

# Industry & Trade Summary

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## Dried Fruits Other Than Tropical

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USITC Publication 3171

March 1999

OFFICE OF INDUSTRIES  
U.S. International Trade Commission  
Washington, DC 20436



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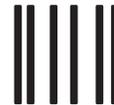
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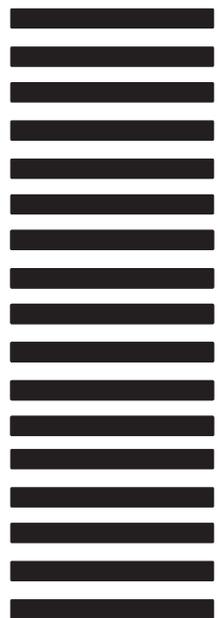
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# PREFACE

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In 1991 the United States International Trade Commission initiated its current *Industry and Trade Summary* series of informational reports on the thousands of products imported into and exported from the United States. Each summary addresses a different commodity/industry area and contains information on product uses, U.S. and foreign producers, and customs treatment. Also included is an analysis of the basic factors affecting trends in consumption, production, and trade of the commodity, as well as those bearing on the competitiveness of U.S. industries in domestic and foreign markets.<sup>1</sup>

This report on dried fruit other than tropical covers the period 1993-97. Listed below are the individual summary reports published to date in the agricultural, animal, and forest products sectors.

<i>USITC publication number</i>	<i>Publication date</i>	<i>Title</i>
2459 . . . . .	November 1991	Live Sheep and Meat of Sheep
2462 . . . . .	November 1991	Cigarettes
2477 . . . . .	January 1992	Dairy Produce
2478 . . . . .	January 1992	Oilseeds
2511 . . . . .	March 1992	Live Swine and Fresh, Chilled, or Frozen Pork
2520 . . . . .	June 1992	Poultry
2544 . . . . .	August 1992	Fresh or Frozen Fish
2545 . . . . .	November 1992	Natural Sweeteners
2551 . . . . .	November 1992	Newsprint
2612 . . . . .	March 1993	Wood Pulp and Waste Paper
2615 . . . . .	March 1993	Citrus Fruit
2625 . . . . .	April 1993	Live Cattle and Fresh, Chilled, or Frozen Beef and Veal
2631 . . . . .	May 1993	Animal and Vegetable Fats and Oils
2635 . . . . .	June 1993	Cocoa, Chocolate, and Confectionery
2636 . . . . .	May 1993	Olives
2639 . . . . .	June 1993	Wine and Certain Fermented Beverages
2693 . . . . .	October 1993	Printing and Writing Paper
2702 . . . . .	November 1993	Fur Goods
2726 . . . . .	January 1994	Furskins
2737 . . . . .	March 1994	Cut Flowers
2749 . . . . .	March 1994	Paper Boxes and Bags
2762 . . . . .	April 1994	Coffee and Tea
2859 . . . . .	May 1995	Seeds

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<sup>1</sup> The information and analysis provided in this report are for the purpose of this report only. Nothing in this report should be construed to indicate how the Commission would find in an investigation conducted under statutory authority covering the same or similar subject matter.

# PREFACE—*Continued*

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<i>USITC publication number</i>	<i>Publication date</i>	<i>Title</i>
2865 . . . . .	April 1995	Malt Beverages
2875 . . . . .	May 1995	Certain Fresh Deciduous Fruits
2898 . . . . .	June 1995	Certain Miscellaneous Vegetable Substances and Products
2917 . . . . .	October 1995	Lumber, Flooring, and Siding
2918 . . . . .	August 1995	Printed Matter
2928 . . . . .	November 1995	Processed Vegetables
3015 . . . . .	February 1997	Hides, Skins, and Leather
3020 . . . . .	March 1997	Nonalcoholic Beverages
3022 . . . . .	April 1997	Industrial Papers and Paperboards
3080 . . . . .	January 1998	Dairy Products
3083 . . . . .	February 1998	Canned Fish, Except Shellfish
3095 . . . . .	March 1998	Milled Grains, Malts, and Starches
3096 . . . . .	April 1998	Millwork
3148 . . . . .	December 1998	Poultry

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# ABSTRACT

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This report addresses trade and industry conditions for nontropical dried fruits for the period 1993-97.

