanch

Supplies for Brussels Sprout Lesson

- Braised Brussels Sprouts with Mustard Butter
 - » 2 Cutting boards
 - » 2 Knives
 - » Measuring spoons
 - » Liquid measuring cup
 - » 2-Quart sauce pan with lid
 - » Hot plate
 - » Mixing spoon
 - » Spatula
 - » Colander
- Brussels Sprouts with Mushroom Sauce
 - » Measuring cups
 - » Measuring spoons
 - » Liquid measuring cup
 - » 2 Cutting boards
 - » 2 Knives
 - » Electric skillet
 - » Bowl
 - » Spatula
 - » Mixing spoon
 - » Colander

What You Say:	What You Do:
<p>Every class we're going to learn about a different fruit or vegetable. I'm 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"> • Grows best in cooler weather • Usually harvested after a frost • Grows in clusters on woody stalks • Looks like baby cabbages <p>(Answer: Brussels sprouts.)</p>	<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 Brussels sprouts.
<p>MyPlate shows us how to eat healthier. We should be filling half our plates with fruits and vegetables. Depending on your age and gender, you should be eating between 1-4 cups of vegetables each day.</p> <p>½ cup of diced, chopped or sliced Brussels sprouts is equal to ½ cup in the MyPlate vegetable group.</p>	<ul style="list-style-type: none"> • Show the vegetable group on MyPlate poster. • Refer to the daily vegetable chart for specific age groups • Show a ½ cup measuring cup
<p>There are 5 subgroups of vegetables: dark green, red and orange, beans and peas, starchy and others. We need to make sure we are eating vegetables from each of these groups because each have different vitamins and nutrients in them.</p> <p>Do you know what subgroup Brussels sprouts is in?</p> <p>(Answer: Other.)</p>	<ul style="list-style-type: none"> • Keep the visuals of Brussels sprouts visible. Point to the visuals as you talk about each subset. • Call on someone who wants to answer. • Show the Vegetable Subgroup visual
<p>Has anyone planted or tried to grow Brussels sprouts in their garden?</p> <p>Brussels sprouts need a long growing season. They should be planted in early summer. Seeds should be started inside 4-5 weeks, and grow to be 3 inches tall, before planting outside in the garden.</p> <p>Brussels sprout plants should be planted 24-36 inches apart in rows.</p> <p>About 3 weeks before harvest, the plants may be topped which is chopping the top of the plant off. Doing this speeds up the final development of the sprouts.</p>	<ul style="list-style-type: none"> • Allow discussion. • Keep the visuals of Brussels sprouts visible. Point to the visuals as you talk about each subset. • Review Parts of a Plant visual.
<p>Brussels sprouts should be picked when they are about 1-2 inches around and bright green. Sprouts should be picked before the leaves yellow.</p>	<ul style="list-style-type: none"> • Keep the visuals of Brussels sprouts visible. Point to the visuals as you talk about each.

