

Harvests of the Month

First two weeks: Spinach

Second two weeks: Radishes

If these are not available in your school garden, they should be available at the Farmers' Market. Grocery stores often have locally-grown produce in season, too.

Please choose at least one activity from each week to go along with your weekly gardening time. You may also create your own lesson plan.



	Monday	Tuesday	Wednesday	Thursday	Friday
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SPINACH ACTIVITIES	Book – I Eat Vegetables, by Hannah Tofts, p. 4	Spinach Name Game, p. 5	Spinach Leaf Prints, p. 5	Recipe – Veggie Tortilla Roll-up, p. 5	Gardening!
RADISH ACTIVITIES	Book – Rah Rah Radishes, by April Sayre, p. 7	Radish Mystery Bag p. 8	Root Vegetable Sensory Bin, p. 8	Recipe – Radish Bruschetta, p. 8	Gardening!
RADISH ACTIVITIES	Book – I Can Eat a Rainbow, by Annabel Karmel, p. 9	Vegetable Poem, p. 9	Paper Plate Radish Craft, p. 10	Recipe — Yogurt Dip with Veggies, p. 10	Gardening!

Note: Please feel free to adapt these activities as necessary. Younger children may require additional assistance with some of the tasks required.





SPINACH

Fun Facts

Botany

- o Spinach is an annual plant of the family Amaranthaceae, which grows best in cool, damp weather and rich, moist soil and is typically planted by direct seeding.
- Spinach consists of small and medium leaves that are bright green, thick, soft, and oval to arrow-shaped with green stems. Both the leaves and stems are edible. The leaves form rose-like clusters or rosettes from which flowering shoots emerge.
- o Chlorophyll, or a group of green pigments found in plants and vegetables, like spinach, can be used to create a phenomenon called "fluorescence," which is essentially the same phenomenon as neon light.
- The name "spinach" has been applied to a number of leafy vegetables that are unrelated or only distantly related to spinach including: New Zealand spinach, Water spinach, Malabar spinach, and Orach, which is also referred to as "French spinach" or "mountain spinach."

History

- o Spinach originated in Iran where it was known as aspanakh.
- o It made its way to China in the 7th century when the king of Nepal sent it as a gift.
- Spinach arrived in Europe in the 11th century when it was brought to Spain by the Moors (Muslims). In fact, spinach was known as "the Spanish vegetable" in England.
- o In the 16th century, spinach became the favorite vegetable of Catherine de Medici of the famous Medici family of the Italian Renaissance. When she left her home in Florence, to marry King Henry II of France, she brought along her own cooks to prepare spinach in the variety of ways she liked. Since then, dishes prepared on a bed of spinach are referred to as "à la Florentine."
- North Americans began growing spinach in the early 19th century. When Popeye made his debut on January 17, 1929, spinach became the third most popular children's food after turkey and ice cream. Today, more than 94% of Americans associate spinach with Popeye.
- o Spinach was the first frozen vegetable to be sold for commercial use.

Nutrition

- One cup of fresh spinach provides:
 - An excellent source of vitamin A and vitamin K.
 - A good source of vitamin C and folate.
- O A ½ cup of cooked spinach provides:
 - An excellent source of vitamin A, vitamin K, folate and magnesium.
 - A good source of vitamin C, vitamin B6, calcium, iron, potassium and riboflavin.

Adapted from: https://harvestofthemonth.cdph.ca.gov/documents/Spring/Spinach/Spinach_Educator%27s-Newsletter_5.pdf

Activity: Fruit and Vegetable Knowledge Assessment

Ages: 3-5 years Time: 10 minutes Objective(s):

- To establish a baseline with which to compare children's knowledge of fruits and vegetables from the start of the growing season to the end.
- Children will share their current knowledge of fruits and vegetables.

Materials: Pen and paper to track children's responses

Preparation:

1. Gather materials.

- 2. Invite children to sit in a circle on the floor.
- 3. Tell children you would like their help listing as many fruits and vegetables as they can. Do not provide any further prompting. Allow children to continue naming fruits and vegetables until they cannot think of any more. Write down the answers provided.
- 4. Ask children where fruits and vegetables come from and record answers. Once children have finished answering, reinforce that fruits and vegetables are grown in the ground or on bushes or trees.
- 5. Ask children where they can buy fruits and vegetables and record answers.
- 6. Ask children what fruits or vegetables they can help to grow at school or at home and record answers. Discuss what plants need to grow (soil, air, sun, water).