- The United States is the world's leading producer of nontropical dried fruits, producing two-thirds of world prunes and about 45 percent of world raisins.
- Dried fruit is particularly suited to international trade because of its low transportation cost, easy storage requirements, and long shelf life. Recent trade agreements to lower duties and other trade barriers have been particularly useful to exporters and importers of dried fruits.
- Supermarket sales of dried fruits in 1996 were about \$448 million, most of which consisted of raisins and prunes. The top four markets for U.S. exports in 1997 were Japan, the United Kingdom, Canada, and Germany. About half of U.S. imports came from Turkey, mainly in the form of dried apricots. Chile, Argentina, and Mexico were also significant suppliers.
- Much of the demand for dried fruit comes from the packaged food product industry. For example, one of the principal uses of dried apples is as an ingredient in breakfast cereals.
- Dried cranberries, a relatively new product introduced in 1995 by Ocean Spray and sold under the trademark name "craisins," is one of the fastest growing segments of the dried fruit industry. Other dried berries such as dried blueberries are another fast growing segment, as are dried cherries.



# INTRODUCTION

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This summary of information on dried fruit other than tropical explains the structure of the U.S. and major foreign industries, domestic and foreign tariffs, and the competitiveness of U.S. and foreign producers. The report covers the general period 1993 through 1997. The industry covered in this summary produces dried nontropical fruit,<sup>2</sup> which includes dried raisins, dried apricots, dried prunes, dried apples, dried berries, dried peaches, and mixtures of dried fruits or dried fruits mixed with nuts. The industry consists of fresh fruit growers, dryers, packers, repackers, shippers, marketers, and exporters. Most of the dried fruit covered in this summary is sold through supermarkets, health food stores, and restaurants. The dried fruit market depends on the fresh fruit market for supplies of raw products, and the fresh market influences prices and market demand. Normally, fresh fruit is dried close to the growing area, and it is unusual for fresh fruit to be imported for drying.

U.S. exports of dried fruit were \$386 million in 1997, while imports were \$61 million.<sup>3</sup> U.S. production of dried fruit was 520,000 tons in 1997,<sup>4</sup> and supermarket sales of dried fruits were \$448 million in 1996.<sup>5</sup> Much of the dried fruit produced in the United States is exported. A relatively small portion of dried fruit for U.S. domestic consumption is imported, primarily dried apricots from Turkey. Unlike fresh fruit, which has a limited storage life, the fruits covered in this summary have a longer shelf life, from 9 months to more than 2 years, and are available on a year-round basis. Compared to fresh fruit, dried fruit is more likely to travel longer distances and be traded across international borders because transportation accounts for a smaller portion of the retail value; further, the fruit requires no refrigeration and has a higher value to weight ratio, and lower spoilage rate. In addition, higher cost transportation such as air shipment is less essential because fast delivery is not as critical. Finally, many countries have trade barriers such as phytosanitary restrictions, quarantine laws, and fumigation policies that apply to fresh fruits but not to dried fruits.

The U.S. dried fruit industry may be characterized as a specialized niche of U.S. agriculture, which is largely confined to a few small areas in California and controlled by a few firms that grow, dry, market, and export fruit. Factors that have encouraged dried fruit production in California include climate, soil, agricultural research, and investment in trees, vines, irrigation, and technology. The U.S. industry is world renowned for its productivity, quality, and price, and U.S. production is slowly growing as yields improve, as more acres are gradually planted, and as mechanization improves efficiency, all of which allow the U.S. industry to maintain a dominant share of the world market. Growth is unlikely, however,

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<sup>2</sup> Dried dates, dried figs, dried papaya, dried tamarinds, dried pineapples, dried avocados, dried guavas, dried mangoes, and dried bananas will be covered in the tropical fruit summary, which includes fresh and dried, but not canned, tropical fruits.

<sup>3</sup> Based on official statistics of the U.S. Department of Commerce.

<sup>4</sup> Estimated from USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities*, various issues, and USDA, ERS, *Fruit and Tree Nuts Situation and Outlook Report 1997*, Oct. 1997, p. 20.

