Health and Learning Success Go Hand-In-Hand
California’s geography offers a bounty of fresh produce and recreational areas. From stone fruits and salad greens to state and local parks, there is no shortage of healthy foods to eat and outdoor activities to do in California. Studies show that healthy eating and physical activity are correlated with improved academic achievement. Use Harvest of the Month to allow students to experience California-grown fruit and vegetables with their senses. Teach students to live a healthy, active lifestyle and support academic content standards to link the classroom, cafeteria, home, and community.

Exploring California Peaches: Taste Testing
What You Will Need (per group of 8 students):
- Four ripe peaches and four ripe nectarines (two each of yellow and white varieties)*
- Paring knife and cutting board
- Paper towels

*Choose peaches and nectarines that are fragrant and firm to slightly soft when pressed.

Optional: Sample other stone fruits (cherries, plums, apricots, etc.) with peaches.

Activity:
- Distribute yellow peaches and nectarines to each student group.
- Observe the look, feel, and smell of each; record observations.
- Cut open the second yellow fruit; observe the taste and sound and record observations.
- Repeat with white peaches and nectarines.
- Discuss similarities and differences among the four varieties.
- Record students’ favorite variety; share results with school nutrition staff.

For more ideas, reference:

Cooking in Class: Peach Smoothies
Makes 35 tastes at ¼ cup each
Ingredients:
- 6 fresh peaches, pitted and sliced
- 6 fresh nectarines, pitted and sliced
- 4½ cups plain nonfat yogurt (or milk)
- 4½ cups 100% orange juice
- 3 tablespoons honey
- Blender container
- Small paper cups

1. Blend all ingredients together with ice. (May need to do in 2 to 3 batches.)
2. Serve cold in cups.

Nutrition Information per serving:
Calories: 62, Carbohydrate: 13 g, Dietary Fiber: 1 g,
Protein: 3 g, Total Fat: 0 g, Saturated Fat: 0 g,
Trans Fat: 0 g, Cholesterol: 1 mg, Sodium: 26 mg

Adapted from: Kids Cook Farm-Fresh Food, CDE, 2002.

Reasons to Eat Peaches
A ½ cup of sliced peaches (about half of a medium peach) provides:
- A source of vitamin A and vitamin C.
- A source of fiber*.

*Learn about fiber on page 2.

Champion Sources of Fiber*:
- Avocados
- Beans
- Blackberries
- Broccoli
- Papayas
- Raspberries
- Sweet potatoes
- Whole wheat cereals and breads
- Winter squash

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

For more information, visit: www.nal.usda.gov/fnic/foodcomp/search/ (NDB No.: 09236)
**What is Fiber?**

- Fiber is a complex carbohydrate found only in plant foods like fruits, vegetables, grains, nuts, and seeds.
- Dietary fiber is important for lasting health benefits. It helps you feel full, helps keep your blood sugar level normal, helps to avoid constipation, and can help individuals maintain a healthy weight.
- Currently Americans consume only about half the amount of recommended fiber daily.
- Eating foods that are rich in fiber – like fruits, vegetables, dry beans, and whole grains – will help you meet your daily needs for fiber.
- The 2010 Dietary Guidelines for Americans recommend 14 to 31 grams of fiber per 1,000 calories each day, depending on age and gender. To find out how much you need, visit www.mypyramid.gov.

For more information, visit:
- www.teamnutrition.usda.gov
- www.eatright.org/Public/content.aspx?id=6796&terms=fiber

**Botanical Facts**

**Pronunciation:** péch
**Spanish name:** durazno
**Family:** Rosaceae
**Genus:** Prunus
**Species:** P. persica

The peach comes from a deciduous fruit-bearing tree of the rose family and is native to China. Its botanical name, *Prunus persica*, resulted from the original belief that peaches were native to Persia (Iran)*. Commercially, peaches and nectarines are treated as different fruits but they belong to the same species. The nectarine is a type of peach with a smooth, fuzzless skin.

Peaches are classified as a stone fruit, meaning that they possess a single large seed or stone surrounded by juicy flesh. Other common stone fruits include cherries, plums, and apricots. There are two major peach cultivars — clingstone and freestone — based on how the flesh sticks to the stone (or pit). Commercially, nearly all clingstone varieties are processed (pit removed), then canned, preserved, juiced, or used in other food products (e.g., baby food). Freestone peaches are primarily sold as fresh.

