



**SOUTH DAKOTA STATE  
UNIVERSITY EXTENSION**

# Spinach

**In season:**



**Summer**

## Preschool Lesson Plan

### Objectives

Participants will:

- identify spinach as a vegetable and the part of the plant it comes from.
- increase knowledge in harvesting, storage and use of spinach.
- demonstrate use of spinach in a recipe.

### Items Needed for the Lesson

- MyPlate poster
- Parts of a Plant visual
- Spinach visuals

### Handouts or Take Home Items

- Pick It! Try It! Like It! Preserve it! fact sheet
- Coloring Sheet

### Recipe

- Turkey Pinwheel Appetizers

### Cooking and Food Safety Skill Sheets

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

### Other Cooking and Food Safety Skills

- Storing fresh vegetables
- Cleaning canned goods and can openers
- Safely storing leftovers

### Supplies for Spinach Lesson

- Turkey Pinwheel Appetizers
  - » Microwave oven
  - » Butter knife or plastic knife
  - » Paring knife
  - » Cutting board
  - » Plastic wrap
  - » Wax paper
  - » Measuring spoons
  - » Paper towels
  - » Microwave safe plate
  - » Serving plate
  - » Colander for washing the vegetables
  - » Two small bowls to place the washed and chopped vegetables

What You Say:	What You Do:
<p>Every class we are 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"> <li>• It's a vegetable.</li> <li>• Its green and leafy.</li> <li>• It can be picked in the spring or fall.</li> </ul> <p>(Answer: Spinach.)</p>	<ul style="list-style-type: none"> <li>• Name off each clue, allow a few guesses before moving on to the next clue.</li> <li>• After someone guesses the answer, or you tell them, show them visuals of spinach.</li> </ul>
<p>Half of our plate should be fruits and vegetables. Preschool-aged children should be eating 1 cup of vegetables a day.</p> <p>Kindergartners should be eating 1 ½ cups of vegetables a day.</p>	<ul style="list-style-type: none"> <li>• Point to MyPlate poster.</li> </ul>
<p>Did you know different vegetables come from different parts of the plant? They are either a root, stem, leaf, fruit, flower or seed. What part of the plant do you think spinach is?</p> <p>(Answer: Leaf.)</p> <p>Do you know why plants need leaves?</p> <p>(Answer: The leaves catch sunlight and turn it into food for the plant. There are small holes in the leaves that allow air and water to go in and out of the plant, and small veins in the leaves that carry water.)</p>	<ul style="list-style-type: none"> <li>• Show Parts of Plant visual.</li> <li>• Call on participants to answer questions.</li> </ul>
<p>Spinach can be picked in spring and fall. You can grow spinach in a pot or in the ground. Spinach tastes best when it is picked when the leaves are small.</p>	<ul style="list-style-type: none"> <li>• Show Spinach visuals.</li> </ul>
<p>Pick spinach leaves that are crisp. You do not want to eat leaves that are limp, broken or spotted. Spinach can come in cans and frozen.</p>	
<p>Before you eat fresh spinach, you need to tear off the stems and wash the leaves in clear water. Pat the leaves dry with paper towels.</p> <p>To keep fresh spinach in the fridge put it in a plastic bag with holes poked into it. Keep the bag in the crisper with only vegetables. Spinach can be kept for four days in the fridge.</p>	<ul style="list-style-type: none"> <li>• Show how to clean.</li> </ul>
<p>Why should we eat spinach?</p> <p>It helps us have healthy blood and helps keep us from getting sick.</p>	
<p>How can we eat spinach?</p> <p>We can eat it raw in salads, sandwiches and smoothies. We can eat it cooked in soups, stir-fried, boiled and steamed.</p>	<ul style="list-style-type: none"> <li>• Talk about different ways to eat spinach.</li> </ul>

What You Say:	What You Do:
<p>Are you ready to try out a spinach recipe?</p> <p>What is the first thing we always do before making food? (Answer: Wash hands.)</p>	<ul style="list-style-type: none"> <li>• Call on someone.</li> </ul>
<p>Show the children the handwashing steps.</p>	<ul style="list-style-type: none"> <li>• You may show the Handwashing skill sheet.</li> </ul>
<p>What else should we wash before we make the recipe? (Answer: Countertop, table, etc.)</p>	

# Use this page if you are going to prepare Turkey Pinwheel Appetizers

## Equipment Needed

- Microwave oven
- Butter knife or plastic knife
- Paring knife
- Cutting board
- Plastic wrap
- Wax paper
- Measuring spoons
- Paper towels
- Microwave safe plate
- Serving plate
- Colander for washing the vegetables
- Two small bowls to place the washed and chopped vegetables