<sup>5</sup> The Food Institute, *Food Markets in Review 1997: Dried Fruits*, Fair Lawn, NJ, May 1997, p. 129.

to accelerate greatly because of slow demand growth in the United States and abroad for the traditional dried fruit products.

# U.S. INDUSTRY PROFILE

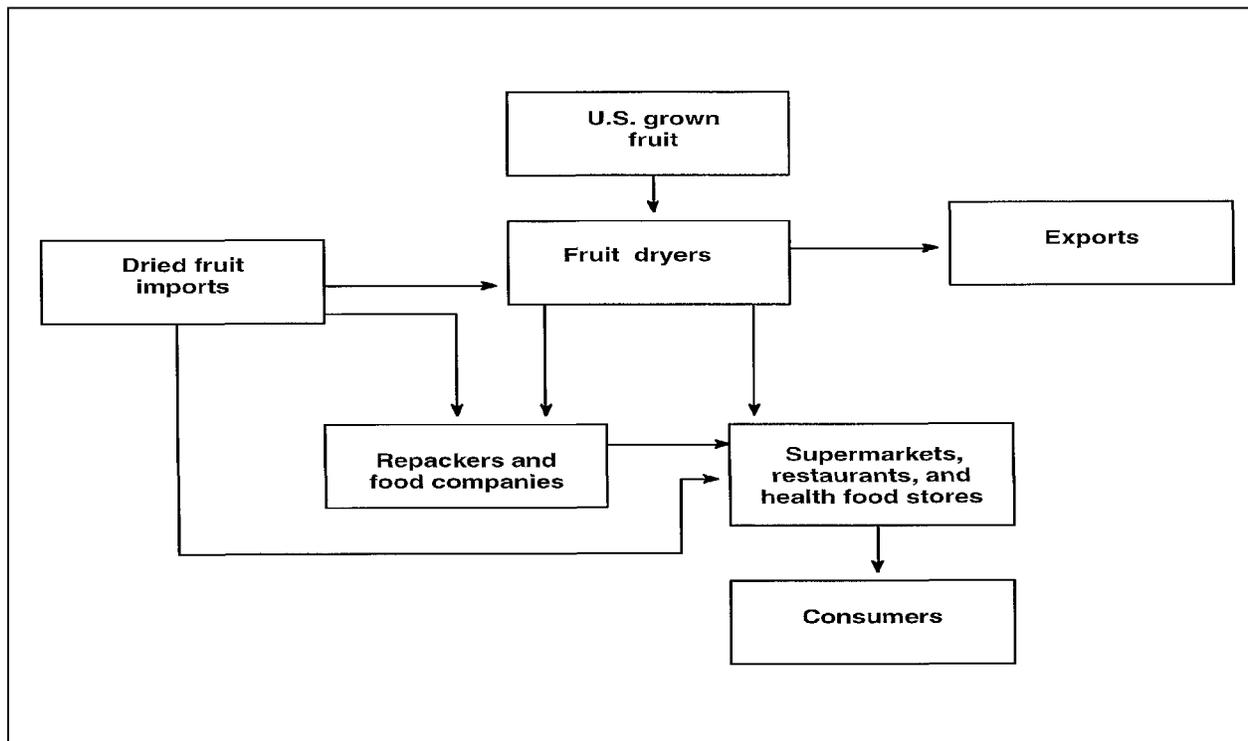
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## Industry Structure

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Figure 1 shows the structure of the dried fruit industry. Fresh fruit is grown for processing into dried fruit and is either sun dried or dehydrated, usually in the vicinity of where it is grown. It is shipped in bulk to packers, exporters, or food companies, such as breakfast cereal companies, that use it as an ingredient. It may also be shipped to supermarkets or other chain stores that may repack the fruit under a store label. A repacker typically

**Figure 1**  
**Dried fruit: Structure of the U.S. industry**



Source: USITC staff.

purchases domestically produced or imported dried fruit in bulk or in large packages, then mixes the dried fruit or repacks it in smaller containers in generic or brand name labels, and ships it to stores, restaurants, health food, or sporting goods stores. The industry consists of growers, grower/dryers, importers, exporters, packers and repackers, and marketers. Imports are not an important part of the domestic dried fruit market except for apricots, imports of which dominate the market.

