



Watermelon

Lakota: špaŋšniyútapi

Lesson Plan

Objectives

- Identify watermelon as a fruit and a vegetable.
- Identify how to select and store watermelon and its nutritional value including lycopene.
- Demonstrate using watermelon in a healthy recipe.

Items Needed for the Lesson

- MyPlate poster
- Nutrition Facts for watermelon
- A ripe watermelon or visual to show ground spot and dull surface.
- Visuals of different types of watermelon

Handouts or Take Home Items

- Pick It, Try It, Like It Handout with recipe
- Additional recipe card with alternative recipe

Recipe Choices

- Easy – Watermelon Smoothie
- Intermediate – Watermelon Gazpacho

Facts to Share with Students

- Start with Ice Breaker – Guess the fruit or vegetable.
- MyPlate – fruit servings per day and serving size
- Where and how it is grown
- How to choose and store watermelon
- Watermelon nutrition

Cooking and Food Safety Skills

- Wash hands for 20 seconds
- Washing fruits and vegetables
- Watermelon storage
- Using measuring spoons
- Blender safety
- Knife safety and cutting boards

Supplies for Watermelon Lesson

- Watermelon Smoothie
 - » Knives
 - » Cutting board
 - » Measuring cups
 - » Measuring spoons
 - » Blender or food processor

- Watermelon Gazpacho
 - » Knives
 - » Cutting Boards
 - » Vegetable Peeler
 - » Measuring Cups
 - » Measuring Spoons
 - » Large Bowl
 - » Small Bowl
 - » Spoon
 - » Blender or Food Processor

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"> • Africa is considered its native home. • This round food can be considered a fruit and a vegetable. • Early explorers used them as canteens. • Some people thump them to check for ripeness. <p>(Answer: Watermelon)</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 watermelon.
<p>Watermelon can be considered a fruit and a vegetable. It is a fruit as it grows from a seed and has a sweet, refreshing flavor. It is a vegetable, related to cucumbers, pumpkin and squash, and is harvested like other vine growing vegetables.</p> <p>MyPlate shows us that we should be filling half of our plates with fruits and vegetables.</p>	<ul style="list-style-type: none"> • Point to the MyPlate poster.
<p>Have any of you grown watermelon before?</p> <p>Watermelon prefers a sunny location with well-drained soil for best growth.</p> <p>Watermelon can be grown from seeds or from started plants. When planting seeds, plant 4 – 6 seeds, 1 – 2 inches deep in mounds about 4 feet apart. If growing from transplants, the plants should have 2 – 3 mature leaves. Plant them 2 feet apart in rows 4 to 6 feet apart. Water 1 -2 inches per week. To improve the watermelon's flavor, reduce the water amounts as the fruit ripens.</p> <p>Watermelons are ripe and should be harvested when the underside, or ground spot, changes from white to yellow and the watermelon skin changes from shiny to dull.</p>	<ul style="list-style-type: none"> • Discuss growing watermelon. • If using a whole watermelon in your food prep, show the ground spot and dull skin surface.
<p>Watermelons are available in many sizes, shapes and colors. They may be round to oblong, light green to deep, dark green and the skin color may be solid, striped or marbled. The edible flesh inside of the watermelon may be yellow, pink, orange or red. Another choice is seeded or seedless watermelon.</p> <p>When purchasing watermelon, choose one that is heavy with a hard rind. Again, look for the yellow ground spot and a dull finish to the outer skin.</p>	<ul style="list-style-type: none"> • Show visuals of different varieties of watermelon.

What You Say:	What you do:
<p>Why would we want to eat watermelon?</p> <p>Watermelon is mostly water – up to 92% water.</p> <p>Watermelon’s high-water content refreshes us and carries many minerals and antioxidants in our bodies. A powerful antioxidant, lycopene, is found in watermelon. Watermelon has more lycopene than any other fruit or vegetable.</p> <p>Lycopene can help to reduce inflammation in our body.</p> <p>Watermelon is also low in fat, is an excellent source of Vitamin A and Vitamin C and has only 80 calories per 2 cups.</p>	<ul style="list-style-type: none"> • Show the nutrient chart for watermelon. • Show a 2-cup equivalent of watermelon using food models or measuring cups.
<p>If we are not going to eat watermelon right away, how do we store it?</p> <p>Uncut watermelon can be stored at cool room temperature for one to two weeks.</p> <p>What steps should we follow if we are going to cut the watermelon?</p> <p>Wash the outer surface of watermelon thoroughly under cool running water before cutting to remove any bacteria.</p> <p>To store cut watermelon, tightly cover it and put in the refrigerator, make sure to eat it within 2 – 3 days.</p>	<ul style="list-style-type: none"> • Discuss storage of watermelon. • Discuss food safety when preparing watermelon for eating.
<p>Are you ready to try out a watermelon recipe?</p> <p>What is the first thing that we do before preparing food?</p> <p>(Answer: Wash hands)</p>	<ul style="list-style-type: none"> • Wait for possible answers to the question. • Show this process using a paper bag.

