

Radish

Grow

Rooting for Radishes

Radishes are a root vegetable. Root vegetables are the roots of plants that are eaten as vegetables. These roots grow into the ground from the base of the plant stem. They anchor the plant, absorb water and nutrients, and store energy. There are six categories of root vegetables: tap roots, tuberous roots, corms, rhizomes, tubers, and bulbs. Radish is a tap root along with beet, carrot, cassava, jicama, parsnip, rutabaga, and turnip.

Root vegetables are cool-weather, annual crops that can be planted in early spring and late summer. Radishes are quick and easy to grow, taking 4 to 6 weeks from planting to harvest. Sow seed $\frac{1}{4}$ to $\frac{1}{2}$ inch deep. Thin the spring varieties to $\frac{1}{2}$ to 1 inch between plants. Winter radishes, which are harvested in the fall or winter, are larger and must be thinned to 2 to 4 inches or even further apart to allow for development of their roots. In beds, radishes may be thinned to stand 2 to 3 inches apart. Radishes grow well in almost any soil that is prepared well, is fertilized before planting, and has adequate moisture.¹⁻³

Fun Fact: The shoulders of the radish will appear through the soil when it is ready to be harvested.³

Choose

Radishes are available in a wide range of shapes, sizes, colors, and flavors. They can be round or oblong, the size of a grape or a carrot, and range in color from reds, pinks, and purples to white and black. The watermelon radish is green on the outside and pink inside. The Red Globe radish is the most well-known variety. This radish is small (1-4 inches) and has red and white coloring. Some other radishes most commonly grown in the U.S. are the Daikon, California Mammoth White, White Icicle, Easter Egg, French Breakfast, and Black varieties.

Radishes can be available almost year-round. Peak season in the U.S. is February to May. Choose radishes that are plump, firm, smooth, and free of cracks and blemishes.¹⁻⁵



Store

Store radishes with the tops iced. Refrigerate topped radishes in the coldest part of the refrigerator, 32-36 degrees F and 90-98% relative humidity. Most radishes can be stored in the refrigerator for up to two weeks. To improve storage length, cut off the leafy radish tops as they break down faster than the root.^{3,4}

Fun Fact: “Radish” comes from the Latin word “radix”- meaning “root.” The word Daikon comes from two Asian words: dai- (large) and kon (root).¹⁻²

Use

Most root vegetables can be eaten raw or cooked. The radish and its leaves can both be harvested and eaten. Wash under running water before eating or cooking.

Radishes are usually eaten fresh as a snack, in salads, or added to sandwiches, wraps, a crudité or vegetable platter with dip. They can be served whole, sliced, diced or shredded. Radishes can be roasted or pickled. Kimchi is a staple Korean side dish made of fermented and salted cabbage and radish. Radish leaves can be added to a salad, wrap, sandwich, or stir fry. Radishes are often known for their hot or spicy flavor. The radish skin is the source of the spiciness. Try to keep the radish skin on to maximize the flavor and fiber content.^{1,3-5}

Radish

Teach

It is possible the radish originated from several different regions, including the Mediterranean, Egypt, China, Japan and other Asian and European countries. Today, radishes are still grown and enjoyed all over the world. Small rooted radishes are grown in more temperate climates while large-rooted radishes are mainly grown in East and Southeast Asia. Radishes are grown in almost all of the United States.²

Fun Fact: Night of the Radish, or Noche de Los Rábanos, is a radish carving festival held every year on December 23 in Oaxaca, Mexico.⁴

Class Activity - *Tops and Bottoms*

Materials Needed:

- *R is for Radish* by Molly Coxe
- *Rosie Rabbit's Radish* by Wendy Cheyette Lewison
- *Rosie Plants a Radish* by Kate Petty
- *Tops & Bottoms* by Janet Stevens
- *Rude Ramsay and the Roaring Radishes* by Margaret Atwood
- *Runaway Radish* by Janice Levy
- *Rosita and the Night of the Radishes* by Dorothy Thurgood Manning
- Variety of radishes for students to taste
- Paper plates or napkins
- Paper and pencils
- Radish tops, pebbles, dish, water

Steps: **Use food safety steps. Wash hands and produce.*

1. Depending on the students' reading level, explore one or more of the books listed above. Ask the students to suggest additional books featuring radishes.
2. Discuss as a class how some plant parts we eat grow above ground and some below.
3. Brainstorm a list of root vegetables.
4. Have students sample each of the different varieties of radishes and note their observations.
5. Place radish tops in a dish with pebbles and water. Allow the tops to resprout and start to grow little roots. Then, plant in the school garden.

Eat

One cup of fresh, sliced radishes has about 19 calories. Radishes are cholesterol free and low in fat and sodium. They are a good source of vitamin C. Radishes also offer dietary fiber, folate, potassium, copper, lutein and zeaxanthin.^{5,6}

Fun Fact: The watermelon radish is green on the outside and pink on the inside. It is a sweet variety of radish.³

Vitamin C helps our body absorb iron and folate from plants, protects us from infections and bruising, aids in healing, keeps our gums healthy, helps form collagen to hold muscles, bones and tissues together, and acts as an antioxidant to prevent cell damage. Soluble fiber helps lower blood cholesterol. Insoluble fiber aids in digestion. Our bodies need folate for blood cell, DNA and genetic development. Potassium helps maintain normal blood pressure, regulate fluids and mineral balance, transmit nerve signals and contract muscles. Copper is part of many enzymes. It helps your body produce energy in all body cells, develop connective tissue, myelin and melanin, and make hemoglobin which is needed to carry oxygen in red blood cells. Phytochemicals act as antioxidants preventing or repairing cell damage. Lutein and zeaxanthin are carotenoids that may help maintain normal vision.⁷

Fun Fact: California is the leading producer of Daikon radishes in the United States.¹

Find

For more radish info and resources, visit:

1. California Harvest of the Month, <https://harvestofthemonth.cdph.ca.gov>
2. Wisconsin Department of Public Instruction, <https://dpi.wi.gov/school-nutrition/programs/fresh-fruit-vegetable>
3. North Carolina State Extension, www.ces.ncsu.edu
4. U.S. Department of Agriculture, Food and Nutrition Service, www.fns.usda.gov
5. Fruits & Veggies For Better Health, <https://fruitsandveggies.org/>
6. USDA FoodData Central, <https://fdc.nal.usda.gov/index.html>
7. Academy of Nutrition and Dietetics, www.eatright.org