



**SOUTH DAKOTA STATE
UNIVERSITY EXTENSION**

Greens

In season:



**Spring and
Summer**

Lakota: omníča thąnkínkinyan

Lesson Plan

Objectives

Participants will:

- identify the recommended daily servings of vegetables in a healthy diet and how greens can fit into that recommendation.
- increase knowledge in growing, selecting, storing, and use of leafy greens.
- use leafy greens in a recipe.

Items Needed for the Lesson

- MyPlate poster
- Parts of a Plant visual
- ½ cup and 1 cup measuring cups
- Examples of leafy greens –real and visuals

Handouts or Take Home Items

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

Recipe Choices

- Wilted Swiss Chard with Garlic
- Baked Kale Chips

Cooking and Food Safety Skill Sheets

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

Other Cooking and Food Safety Skills

- Cooking terms - blanch, mince and evaporate
- Washing and drying leafy greens

Supplies for Greens Lesson

- Wilted Swiss Chard with Garlic
 - » Bowl
 - » Colander
 - » Paper towels
 - » Knife
 - » Cutting boards
 - » Measuring spoons
 - » Skillet or saucepan with lid
 - » Spoon
- Baked Kale Chips
 - » Baking sheets
 - » Paper towels
 - » Kitchen shears
 - » Measuring spoons
 - » Bowl
 - » Oven

Notes

- If making the Baked Kale Chips recipe, do the food preparation first as they need to bake for a total of 30 minutes.

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"> • These can be eaten raw or cooked. • They have a variety of tastes and textures. • Two cups of these raw makes about ½ cup cooked. • They are loaded with lots of health-giving nutrients. • They are actually plant leaves that are eaten as vegetables. <p>(Answer: Greens.)</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 greens.
<p>Leafy greens are a broad term for plant leaves that are eaten as vegetables. Some plants that are considered leafy greens include collard greens, Swiss chard, kale, mustard greens, turnip greens, Bok choy and spinach.</p> <p>Some leafy greens are eaten cooked. They may be boiled, steamed or sautéed. They can be added to pasta dishes, main dishes, stir-fries and soups. Other greens are eaten fresh in salads.</p>	<ul style="list-style-type: none"> • Refer to visuals of greens again.
<p>MyPlate shows us how to eat healthier by dividing a "plate" into 4 food groups and the dairy group is shown as a glass of milk. If we look at the plate, ½ of it is fruits and vegetables. Depending on our age and gender, we should be eating between 1-4 cups of vegetables a day.</p> <p>How much is a serving of leafy greens? (Answer: 2 cups of raw leafy greens can be considered as 1 cup from the vegetable group on MyPlate. 1 cup of cooked leafy greens counts as 1 cup from the vegetable group.)</p> <p>It takes 2 cups of raw leafy greens to make about ½ cup of cooked greens.</p>	<ul style="list-style-type: none"> • Point to the MyPlate visual. • Refer to the Daily Recommendations visual. • Show a ½ cup and two 1 cup measures. • If possible, show what 2 cups of raw leafy greens look like.
<p>Different vegetables come from different parts of the plant. Vegetables can be a root, stem, leaf, fruit, flower or seed.</p> <p>What part of the plant do you think greens come from? (Answer: Leaf/leaves.)</p>	<ul style="list-style-type: none"> • Show the Parts of a Plant visual.

What You Say:	What You Do:
<p>Have any of you planted leafy greens in a garden? Leafy greens like a fertile, well-drained soil type. They also like full sun. Some leafy greens are grown from seeds, which should be planted $\frac{1}{4}$-$\frac{1}{2}$ inch deep. Other leafy greens may be transplanted from started plants. As soon as leafy greens reach a usable size, they can be harvested. Harvest by removing the outer leaves of the plant.</p>	<ul style="list-style-type: none"> Allow discussion of planting greens.
<p>Some leafy greens, when picked when they are small, will produce another crop of greens to be picked later. Others allow you to plant more than 1 crop during the growing season.</p> <p>Leafy greens have the best flavor if they are harvested before the weather becomes hot and dry.</p>	
<p>If you are purchasing leafy greens at the store, choose crisp, deeply colored greens with fresh, full leaves. Avoid greens that have wilted, brown, yellow or spotted leaves.</p>	
<p>Keep the greens whole until you are ready to use them. Remove any discolored leaves before storing them. Keep un-washed greens in the refrigerator in a plastic bag for about 3 days.</p> <p>Leafy greens do need to be washed thoroughly before use. To clean them, rinse them with lots of cool running water. Sometimes dirt can be difficult to get off, so put the greens in a bowl of cool water and let them sit for a few minutes. This will loosen any soil that is on the leaves. Rinse with cool water and pat them dry with a clean paper towel. Cut any stems from leafy greens immediately before cooking.</p>	<ul style="list-style-type: none"> Demonstrate washing leafy greens if possible.
<p>Leafy greens can also be frozen for later use. To freeze greens, wash them thoroughly and cut off any stems. Blanch the greens in boiling water for 2-3 minutes.</p> <p>What does blanch mean? (Answer: To immerse in rapidly boiling water and allow to cook slightly.)</p> <p>Cool, drain the leaves and package in freezer bags. Freeze.</p>	<ul style="list-style-type: none"> Call on someone who would like to answer.
<p>There are a variety of tastes and textures of leafy greens. Some may taste better eaten raw while others may taste better cooked. Some greens also cook faster than others. Those with heartier leaves take longer to cook.</p>	