Activity: Book – From the Garden, by Michael Dahl

Ages: 6 months-5 years Time: 15 minutes Objective(s):

- Children will be introduced to spinach as a vegetable.
- Children will identify the fruits and vegetables from the story and how they grow.
- Children will learn where spinach grows.
- Children will find the hidden numbers in the illustrations from the story.

Materials: Pictures of fruits and vegetables found in the book (i.e., tomatoes, carrots, cabbage, lettuce, broccoli, strawberries, onions, peas, cucumbers, radishes and peppers), a picture of spinach

Preparation:

1. Gather materials.

Procedure:

- 2. Invite children to sit in a circle on the floor.
- 3. Read *From the Garden*, by Michael Dahl. Ask the children to identify the fruits and vegetables from the story and how they grow. Use pictures of fruits and vegetables to reinforce each fruit and vegetable they identify.
- 4. Talk about how spinach also grows in the garden. Show children a picture of spinach and describe it it can have smooth or wrinkled leaves; it grows in Colorado through the whole year, but likes the weather to be cooler (in the fall and spring). Spinach can be bought fresh at a farmers' market or at a farm stand. It can also be bought at the supermarket, but usually it comes from farms further away from where we live. We eat both the leaves and the stems.
- 5. Tell the children that you have a surprise for them in the book. On each page there is a number hidden in the picture. Have them look at each page of fruits and vegetables and try to find the hidden number.

Activity: Spinach Mystery Bag and Taste Test

Ages: 3-5 years Time: 20 minutes Objective(s):

- Children will identify spinach as a lightweight, green leaf vegetable.
- Children will describe the appearance, smell, and taste of spinach.

Materials: Fresh spinach leaves (1/child to taste plus a few more for the mystery box/bag), mystery box/bag, paper and pencil, feather

Preparation:

- 1. Gather materials.
- 2. Wash spinach leaves. Reserve at least one pre- washed leaf per child for tasting. Place a handful of spinach leaves in the mystery box/ bag. Keep the remainder out of the sight of children, but have available in case "enthusiastic feelers" damage the leaves in the box/bag and more are needed.

- 1. Invite children to sit in a circle on the floor.
- 2. Introduce or reintroduce the mystery box/bag, if you have used it before. One at a time, ask each child to come and feel inside the box or bag without looking. If a child seems afraid, feel inside the box/bag with the child. Ask each child to describe quietly to you what he/she feels. After everyone has guessed, reveal the spinach. Show the spinach to the children. Note the children's guesses that were close (leaves, a plant, food) or correct (spinach). Offer each child a clean leaf of spinach to look at, touch, and smell. Talk about spinach. Ask the questions below and any other questions you like.
 - a. Is spinach a fruit or a vegetable? (Vegetable)
 - b. What color is it? (Green)
 - c. Do the leaves feel thick or thin? (Thin)
 - d. How does the outside of it feel? (Smooth and bumpy)
 - e. Is the spinach leaf light or heavy? (Very light like a feather pass around the feather for children to compare to the spinach)
 - f. Is it soft or hard? (Soft like the leaf from a tree)
 - q. Is the stem on the spinach leaf thick or thin? (Thin)
 - h. Has anyone ever tasted a spinach leaf? (Yes or no)
 - i. When you bite or tear the spinach leaf, what color do you see inside? (Green)
- 3. Activity Conclusion Tasting: Conclude the lesson by inviting the children to taste the spinach leaf. Explain that we should always wash our hands before preparing and eating food. Have the children wash their hands. If this is the first activity involving food tasting, talk with the children about polite food tasting habits, such as:



- a. "Don't yuck my yum!" Remind children that we do not say negative things about how something tastes because it might offend someone and discourage others from trying something new.
- b. If a child tries something that they do not like, request that they quietly spit it out in a napkin so other children have an opportunity to taste it and form their own opinions.
- c. Encourage children to use respectful language like "I don't care for it."
- d. Remind children that sometimes it takes trying new things 10-20 times before you begin to like them.
- a. Then, encourage children to taste the spinach. After they do so, ask the children:
 - Is the leaf soft or chewy? (Chewy)
 - How does the spinach taste? (Mild)
- 4. Optional: Create a sticker chart for children to document whether they "liked" the spinach or "don't like it yet." A sample chart is included at the end of this document.