What You Say:	What You Do:
<p>Brussels sprouts are sold in three forms: fresh on the stem, fresh removed from the stem and frozen.</p> <p>To store Brussels sprouts that have been purchased on the stem, you first need to remove the spouts and throw away the stem. The sprouts should be stored with a damp towel in a plastic bag in the refrigerator.</p> <p>To store Brussels sprouts purchased off the stem, place them in a plastic bag with a damp towel.</p> <p>Do not wash or peel sprouts until ready to use.</p>	<ul style="list-style-type: none"> Keep the visuals of Brussels sprouts visible. Point to the visuals as you talk about each.
<p>Brussels sprouts may be frozen for long-term storage. Brussels sprouts will need to be blanched or placed into boiling water for a minute or two and then immediately placed into a bowl of ice water, before being placed into a freezer container and the freezer.</p> <p>Brussels sprouts can be frozen for up to 1 year at or below 0 degrees Fahrenheit.</p>	
<p>Who has tried Brussels sprouts? Who likes Brussels sprouts? How do you like to eat Brussels sprouts or how would you like to try them?</p> <p>Brussels sprouts can be eaten raw, roasted, sautéed, braised or boiled.</p> <p>Before cooking, remove any loose, spotty or yellow leaves and rinse the Brussels sprouts under cold water. If the Brussels sprouts will be cooked whole a small x needs to be cut into the bottom of the stem. This helps the Brussels sprouts cook evenly since the out leaves cook faster than the core.</p> <p>To roast Brussels sprouts, toss them in olive oil and lay them on a baking sheet. Roast in the oven at 400 degrees for about 40 minutes.</p> <p>To boil Brussels sprouts, bring a pot of salted water to a boil. Place sprouts in the boiling water and cook for about 10-15 minutes. Sprouts are done when a knife will easily cut through them.</p> <p>To saute Brussels sprouts, cook on each side for about 5 minutes or until golden brown.</p> <p>Brussels sprouts are over cooked if they have lost the bright green color. Once they have over cooked, they have lost a lot of their nutritional value.</p>	<ul style="list-style-type: none"> Allow for discussion.

What You Say:	What You Do:
<p>Brussels sprouts are high in protein. Current research suggests vegetables in the cabbage family offer protection against some forms of cancer.</p>	
<p>Brussels sprouts are a good source of potassium, vitamins C and A, Folate and Manganese.</p> <p>Potassium helps nerves to function properly and muscles to contract. It also helps to regulate the heartbeat.</p> <p>Vitamin C is important for skin, bones and connective tissues. It promotes healing and helps to absorb iron.</p> <p>Vitamin A helps vision, bone growth, reproduction, cell functions and immune system.</p> <p>Folate is a B vitamin that helps make new cells. It is important for women who are pregnant to prevent birth defects to the baby's spine or brain.</p> <p>Manganese is required for proper bodily function.</p>	
<p>Are you ready to try a recipe with Brussels sprouts?</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"> Review Handwashing skill sheet.

Use this page if you are going to prepare Braised Brussels Sprouts with Mustard Butter

Equipment List

- 2 Cutting boards
- 2 Knives
- Measuring spoons
- Liquid measuring cup
- 2-Quart sauce pan with lid
- Hot plate
- Mixing spoon
- Spatula
- Colander

What You Say:	What You Do:
<p>Today we are going to be making Braised Brussels sprouts with mustard butter.</p> <p>Let's read the recipe together before we begin.</p> <p>The first thing we need to do is to wash and clean our Brussels sprouts. Remember we wash fruits and vegetables with cold running water only.</p> <p>Check each head; peel off any loose or discolored leaves.</p>	<ul style="list-style-type: none"> • Read the recipe with the group. • Have a volunteer place the Brussels sprouts into the colander and rinse under cold water. • Have a volunteer or 2 check each head, peel off any loose or discolored leaves.
Now we need to cut an x through the core of each Brussels sprout.	<ul style="list-style-type: none"> • Demonstrate this then have 2 volunteers cut x's into the remaining Brussels sprouts
The next step is to place the sprouts, water and salt into the sauce pan and bring to a boil over medium heat. Remember when measuring liquid ingredients to use the liquid measuring cup and to squat down to be eye level with the counter and the measuring cup.	<ul style="list-style-type: none"> • Have a volunteer measure out the water and salt and then pour into the pan. Have another volunteer add the Brussels sprouts and bring to a boil.
Now we need to lower heat, cover and simmer just until the sprouts are tender about 8-10 minutes.	<ul style="list-style-type: none"> • Have a volunteer reduce heat and stir the Brussels sprouts. Have the volunteer make sure the Brussels sprouts do not burn.
To test for doneness we poke the tip of a knife into the core end of the sprouts. If it enters the sprouts with a slight resistance then the sprouts are done. If they are done, drain the sprouts in the colander.	<ul style="list-style-type: none"> • Have a volunteer test the sprouts for doneness, if done drain them.
Now we will make the mustard butter and mix it in to the cooked Brussels sprouts in a skillet. We will also season the sprouts with salt and pepper.	<ul style="list-style-type: none"> • Have a volunteer melt the margarine and mix it with the mustard. • Have another volunteer add the sprouts in the skillet with the mustard sauce and mix. Have them sprinkle a little salt and pepper on top. • Have a volunteer add the sprouts and mix and sprinkle with a little salt and pepper.
Divide out for the participants to taste.	

