Vegetable

Kale

Grow

Kale is a green leafy vegetable, part of the cabbage or *Brassicaceae* family. Kale is grown all over the world. In the United States, California, Georgia, New Jersey, Texas, and North Carolina are the top kale producing states.[1-3]

Fun Fact: The number of farms harvesting kale more than doubled from 954 in 2007 to 2,500 in 2012![3]

Kale is Cool

Kale is considered a cool-season crop but can be grown and harvested almost year-round. It prefers cooler weather and loamy soil. Kale can survive and may taste sweeter when harvested after a frost. For a spring crop, plant seeds indoors (greenhouse or window sill) 6-8 weeks before the last expected frost. Move the seeds to the garden 2 weeks before the last frost. For a fall crop, plant seeds outside (garden or raised bed) 8 weeks before the first expected fall frost. The seeds should be planted roughly 4 inches apart and ¼-½ inch deep. Keep the plants moist. To harvest early, cut individual leaves when they are 3 inches long. Otherwise, harvest the bunch when it is roughly 1 foot tall. Peak season is November to April.[1-2]

Fun Fact: Kale has been around for over 2,000 years. It descended from a wild cabbage found in eastern Europe and parts of Asia.[2]

Choose

Varied Vegetable

Flat or curly, green or red, kale comes in many different textures and colors. The most common type of kale grown in America is the *Dwarf Blue Curled Scotch Vates.* Other common varieties include: *Redbor*, *Red Russian*, and *Lacinato* (Dinosaur) kale. Depending on the variety, the flavors range from peppery and bitter to delicate and slightly sweet. Whatever tastes and textures you enjoy, there is a variety of kale for you![1]

When choosing raw kale, look for even colored, small to medium-sized leaves. Avoid kale that is yellow in color or has leaves with wilt or insect damage.[2-3]

Store

Super care for your super food

Dark green leafy vegetables, like kale, should be stored immediately in a tightly covered container in the coldest part of the refrigerator (32-36°F, 90-98% relative humidity). If you have bunched, raw kale, store it uncut. Leave outer leaves in place until it is time to wash and prepare the kale. Store away from ethylene-producers such as apples, bananas, pears and tomatoes.[3]

Fun Fact: Kale was so popular in Scotland that being invited to "come to kale" was an invitation for dinner.

Kale should be enjoyed in 3-5 days of purchase or receipt. The longer you store kale, the stronger, more bitter it becomes. If at any point, the kale gives off an aggressively pungent odor, discard the kale in a compost bin or trash.

Fun Fact: Some kale varieties are ornamental and are grown for their white, red, pink, purple and blue leaves.[2]

Use

Fresh, raw kale can be purchased in bunches or washed, chopped and bagged. Kale can also be sold canned, frozen, dried and as juice. Fresh kale is a great addition to a salad, sandwich, wrap or smoothie. Kale can also be boiled, steamed, baked, braised, or sautéed. Avoid using an aluminum pan to cook greens. Try not to overcook.[2-4]

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Teach

Did you know kale comes from the Brassicaceae family?
The *Brassicaceae* family consists of vegetables with a physical appearance of loosely crinkled purple or green leaves and central leaves that do not form a head. This vegetable group includes collard greens, wild cabbage, cauliflower, broccoli, and Brussels sprouts.[1-2]

We all know the phrase, "eat plenty of greens". But how much is considered "plenty"?
The *Dietary Guidelines for Americans* recommends eating a variety of colorful vegetables, including dark green leafy vegetables. The National School Lunch Program now requires that students are offered a minimum of ½ cup of dark green vegetables for lunch each week. This subgroup of vegetables may include items such as broccoli, collard greens, spinach, and kale! Remember, this is only a minimum. By eating greens at home and at school, you can get your weekly dose of "*plenty.*"[3]

Fun Fact: The first Wednesday in October is National Kale Day![3]

Kale 'Chips'
Class Activity
Materials Needed:
- Kale, olive oil (use sparingly), salt (optional)
- Gallon-sized plastic resealable bag, oven, baking pan, oven mitt

Steps:
1. Wash hands thoroughly with soap and water.
2. Wash the kale under running water, removing any dirt.
3. Remove kale leaves from the stems. Tear leaves into bite-sized pieces and place in the plastic bag.
4. Drizzle olive oil in the bag, just enough to moisten kale.
5. Close the bag and shake.
6. Spread the kale on the baking sheet.
7. Lightly sprinkle with salt.
8. Bake at 400°F for 10-15 minutes, or until the leaves are crisp.
9. Remove from the oven, using mitt, and cool. Enjoy!

Eat

Colossal Kale
Kale is considered a *superfood*—a nutritional powerhouse of vitamins and antioxidants. One cup of raw (loosely packed) kale has about 8 calories and ½ cup of cooked, chopped kale has about 18 calories. Raw and cooked kale are excellent sources of vitamins A, C and K, cholesterol free and low in fat and sodium. Vitamin A promotes normal vision, supports the growth and health of cells and tissues, protects against infection, and helps regulate the immune system. It works as an antioxidant in the form of carotenoids (which form vitamin A). Vitamin C helps form collagen to hold muscles, bones and tissues together, protects us from infections and bruising, aids in healing, keeps our gums healthy, helps our body absorb iron and folate from plants and acts as an antioxidant to prevent cell damage. Vitamin K helps our body to clot blood and make proteins needed for our blood, bones and kidneys. Lutein in kale helps maintain healthy vision.[2,5-7]

Fun Fact: One cup of kale has 130% of the Daily Value of Vitamin C, more than an orange![2,5-7]

Class Activity
Materials Needed:
- Washed dark leafy greens, two different types of kale

Steps:
1. Discuss as a class how each variety feels, looks, smells and tastes. How are they similar/different?[2]

Fun Fact: Kale is a cruciferous vegetable. Kale flowers have a shape like a "cross".[1]

Find

For more kale info and resources, visit:

1.North Carolina State Extension, www.ces.ncsu.edu
2.California Harvest of the Month, http://harvestofthemonth.cdph.ca.gov
3.U.S. Department of Agriculture, Food and Nutrition Service, www.fns.usda.gov
4.Leafy Greens Council, http://leafy-greens.org
5.Fruits & Veggies More Matters®, www.fruitsveggiesmorematters.org
6.USDA Food Composition Databases, http://ndb.nal.usda.gov
7.Academy of Nutrition and Dietetics, www.eatright.org

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