*Refer to A Slice of Peach History (page 3) for more information.

For more information, visit:
- www.agmrc.org/commodities__products/fruits/peach_profile.cfm

**How Much Do I Need?**

A ½ cup of sliced peaches is about one cupped handful. This is about the size of half of a medium peach. The amount of fruits and vegetables you need depends on your age, gender, and how active you are every day. Look at the chart below to find out how many cups of fruits and vegetables you and your students need. All forms count toward the daily amount – fresh, frozen, canned, dried, and 100% juice. Have students make a list of their favorite fruits and vegetables and how they like to eat them. Encourage students to share their lists with their families.

**Recommended Daily Amount of Fruits and Vegetables***

<table>
<thead>
<tr>
<th></th>
<th>Kids, Ages 5-12</th>
<th>Teens and Adults, Ages 13 and up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>2½ - 5 cups per day</td>
<td>4½ - 6½ cups per day</td>
</tr>
<tr>
<td>Females</td>
<td>2½ - 5 cups per day</td>
<td>3½ - 5 cups per day</td>
</tr>
</tbody>
</table>

*If you are active, eat the higher number of cups per day. Visit www.mypyramid.gov to learn more.

**Adapted from:** Tall and Tasty Fruit Trees, Meredith Sayles Hughes, 2000.


**How Do Peaches Grow?**

Peach trees are warm-weather deciduous trees that grow 15 to 25 feet high. Susceptible to drought and frost, peach trees grow best inland and in warmer, tropical to subtropical climates. Most commercial trees are grafted cultivars, bearing fruit after about three to five years. Healthy trees reach peak production when about 10 years old and can live up to 20 years.

Unlike most fruit trees, the flowers of peach trees are produced in early spring before the leaves. Pruning is necessary during the spring to ensure quality fruit production. This technique of thinning increases the size and improves the taste of the fruit. Commercial growers use a machine to brush the peach skin after harvesting to remove most of the natural fuzz.

**Adapted from:** Tall and Tasty Fruit Trees, Meredith Sayles Hughes, 2000.
**Home Grown Facts**
- The United States is the world’s leading grower of peaches. California also leads the country in peach and nectarine production — growing more than 84% of the nation’s peaches and 95% of the nation’s nectarines.*
- California is the nation’s sole producer of clingstone peaches*.
- Peaches and nectarines rank in California’s top 20 commodity exports (#17)*.
- Fresno County is the leading producer of the State’s peach and nectarine crops.
- Other top peach-producing counties include Tulare, Stanislaus, Sutter, and Yuba. Tulare, Kings, and Kern counties are also leading growers of nectarines.

*2008 Data

For more information, visit:
http://usda.mannlib.cornell.edu/

**School Garden: Garden Sweep**

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.

Gardens often contain many insects and can sometimes be damaged or destroyed by hungry pests. There are also helpful insects, though, that will eat the harmful kind. Do a sweep of your school garden and see what types of insects are helping or harming it.

**What You Will Need:**
- Quart-size (or larger) resealable plastic bags (one bag per team)
- Sweep nets (one or two per team)
- Cotton gloves
- Magnifying glasses
- Insect identification chart or field guide

**Activity:**
- Divide students into teams of five.
- Assign each team with a large area to sweep.
- Spend 15 to 30 minutes capturing insects using nets and transferring to the resealable bag*.
- Examine insects using the magnifying glasses.
- Use the chart or field guide to identify insects.
- Discuss student findings and observations as a class.

Sample discussion topics include:
- Insects that inhibit or damage the garden
- Insects that help the garden
- Seasonal insects

*Only students wearing gloves should transfer insects to bags to prevent insect bites or stings.

Adapted from: www.kidsgardening.com

For more ideas, reference:
www.lifelab.org

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**A Slice of Peach History**

- The peach tree originated in western China about 4,000 years ago.
- Alexander the Great introduced the peach to Greek and Roman society.
- From the Mediterranean and North Africa, the peach traveled north during the Middle Ages with the Moors to the Iberian Peninsula.
- Spanish and Portuguese explorers brought peaches to the Americas in the 1500s.
- Spanish missionaries in California planted the first peach trees in the mid-18th century.
- Russian immigrants brought peach seeds to San Francisco in the early 1800s and planted them near Fort Ross.
- Gold miners began California’s commercial peach production in 1849 after demand for peaches could not be fulfilled by eastern supply.