Use this page if you are going to prepare Brussels Sprouts with Mushroom Sauce

Equipment List

- Measuring cups
- Measuring spoons
- Liquid measuring cup
- 2 Cutting boards
- 2 Knives
- Electric skillet
- Bowl
- Spatula
- Mixing spoon
- Colander

What You Say:	What You Do:
<p>Today we are going to be making Brussels sprouts with mushroom sauce.</p> <p>Let's read the recipe together before we begin.</p> <p>The first thing we need to do is to wash and clean our Brussels sprouts. Remember we wash fruits and vegetables with cold running water only.</p> <p>Check each head; peel off any loose or discolored leaves.</p>	<ul style="list-style-type: none"> • Read the recipe with the group. • Have a volunteer place the Brussels sprouts into the colander and rinse under cold water. • Have a volunteer or 2 check each head, peel off any loose or discolored leaves.
We need to cut the Brussels sprouts in half.	<ul style="list-style-type: none"> • Review Knife Safety and Cutting Boards skill sheet. • Have 2 volunteers cut the sprouts in half.
Now we need to steam the sprouts. To do this we need to put a couple inches of water in the electric skillet and turn it on to boil. Once the water starts to boil, we will add the sprouts, put the lid on and steam for 6-10 minutes, just until the sprouts are tender.	<ul style="list-style-type: none"> • Review electric skillet safety with participants. • Have a volunteer pour water into the electric skillet and turn it on to boil. Then add the sprouts and cover. Time for 6-10 minutes.
Now we need to make the sauce. First let's wash and cut the mushrooms.	<ul style="list-style-type: none"> • Have two volunteers rinse the mushrooms in the colander and then slice them.
We need to measure ½ cup broth into the skillet and bring to a boil. Then we will add the mushrooms.	<ul style="list-style-type: none"> • Have a volunteer measure and add the broth to the skillet. • Have another volunteer mix in the mushrooms. • Have a volunteer mix in the mushrooms.
Let's mix in the Brussels sprouts and toss to coat.	<ul style="list-style-type: none"> • Have a volunteer add Brussels sprouts and toss to coat.
Divide out into tasting portions.	

Visuals



Brussels sprouts grow on the central stem of the plant. The top leaves are also edible.



A close-up of Brussels sprouts growing on the plant.



Steamed Brussels sprouts.

Brussels Sprout Nutrition Information

Type	Serving Size/Weight in grams	Calories	Fiber (g)	Vitamin A (International Units)	Vitamin C (mg)	Potassium (mg)	Folate (mcg)
Brussels Sprout, steamed	1 cup	56.2	4.1	24.2	161.2	494.5	23.4
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)

Brussels Sprout Sources

Recipe

- myplate.gov/recipes/supplemental-nutrition-assistance-program-snap/brussels-sprouts-mushroom-sauce

Information

- myfitnesspal.com/recipe/calculator
- easyscienceforkids.com/brussels-sprouts/
- fruitsandveggies.org/fruits-and-veggies/brussels-sprouts/
- extension.illinois.edu/veggies/brusselssprouts.cfm
- extension.purdue.edu/foodlink/food.php?food=Brussels%20sprouts
- ods.od.nih.gov/factsheets/Manganese-HealthProfessional/
- ods.od.nih.gov/factsheets/Folate-HealthProfessional/
- ods.od.nih.gov/factsheets/VitaminA-HealthProfessional/
- ods.od.nih.gov/factsheets/VitaminC-HealthProfessional/
- ods.od.nih.gov/factsheets/Potassium-HealthProfessional/

Cooking Terms

- eatgathergo.org/eat/cooking/cooking-basics-tips/

Lakota translation

- Translated by Jeshua Estes

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Brussels Sprout

In season:



Summer and
Fall

Lakota: čhammĩgmigma

Pick it!