Use this page if you are going to prepare Watermelon Smoothie

Equipment List

- Knives
- Measuring cups
- Blender or food processor
- Cutting board
- Measuring spoons

What You Say:	What You Do:
<p>Today we are going to make a Watermelon Smoothie.</p> <p>This smoothie has only 5 ingredients: fat-free yogurt, watermelon, strawberries, honey or strawberry jam and ice.</p>	<ul style="list-style-type: none"> Pass out the recipe.
<p>What two food groups are represented in our recipe? (Answer: Fruit and Dairy)</p>	<ul style="list-style-type: none"> Point to fruit and dairy groups on MyPlate.
<p>Our focus has been on Pick It, Try It, Like It fruits and vegetables and the nutrients that they provide. Why do you think we need to include dairy in our diet? (Possible answers: for strong bones and teeth, they provide calcium and vitamin D.)</p>	<ul style="list-style-type: none"> Discuss importance of dairy foods.
<p>The amount of dairy foods we need each day depends on our age.</p> <p>It is best to choose low-fat dairy foods. Low-fat choices have the same amount of calcium, but less fat and calories.</p>	<ul style="list-style-type: none"> Look at the label on the low-fat yogurt container.
<p>In the recipe, it says to hull the strawberries before putting them in the blender. Does anyone know what that means? (Answer: to remove the green leafy stem)</p> <p>To hull strawberries, it is best to use a paring knife.</p>	<ul style="list-style-type: none"> See if anyone knows the answer, if not explain.
<p>To make our smoothie, we will be using a blender.</p> <p>We will also be using a knife to cube the watermelon.</p>	<ul style="list-style-type: none"> Go over blender safety. Review knife safety. Review washing fruits and vegetables.

Use this page if you are going to prepare Watermelon Gazpacho

Equipment List

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| <ul style="list-style-type: none"> • Knives • Cutting Boards • Vegetable Peeler | <ul style="list-style-type: none"> • Measuring Cups • Measuring Spoons • Large Bowl | <ul style="list-style-type: none"> • Small Bowl • Spoon • Blender or Food Processor |
|--|--|--|

What You Say:	What You Do:
<p>Today we are going to make Watermelon Gazpacho.</p> <p>Does anyone know what "gazpacho" is? (Answer: Gazpacho is a spicy soup that is usually made from chopped raw vegetables and is served cold.)</p>	<ul style="list-style-type: none"> • Pass out the recipe. • Check to see if anyone would like to answer.
<p>Before we begin any food preparation, what do we need to do? (Answer: Wash our hands.)</p> <p>We also want to wash the produce that we will be using in our recipe before we do any cutting or chopping. How do we wash the different fruits and vegetables that we are going to use today?</p>	<ul style="list-style-type: none"> • Refer to handwashing reference sheet. • Refer to the washing fruits and vegetables reference sheet.
<p>Let us read through the recipe together.</p> <p>Note that the watermelon and cucumber amounts are "divided".</p> <p>We will be using part of the amounts for different steps in the recipe.</p>	<ul style="list-style-type: none"> • Read the recipe aloud.
<p>Some other cooking terms used in the recipe are chopped, minced and pureed. What do these terms mean? (Answer: chop – cut solids into pieces with a sharp knife or other chopping equipment; mince – cut or chop into very small pieces; puree – to mash foods by hand or by whirling in a food processor or blender until very smooth)</p>	<ul style="list-style-type: none"> • Allow time for participants to describe the cooking terms.
<p>We will be using knives, cutting boards and a blender to prepare the gazpacho. What are some things we want to remember when using these pieces of kitchen equipment?</p>	<ul style="list-style-type: none"> • Refer to knife and cutting board reference sheet. • Refer to blender safety reference sheet.

