

## Persimmon-Teaching Points Grades 5-6

### Reasons to Eat Persimmons?

- ❖ Persimmons are an excellent source of fiber, most in the form of soluble fiber. They are also an excellent source of vitamins A and C and the mineral manganese, a source of vitamin B6 and potassium.



### How Much Do I Need?

- ❖ A serving of persimmons is one medium-sized fruit, which is about the size of a baseball. *Remind students that eating a variety of colorful fruits and vegetables throughout the day will help them reach their recommended needs.*
- ❖ *Recommended ranges take into account three activity levels: sedentary, moderately active and active. Children should get at least 60 minutes of moderate physical activity a day in addition to regular activity.*

### Just the Facts

- ❖ In Asia, persimmons have been grown for thousands of years and rank next to citrus in importance.
- ❖ The persimmon is Japan's national fruit.
- ❖ There are two popular varieties we eat in California, Hachiya and Fuyu.
- ❖ Some persimmons contain tannic acid which makes fruit bitter and makes your mouth feel dry. The Fuyu does not have tannic acid but the Hachiya does. This makes the Fuyu better tasting taste and easier to eat right off the tree.
- ❖ Persimmon trees are grown for wood (used in golf clubs, weaving cloth and making furniture), their flowers to make nectar for honeybees, and for their beauty.

### What's In a Name?

- ❖ Ancient references to the persimmon as "food for the Gods" have led to its classification in the genus *Diospyros* of the Ebony family. ("Dios" means God; "pyros" means grain or food.)
- ❖ The English word "persimmon" is derived from the Algonquian language of the eastern United States meaning "dry fruit".
- ❖ Today all persimmons cultivated in California (and most in the United States) are of the *D. kaki* species. Although native to China, this species is often referred to as Japanese or Oriental persimmons. These fruits are generally classified into two categories: astringent and non-astringent.
- ❖ Hachiya is an astringent variety; acorn shaped with a bright, deep orange-red color. It must be jelly soft before it is edible. This variety is used mostly for baking. To ripen astringent varieties, store at room temperature. It will ripen faster if put in a paper bag with an apple or banana.
- ❖ The Fuyu is a non-astringent variety; light orange in color, spherical, pumpkin shaped and may be eaten raw when firm or soft.

### Student Sleuths

- ❖ Some persimmon varieties contain tannins, which cause astringency. What are tannins? Tannins are chemicals found in some plant or unripe fruit that give off a bitter taste. Other sources of tannins are: green tea plants, pomegranates, blueberries, and chocolate.
- ❖ Persimmons are high in antioxidants. What are antioxidants and what do they do for our body? **Depending on grade level, answers may be more or less scientifically advanced.** The burning of nutrient fuel (fats and carbohydrates) to provide energy for bodily functions occurs by oxidation. A constant supply of oxygen





is required for these oxidative processes. Even so, if oxidation occurs too vigorously, damage to the body's molecules and tissues can occur. This damage is particularly likely to occur when oxidation occurs by highly reactive oxygen molecules called free radicals. If the body's DNA is damaged by free radicals and is not repaired, the long-term risk for cancer increases.

Antioxidants are chemical substances that help protect the body's cells against damage from cancer-causing free radicals. Common vitamins with antioxidant properties include vitamins A, C, and E. Carotenoids and bioflavonoids also have antioxidant properties.

#### A Piece of Persimmon History

- ❖ The *D. kaki* species originated in China and made its way to Japan more than a thousand years ago. Persimmons of the species *D. virginiana* (the American persimmon) are native to North America, mostly on the East Coast. While it was a food staple of early Native Americans, the species today accounts for less than 1 percent of the country's total crop production.
- ❖ At least 500 different *D. kaki* varieties were brought to California during a major planting spree from 1870 to 1920. In 1877 alone, more than 5,000 plants in 19 varieties were imported from Japan.
- ❖ Today, the two major Japanese varieties grown in California are the Hachiya and the Fuyu.

#### Home Grown Facts

- ❖ In 2004, California produced 99 percent of the *D. kaki* crop in the United States at a total value of about \$10.3 million.
- ❖ Tulare and Fresno Counties produce 53 percent of the State's total production.
- ❖ Persimmons reached their peak in popularity during the first half of the 20<sup>th</sup> century. The Hachiya was the preferred variety, but production declined and has since been surpassed by the Fuyu.

#### How Do Persimmons Grow?

- ❖ The persimmon is a deciduous tree, adaptable to a wide range of soils and climates and immune from most diseases and insects. Although the trees can withstand temperatures as low as 0° F when fully dormant, they do not produce well in high summer heat or desert regions.
- ❖ Trees can reach heights of up to 25 feet. The trees bear fruit about two to three years after grafting and have a life span of about 10 years.



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