The Standard Industrial Classification (SIC) categories applicable to the products in this summary include part of Fruits and Tree Nuts, SIC 017. Within this category are Berry Crops (0171), Grapes (0172), and Deciduous Tree Fruits (0175). Fruits grown in greenhouses and nurseries are included in SIC 0182, Food Crops Grown Under Cover. Part of SIC category 203, Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialities, covering canning, freezing, drying, and otherwise preparing and preserving fruits, is also included here. These categories include Dried and Dehydrated Fruits, Vegetables, and Soup Mixes (2034).

### ***Number of Firms and Industry Concentration***

According to the 1992 U.S. Census of Agriculture, the number of fruit orchards has declined since the prior census done in 1987. The following tabulation shows the number of fruit orchards in 1987 and 1992.<sup>6</sup> The number of orchards and farms has declined, except for apricot and berry farms. Some of the smaller growers have sold their land to larger growers or land developers, and in some cases the land owners have died, or abandoned trees because of bad weather, tree disease or low prices. As the industry has become more capital intensive, economies of scale have become more important and give the larger growers a competitive advantage in the purchase of equipment and other inputs.

<b>Fruit orchards and farms</b>	<b>Number in 1987</b>	<b>Number in 1992</b>
Apple .....	36,718	33,879
Apricot .....	3,306	3,353
Cherry .....	10,757	10,149
Grape .....	23,236	21,843
Peach .....	20,995	19,108
Pear .....	10,092	9,800
Plum .....	8,789	8,006
Berries <sup>1</sup> .....	17,623	18,077

<sup>1</sup> Berry farms include ones that grow blackberries, tame blueberries, wild blueberries, boysenberries, cranberries, currants, loganberries, raspberries, and strawberries.

Relative to growing fruit, drying fruit is even more capital intensive and economies of scale are much more important. There are many fruit growers relative to the number of fruit dryers.<sup>7</sup> Fruit may be grown on small parcels of land, often by part-time farmers, the orchards

<sup>6</sup> U.S. Bureau of the Census, *U.S. Census of Agriculture*, pp. 430-450.

<sup>7</sup> A dryer is defined as a grower who dries fruit grown from their own orchard or vineyard and/or fruit grown by other growers, or as a firm or entity that dries but does not grow fruit, and  
(continued...)

passed on to succeeding generations and maintained with minimal amounts of capital. Fruit drying, however, requires large amounts of capital for plant and equipment. Hence, the economics of drying do not permit more than a few large dryers. Dryers tend to be close to fresh fruit sources and so most are in California and the Pacific Northwest. Dryers may be either privately owned or grower owned in the form of cooperatives. An example of a grower-owned cooperative is Sunsweet Dryers, a cooperative owned by 450 growers. Sunsweet Dryers is the world's largest prune-drying organization and accounts for about 35 percent of the California crop. It also acts as a prune-marketing organization and operates 962 drying/dehydrating tunnels.<sup>8</sup> According to the California Prune Board list of California prune handlers, there were 21 member handlers in 1997, including export handlers, prune juice suppliers and industrial product suppliers.<sup>9</sup> There are 21 apricot dryers, most of which are in California.<sup>10</sup> The *1992 Census of Manufactures*, the most recent available, categorizes the dried fruit industry in SIC 2034, which includes dehydrated fruits, vegetables, and soups. The number of establishments in this category is 150, of which 79 are listed as having at least 20 employees.<sup>11</sup>