What You Say:	What You Do:
<p>Today we are going to make Turkey Pinwheel Appetizers. Here are the foods that we will use in this recipe today. Which food groups do you see? (Answer: Grains, protein, vegetables.) How many groups is that?</p> <p><b>Do not read the following to children:</b> Please note that cream cheese does not really fit into a food group. You could also mention that tomatoes are sometimes called a fruit too, but most people eat them like a vegetable.</p>	<ul style="list-style-type: none"> <li>• Show the ingredients to the children (cream cheese, tortillas, turkey, tomatoes, spinach). Then show the MyPlate poster. Show where each ingredient goes on the poster.</li> </ul>
<p>The first thing we need to do is warm up our tortillas to make them soft. Always ask a grown up to help with this. I am going to put them on a plate that we can use in a microwave.</p>	<ul style="list-style-type: none"> <li>• Show microwave safety poster. Demonstrate warming the tortillas.</li> </ul>
<p>Next, we are going to wash the tomatoes. we will use a cutting board and a sharp knife to chop the tomatoes. A grown up will do this for you. This is the way we cut the tomatoes, so we don't get hurt. We will put them in this bowl until we need them.</p>	<ul style="list-style-type: none"> <li>• Demonstrate washing and chopping the tomatoes safely. Show the posters for washing fruits and vegetables and using a knife. Do not let the children handle the knife. If the tomatoes are already washed, show the colander so they see how you washed them.</li> </ul>
<p>This is fresh spinach. What should we do before we use the spinach? That's right! We need to wash it. We will put the washed spinach on these paper towels to dry a little.</p>	<ul style="list-style-type: none"> <li>• Demonstrate washing and drying the spinach, even if washed already. Children may help with this step.</li> </ul>
<p>Now we will spread the cream cheese on each tortilla. We will need to use a Tablespoon to measure the cream cheese. It will take 2 Tablespoons. We will put the tortilla on a piece of waxed paper to do this.</p>	<ul style="list-style-type: none"> <li>• Show the children how to spread the cream cheese on a tortilla. They may help with this step too.</li> </ul>
<p>Let's add some tomatoes and spinach on top of the turkey.</p>	<ul style="list-style-type: none"> <li>• Children may help with this part.</li> </ul>
<p>The last thing we will do is roll the tortillas up. We will wrap them in plastic wrap and out in the refrigerator until we are ready to eat them. Do you know why we need to keep these rollups in the fridge? Possible answers: keep the turkey cold, the cheese, etc.</p>	<ul style="list-style-type: none"> <li>• Rollup and wrap the tortillas in plastic wrap. If the children will eat this right away, go on to the final step.</li> </ul>
<p>When we are ready to eat our rollups, we will take the sharp knife to slice them into pinwheels. A grown up can do this for you. Then we can eat them! If you have any left, put them back in the fridge.</p>	<ul style="list-style-type: none"> <li>• Slice these for the children. Do not allow them to use the knife.</li> </ul>



## Visuals



**Young Spinach Plants**



**Freshly Harvested Spinach Leaves**



**Spinach Growing in a Raised Bed**



**Salad Using Fresh Spinach**

## Spinach Nutrition Information

Types	Serving Size/ Weight in grams	Calories	Fiber (g)	Vitamin A (International Units)	Vitamin C (mg)	Potassium (mg)	Folate (mcg)
<b>Spinach, raw</b>	1 cup, packed leaves; 30 g	7	0.7	2813	8	167	58
<b>Spinach, cooked</b>	½ cup; 90 g	21	2.2	9433	9	419	131
<b>Daily Recommendations</b> <b>RDA=Recommended daily allowance</b> <b>AI=Adequate intake</b>	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	RDA (depending on age) ranges from 300-900 mg	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)



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# SPINACH



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

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# Spinach Sources

## Recipe

- [myplate.gov/recipes/supplemental-nutrition-assistance-program-snap/colorful-quesadillas](https://myplate.gov/recipes/supplemental-nutrition-assistance-program-snap/colorful-quesadillas)

