

# Harvest of the Month

## Juicy Pineapples

You can benefit from all of the phytochemicals and nutrients by eating 5-9 servings of fruit & vegetables a day.

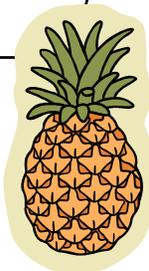
### PINEAPPLE FACTS

- Pineapples are good sources of fiber and potassium and provide some Vitamin C.
- Pineapples not only come from Hawaii, but from Honduras, Mexico, Philippines, Puerto Rico, and South America.
- The scientific name for pineapple is *Ananas Cosmosus*.
- Of all the New World discoveries made by Columbus and his crews, pineapples were the fruits that caused the biggest stir back home.
- Pineapples make up the family Bromeliaceae and the order Bromeliales.

### Nutrition Facts

Serving Size  
= 1 cup, diced

<b>Calories</b>	74
<b>Fat</b>	0 g
<b>Calcium</b>	20 mg
<b>Iron</b>	0.4 mg
<b>Potassium</b>	178 mg
<b>Vit. A</b>	87 IU
<b>Vit. C</b>	56 mg
<b>Fiber</b>	2 g



### Did you know?

Did you know that the pineapple has been a symbol of hospitality since colonial days? The discovery of formerly unknown continents brought new and exotic fruits to Europe and the American colonies. Merchants and sea captains returning from the West Indies would present their guests or host with a pineapple as a gesture of

friendship. The significance of such a gift was greatly enhanced by the rarity of tropical fruit.

The symmetrical beauty soon made the pineapple a favored form of decoration for eighteenth and nineteenth-century homes. Many examples of this symbol of hospitality exist throughout Colonial Williamsburg. Sculpted fini-

als, wall decorations and elaborate furniture carvings are but a few of the examples of the pineapple which have provided inspiration for this design.

Today, the pineapple is a prominent symbol of hospitality found throughout America.

# Pineapple Information



## How are pineapples grown and harvested?

Pineapples grow best in tropical and warm subtropical areas of the world. They will usually tolerate brief exposures to 28°F. They are successfully grown in southern Florida and coastal areas of southern California. The best soil for the pineapple is the well-drained sandy loam.

Pineapples are propagated by new vegetative growth. There are four general types: slips that arise from the stalk below the fruit, suckers that originate at the axils or leaves, crowns that grow from the top of the fruits, and ratoons that come out from the under-ground portions of the stems. Although slips and suckers are preferred, crowns are the main planting material of home gardeners. These are obtained from store-bought fruit and are removed

from the fruit by twisting the crown until it comes free. The bottom leaves are removed and the crown is left to dry for two days, then planted or started in water.

The summer crop is harvested when the eye shows a light pale green color. The winter crop is about 30 days slower to mature, and the fruits are picked when there is a slight yellowing around the base. In manual harvesting, one man cuts off or breaks off the fruits (depending on the cultivar) and tosses them to a truck or passes them to 2 other workers with baskets who convey them to boxes in which they are arranged with the stems upward. Total mechanical harvesting is achieved by 2 hydraulically operated conveyors with fingers on the top conveyor to snap off the fruit, the lower conveyor carrying it away to the de-crowners. After the fruit has been conveyed away, the workers go through the field to collect the crowns (where they have been left on the tops of the plants) and place them on the conveyors for a trip to the bins which are then fork lifted and the crowns dumped into a planting machine.

## Choosing, Storing, & Cooking with Pineapple

**Buying Tips:** Some people judge ripeness and quality by snapping a finger against the side of the fruit. A good, ripe fruit has a dull, solid sound; immaturity and poor quality are indicated by a hollow thud. The fruit should be heavy and plump, with fresh-looking leaves. A good pineapple should be fragrant. Avoid bruises or soft spots at the base of the pineapple.

**Storing Tips:** At 44.6-46.4°F (7-8°C) and above, 80-90% relative humidity, and adequate air circulation aid the normal ripening progresses during and after storage. At best, pineapples may be stored for no more than 4-6 weeks.

**Cooking with Pineapples:** Fresh pineapple contains an enzyme called bromelain, which digests protein. The fresh fruit is never used in gelatin molds because the bromelain would break down the protein in the gelatin and prevent it from setting. However, heating pineapple to the boiling point can inactivate the enzyme, so canned pineapple can be safely substituted. Fresh pineapple should not be mixed with yogurt or cottage cheese until just before serving, or the bromelain will begin to digest the protein in these foods, too, changing their flavor and consistency.

Source: UC at Berkeley, *The Wellness Encyclopedia of Food and Nutrition* by Sheldon Margen, M.D.

## Pineapple History

Native to southern Brazil and Paraguay area where wild relatives occur, the pineapple was apparently domesticated by the Indians and carried by them up through South and Central America to Mexico and the West Indies long before the arrival of Europeans. Christopher Columbus and his shipmates saw the pineapple for the first time on the island of Guadeloupe in 1493 and then again in Panama in 1502. Caribbean Indians placed pineapples outside the entrances to their dwellings as symbols of friendship and hospitality. The plant has become naturalized in Costa Rica, Guatemala, Honduras and Trinidad but the fruits of wild plants are hardly edible.

