



**SOUTH DAKOTA STATE  
UNIVERSITY EXTENSION**

# Garlic

**In season:**



**Spring,  
Summer and  
Fall**

*Lakota: pšíŋkčeka*

## Lesson Plan

### Objectives

Participants will:

- identify garlic as a vegetable from MyPlate.
- increase knowledge in the growth, selection, storage and use of garlic.
- compare garlic to onions.
- demonstrate the use of garlic in a recipe.

### Items Needed for the Lesson

- Visual of or actual garlic bulb to show the cloves and papery skin of garlic
- Clove of garlic and chefs knife to demonstrate removing the skin
- Garlic press
- Garlic powder

### Handouts or Take Home Items

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

### Recipe Choices

- Garlic and Herb Butter
- Orzo Garlic Chicken

### Cooking and Food Safety Skill Sheets

- Handwashing
- Knife Safety and Cutting Boards
- Stove Top Safety

### Other Cooking and Food Safety Skills

- Kitchen terms - boil, chop and mince
- What wilted spinach looks like

## Supplies for Garlic Lesson

- Garlic and Herb Butter
  - » Knife
  - » Cutting board
  - » Measuring cups
  - » Measuring spoons
  - » Bowl
  - » Spoon
  - » Plastic wrap
- Orzo Garlic Chicken
  - » Measuring cups
  - » Measuring spoons
  - » Knives
  - » Cutting boards
  - » Saucepan
  - » Skillet
  - » Spoon

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"> <li>Brides in ancient Greece carried bouquets of this instead of flowers.</li> <li>It is a close relative of onions.</li> <li>Many cooks depend on this to flavor food.</li> <li>Folklore says that this was used to scare away vampires.</li> </ul> <p>(Answer: Garlic.)</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 Garlic.</li> </ul>
<p>Garlic is a member of the onion family.</p> <p>Even though it is related to onions, it is very different from onions. Garlic is a cluster of cloves rather than one big bulb like an onion. Each cluster, or bulb, of garlic contains a dozen or more cloves. The larger outer cloves have the best flavor. The bulb is covered with a dry, loose, white outer skin.</p> <p>The garlic plant is also different from onions because it has flat leaves and onions have round, hollow leaves.</p> <p>Garlic and onions both grow underground.</p>	<ul style="list-style-type: none"> <li>Show visuals of or an actual bulb of garlic to show the size, make up of cloves and outer skin.</li> </ul>
<p>What food group do you think garlic belongs to? (Answer: Vegetable group.)</p> <p>Garlic is considered a vegetable but it is not usually eaten by itself like other vegetables.</p> <p>If garlic is not eaten by itself, how is it used? (Possible answers: In stir-fries, soups, sauces, stews, salads, pickles, salad dressings, etc.)</p> <p>Garlic is used to flavor and add a good smell to foods.</p>	<ul style="list-style-type: none"> <li>Call on someone who would like to answer.</li> <li>Allow discussion of the uses of garlic.</li> </ul>
<p>There are two main types of garlic: Hardneck Garlic which has stems that are used like green onions for mild garlic flavor.</p> <p>Softneck Garlic which is the common variety found in grocery stores. It can be stored for a long time.</p> <p>You may have also heard of elephant garlic. Elephant garlic is related to leeks rather than to garlic. It is much larger than real garlic. The bulb can weigh up to 1 pound. Elephant garlic has a mild flavor. It is sometimes eaten raw or used as an appetizer.</p>	<ul style="list-style-type: none"> <li>Show visuals of the two main types of garlic pointing out their differences.</li> </ul>