## Information

- [extension.illinois.edu/veggies/spinach.cfm](https://extension.illinois.edu/veggies/spinach.cfm)
- SD Harvest Calendar – [pickyourown.org/SDharvestcalendar.htm](https://pickyourown.org/SDharvestcalendar.htm)
- How long to store – [foodsafety.gov/keep/foodkeeperapp/index.html](https://foodsafety.gov/keep/foodkeeperapp/index.html)
- How to store – [extension.purdue.edu/foodlink/food.php?food=spinach#:~:text=Store%20spinach%20leaves%20in%20a,water%20and%20squeeze%20it%20dry](https://extension.purdue.edu/foodlink/food.php?food=spinach#:~:text=Store%20spinach%20leaves%20in%20a,water%20and%20squeeze%20it%20dry)
- Cooking Glossary – [reallifegoodfood.umn.edu/kitchen-skills-and-tips/cooking-terms-glossary](https://reallifegoodfood.umn.edu/kitchen-skills-and-tips/cooking-terms-glossary)
- Daily Nutrition Goals – [dietaryguidelines.gov/resources/2020-2025-dietary-guidelines-online-materials](https://dietaryguidelines.gov/resources/2020-2025-dietary-guidelines-online-materials)

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In season:



Summer

# Spinach

## Pick it!

Select green, crisp leaves with fresh fragrance. Avoid limp, damaged or spotted leaves.

Leave should be dull green on top and bright green on the underside.

Available all year round.

Dry and pack fresh spinach loosely in a plastic bag and store for 3-4 days in the refrigerator crisper.

## Try it!

Use cooked or raw in salads and sandwiches.

Can be steamed, boiled, microwaved, sautéed or stir-fried.

Tear off the stem and separate the leaves. Place in a large bowl of water; let dirt and debris drift to the bottom of the water and remove leaves by lifting out. Repeat until leaves are clean.



## Types of Spinach

**Smooth leaf:** Flat, smooth, easy to clean; picked young as baby spinach for salads

**Semi-Savoy:** Crinkled leaves with some texture; not difficult to clean

**Savoy:** Dark green, crinkled, curly leaves; sold in fresh bunches for salads

## Did you know...

Vitamin K, known as the clotting vitamin, is found in green leafy vegetables and made by the bacteria that line the gastrointestinal tract.





**Like it!**

## Chicken Florentine

### Ingredients

- 10 ounces package frozen, chopped spinach, thawed and drained well
- 1 teaspoon dried thyme leaves, crushed
- 1 Tablespoon olive oil
- 2 teaspoons garlic powder
- ½ cup onion, finely chopped
- 1 Tablespoon white flour
- 1 cup low-sodium chicken broth
- 3 cups cooked chicken, cubed
- 2 Tablespoons grated lemon peel

### Directions

1. Preheat oven to 300 degrees F.
2. Put spinach in a large skillet, cover and cook over medium heat until heated through.
3. Remove and drain liquid.
4. Heat thyme, oil, garlic and onion until onion is transparent.
5. Add broth and heat until thick. Add cooked spinach.
6. Put chicken in a baking dish and add spinach sauce and lemon peel.
7. Place in oven and cook for 10 minutes.

Yields 4 servings

Nutrition Facts per Serving:  
Calories 220; Fat 7g; Cholesterol 75mg; Sodium 150mg;  
Carbs 8g

Sources: [urbanext.illinois.edu/](http://urbanext.illinois.edu/)

## Colorful Quesadilla

### Ingredients

- 8 ounces fat-free cream cheese
- ¼ teaspoon garlic powder
- 8 6-inch flour tortillas
- 1 cup sweet red pepper, chopped
- 1 cup low-fat shredded cheese
- 2 cups spinach leaves

### Directions

1. In a small bowl, mix cream cheese and garlic powder.
2. On each tortilla, spread 2 Tablespoons of the cream cheese mixture and add 2 Tablespoons bell pepper, ¼ cup spinach, and 2 Tablespoons cheese on ½ of the tortilla. And fold in half.
3. Heat a skillet over medium heat.
4. When skillet is hot, cook tortillas for 1-2 minutes on each side or until golden brown.
5. Remove and cut into 4 wedges.

Yields 8 servings

Nutrition Facts per Serving:  
Total Calories 156; Total Fat 4g, Saturated Fat 1g;  
Cholesterol 6mg; Sodium 483mg; Carbohydrates 19g,  
Dietary Fiber 2g, Total Sugars 3g, Added Sugars included  
0g; Protein 11g

Sources: [myplate.gov/recipes/supplemental-nutrition-assistance-program-snap/colorful-quesadillas](https://myplate.gov/recipes/supplemental-nutrition-assistance-program-snap/colorful-quesadillas)

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