The marketing of dried fruit is highly concentrated. Although there were 208 dried fruit marketers in 1996, each with supermarket sales of at least \$1,000, the top three marketers accounted for more than 70 percent of supermarket sales.<sup>12</sup> Total dried fruit supermarket sales in 1996 were \$448 million, and the top dried fruit marketer had sales of over \$130 million, or 30 percent of the market. The prune market is highly concentrated as well, with the top firm accounting for 71 percent of supermarket sales in 1996. The top raisin-marketing firm controlled 52 percent of raisin sales, and the top 3 firms accounted for over 90 percent of all raisin sales during 1996. The market for dried apricots is less highly concentrated, with the top firm accounting for only 23 percent of sales. For dried cranberries, one company accounted for more than 86 percent of supermarket sales of dried cranberries in 1996. Dried apple sales are also dominated by one company that accounts for 58 percent of the market. The top dried bing cherry company accounted for 96 percent of all dried bing cherry sales in 1996, while another firm accounted for 42 percent of other dried cherry sales. The dried blueberry market is dominated by one firm with a 65-percent share, and about 54 percent of dried peaches are sold by one firm, followed by a second that has a 19-percent share. The dried pear market is controlled by a company that has a 65-percent market share. Most dried fruit marketers carry several types of dried fruit, so companies dominating sales of one dried fruit are likely to also dominate sales of at least one other dried fruit. For example, the company that dominates the dried raisin market also dominates the market for dried apricots and dried peaches.

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<sup>7</sup> (...continued)

may also pack dried fruit. Some of the largest dryers are cooperatives made up of several growers who pool their resources to dry fruit.

<sup>8</sup> California League of Food Processors, "Spotlight on Sunsweet Dryers," *News and Views, Information of Importance to the Food Processing Industry*, vol. xiv, No. iv, Apr. 1998.

<sup>9</sup> California Prune Board, "California Prune Handlers, Handler Directory," June 1997.

<sup>10</sup> Apricot Producers of California, *Apricot Producers of California 1998 Summary*, Modesto, CA, Gowans Printing, 1997.

<sup>11</sup> U.S. Bureau of the Census, *1992 Census of Manufactures, Industry Series 2034*, Apr. 1995, p. 4.

<sup>12</sup> The Food Institute, *Food Markets in Review 1997: Dried Fruits*, Fair Lawn, NJ, May 1997, p. 132.

## ***Employment***

Employment in the dried fruit industry is highly seasonal. According to the Census Bureau, in 1995 there were some 797,000 farm workers.<sup>13</sup> A subsector of farm workers are orchard workers who plant, prune, irrigate, and pick fresh fruit. In addition to these workers, there are approximately 10,000 workers in the drying industry during the peak drying season, which typically lasts about a month for most dried fruits.<sup>14</sup> The *1992 U.S. Census of Manufactures*, containing employment data for SIC code 2034, estimates that this sector had 11,400 employees and 9,600 production workers,<sup>15</sup> but this number does not include the larger number of workers who maintain orchards, pick fruit, and prepare it for dehydration.

## ***Geographic Distribution***

California has the largest number of fruit growers and dryers. The California climate favors not only growing, but also air or sun drying, of such products as raisins, prunes, apricots, and dried apples. Other parts of the country account for some of the more specialized items. For example, dried cherries are produced in Michigan, the Pacific Northwest, and California, while dried pears and dried apples are found in the Pacific Northwest and California, and dried blueberries are produced in Michigan and the Pacific Northwest.

## ***Labor Intensity; Level of Automation***

Growing and drying fruit is highly labor-intensive, though less so than in the past. The dried fruit industry has been able to substitute capital for labor throughout the production process. For example, many fruit trees, instead of being harvested by hand, are now harvested by mechanical shakers that drop the fruit into tarps. Sun drying and dehydrating methods have also become more mechanized through the use of conveyor systems and mechanized sorting equipment, although workers must still be involved at each stage of the process. Likewise, irrigation methods have been mechanized with moisture detectors and computerized water distribution systems.

## ***Labor Skill Levels and Wage Rates***

In general, workers who pick fruit and tend orchards and vineyards for the dried fruit industry are seasonal migrant workers who move from one harvest to the next in search of work. Wage levels are low and many workers, particularly those who pick fruit, are paid

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<sup>13</sup> U.S. Bureau of the Census, "Employed Civilians, by Occupation," *Statistical Abstract of the United States 1996*, 116th Edition, Table No. 637, p. 407.

<sup>14</sup> California League of Food Processors, "Spotlight on Sunsweet dryers," *News and Views, Information of Importance to the Food Processing Industry*, vol. xiv, issue iv, Apr. 1998, p. 5.

