

Harvest of the Month



Network for a Healthy California

Health and Learning Success Go Hand-In-Hand

Food Day takes place annually on October 24. It is a national celebration and movement toward more healthy, affordable, and sustainable food. The foods we eat should bolster our health, but many are contributing to several hundred thousand premature deaths from heart attack, stroke, diabetes, and cancer each year. Food Day aims to transform the American diet. All Americans should be able to select healthy diets. And healthy diets for students translates to improved learning in the classroom and beyond. So, celebrate Food Day on October 24. Use *Harvest of the Month* to help teach students how to eat healthy and be active every day.

For more information, visit:
www.foodday.org



Exploring California Pumpkins: Taste Testing

What You Will Need (per group of 8 students):

- 1 whole pumpkin
- 1 cup cooked pumpkin, cubed and roasted
- ½ cup canned pumpkin (in a clear bowl)
- ½ cup pumpkin seeds, roasted
- Nutrition Facts labels* for cooked pumpkin, canned pumpkin, and pumpkin seeds
- Pencils and paper

*Download labels from www.harvestofthemonth.com.

Activity:

- Explore whole pumpkin noting color, texture, sound, and smell. Record observations in a group chart.
- Examine the cooked and canned pumpkin and pumpkin seeds. Note color, texture, sound, smell, and taste. Record observations in group chart.
- Look at the Nutrition Facts labels. Examine similarities and differences. Chart the three highest nutrients in each variety.
- Discuss observations as a class. Talk about the nutrients and how they are different in each variety.

For more ideas, reference:

The Power of Choice, USDA, 2003, pp. 41-51.

Cooking in Class: Pumpkin Dip

Makes 36 servings at ½ cup each

Ingredients:

- 2 15-ounce cans 100% pumpkin
- 1 32-ounce container lowfat vanilla yogurt
- 6 apples, sliced
- Small paper cups and napkins

1. In a large bowl, combine the pumpkin and yogurt.
2. Spoon 2 tablespoons of dip into cups.
3. Add 1 or 2 apple slices to each cup. Serve immediately.

Nutrition information per serving:

Calories 50, Carbohydrate 11 g, Dietary Fiber 2 g, Protein 2 g, Total Fat 0 g, Saturated Fat 0 g, Trans Fat 0 g, Cholesterol 0 mg, Sodium 20 mg

Source: *Network for a Healthy California*, 2012.

For more ideas, visit:

http://publichealth.lacounty.gov/nut/LACOLLAB_Files/documents/HOTM/HOTM%20Resources.htm

Reasons to Eat Pumpkins

A ½ cup of pumpkin provides:

- An excellent source of vitamin A.*
- A good source of vitamin C.

*Learn about vitamin A on page 2.

Champion Sources of Vitamin A:*

- Canned pumpkin
- Carrots
- Cooked greens (collards, kale, turnip greens)
- Cooked pumpkin
- Sweet potatoes
- Winter squash (acorn, butternut)

*Champion sources provide a good or excellent source of vitamin A (at least 10% Daily Value).

For more information, visit:

www.fruitsandveggiesmorematters.org/pumpkin
<http://ndb.nal.usda.gov>
(NDB No: 11423)



Nutrition Facts

Serving Size: ½ cup pumpkin,
cooked (123g)

Calories 24 Calories from Fat 0

% Daily Value

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 1mg 0%

Total Carbohydrate 6g 2%

Dietary Fiber 1g 5%

Sugars 1g

Protein 1g

Vitamin A 122% Calcium 2%

Vitamin C 10% Iron 4%

PUMPKINS

What is Beta-Carotene?

- The bright orange color of pumpkin indicates that pumpkin is loaded with an important antioxidant, beta-carotene.
- Beta-carotene is one of more than 600 plant carotenoids. It is converted to vitamin A in the body. In the conversion to vitamin A, beta-carotene performs many important functions in overall health.
- Current research shows signs that a diet rich in foods containing beta-carotene may lower the risk of certain types of cancer and may offer protection against heart disease.
- Other studies show that beta-carotene may also help protect against some degenerative aspects of aging.

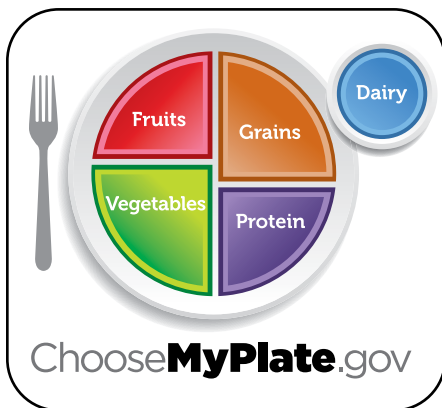
For more information, visit:

www.mayoclinic.com/health/beta-carotene/NS_patient-betacarotene

How Much Do I Need?