What You Say:	What You Do:
<p>Have any of you ever tried growing garlic in your garden?</p> <p>Garlic is grown by planting cloves rather than seeds because the garlic plant does not produce true seeds.</p> <p>Garlic likes well-drained soil and full sunshine.</p> <p>When garlic is ready to be harvested, it is best to dig the bulbs from the soil rather than to pull them.</p> <p>The bulbs, with tops attached, need to dry in a well-ventilated room for about 2 weeks. After that, the tops should be removed, about 1 inch above the bulb. The bulb can then be stored in a cool, dry place for several months.</p>	<ul style="list-style-type: none"> <li>• Allow discussion.</li> </ul>
<p>If you are buying garlic at the grocery store, what might be some things that we want to look for?</p> <p>Check for bulbs that are plump, firm and dry with tight skin. You may want to squeeze the garlic bulb between your fingers to make sure that it is not soft.</p> <p>Do not buy garlic that is shriveled, moldy or that has begun to sprout.</p>	<ul style="list-style-type: none"> <li>• Call on participants that would like to answer.</li> <li>• Show a bulb of garlic that is firm.</li> <li>• Demonstrate how to check the garlic by squeezing it between your fingers.</li> </ul>
<p>How should we store garlic?</p> <p>Fresh garlic should be stored in a covered or uncovered container in a cool, dark place. It should be kept away from heat and sunlight to prevent it from sprouting.</p> <p>If garlic becomes soft or moldy, throw it away.</p>	<ul style="list-style-type: none"> <li>• Call on someone who would like to answer.</li> </ul>
<p>Before we use garlic, we must first remove the papery skin from the whole bulb of garlic. To do this quickly, separate all of the cloves and put them in a metal bowl. Place a lid on the bowl and shake the bowl for about 1 minute. This will peel the papery skin off from all of the cloves.</p> <p>To peel an individual clove of garlic, lay the clove under the flat side of a large chefs knife. Press the knife with the heel of your hand, until the clove and skin crack. This will loosen the clove of garlic from the skin and it can easily be removed.</p>	<ul style="list-style-type: none"> <li>• Demonstrate removing the papery skin from a whole bulb of garlic using a bowl with a lid.</li> <li>• Demonstrate how to remove the skin from one clove of garlic using a chefs knife.</li> </ul>



= for adults or older youth

What You Say:	What You Do:
<p>Garlic can be chopped, minced or crushed. The finer garlic is chopped, the more flavor it will give to foods. The flavor of garlic is strongest right after chopping.</p> <p>You can chop and mince garlic with a sharp knife. You can also use a garlic press to mince garlic.</p>	<ul style="list-style-type: none"> <li>• Show a garlic press and demonstrate how it is used.</li> </ul>
<p>Sometimes our hands will smell like garlic after handling it. What can we do to help remove the smell from our hands?</p> <p>(Answer: Try rubbing a cut lemon on our hands or pouring lemon juice on them to remove the smell.)</p>	<ul style="list-style-type: none"> <li>• Call on someone who would like to answer.</li> <li>• Allow discussion.</li> </ul>
<p>We can also purchase garlic in powder form at the grocery store. It is located in the same section as other spices.</p> <p>When substituting garlic powder for fresh garlic, in a recipe, we can use 1 teaspoon of garlic powder for 1 fresh garlic clove.</p>	
<p>Are you ready to try a recipe using garlic?</p> <p>What is the first thing we need to do before preparing food?</p> <p>(Answer: Wash our hands.)</p>	<ul style="list-style-type: none"> <li>• Review Handwashing skill sheet.</li> </ul>



# Use this page if you are going to prepare Garlic and Herb Butter

## Equipment List

- Knife
- Measuring cups
- Bowl
- Plastic wrap
- Cutting board
- Measuring spoons
- Spoon

What You Say:	What You Do:
<p>Today we are going to be making Garlic and Herb Butter.</p> <p>Let's read through the recipe before we begin.</p>	<ul style="list-style-type: none"> <li>• Pass out the recipes and read aloud with participants.</li> </ul>
<p>We will be chopping the herbs that we have chosen and mincing the garlic.</p> <p>What do the cooking terms "chop" and "mince" mean?</p> <p>(Answer: Chop – to cut solids into pieces with a sharp knife or other chopping device. Mince – to cut or chop food into extremely small pieces.)</p>	<ul style="list-style-type: none"> <li>• Call on someone who would like to answer.</li> </ul>
<p>We will be using a knife and cutting board to chop and mince.</p> <p>What are some things we need to remember about knives and cutting boards?</p> <p>We might also use a garlic press to mince the garlic.</p> <p>Has anyone used a garlic press before?</p>	<ul style="list-style-type: none"> <li>• Review Knife Safety and Cutting Boards skill sheet.</li> <li>• Show a garlic press and demonstrate how to use it.</li> </ul>
<p>The butter, herb, garlic, lemon juice, salt and pepper will all be mixed together.</p> <p>When we measure the lemon juice, it is best to measure it over another bowl rather than the bowl that contains the other ingredients. That way, if we overfill the measuring spoon, it will spill into the extra bowl, which prevents adding too much lemon juice to the Garlic and Herb Butter.</p> <p>Next it will be shaped into a roll, wrapped in plastic wrap and placed in the freezer.</p>	
<p>What are some foods we might use the garlic and herb butter on?</p> <p>(Possible answers: Toast, bread, corn on the cob, vegetables, etc.)</p>	<ul style="list-style-type: none"> <li>• Allow discussion of the use of Garlic and Herb Butter.</li> </ul>