What You Say:	What You Do:
<p>Why should we eat leafy greens? Greens are low in calories, sodium and are cholesterol free. Greens are a good source of vitamins A, C and K. Vitamin A keeps our eyes and skin healthy. Vitamin C helps heal cuts and bruises, as well as helping keep our immune system healthy. Vitamin K helps our blood to clot. They also provide calcium for strong bones and teeth as well as fiber that keeps our digestive system healthy.</p> <p>Many leafy greens are called “super foods” because they contain phytochemicals. Phytochemicals are compounds found in plants that are not necessary to our diet, but have several health benefits. There are different phytochemicals in different fruits and vegetables. Phytochemicals can help reduce inflammation, help lower cholesterol and blood pressure and reduce the risk of certain cancers.</p>	
<p>We are going to be making a recipe with greens today.</p>	
<p>Note: If making the Baked Kale Chips, possibly do the cooking part of the lesson first as they need to bake for 30 minutes total.</p>	



= for adults or older youth

Use this page if you are going to prepare Wilted Swiss Chard with Garlic

Equipment List

- Bowl
- Knife
- Skillet or saucepan with lid
- Colander
- Cutting boards
- Spoon
- Paper towels
- Measuring spoons

What You Say:	What You Do:
<p>Today we are going to make a recipe using leafy greens, specifically Swiss Chard.</p> <p>What is the first thing we need to do before we begin? (Answer: Wash our hands.)</p>	<ul style="list-style-type: none"> Go over Handwashing skill sheet.
<p>Let's read the recipe so that we know the steps that we are going to do. There are 3 main ingredients in this recipe – Swiss Chard, olive oil and garlic.</p>	<ul style="list-style-type: none"> Pass out the recipe and read the recipe aloud together.
<p>Our first step involves washing the Swiss Chard. We will need to change the water several times to make sure that we have all of the dirt and impurities off from the greens.</p>	
<p>We will be using a knife to cut and chop the stems and also to cut the greens.</p>	<ul style="list-style-type: none"> Refer to the Knife Safety and Cutting Boards skill sheet.
<p>We are going to mince the garlic. What does the cooking term "mince" mean? (Answer: To cut or chop into extremely small pieces.)</p>	<ul style="list-style-type: none"> Call on someone who would like to answer.
<p>After the greens have cooked for about 5 minutes, we will remove the lid and let the liquid evaporate. What does the term "evaporate" mean? (Answer: The liquid becomes a gas and is no longer in the pan.)</p>	<ul style="list-style-type: none"> Call on someone who would like to answer.

Use this page if you are going to prepare Baked Kale Chips

Equipment List

- Baking sheets
- Kitchen shears
- Bowl
- Paper towels
- Measuring spoons
- Oven

What You Say:	What You Do:
<p>Today we are going to be making Kale Chips.</p> <p>What is the first thing that we need to do before we begin?</p> <p>(Answer: Wash our hands.)</p>	<ul style="list-style-type: none"> • Go over Handwashing skill sheet.
<p>Let's read through the recipe to see what steps we are going to do to make the Kale Chips. There are only 2 ingredients needed for the kale chips – kale and oil.</p>	<ul style="list-style-type: none"> • Pass out the recipes and read aloud together.
<p>We will be using the oven to bake the chips. What are some things we want to remember about using the oven?</p> <p>The oven needs to be preheated to 200 degrees Fahrenheit.</p>	<ul style="list-style-type: none"> • Review Oven Use and Safety skill sheet. • Ask someone to turn the oven on if it is not already done.
<p>We need to wash and dry the kale. Why do we need to dry the kale?</p> <p>(Answer: So the oil will stick to the kale.)</p> <p>We will want to cut or tear the kale into similar size pieces so that they bake evenly.</p> <p>We may need to use our fingers to rub the oil onto the kale leaves.</p>	<ul style="list-style-type: none"> • Call on someone who would like to answer.
<p>After the chips have baked for 20 minutes, turned and baked for 10 more minutes, we can take them from the oven and sprinkle them with some salt, Parmesan cheese or your favorite spice. What spices do you think would taste good with the Kale Chips?</p> <p>(Possible answers: Garlic powder, chili powder, seasoned salt.)</p>	<ul style="list-style-type: none"> • Allow some brainstorming time and answers.