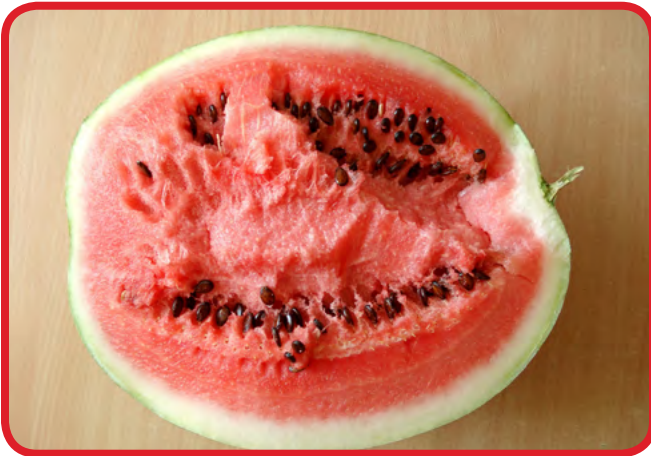
Visuals



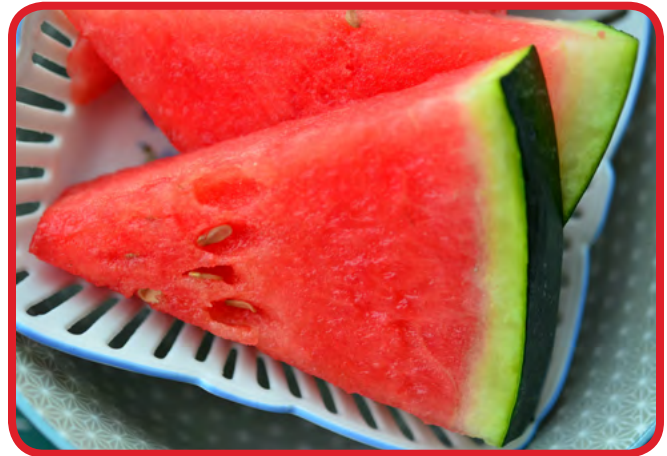
Small watermelon growing on the vine



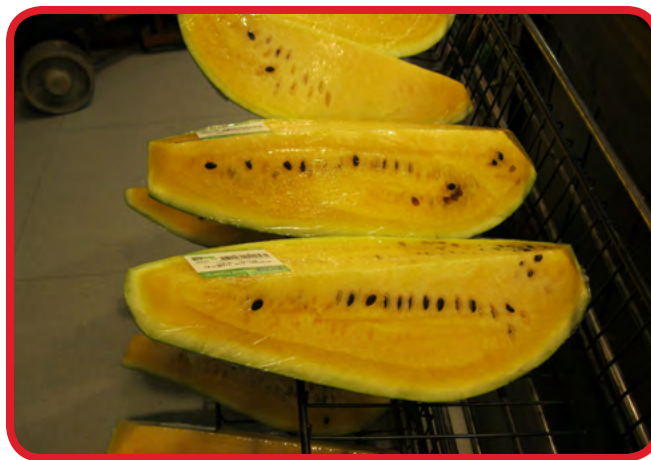
Full-sized watermelon on the vine



A seeded watermelon



Seedless watermelon



Cut yellow watermelon

Watermelon Nutrition Information

Type	Serving Size/Weight in grams	Calories	Fiber (g)	Vitamin A (% Daily Value)	Vitamin C (mg)	Potassium (mg)	Folate (mcg)
Watermelon, cut	½ cup 77	23	.3	438	6	86	2
Daily Recommendations RDA=Recommended daily allowance AI=Adequate intake	1-2 cup servings of fruit 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 3000-4700 mg)	RDA (depending on age) ranges from 150-400 mcg)

Daily Fruit Table

Daily Recommendation*		
Children	2-3 years old	1 cup
	4-8 years old	1 to 1 ½ cups
Girls	9-13 years old	1 ½ cups
	14-18 years old	1 ½ cups
Boys	9-13 years old	1 ½ cups
	14-18 years old	2 cups
Women	19-30 years old	2 cups
	31-50 years old	1 ½ cups
	51+ years old	1 ½ cups
Men	19-30 years old	2 cups
	31-50 years old	2 cups
	51+ years old	2 cups

Daily Vegetable Table

Daily Recommendation*		
Children	2-3 years old	1 cup
	4-8 years old	1 ½ cups
Girls	9-13 years old	2 cups
	14-18 years old	2 ½ cups
Boys	9-13 years old	2 ½ cups
	14-18 years old	3 cups
Women	19-30 years old	2 ½ cups
	31-50 years old	2 ½ cups
	51+ years old	2 cups
Men	19-30 years old	3 cups
	31-50 years old	3 cups
	51+ years old	2 ½ cups

Daily Dairy Table

Daily recommendation		
Children	2-3 years old	2 cups
	4-8 years old	2 ½ cups
Girls	9-13 years old	3 cups
	14-18 years old	3 cups
Boys	9-13 years old	3 cups
	14-18 years old	3 cups
Women	19-30 years old	3 cups
	31-50 years old	3 cups
	51+ years old	3 cups
Men	19-30 years old	3 cups
	31-50 years old	3 cups
	51+ years old	3 cups

*These amounts are appropriate for individuals who get less than 30 minutes per day of moderate.

