

Commodity Fact Sheet

Prunes

Information compiled by the California Prune Board

How Produced – A prune tree starts to bear fruit four to six years after planting and reaches its full production capacity (150 to 300 pounds of raw fruit per year) sometime between its eighth and twelfth year in the ground. The tree will continue to bear quality fruit on a commercial basis for about 30 years. Typically, the orchards are ready for harvesting between mid-August and early September, which generally takes about 30 days. Harvest time is determined by fruit ripeness, since plums are one of the few fruits allowed to fully ripen before they are picked.

Today, the majority of California Prunes are machine harvested. The fruit is shaken off the tree and transferred via conveyor belt into bins which then go to the dehydrator. The tree-ripened fruit is washed, placed on wooden trays, and dehydrated—three pounds of fresh fruit then becomes one pound of dried fruit. From the dehydrator, the prunes go to packing plants where they are graded for size, inspected, and stored to await final processing and packaging. Unlike most processed fruits, prunes are often packed to order. With each order, the prunes are re-hydrated, sterilized, put through a final inspection, and packaged for shipping.

History – During the Gold Rush, a Frenchman named Louis Pellier came to California, but he didn't find much gold, so he decided to try growing prunes instead. He attached part of the French plum tree to a wild American plum tree—a practice that farmers call "grafting"—and created the "Improved French" variety that California still grows today. These trees grew so well in California that others soon caught on, and orchards began popping up all over the state from the Santa Clara and San Joaquin Valleys to Sacramento, Sonoma, and Napa.

The turn of the century brought rapid ups and downs and one farmer tried to remedy a labor shortage by using 500 monkeys for cheap labor. The monkeys were surprisingly reliable at picking the fruit, but they ate the crop. In the 1950's the industry replaced prewar harvesting methods with more innovative practices and modern machines while high-tech companies started to colonize the Santa Clara Valley — now known as "Silicon Valley" — pushing farmers into other regions making the Sacramento Valley the new epicenter for prunes. The next six decades brought new ways of marketing and promoting prunes paving the way for nutrition and culinary research and contemplation of changing the name from prunes to "dried plums." The alternative never entirely took root, and today the commodity board proudly promotes all the wonders of California Prunes.

Varieties – Although all prunes are plums, not all plums can be prunes! Only certain varieties can be dehydrated the right way, turning them into prunes. California Prunes are the "Improved French" variety of plums, an offshoot of La Petite d'Agen, a plum native of Southwest France. The high sugar content of the California variety allows it to be dried without fermentation occurring around the pit.



Commodity Value – California is the world's largest prune producer growing more than 90% of the United States' supply and about 40 percent of the world's prunes. Today, California has more than 40,000 bearing acres of prune orchards producing an average of 90,000 tons each year. California exports to more than 50 different countries – Europe, Canada,

Japan and China are among the top exports. The crop value of the California Prunes is approximately \$172 million annually.

Top Producing Counties – Most prunes are grown in the Sacramento and San Joaquin valleys where the rich soil and the long warm season provides ideal growing conditions. The leading counties are Sutter, Butte, Yuba, Tehama, and Glenn.

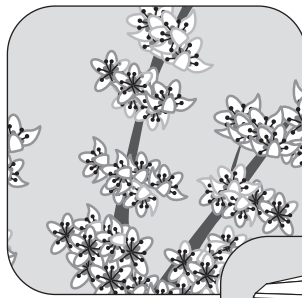
Nutritional Value – A serving of 4-5 prunes has 100 calories, are naturally sweet and have no added sugar providing antioxidants, potassium, fiber, and other important vitamins and minerals. These nutrients may help reduce the risk of some chronic diseases. Prunes are naturally fat free and have no cholesterol and no sodium. Macronutrients like carbs and soluble fiber found in California Prunes energize muscles and delay hunger during exercise. California Prunes help support bone health and the nutrients in prunes including boron, potassium, Vitamin K, copper, fiber, and polyphenols work together to protect the bone.

Prunes make an easy snack - ready to eat, no prep required, and can be enjoyed alone or with other foods like cheese, nuts or yogurt and counts as a serving of fruit. Prunes also work well as a fat substitute and can reduce sugar in baked goods.

For additional information:
California Prune Board
(916) 749-3442
Website: www.californiaprunes.org



Prune Activity Sheet



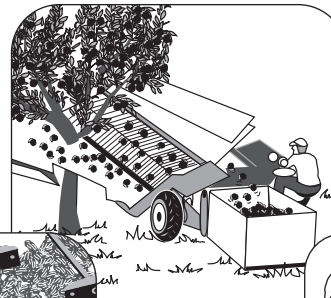
← #1

In early spring, bees pollinate the white, fragrant blossoms, and plum development begins.