Activity: Recipe - Spinach-Strawberry Salad

Ages: 6 months-5 years Time: 20 minutes Objective(s):

- Children will engage in healthy eating practices by helping to prepare their own salad.
- Children will learn food safety practices, such as rinsing produce and asking an adult to cut food.

Materials: Chef's knife, cutting board, plates (1/child), bowls (1/child), forks (1/child), small cups (1/child)

Servings: 10, ½ cup servings

Ingredients:

- 4 cups fresh spinach leaves, washed
- 1 cup fresh strawberries, cut into bite-sized pieces
- Poppy seed salad dressing or raspberry vinaigrette

Procedure:

- 1. Wash spinach and strawberries.
- 2. Cut strawberries into bite-size pieces.
- 3. Pour about 2 Tbsp of dressing into each cup.
- 4. Provide each child with a plate of spinach leaves and strawberry pieces, a cup with dressing, a bowl and a fork.
- 5. Instruct children to:
 - a. Wash hands.
 - b. Tear spinach into smaller pieces.
 - c. Mix spinach and strawberries in individual bowls.
 - d. Pour the dressing onto salad and mix.
 - e. Taste and enjoy!

Activity: Book – I Eat Vegetables, by Hannah Tofts

Ages: 6 months-5 years Time: 15 minutes Objective(s):

- Children will be able to describe spinach.
- Children will be able to paint a picture of spinach.

Materials: Paper for children to draw/paint (1 piece/child), picture of spinach, watercolors and paintbrushes (or markers, crayons, etc.)

Preparation:

1. Gather materials.

- 1. Invite children to sit in a circle on the floor.
- 2. Read *I Eat Vegetables*, by Hannah Tofts. Discuss with the children the different vegetables pictured in the book. Explain that in the book there is not a page for spinach and you need the children's help in creating one.
- 3. Provide each child with a blank page to paint. Place the spinach picture where all children can see it. Encourage children to paint a picture of spinach. Children may include other fruits or vegetables to the picture, or create a spinach "dinner" by making the spinach part of a "meal."
- 4. Create a class "book" and encourage children to help you think of words that would describe something about spinach. Examples include: leaf, stem, bunch, green, yummy, etc.



Activity: Spinach Name Game

Ages: 3-5 years Time: 20 minutes Objective(s):

- Children will identify spinach as a vegetable.
- Children will identify other vegetables and fruits that are green.
- Children will learn about other leafy plants you can eat.

Materials: Poster board, glue, scissors, crayons or markers

Preparation:

1. Gather materials.

Procedure:

- 2. Invite children to sit in a circle on the floor.
- 3. Ask children to name other green fruits or vegetables (i.e., kiwi, peppers, cantaloupe, asparagus, brussels sprouts, celery, apples, avocados, broccoli, peas, green beans, etc.). Ask children if they know other leafy plants you can eat (i.e., lettuce, kale, collard greens, basil, etc.).
- 4. Provide children with drawing materials to create pictures of green or leafy vegetables and fruit.
- 5. Discuss health benefits of eating green foods
 - a. Contain vitamin A, vitamin C, potassium, and folate, as well as phytochemicals and fiber.
 - b. Help reduce the risk of some types of cancer, maintain strong bones and teeth, promote vision health

Activity: Spinach Leaf Prints

Ages: 3-5 years Time: 20 minutes Objective(s):

• Children will be able to identify spinach as a lightweight, green leaf vegetable.

Materials: Plain white paper (1/child), spinach leaves, green crayons or colored pencils

Preparation:

1. Gather materials.

Procedure:

- 1. Invite children to sit in a circle on the floor.
- 2. Review what spinach looks like, mentioning shape, color, and parts of the leaf (i.e., stem, veins).
- 3. Provide each child with a piece of paper and one spinach leaf. Instruct children to fold paper in half and place spinach leaf inside folded sheet of paper. Show children how to rub crayon or colored pencil gently across the paper until the spinach print appears. Point out the parts of the leaf that were discussed.

