

Figs, Prunes, Dates, Raisins-Teaching Points 5-6 Grades

Reasons to Eat Dried Fruit

- ❖ One serving of dried fruits is $\frac{1}{4}$ cup and provides a source of:
 1. Potassium, which the body needs to maintain muscle contractions and a healthy nervous system.
 2. Iron, an essential mineral needed to produce red blood cells. Iron deficiency anemia is a condition in which the number of red blood cells is low. A symptom of mild anemia is weakness and fatigue.
 3. Calcium, vitamin A, vitamin C, B-complex vitamins and magnesium.

Just the Facts

- ❖ Dates grow on palm trees. There are about 250,000 date palm trees in the United States. In comparison, Iraq which is slightly larger in size than California – has nearly 22 millions date palm trees.
- ❖ The fig is actually an inverted flower while the seeds are the drupes, or real fruit.
- ❖ If you add dried plums when cooking lean cuts of red meat and chicken, the fiber and sugar found in the dried plums will help keep the meat from drying out.
- ❖ On average, Americans consume about two pounds of raisins per year, slightly ahead of fresh grape consumption.

Dried Fruit History

- ❖ The ancient philosopher Plato lived in Athens, Greece. The Athenians referred to themselves as “philosykos,” which translates to “friend of the fig”.
- ❖ Louis Pellier, a Frenchman, failed at gold mining. He is famous for introducing Californians to dried plums at his Santa Clara Valley nursery in 1856.
- ❖ Raisins were eaten as far back as 1490 B.C.E. Raisins were mentioned in ancient writings.
- ❖ In 1876, a Scottish immigrant by the name of William Thompson developed a seedless grape variety in the San Joaquin Valley. This was the beginning of the raisin industry.

What’s in a Name?

Date:

Varieties: Deglet Noor, Medjool, Zahidi, Khadrawy, Halawy

Dried Fig:

Varieties: Calimyrna, Mission, Adriatic, Kadota

Dried Plum:

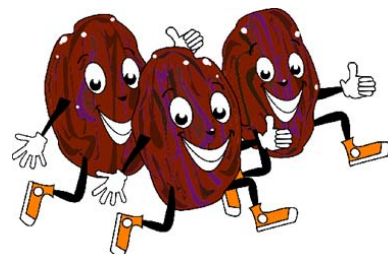
Varieties: California plum (graft of La Petite d’Agen and wild American plum)

Raisin:

Varieties: Dark purple raisin, golden raisin, dipped seedless, Muscat, Zante currant

Eat Your Colors

- ❖ Fruits and vegetables come in a rainbow of colors. Eat a variety of colorful fruits and vegetables every day – red, yellow/orange, white, green, and blue/purple.
- ❖ These may lower the risk of some cancers.





Color Group	Health Benefits	Examples
Red	Help maintain heart health, memory function and urinary tract health	dried apples dried cranberries red currants
Yellow/Orange	Help maintain heart health, vision health and healthy immune system	golden raisins dried apricots
White/Tan/Brown	Help maintain heart health and cholesterol levels that are already healthy	dates, dried figs
Green	Help maintain vision health, strong bones and teeth	dried kiwi dried green apples
Blue/Purple	Help maintain healthy aging, memory function and urinary tract health	dried plums raisins Zante currants dried blueberries

Home Grown Facts

- ❖ Ninety five percent of the 30 million pounds of dates grown in the United States come from the Coachella Valley and Salt River Valleys in Southern California.
- ❖ The Deglet Noor accounts for ninety percent of California's date crop.
- ❖ California's San Joaquin Valley grows 99 percent of the nation's fig crop.
- ❖ Two thirds of California's fig crop consists of the Mission (black) and Calimyrna (golden) varieties.
- ❖ The three top fig producing counties are Fresno, Madera and Merced.
- ❖ California is the world's leader of dried plums, producing about 65 percent of the world's supply and almost 99 percent of the nation's supply.
- ❖ Tulare County is one of the top dried plum producing counties in California.
- ❖ In the United States, raisins are produced almost exclusively in California's Central Valley (mostly in Fresno County) and represent nearly half of the world's supply.
- ❖ Ninety percent of raisin production comes from the Thompson seedless grape variety. What color are Thompson seedless grapes? What color are raisins?

How Do Fruits Dry?

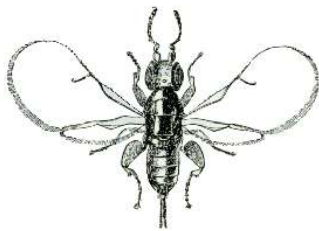
- ❖ Fruits become dry when their moisture content drops below 20 percent.
- ❖ Dried fruits are the result of natural or mechanical processes.
- ❖ California's grape growers happened upon raisins accidentally when an early heat wave dried the grapes on the vine.
- ❖ California plums by comparison, are dehydrated by machines that lower the moisture content to about 15 percent. Not all plum varieties can be dried. The California plum variety is unique.
- ❖ California has strict standards for dried fruit crops. Dried fruits are often treated with potassium sorbate to inhibit yeast and mold growth; sulfur dioxide is also added to preserve color. Before being sent to market, most dried fruits undergo a process, usually by boiling or steaming, to bring their moisture content up to about 30 percent. This added moisture usually makes the fruit more plump and tasty.



Student Sleuths

- ❖ Dates, dried plums, figs and raisins are all sources of fiber. The Dietary fibers are the portions of the plant our bodies cannot digest and move through our digestive tract absorbing water.
- ❖ Dietary fiber is a complex carbohydrate divided into two categories: water soluble and water insoluble.
- ❖ Insoluble fiber does not dissolve in water where soluble fiber does.
- ❖ In fruits, the outside skin is usually insoluble and the fleshy pulp is soluble fiber. Wheat bran and vegetables are usually insoluble.
- ❖ Soluble fiber has been shown to lower cholesterol and can help maintain steady blood sugar levels.
- ❖ Insoluble fiber helps maintain digestive health and has been correlated with a reduced risk of colon cancer. It may also help protect against heart disease.
- ❖ Dried fruits are a good source of potassium. **What is potassium and what does it do for our bodies?** Potassium is an essential mineral needed to regulate water balance, acidity levels and blood pressure.
- ❖ Potassium also plays a key role in the contraction of muscles, including the heart. The body needs potassium to maintain a healthy nervous system and to balance the body's metabolism of carbohydrates and proteins.
- ❖ Potassium is not stored in the body and is easily lost with perspiration like when exercising and playing sports. Muscle cramping is a common symptom of the body not having enough potassium.
- ❖ Electrolytes are important for maintaining hydration. Potassium, sodium and calcium are examples of electrolytes.
- ❖ Bees are important for pollinating many kinds of flowers on plants that produce fruit. Without pollination, plants like kiwi, papaya, apple and blackberries would not produce fruit. Fig varieties such as Mission, Kadota and Adriatic do not require pollination.
- ❖ The Calimyrna fig, does need pollination for fruit development but the pollination does not come from a bee. It comes from a tiny wasp called a Blastophaga psenes. It has no stinger and is smaller than a gnat.

Blastophaga psenes



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