# Use this page if you are going to prepare Orzo Garlic Chicken

## Equipment List

- Measuring cups
- Knives
- Saucepan
- Spoon
- Measuring spoons
- Cutting boards
- Skillet

What You Say:	What You Do:
Today we will be making Orzo Garlic Chicken. Let's read through the recipe before we begin.	<ul style="list-style-type: none"> <li>• Pass out the recipes. Read aloud with participants.</li> </ul>
<p>How many food groups are in this recipe? (Answer: 4. Orzo pasta - grain. Garlic and spinach - vegetables. Chicken - protein. Parmesan cheese - dairy.)</p> <p>Which food group is missing? (Answer: Fruits.)</p>	<ul style="list-style-type: none"> <li>• Point to the MyPlate poster.</li> <li>• Call on participants to answer.</li> </ul>
<p>We will be cooking the orzo pasta in boiling water.</p> <p>What does the cooking term "boil" mean? (Answer: To heat a liquid until bubbles break continually on the surface.)</p>	<ul style="list-style-type: none"> <li>• Call on someone who would like to answer.</li> </ul>
<p>We will be chopping the parsley and mincing the garlic.</p> <p>What do the cooking terms "chop" and "mince" mean? (Answer: Chop is to cut food into small pieces. Mince is to cut or chop food into tiny pieces.)</p>	<ul style="list-style-type: none"> <li>• Discuss the cooking terms chop and mince.</li> </ul>
<p>We will be using a knife and cutting board to chop and mince. What are some things we need to remember when using knives and cutting boards?</p>	<ul style="list-style-type: none"> <li>• Call on participants.</li> <li>• Review Knife Safety and Cutting Boards skill sheet.</li> </ul>
<p>We could also use a garlic press to mince the garlic.</p> <p>Have any of you seen or used a garlic press before?</p>	<ul style="list-style-type: none"> <li>• Show a garlic press and demonstrate how to use it.</li> </ul>
<p>After the garlic, red pepper and chicken is cooked add parsley and orzo to the mixture. Next add spinach to the skillet. The recipe says to cook stirring occasionally, until the spinach is wilted. What will the spinach look like when it is wilted? (Possible answers: Droopy, wrinkled, shriveled, limp.)</p>	<ul style="list-style-type: none"> <li>• Call on participants. Discuss how to tell when the spinach is wilted.</li> </ul>
<p>If there are leftovers of this recipe, what should be done with them? (Answer: Place them in a covered container and refrigerate within 2 hours. Leftovers should be used within 3 to 4 days.)</p>	



## Visuals



**Garlic growing in a field**



**Garlic flowers**



**A head of garlic contains several cloves**



**If garlic is not used fast enough the cloves will begin to sprout**

## Garlic Nutrition Information

Type	Serving Size/Weight in grams	Calories	Fiber (g)	Vitamin A (International Units)	Vitamin C (mg)	Potassium (mg)	Folate (mcg)
<b>Garlic</b>	1 clove	4	0.1	0%	0.9	12	--
<b>Garlic, minced</b>	1 teaspoon.	5	0.1	0%	1.6	16	--
<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	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)

# Garlic Sources

## Recipe

- [dinnertonight.tamu.edu/recipe/orzo-garlic-chicken/](http://dinnertonight.tamu.edu/recipe/orzo-garlic-chicken/)
- [ndsu.edu/agriculture/extension/publications/field-fork-garlic](http://ndsu.edu/agriculture/extension/publications/field-fork-garlic)

## Clues

- [softschools.com/facts/plants/garlic\\_facts/1069/](http://softschools.com/facts/plants/garlic_facts/1069/)

## Other

- [anrcatalog.ucanr.edu/pdf/7231.pdf](http://anrcatalog.ucanr.edu/pdf/7231.pdf)
- [ag.ndsu.edu/publications/food-nutrition/from-garden-to-table-garlic](http://ag.ndsu.edu/publications/food-nutrition/from-garden-to-table-garlic)
- [eatfresh.org/discover-foods/garlic](http://eatfresh.org/discover-foods/garlic)
- [store.extension.iastate.edu/product/5490](http://store.extension.iastate.edu/product/5490)

## Lakota translation

- Translated by Jeshua Estes

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

SDSU Extension is an equal opportunity provider and employer in accordance with the nondiscrimination policies of South Dakota State University, the South Dakota Board of Regents and the United States Department of Agriculture.