Activity: Recipe - Veggie Tortilla Roll-Ups

Ages: 6 months-5 years Time: 20 minutes Objective(s):

- Children will try spinach prepared in a new way.
- Children will practice fine motor skills by helping prepare a snack for themselves.

Materials: Mixing bowl, measuring cups, measuring spoons, cutting board, Chef's knife, plates (1/child), plastic knives (1/child)

Servings: 24 Ingredients:

- 6 whole wheat tortillas
- 9 Tbsp cream cheese
- 3 cups shredded fresh spinach
- 1 1/2 cups diced tomato
- 3/4 cup chopped cucumber
- $\sqrt{4}$ cup chopped bell pepper (red, green, orange and yellow or mixture of all)
- 1/3 cup diced green chilies (optional)
- 1/3 cup sliced black olives (optional)
- 1/3 cup chopped red onion (optional)

Procedure:

1. Wash and chop vegetables, cut tortillas into quarters.



- 2. Have children wash hands. Provide each child with ¼ tortilla slice, 1 ½ Tbsp of cream cheese, a small portion of desired vegetables, a plate and a plastic knife.
- 3. Instruct children to spread cream cheese on tortilla, assisting as necessary. Tell children to place their vegetables on the tortilla slices. Roll up tightly to enclose filling.



RADISHES

Fun Facts

Botany

- o Radishes are root vegetables of a plant classified in the mustard family. They resemble beets or turnips in appearance and texture, but have a distinct flavor.
- o Radishes are cool-season, fast-maturing, easy-to-grow vegetables.
- o Radishes come in multiple types and many different colors including, red, pink, white, purple and even black. They can also come in different sizes, some being small and round, others long and oblong.

History

- o Radishes most likely originated in the area between the Mediterranean and the Caspian Sea. Cultivated radish and its uses were reported in China nearly 2000 years ago and in Japan radishes were known about 1000 years ago.
- o Radishes were thought to be one of the important crops in ancient Egypt, since they were drawn on the walls of the Pyramids about 4000 years ago.
- o The biggest radish crops grown in the United States come from California and Florida.

Nutrition

- Radishes are a good source of vitamin C, potassium, folate and fiber. They also contain sulfurous compounds, (i.e., sulforaphane), which have anti-cancer properties, and are expectorant (a medicine that promotes drainage of mucus from the lungs).
- o Radishes can be eaten raw or cooked.
- o Some radishes are spicy and some are milder. Spice level varies based on type and maturity. More mature radishes tend to be spicier. Black Spanish radishes are the spiciest variety.
- After purchasing your radishes
 - Rinse the dirt off and remove the radish greens.
 - If you plan to use the radish greens, store them separate from the radishes.
 - Radishes should be stored in a plastic bag or container in the fridge. Make sure they are completely dry before refrigerating.
 - Fresh picked radishes can be stored in the fridge for up to a month.
 - Note: Do not freeze radishes. When thawed they will lose their crisp texture.

Adapted from: https://fruitsandveggies.org/fruits-and-veggies/radish/, https://idph.iowa.gov/Portals/1/Files/INN/LP10%202-3%20Vary%20Your%20Veggies%20Final%207.13.12.pdf, https://onieproject.org/produce-spotlight-radishes/, https://web.extension.illinois.edu/veggies/radish.cfm and https://cropgenebank.sgrp.cgiar.org/index.php/crops-mainmenu-367/radish-mainmenu-812

Activity: Book – Rah, Rah, Radishes! A Vegetable Chant, by April Pulley Sayre

Ages: 6 months-5 years Time: 15 minutes Objective(s):

Children will learn about a variety of vegetables and their distinguishing characteristics.