← #2

The orchards are irrigated and nutrients are added to the soil. As the plums ripen, they turn from green to purple.

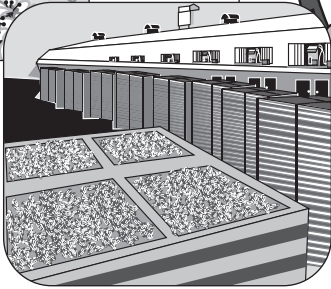


← #3

Mechanical harvesters grab the trunks and shake off the fruit which fall onto fabric catching frames and are then transported by conveyor belt into bins.

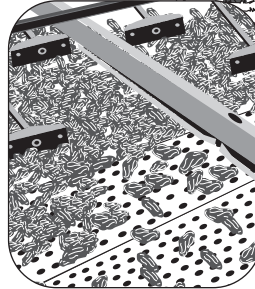
#4 ➤

After weighing and washing, the plums are stacked onto trays and rolled into large tunnels where they are dehydrated.



#5 ➤

During processing the prunes are sorted, steamed, pitted and packaged.



#6 ➤

Consumers enjoy healthful prunes as bite-sized snacks and juice or as an ingredient in baked goods, cereals, and energy bars.



Lesson Ideas

- Keep a daily journal tracking the food you eat throughout the week. Compare your daily servings of fruits and vegetables to those recommended by USDA's MyPlate. Set an attainable goal to increase your fruit and vegetable consumption.
- Visit choosemyplate.gov to investigate the nutritional value of fresh vs. dried fruits. Determine if there is enough fruit in your daily diet.
- Devise an advertisement which promotes eating prunes.
- Research the importance of bone health as a youth and into adulthood
- Research the science of dehydration and learn its benefits as a food preservation method.
- Invite a prune producer or grower into your classroom to discuss his or her profession.
- Reduce, replace, reward – try making an easy prune puree as a swap for some of the fat and sugar in cookies or muffins.

Fantastic Facts

1. Prunes are simply plums grown on trees in orchards and dried in large ovens called tunnels.
2. California Prunes are harvested by mechanical shakers.
3. The first prune orchard was established in Santa Clara county, California now known as the Silicon Valley.
4. During a labor shortage in 1905, a prune grower tried to use 500 monkeys to pick the fruit.
5. Prunes are fully ripened on the tree, so farmers determine harvest time by checking fruit firmness and sugar content.
6. Three pounds of fresh fruit makes one pound of prunes.
7. Water is added to dehydrated prunes before they are packed for consumers.
8. Commercial prune trees are productive for approximately 30 years.
9. Prunes are a healthy snack that count as a full serving of fruit.
10. Prunes are an excellent source of Vitamin K and a source of manganese which contribute to the maintenance of normal bone.

Lesson Plan: Healthier Baking Cookbook

Introduction: Now more than ever, people have realized the health benefits of having a strong immune system that reduces fats and sugar intake and includes a minimum of five servings of fruits and vegetables each day.

Objective: Students will analyze some of their favorite recipes and see how they can make their favorite dessert a healthier snack.

California Standards: CC ELA: W.3-8.4, RST.6-8.3, 9, WHST.6-8.4, 10; CC Math: 3.NF.3, 4-5.NF.4; NGSS: 5-PS1-2, 3, 4

Materials: 1 cup (8 ounces) California Prunes, water, blender, one packaged brownie mix with required ingredients, one favorite baked snack recipe from each student, blank paper, markers, construction paper.

Procedure:

1. Make a puree by blending 1 cup of prunes and six tablespoons of hot water in a food processor or blender. This makes one

cup of prune puree. Use one half the butter or oil called for in the recipe. Replace the remaining amount of butter eliminated with half of the measurement of puree. If a recipe calls for 1 cup butter, use ½ cup butter and ¼ cup prune puree.

2. Have the students taste the brownies and comment on their flavor. Explain what you did to make them lower in fat.
3. Have the students bring in one or two of their favorite brownie, cake or cookie recipes and rewrite the recipe using prune puree (see step 1). Encourage the students to try their new recipes at home. Works best with dark colored baked goods.
4. Create a class cookbook of the low-fat recipes. It may include a recipe from each student with illustrations, quotes from students and parents who tried their new recipes,