Captain Cook planted pineapples on the Society Islands, Friendly Islands and elsewhere in the South Pacific in 1777. A commercial industry took form in 1924 and a modern canning plant was erected about 1946.

# Nutrition Education Activities



## Attention Teachers!

Try one of the activities with students to promote healthy eating habits. Help support literacy while creating an educational link between your classroom and the cafeteria. Contact Nutrition Services (ext. 8931) to see how we can pay for your nutrition lesson.



Grade/s	Learning Activity	Assessment Tool	Curriculum Links*
PreK-K	Have students name foods from photos or real food samples. Display the photos or foods in two unlabeled groups, based on whether they are from a plant or animal source.	Individually or in pairs, students name each food or photo, sort them into plant and animal categories, and total how many pictures are in each group.	Math-K Number; Sense Stds 1.1-1.2, Sort & Classify Std 1.1
PreK-K	Read <i>Farmers Market</i> or <i>Eating the Alphabet, Fruits &amp; Vegetables from A to Z</i> . Rotate students through tasting centers of various types of fruits (include pineapples).	Students draw pictures of favorites, dictate/write the food name and reasons for liking it.	LA-K Writ & Oral Std 1.2 Read Comp Std 2.3
1-3	Guide students in tasting a variety of fruit pieces, then guide them in discussing the smells, colors, sounds (when eaten), texture, and taste.	Students write sensory words on word strips and place them on a word wall under sound, sight, smell, feel, and taste categories.	LA-Gr. 1 Word Anal Std 1.17; Gr.3 Writ App Std 2.2, Writ & Oral Std 1.1, Speak App Std 2.3
1-3	Before lunch, guide students in sorting foods on the school lunch menu for the day into the <i>Food Guide Pyramid</i> groups.	After lunch, students tally the number of <i>Food Guide Pyramid</i> groups represented by the foods they actually ate for lunch (school lunch or lunch from home) and compare with <i>Food Guide Pyramid</i> recommendations.	CS—Gr. 1-3 Std 1 Math—Gr. 2 Stat, Data Anal Std 1.1
4-5	Review the five taste sensations and discuss how their tastes have changed since they were younger. Discuss students' willingness to taste different foods, ie fruits & vegetables, as a way to increase food variety and interest. Have students prepare & taste a healthy snack featuring foods they haven't tasted before.	Students create a class cookbook of after school snacks made with foods new to the students.	LA—Gr.4 Writ Strat Stds 1.1, 1.10, Writ & Oral Stds 1.1, 1.2, 1.7; Gr. 5 Writ Strat Stds 1.6, Writ & Oral 1.4, 1.5
4-5	Introduce a unit on the important role of agricultural growers in California history. Help students explore how technology, water and land use have changed growers' roles from the 1830's to the present.	Students create & perform a skit, set in several different time periods, about a mythical, time traveling, agricultural grower.	LA—Gr.4 List & Speak Stds 1.5-1.9, Speak App Stds 2.2-2.4

\*LA = California English Language Arts Content Standards; \*Math = Mathematics Content Standards; \*CS = Challenge Standards for Student Success/Healthy Education;

Fruit & Vegetable Photo Cards are available at Nutrition Services or see resource on the back—They're a great teaching tool!

# Pineapple Recipes and Resources

Tasting and exploring different fruits and vegetables each month encourages students to make healthy eating choices.

## Pineapple Pepper Salsa

*Yields 4 servings*

- 3 cups Pineapple (fresh cut), diced
- 1/2 cup Red bell pepper, diced
- 1/4 cup Scallions, thinly sliced
- 1 tablespoon Coriander (fresh), chopped
- 1 tablespoon jalapeno pepper, chopped
- 1 tablespoon fresh lime juice

In a medium bowl, combine all ingredients, stirring until blended. Great on top of grilled chicken!



## Pineapple-Stuffed Acorn Squash

*Yields 4 servings*

- 2 Acorn squash (medium)
- 1 cup Nonfat cottage cheese
- 1/3 cup Pineapple, well-drained & crushed
- 1/4 cup Fresh parsley, minced
- 1 tablespoon Scallions, minced

Cut the squash in half lengthwise; scoop out & discard seeds. Place cut side down in 7"x11" baking dish. Microwave on high for 3 minutes. Rearrange the pieces. Microwave on high for 4 minutes, or until easily pierced with a fork. Flip the pieces so that the cut sides are facing up. In small bowl, mix the cottage cheese, pineapple, parsley, and scallions. Spoon into the squash cavities. If desired, microwave on high for 1 minute to slightly heat the filling.

**Next Issue:  
March 2004 is  
Greens!**

## Books

- *Farmers Market*, by Carmen Parks
- *Eating the Alphabet: Fruits & Vegetables from A to Z*, by Lois Ehlert
- *I Eat Fruit!* By Hannah Tofts

## Other Resources

- California Department of Education Press (800) 995-4099 or logon to [www.cde.ca.gov/cdepress](http://www.cde.ca.gov/cdepress):
  - Fruit & Vegetable Photo Cards
  - Kid's Cook Farm-Fresh Food (Grades 2-7)



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