<https://www.choosemyplate.gov>

Handwashing

Washing hands often and properly helps kill harmful bacteria. We need to wash our hands before starting to work in the kitchen and prior to handling food. To wash properly follow these steps:

1. Wet hands well with warm water.
2. Add soap.
3. Scrub hands, wrists, fingernails, and between fingers for at least 20 seconds. To measure 20 seconds, sing the Happy Birthday song twice OR sing the ABC song.
4. Rinse hands thoroughly.
5. Dry hands with a clean paper towel.
6. Use the paper towel to turn the water off.
7. Discard the paper towel.



Knife Safety

1. Always cut away from you and use a cutting board.
2. Keep knife blades sharp and clean.
3. Keep the knife handle clean.
4. Never place knives in the dish water, as they can injure the person washing dishes.
5. When wiping a knife blade, point the cutting edge away from your hand.
6. Do not lay knives close to the edge of the counter.
7. If a knife falls, do not try to catch it.
8. When done using them, return clean knives back to their proper storage areas.



Cutting Boards

1. Choose a cutting board with a smooth, hard surface.
2. Replace your cutting board when it has lots of grooves and scratches.
3. Do not chop fruits, vegetables or other ready-to-eat foods on a cutting board that was used for meat, unless you wash it first. If possible, use a different board for meats than you use for ready-to-eat foods.
4. Scrub cutting boards with hot, soapy water after each use.
5. Dishwashers are good cleaners if the cutting board is dishwasher safe – thin plastic and wooden cutting boards may be damaged in the dishwasher.
6. Make sure cutting boards are completely dry before putting them away.

Washing Fruits and Vegetables

- Start with clean hands. Wash hands for 20 seconds with soap and water before and after preparing fresh produce.
- All fruits and vegetables should be washed before eating. This includes produce purchased from the grocery store, farmer's market, or produce grown at home.
- Wash fruits and vegetables under cool running water just before eating, cutting or cooking.
- Even produce that is going to be peeled before eating needs to be washed first.
- Scrub firm produce, such as melons, cucumbers and carrots with a clean produce brush.
- After washing, dry the produce with a clean cloth or paper towel, this may remove even more bacteria that may be present.
- Cut away any bruised or damaged areas before preparing or eating. Produce that is moldy or that looks rotten should be thrown away.



Using a Blender

1. Place container on the base making sure that it feels firm or locked. Then plug the base in.
2. Add liquids to the blender first.
3. Before adding fruits and vegetables to the blender, cut them into pieces about 1 inch in size.
4. Do not fill the blender more than 2/3 full.
5. Put the lid on the blender container before turning the blender on. Place one hand on the lid of the blender during operation.
6. Turn the blender on and off several times to avoid over blending.
7. A rubber spatula works well when blending to scrape the sides of the blender, but do not use it when the blender is running.
8. Use both hands to twist or lift the container from the base.
9. To clean the blender container, fill it about 2/3 full of warm water, add a drop of liquid dish soap and turn the blender on and off several times. Then rinse the blender well with warm water.
10. Unplug the base and wipe clean with a damp cloth. Do not immerse the base in water



Watermelon Sources

Recipe

- <https://www.choosemyplate.gov/recipes/myplate-cnpp/watermelon-gazpacho>

SD Harvest Calendar

- <http://www.pickyourown.org/SDharvestcalendar.htm>

How long to store

- <https://www.foodsafety.gov/keep/foodkeeperapp/index.html>

How to store

- <https://hgic.clemson.edu/factsheet/selecting-storing-fruits-vegetables/>

Cooking Glossary

- https://www.d.umn.edu/~alphanu/cookery/glossary_cooking.html

Fruit and Vegetable Nutrition Facts Chart

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

Daily Nutrition Goals

- <https://health.gov/dietaryguidelines/2015/guidelines/appendix-7/#table-a7-1-daily-nutritional-goals-for-agesex-groups-based-on-d>