Materials: Rah, Rah, Radishes! A Vegetable Chant, by April Pulley Sayre

Preparation:

1. Gather materials.

- 1. Invite children to sit in a circle on the floor.
- 2. Introduce the Book: *Rah, Rah, Radishes! A Vegetable Chant,* by April Pulley Sayre to your children. Ask children: raise your hand if you know what a radish looks like. Raise your hand if you know what a radish tastes like.
- 3. Tell children to listen for these names and look at the pictures of all of the different vegetables you hear as you read the book.
- 4. After reading the story tell the children: Plants have many parts including the root (that grows below ground), the stem, a flower (that makes the seeds), and the leaf. Show pages from the books as you ask: What part of the plant does this vegetable come from? Ask:
 - a. What part is the radish? (root)
 - b. What part is the cauliflower? (flower)
 - c. What part is the cabbage? (leaf)
 - d. What part is the celery? (stem)



Activity: Radish Mystery Bag

Ages: 3-5 years Time: 20 minutes Objective(s):

• Children will identify radishes as a small, hard, smooth and round/oval vegetables.

Materials: Radish (leaves and root), mystery box/baq, paper and pencil

Preparation:

- 1. Gather materials.
- 2. Place a radish in the mystery box/ bag.

Procedure:

- 1. Invite children to sit in a circle on the floor.
- 2. Introduce or reintroduce the mystery box/bag, if you have used it before. One at a time, ask each child to come and feel inside the box or bag without looking. If a child seems afraid, feel inside the box/bag with the child. Ask each child to describe quietly to you what he/she feels. After everyone has guessed, reveal the radish. Note the children's guesses that were close (a plant, food) or correct (radish). Pass the radish around the circle for each child to look at, touch, and smell. Talk about radishes. Ask the guestions below and any other guestions you like.
 - a. Are radishes a fruit or a vegetable? (Vegetable)
 - b. What color are they? (Varies red, pink, white, purple and even black)
 - c. How does the outside of it feel? (Smooth)
 - d. Is the radish light or heavy? (Light)
 - e. Is it soft or hard? (Hard)
 - f. Is the stem on the radish leaf thick or thin? (Thin)
 - q. Has anyone ever tasted a radish? (Yes or no)
 - h. When you bite into a radish, what color do you see inside? (White)

Activity: Root Vegetable Sensory Bin

Ages: 3-5 years Time: 20 minutes Objective(s):

- Children will explore vegetables with their senses.
- Children will be exposed to a variety of vegetables.

Materials: A selection of root vegetables (i.e., radishes, carrots, potatoes, turnips, beets), dry beans, gardening/farming tools (i.e., plastic spades, small plastic rakes, etc.), plastic bin

Preparation:

- 1. Gather materials.
- 2. Create sensory bin: Wash and scrub dirt from vegetables. Place vegetables with dry beans and gardening utensils in plastic bin.

Procedure:

- 1. Invite children to the activity area.
- 2. Introduce sensory bin to children. Talk about appropriate use of sensory bin-to be touched, smelled, seen, and heard, but not tasted! Discuss different produce included, naming each vegetable. Ask if children know where these vegetables grow (in the ground). Explain that the beans are like the dirt, and the vegetables grow under the dirt. Allow children to "dig" and "harvest" vegetables from under the "dirt."
- 3. Make sure to check vegetables for freshness daily. Do not keep out longer than one week, depending on freshness.

Activity: Recipe – Radish Bruschetta

Ages: 6 months-5 years Time: 30 minutes Objective(s):

- Children will practice safe food handling.
- Children will have the opportunity to try radishes prepared a new way and determine which way they like the vegetable better.

Materials: Chef's knife, cutting board, plates (1/child), plastic knives (1/child)

Servings: 10 slices Ingredients:



- 3-4 radishes, washed and sliced
- 16 oz of cream cheese
- Loaf of French bread, sliced
- Salt and pepper (optional)

Procedure:

- 1. Instruct children to wash hands.
- 2. Provide each child with a plate, plastic knife, slice of French bread, 1 Tbsp of cream cheese and a handful of radish slices.
- 3. Instruct children to spread cream cheese on bread and top with radish slices. Children may sprinkle salt and pepper on top if desired.

Activity: Book – I Can Eat a Rainbow, by Annabel Karmel

Ages: 6 months-5 years Time: 15 minutes Objective(s):

- Children will be introduced to fruit and vegetables of different colors.
- Children will identify additional fruits and vegetables using a rainbow theme.
- Children will learn the benefits of "eating a rainbow."