The amount of fruits and vegetables you need depends on your age, gender, and the amount of physical activity you get every day. Make half your plate fruits and vegetables to reach your total daily needs! Remember that all forms of fruits and vegetables count – fresh, frozen, canned, dried, and 100% juice. (And you can enjoy pumpkins cooked, canned, as juice, and even the seeds!)

Have students visit www.ChooseMyPlate.gov/children-over-five.html to learn how food and physical activity are like “fuel” to help keep their bodies healthy.



Botanical Facts

Pronunciation: 'pûm(p)-kën

Spanish name: calabaza

Family: Cucurbitaceae

Genus: *Cucurbita*

Species: *Cucurbita pepo*

Pumpkins are members of the vine family called cucurbits, related to squash and melons. In North America, pumpkin cultivars belong to either the *Cucurbita pepo*, *maxima*, *mixta*, or *moschata* species. Pumpkins are the largest squash variety most commonly with bright orange, ribbed skin, and orange flesh.

The name pumpkin originated from the Greek word “pepon” meaning “large melon.” The French called it “pompon,” which was changed to “pumpion” by the English. Finally, American colonists changed it to “pumpkin.”

For more information, visit:

<http://urbanext.illinois.edu/veggies/pumpkin.cfm>

How Do Pumpkins Grow?

Pumpkins are a warm-season crop that can be grown in most regions of the United States. They are vigorous vine growers and need lots of room to grow – a single vine can grow as long as 30 feet. Pumpkins prefer a soil enriched with compost or fertilizer. Once planted, a pumpkin will begin to blossom with male and female flowers. The male flowers attach straight to the stem of the blossom, while the females have a small bulb at the base. The male blossoms attract the bees. When the female blossom opens, it is only open for one day, and if a bee does not transfer pollen from the male to the female on that day, it will fall off and the plant will not be fertilized. Once fertilized, most pumpkin varieties take between 90 to 120 days to mature.

Temperature	70° to 90°F
Exposure	Full sunlight
Planting	In small hills or mounds about 3 feet in diameter; about 4 to 6 seeds per hill, about 1 to 2 inches deep
Irrigation	Infrequent, deep watering with good drainage
Pollination	Requires bee pollination
Maturity	90 to 120 days
Harvest	When shell is hard; predominantly orange in color; stem starts to twist and dry; or when the vine “goes away”

For more information, visit:

<http://urbanext.illinois.edu/firstgarden/planning/dictionary/veggies/pumpkins.cfm>



Home Grown Facts

- California ranks second in production of pumpkins behind Illinois. Roughly 90% of processed pumpkins come from Illinois.*
- Eighty percent of the U.S. pumpkin supply is available in October.
- In the U.S., pumpkins are grown mainly for processing, and a small percentage is grown for ornamental sales.
- In California, about 90% of pumpkins are grown specifically for Halloween. Most pumpkins are sold in local markets or directly to consumers at you-pick pumpkin patches, farmers' markets, and food retail stores.

*2011 Data

For more information, visit:

www.cdfa.ca.gov/statistics/pdfs/Vegetable&MelonCrops2011-12.pdf
http://vric.ucdavis.edu/veg_info_crop/pumpkinsandsquash.htm

Student Champions

Pumpkins are most commonly used and eaten in October and November. However, with canned pumpkin and pumpkin juice (broth), pumpkins can easily be consumed year-round. Using what they have learned in class about pumpkins, have students market pumpkins as a year-round food to the community.

- Design a poster that shows the health benefits of pumpkins and the many ways they can be eaten. Display on school campus, at grocery stores, or farmers' markets.
- Write a news article that describes the history of pumpkins, its many uses, its nutritional benefits, and how it can be eaten year-round in many different forms. Submit articles to local print outlets.
- Develop healthy recipes featuring pumpkins that can be eaten in any season. Submit recipes to school nutrition staff, local restaurants, and even to the "food editor" of local print outlets.

School Garden: Pumpkin Patch

If your school has a garden, here is an activity you may want to implement. Look for donations to cover the cost of seeds, tools, irrigation systems, electric pumps, and any salary incurred by garden educators or others.

Since most California pumpkin varieties need to be planted in June or July, visit a local pumpkin farm for a school garden activity. Have the local farmer show students how he plants, grows, and harvests the pumpkins on the farm. Divide the class into four groups and have students take notes on:

- Supplies needed
- How and when to plant
- How to tend to the pumpkin while it grows
- How and when to harvest

When students return to class, make a plan for how your class will plant and grow pumpkins for the next school year. Or, students can make a plan to grow pumpkins at home with their family or in a community garden.

For more ideas, visit:

www.csgn.org

Student Sleuths

- 1 True or False: *Pumpkins are a vegetable.* Have students respond to the statement by writing a paragraph supporting or refuting this claim.
- 2 What is beta-carotene and how is it connected to vitamin A? List at least five fruits or vegetables that are excellent sources of beta-carotene. How are the fruits and vegetables on your list similar?
- 3 There are hundreds of varieties of pumpkins, and they can be put into four categories based on use and size. What are the four sizes (include approximate weight ranges)? Describe how each is primarily used in America?
- 4 What are other crops in the Cucurbit family? How are they alike nutritionally? How are they different? What is your favorite fruit or vegetable in the Cucurbit family?
- 5 The pumpkin can be eaten in many different forms, but there is a process to it. Have students look up how to select a pumpkin for cooking, prepare it, cook it, puree it, and even how to use the seeds.