For more information, reference:
Tall and Tasty: Fruit Trees, Meredith Sayles Hughes, 2000.

**Student Sleuths**

1. Name the two different forms of fiber. Describe the different ways in which each form acts in the digestive system. List food sources of each.

2. The store sells the following peach items: fresh peaches, frozen peach slices, dried peaches, canned peaches, peach fruit leather, and peach-flavored iced tea. You want to buy a peach item that will provide you with the most nutrients to help you reach your fruit and vegetable goals. Complete the following steps to determine which peach item will provide you with the most nutrients.
   a. Make a chart showing each of the peach items, nutrient values, and the approximate cost per serving.
   b. Which peach serving provides the most nutrients? The least?
   c. Which peach item will provide you with the most nutrients for the least cost?

3. Using a California map, identify the top 10 counties where clingstone peaches are grown. What geographic characteristics do these counties have in common? Hypothesize why these characteristics are ideal for clingstone peach production. Repeat for freestone peaches. Compare the lists. What are some geographical and climate differences between these areas? What determines if a county’s geography is better for growing clingstone peaches versus freestones?

For information, visit:
www.cdfa.ca.gov

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For more information, visit:
http://usda.mannlib.cornell.edu/
Just the Facts
- Genetically, nectarines differ from peaches by a single recessive gene — the one that makes peaches fuzzy.
- Members of the rose family, peaches are related to the almond.
- Peaches rank among the top 10 most commonly eaten fruits and vegetables by California children.
- The peach is the state flower of Delaware and state fruit of South Carolina. Georgia is nicknamed The Peach State.
- In World War I, peach pits were used as filters in gas masks.

For more information, visit:

Adventurous Activities

History Exploration:
The peach has a rich history in ancient China and Japan, as well as Roman and Greek mythology. Research the peach’s role in Asian folklore and cultural traditions. What does the peach symbolize and what is its significance? Write a short paper describing the peach’s significance in Asian culture and compare it to its significance in Roman and Greek mythology.

For more ideas, visit:
www.harvestofthemonth.com

Student Champions
Local parks often need the support of community members to provide a safe and clean environment for recreation. Clean up litter, plant trees, or volunteer at a local park to instill pride and community ownership. Encourage students to get involved — it may help them become more active, both physically and as leaders in their community.

Getting Started:
- Choose a local neighborhood park. Contact the local city or county parks department.
- Work with department officials to make a list of improvement projects to enhance the park.
- Prioritize the list and select a project.
- Organize and promote a neighborhood event to complete the project.
- Talk to neighbors about ways to keep the park safe and clean. Or, make a flyer with tips and distribute to community members.
- Write and submit an article to a local paper about the activities.

For more information, visit:
www.parks.ca.gov

Cafeteria Connections
School meals can be a source of many fiber-rich foods*. Invite school nutrition staff to your classroom to help students identify fiber-rich foods on the menus (lunch, breakfast, snacks). The school nutrition staff can also talk about the health benefits of fiber. Students can develop a list of their favorite fiber-rich foods they would like to see on the school menus. Encourage students to share lists with school nutrition staff and to create posters promoting fiber-rich foods for display in the cafeteria.

Helpful Hint:
Schools can order a variety of fiber-rich foods through USDA commodity food programs. Visit www.fns.usda.gov/fdd/foods/foods_available.htm to learn more.

*For these purposes, “fiber-rich foods” includes foods that provide at least 5% Daily Value.

Physical Activity Corner
- Divide class into two groups and mark a boundary between groups with rope or chalk.
- Use cones to make a circle (6 paces across) near the outside edge of each territory; this is the “peach.”
- Inside each circle place a “stone” (use a peach pit that has been washed or a beanbag).
- On a signal by teacher, any or all of each group may leave their territory and try to capture the other group’s stone and bring it back to their territory without being tagged. If student is tagged, he/she freezes and waits for a teammate to high-five to unfreeze.
- Students should only enter the “peach” if trying to capture the stone.

Helpful Hint:
For safety, avoid fast running.

Source: Physical Activity Specialist, Northcoast Region, Network for a Healthy California, 2011.

For more ideas, visit:
www.pecentral.org

Literature Links
- Secondary: Epitaph for a Peach by David Masumoto, Family Trees: The Peach Culture of the Piedmont by Mike Corbin and Tall and Tasty: Fruit Trees by Meredith Sayles Hughes.

For more information, visit:
www.cfaitc.org/books