Look like little heads of cabbage with a similar but slightly milder flavor and a more dense texture.

Best if picked after a light frost.

Should be firm, green, not yellow, compact and about 1 inch in diameter.

Best when fresh; store no more than 1-2 days.

Store unrinsed in plastic bags in the vegetable bin of the refrigerator.

Can be eaten as a side dish or added to soups, stews and casseroles.

Select sprouts similar in size and cut larger sprouts in half to help with even cooking.



Try it!

Great steamed, braised, boiled or microwaved.

Remove loose, yellow and bruised outer leaves and rinse well under running water.

Cut an X in the bottom of the stem for even cooking as the core cooks more slowly.

Do not overcook – this results in dull green color and loss of flavor and nutritional value (7-10 minutes).



Types of Brussels Sprout

Green: Most common; includes many growing varieties which are very similar.

Reddish/purple: Resembles small red cabbages, some sprouts retain bluish-purple color when cooked.



Did you know...

Folate and Folic acid protect against heart attack and stroke and prevent neural tube defects in pregnant women. Folate can be found in leafy vegetables.

Like it!

Braised Brussels Sprout with Mustard Butter

Ingredients

- 1 pound small firm bright green Brussels sprouts
- ½ teaspoon salt
- ½ cup water
- 2 Tablespoons melted margarine
- 2 Tablespoons Dijon mustard
- Ground black pepper to taste

Directions

1. Check each head; peel off loose or discolored leaves.
2. Using a pairing knife, cut an X through the core end of each head.
3. Place sprouts, water and salt into a 2 quart saucepan and bring to a boil over medium-high heat. After reaching a boil, lower heat, cover and simmer for 8-10 minutes, or until tender. Shake pan once or twice during cooking to roll the sprouts.
4. Test to check if sprouts are cooked by piercing with pairing knife tip to the core end. It should enter sprouts with slight resistance. If done, drain.
5. Melt margarine in a large skillet on medium heat. Cook stirring constantly, until smooth and creamy, about 30 seconds.
6. Add sprouts to skillet, coating well with margarine mixture. Season to taste with salt and pepper.

Yields 4 servings

Nutrition Facts per Serving:
Calories 140; Fat 8g; Cholesterol 0mg; Carbohydrates 16g; Fiber 6g; Sugars 3g; Protein 5g

Brussels Sprouts with Mushroom Sauce

Ingredients

- 2 cups Brussels sprouts (or broccoli, cabbage, kale, collards or turnips)
- ½ cup low-sodium chicken broth
- 1 teaspoon lemon juice
- 1 teaspoon spicy brown mustard
- ½ teaspoon thyme, dried
- ½ cup mushrooms, sliced

Directions

1. Trim Brussels sprouts and cut in half.
2. Steam sprouts in saucepan with water until tender, about 6-10 minutes or microwave on high for 3-4 minutes.
3. In a non-stick pot, bring the broth to a boil. Mix in the lemon juice, mustard and thyme. Add the mushrooms and boil broth until it is reduced by half, about 5-8 minutes.
4. Add Brussels sprouts (or other cooked vegetable). Toss to coat with sauce.

Yields 2 servings

Nutrition Facts per Serving:
Calories 54; Fat 1g; Cholesterol 0mg; Carbohydrates 10g; Fiber 4g; Sugars 2g; Protein 5g

Lakota word translated by Jeshua Estes.

**Find more recipes
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