For information, visit:

www.agmrc.org/commodities_products/vegetables/pumpkins.cfm
<http://urbanext.illinois.edu/firstgarden/planning/dictionary/veggies/pumpkins.cfm>
<http://urbanext.illinois.edu/pumpkins/selection.cfm>

A Slice of Pumpkin History

- Pumpkins originated in Central America, as seeds from pumpkin relatives have been found in Mexico that date back more than 7,500 years.
- Pumpkins were likely brought to North America by Indian tribes.
- Native Americans called pumpkins "isqoutm squash" and they used the seeds for food and medicine.
- For many centuries, people have carved "jack-o-lanterns" at Halloween. In Ireland and Scotland, they originally used potatoes and turnips. In England, they used beets. In the 18th and 19th centuries, American colonists found pumpkins to be the most ideal "vegetable" for carving jack-o-lanterns.

For more information, visit:

<http://urbanext.illinois.edu/pumpkins/history.cfm>



Adventurous Activities

Botanical Investigation:

There are hundreds of varieties of pumpkins. Sometimes, they are categorized as “jack-o-lantern,” ornamental, or pie pumpkin varieties. Have students research these three varieties, listing the attributes of each and three specific types. Have students find out what varieties and types are grown in their local farms.

History – Part I:

Pumpkins and squash were an important part of Native American history. Research the many uses of pumpkins by Native Americans, describing how they used it in everyday life and why.

History – Part II:

What is the meaning behind the “jack-o-lantern”? Have students research the history of the jack-o-lantern and Halloween.

For more ideas, visit:

<http://teammnutrition.usda.gov/educators.html>

Cafeteria Connections

- Partner with a local pumpkin farm to get pumpkins donated to the school. Host a “Best Jack-o-Lantern” contest between classrooms. Work with the school nutrition staff to judge the contest and display the winning pumpkins in the cafeteria.
- Work with school nutrition staff to feature pumpkins on the school menu. Have students submit healthy pumpkin recipes, including soups, stews, breads, and dips.
- Do a “Pumpkin Taste Test” in the school cafeteria at lunch. Sample tastes of canned pumpkin, cooked pumpkin, pumpkin juice (or soup), and pumpkin seeds. Have students vote for their favorite.

For more ideas, visit:

www.fns.usda.gov/tn



Just the Facts

- Pumpkins are 90% water.
- Pumpkins can range in size from less than a pound (miniatures) to over 1,000 pounds (giant pumpkins). The largest known pumpkin weighed over 1,140 pounds.
- The pumpkin is the state fruit of New Hampshire.
- The town of Morton, Illinois is the self-proclaimed “Pumpkin Capital of the World.” This is because the town is home to a pumpkin processing plant, which cans more than 85% of the world’s pumpkins every year.
- The original “pumpkin pie” was made when colonists sliced off the tops of pumpkins, removed the seeds, filled the insides with milk, spices, and honey, and then baked it in hot ashes.

For more information, visit:

<http://urbanext.illinois.edu/pumpkins/facts.cfm>

Physical Activity Corner

The USDA’s SuperTracker can provide students with:

- A personalized nutrition and physical activity plan
- A way to track the foods they eat and how active they are.
- Tips and support to help them make healthier choices and plan ahead.

Students have the option to create their own profile, or to use a general plan based on their age and gender.

If students have daily access to a computer, have them take 10 minutes every day to input their activity into the Physical Activity Tracker. Students can track their activity over several weeks or months. They can also use the “My Coach Center” to set personal goals.

Visit www.supertracker.usda.gov/

[physicalactivitytracker.aspx](http://www.supertracker.usda.gov/physicalactivitytracker.aspx) to learn more about the Physical Activity Tracker.

For more ideas, visit:

www.pecentral.org/lessonideas/searchresults.asp?category=190

Literature Links

- **Primary:** *Apples and Pumpkins* by Anne Rockwell, *It’s a Fruit, It’s a Vegetable, It’s a Pumpkin* by Allan Fowler, *The Pumpkin Book* by Gail Gibbons, and *Pumpkin Circle: The Story of a Garden* by George Levenson.
- **Secondary:** *The Legend of Sleepy Hollow* by Washington Irving and *Squashed* by Felder Rushing

For more ideas, visit:

www.cfaic.org/trg/pdf/trg2009.pdf

www.harvestofthefmonth.com/EdCorner/literature-links.asp

Network participation in Food Day is for the purpose of educating and informing SNAP-Ed eligibles about healthy eating and physical activity and will not include advocacy for or against any specific laws, regulations or ordinances.



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