Materials: I Can Eat a Rainbow, by Annabel Karmel, plain white paper (1 piece/child), paint supplies or magazines, scissors, markers, rainbow picture

Preparation:

1. Gather materials.

Procedure:

- 1. Invite children to sit in a circle on the floor.
- 2. Ask children if they can name a fruit or vegetable for each color of the rainbow. Read book, emphasizing different colors as you go. Ask children if they can name additional fruits or vegetables not mentioned in the book.
- Explain to children that they are going to make a fruit and vegetable rainbow. (You can make individual rainbows or one large rainbow as a class.)
 - a. Begin by placing a picture of a rainbow where all children can see it, to remind children of all the colors to include. (If children are creating their own rainbows, you may help them to draw the shape in pencil first. Alternately, children may assist in creating one large rainbow.)
 - b. Then, talk through the colors of the rainbow as children draw a fruit or vegetable for each color.
 - Next, have children paint their rainbows and/or cut out pictures of different colored fruits and vegetables from magazines to paste onto the rainbow.
- 4. As you work, reinforce the health benefits of eating fruits and vegetables that are different colors
 - 1. Red: Heart health and healthy aging
 - 2. Orange: Eyesight, immune function and healthy skin.
 - 3. Yellow: Eyesight, immune function and healthy skin.
 - 4. Green: Brain, heart and eye health.
 - 5. Blue, indigo and violet: Heart health and healthy aging

Activity: Vegetable Poem Ages: 6 months-5 years Time: 5 minutes

Objective(s):

Children will remember the importance of eating vegetables through a fun rhyme.

Materials: Chart paper, marker

Preparation:

- 1. Gather materials.
- 2. Write poem on chart paper.

Procedure:

- 1. Invite children to sit in a circle on the floor.
- 2. Read poem to children.

Give me vegetables They're good for me I'll eat carrots



And I'll eat peas Give me vegetables And no more sweets All I want Are vegetables to eat!

Activity: Paper Plate Radish Craft

Ages: 3-5 years Time: 20 minutes Objective(s):

- Children will become familiar with the shape, color, and parts of radishes.
- Children will practice fine motor skills.

Materials: Paper plates (1/ child), green construction paper, tissue paper or construction paper in different shades of red, scissors, glue, picture of radish

Preparation:

- 1. Gather materials.
- 2. Create a sample paper plate radish.

Procedure:

- 1. Invite children to activity area.
- 2. Tell children they are going to be making their own radishes. (Show them the sample you made.)
- 3. Provide children with red tissue or construction paper to tear or cut into small pieces. Have children glue the red pieces onto the paper plates. Then provide children with green paper and scissors to cut out radish leaves. (Children may also trace their hands to create leaves!) Glue the leaves to the plate.
- 4. As children work, reinforce the parts of the radish (leaves, stem, root) and which parts you can eat (all of them!). Discuss the radish shape, color, taste, texture and smell. Ask children where the radish grows (in the ground).

Activity: Recipe – Yogurt Dip with Veggies

Ages: 6 months-5 years Time: 15 minutes Objective(s):

- Children will practice safe food handling.
- Children will develop fine motor skills through pouring, mixing, and scrubbing.

Materials: Large mixing bowl, mixing spoon, veggie brush, measuring cups and spoons, bowls (1/child), Chef's knifer, cutting board

Servings: 16, 1/8 cup servings

Ingredients:

- 2 cups plain yogurt (low-fat or fat free)
- Lemon/lemon juice (2 tsp)
- 2 Tbsp chopped fresh dill
- ½ to 1 tsp salt (flavor as desired)
- ¼ to ½ tsp pepper (flavor as desired)
- Serve with assorted vegetables (i.e., radishes, bell peppers, broccoli, snap peas, asparagus, zucchini, squash, etc.)

- 1. Teacher: Wash and slice vegetables ahead of time.
- 2. Instruct children to wash hands.
- 3. Invite children to take turns measuring and pouring ingredients. Begin by measuring 2 cups plain yogurt and pouring into a large bowl. Add lemon juice, chopped dill, salt and pepper. Pass the bowl around to give all children an opportunity to help stir the dip.
- 4. Spoon 2 Tbsp dip into bowls and allow children to choose several veggies to try with the dip. Enjoy!



Name of Taste Test Here

"I LIKE THIS"



"ME GUSTA"

"I DON'T LIKE THIS YET"



"NO ME GUSTA TODAVÍA"