Visuals



Swiss chard



Kale



Bok choy



**Turnips growing in the ground.
Both the root and the tops of the
turnip plant can be eaten.**

Greens Nutrition Information

Type	Serving Size/Weight in grams	Calories	Fiber (g)	Vitamin A (International Units)	Vitamin C (mg)	Potassium (mg)	Folate (mcg)
Kale (chopped and cooked)	½ cup, 65	18	1.3	n/a	27	148	8
Swiss chard (chopped and cooked)	½ cup 88	18	1.8	n/a	16	480	8
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)

Greens Sources

Sources

- hgic.clemson.edu/factsheet/arugula-kale-mesclun-mustard-and-swiss-chard/
- montana.edu/extension/nutrition/nutrition-cooking-culture/food-fact-sheets/leafy-greens.html
- michigannutritionnetwork.org/
- extension.illinois.edu/global/gardeners-corner
- eatfresh.org/discover-foods/leafy-greens
- integrativemedicine.arizona.edu/file/11275/phytoPrevention.pdf

Recipe

- ag.ndsu.edu/publications/food-nutrition/from-garden-to-table-leafy-greens

Lakota translation:

- Translated by Jeshua Estes

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SOUTH DAKOTA STATE
UNIVERSITY EXTENSION

Greens

In season:



Spring and
Summer

Lakota: omníča thąnkínkinyan

Pick it!

Varieties of greens include collard, mustard, kale, Swiss chard, broccoli rabe.

Should have fresh, green leaves; remove wilted or yellow leaves and avoid any rot and rust.

Young leaves should be crisp, tender and about 8-12 inches long.

Keep un-rinsed greens in a plastic bag in refrigerator's crisper for 3 days; or 5 days if wrapped in moist paper towels.

To clean, rinse in cool water to remove dirt. Change water several times.

Try it!

Each type of greens has a different flavor and popular cooking method.

Most make great additions to stir-fry, soups or stews.

Remove tough stems and central vein.

During boiling and steaming, nutrients are leached into cooking liquid, save liquid for soups.

Serve greens raw in salad, or cooked by boiling, steaming or sautéing.

Types of Greens

Collard: Fairly tough, 20-60 minutes cook time, popular substitute for cabbage in Deep South.

Chard: Type of beet grown for leaves not root, use raw or cooked.

Kale: Slightly peppery-tasting; great raw, cooked in soups or baked as chips.



Did you know...

Most greens are a good source of manganese. Manganese is important for bone formation, metabolism, breaking down carbohydrates and cartilage growth.

Like it!

Wilted Swiss Chard with Garlic

Ingredients

- 2 pounds Swiss chard; cleaned, coarsely chopped
- 3 Tablespoons olive oil
- 2 cloves garlic; minced
- Salt and ground black pepper to taste
- Fresh lemon juice, optional

Directions

1. Rinse the greens in several changes of cold water. Remove stems and chop into 1-inch pieces. Set aside.
2. Stack the leaves and roll them into a tube shape. Using a sharp knife, cut across the tube until all the greens are prepared.
3. Mince the garlic and set aside.
4. Heat a skillet or sauce pan over medium-low to medium heat.
5. Add olive oil and chopped stems. Cook for 5 minutes.
6. Add garlic and cook an additional few seconds.
7. Add the wet chard 1 handful at a time stirring after each addition. Cover with a tight fitting lid.
8. Cook the greens about 5 minutes, keeping the bright color.
9. Remove the lid and cook over medium-high heat until all the liquid has evaporated, about 2-3 minutes.
10. Season with salt and pepper to taste. Serve with a squeeze of lemon juice if desired.

Yields 4 servings

Nutrition Facts per Serving:

Calories 140; Fat 11g; Cholesterol 0mg; Sodium 480mg; Carbohydrates 9g; Fiber 4g; Sugar 3g; Protein 4g

Baked Kale Chips

Ingredients

- 1 bunch kale
- 2 teaspoons olive oil
- optional seasonings

Directions

1. Preheat oven to 200 degrees F.
2. Lightly spray 2 large baking sheets with vegetable oil cooking spray.
3. Wash and thoroughly dry the kale. Cut with kitchen shears or tear leaves from stems and thick center ribs in middle of leaves, then tear into large sections.
4. Toss with 1 teaspoon oil in a large bowl. Use slightly more oil if needed.
5. Place in a single layer on baking sheets. Bake about 20 minutes.
6. Remove the baking sheets from the oven and turn kale chips over. Bake an additional 10 minutes, checking for even crispness. Continue baking if needed.
7. Let chips cool slightly on a baking sheet placed on a cooling rack.
8. Transfer to a bowl and sprinkle lightly with salt, grated Parmesan cheese or your favorite spice if desired.

Nutrition Facts per Serving:

Calories 58; Fat 4.8g; Cholesterol 0g; Sodium 15g; Carbohydrate 3.7g; Fiber 1.3g; Sugar .8g; Protein 1.2g

**Find more recipes
and videos at
extension.sdstate.edu**

Lakota word translated by Jeshua Estes

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