Learn more at [extension.sdstate.edu](http://extension.sdstate.edu).

© 2024, South Dakota Board of Regents





SOUTH DAKOTA STATE  
UNIVERSITY EXTENSION

# Garlic

In season:



Spring,  
Summer and  
Fall

*Lakota: pšíŋkčeka*

## Pick it!

A bulb is covered with dry, loose outer skin, made up of individual cloves; skin must be removed.

Select plump, dry and firm heads with a smooth white covering.

Choose large sized bulbs with roots still in place.

Do not buy garlic with green sprouts growing from it.

Store in a mesh bag at 32-40 degrees for up to 3-6 months.

Member of the onion family; strong flavor and smell for flavoring food.

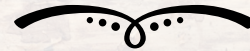
Cooked garlic has a milder flavor than raw; bitter when overcooked.

## Try it!

Used whole, chopped, crushed, pressed or pureed in dishes. The more finely garlic is chopped the stronger its flavor.

Peel the outer skin off; crush by pressing with the side of a large knife blade, chop finely, crush again. Let stand at room temperature about 10 minutes.

Cook for as short a time as possible.

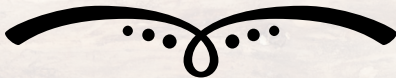


## Types of Garlic

**Softneck:** multiple plant stems braided for drying, common variety, long shelf life

**Hardneck:** stems used like green onions, mild garlic flavor

**Elephant:** related to leeks, strong smell but mild flavor



## Did you know...

Phytochemicals, substances in plants, may protect health. Phytochemicals reduce or neutralize free radicals that damage cells.

Garlic contains phytochemicals.



**Like it!**

## Garlic and Herb Butter

### Ingredients

- ½ cup (1 stick) softened butter
- 2 Tablespoons finely chopped parsley, basil or herb of choice
- ½ teaspoon garlic; minced
- 2-3 teaspoons lemon juice
- Salt and pepper to taste

### Directions

1. Separate the garlic cloves. Crush, remove the coating.
2. After crushing, mince the garlic.
3. Mix all ingredients together.
4. Shape the mixture into a roll.
5. Wrap tightly with freezer quality plastic wrap.
6. Freeze up to 6 months.
7. Slice off amounts as needed.

Yields 8 servings

Nutrition Facts per Serving:  
Calories 100; Fat 12g; Cholesterol 30mg; Sodium 140mg;  
Carbohydrates 0g; Sugar 0g; Fiber 0g; Protein 0g

Source: [ndsu.edu/agriculture/extension/publications/field-fork-garlic](https://ndsu.edu/agriculture/extension/publications/field-fork-garlic)

*Lakota word translated by Jeshua Estes*

## Orzo Garlic Chicken

### Ingredients

- 1 cup orzo pasta; uncooked
- 2 Tablespoons olive oil
- 2 cloves garlic; minced
- ¼ teaspoon crushed red pepper
- 2 (8 ounce) boneless, skinless chicken breast halves, cut into bite size pieces
- 1 Tablespoon fresh parsley; chopped (1 teaspoon if dried)
- 2 cups fresh spinach leaves
- ¼ cup reduced fat, grated Parmesan cheese for topping

### Directions

1. Bring a large pot of water to a boil. Add orzo pasta, cook for 8-10 minutes and drain.
2. Heat the oil in a skillet over medium-high heat. Cook the garlic and red pepper 1 minute until garlic is golden brown.
3. Stir in chicken and cook 2-5 minutes, until lightly brown and juices run clear.
4. Reduce heat to medium and mix in the parsley and cooked orzo.
5. Place spinach in the skillet. Continue to cook for 5 minutes, stirring occasionally until spinach is wilted.
6. Serve topped with Parmesan cheese.

Yields 4 servings

Nutrition Facts per Serving:  
Calories 370; Fat 12g; Cholesterol 85mg; Sodium 150mg;  
Carbohydrates 33g; Fiber 1g; Sugar 2g; Protein 33g

Source: [dinnertonight.tamu.edu/recipe/orzo-garlic-chicken/](https://dinnertonight.tamu.edu/recipe/orzo-garlic-chicken/)

**Find more recipes  
and videos at  
[extension.sdstate.edu](https://extension.sdstate.edu)**

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

SDSU Extension is an equal opportunity provider and employer in accordance with the nondiscrimination policies of South Dakota State University, the South Dakota Board of Regents and the United States Department of Agriculture. Learn more at [extension.sdstate.edu](https://extension.sdstate.edu).

S-0001-18

© 2024, South Dakota Board of Regents