<sup>15</sup> U.S. Bureau of the Census, *1992 Census of Manufactures, Industry Series 2034*, Apr. 1995, p. 4.

on a piece-rate basis according to how much they produce, such as the number of fruit boxes picked or boxes dried. Although most workers are unskilled and receive low wages, some are highly skilled, such as horticulturists who may supervise tree grafting or develop new fruit strains.

### ***Seasonal Factors***

Dried fruit production depends on the availability of fresh fruit supplies, which are highly seasonal and depend on weather conditions as well as growing conditions in the supplying countries. In many cases, the dried fruit market is only one outlet for a fruit crop, and the amount available to be dried depends on the alternative demands for fruit or the quality of the crop. The peak supply season for fresh fruit, which is the fall, occurs just before the peak demand season for dried fruit in November and December. However, dried fruit distributors are able to obtain high-quality dried fruits on a nearly year-round basis by purchasing from domestic dryers when U.S. fruit is in season, or from foreign dryers with growing seasons different from those in the United States.

### ***Supermarket Sales of Dried Fruits***

Supermarket sales of dried fruits have declined steadily since 1992, primarily because of increased prices for raisin variety grapes created by winery demand. Sales by value declined by 0.5 percent during 1995-96, while sales by volume declined 3.5 percent over the same period, to 184.4 million pounds in 1996. Raisins dominated dried fruit sales in 1996 with \$211 million in sales, followed by prunes (\$99 million), and dried apricots (\$31 million).<sup>16</sup>

## **Profiles by Major Categories of Dried Fruit**

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### ***Raisins***

It is thought that raisins were shipped 3,000 years ago by Phoenician traders, who also planted vineyards in Spain and Greece. Spanish missionaries later planted vineyards in what is now California. An important product development was the introduction (by William Thompson in 1876) of a seedless grape that did not stick together with other grapes when dried, and was therefore ideal for packaging. As with the production of prunes, most U.S. raisins are grown in California. Today, 95 percent of raisins produced in California are made from Thompson Seedless grapes grown in the San Joaquin Valley;<sup>17</sup> Thompson Seedless are also known as Natural Seedless grapes. At least eight varieties of grapes grown in the United States are

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<sup>16</sup> The Food Institute, *Food Markets in Review 1997: Dried Fruits*, Fair Lawn, NJ, May 1997, p. 129.

<sup>17</sup> Raisin Administrative Committee (RAC), *Marketing Policy 1997-98 Marketing Season*, Fresno, CA, Oct. 2, 1997, p.2.

dried into raisins. Besides the predominant Natural Seedless type, other varieties include Dipped Seedless, Oleate Seedless, Golden Seedless, Zante Currant, Sultana, Muscat, and Monukka.<sup>18</sup>

It takes at least 3 years from the time of planting the grape vine to the time of the first raisin yield. Vineyards are labor-intensive and require year-round attention, which includes pruning the "canes" or most productive branches in January. The canes must be hand tied to rows of wire 4 or 5 feet off the ground. The vines need large amounts of water that must soak down 3 to 5 feet to the roots. The grapes are hand picked in late summer and laid in clusters on rows of paper trays to dry for 2 or 3 weeks with the grapes turned periodically to allow enough sun to reach them. They are next rolled into bundles to continue the drying process, then dumped into field bins. From the field bins, the raisins are moved onto vibrating conveyor belts that separate the raisins from the larger stems and are then transported to packing houses. Raisins may also be artificially dehydrated. The dehydrating season normally begins in mid-August, while the sun-drying season commences in late August. During mid to late August, normal daytime temperature highs in the raisin-producing areas of California are about 100 degrees.

Grapes cultivated in the United States fall under one of three major varieties--raisin, wine, or table grapes. Although grapes are normally cultivated for one purpose, they may ultimately be channeled into another end use. However, although it is common for raisin grapes to be used for wine, juice, and fresh sales and for table grapes to be dried into raisins or crushed into wine and juice, it is not common for wine varieties to be dried into raisins.<sup>19</sup> Most grapes grown in the United States go into wine production. For example, in 1997 per capita utilization of grapes amounted to 44 pounds, fresh weight equivalent, of which 25 pounds, or 57 percent, were used to produce wine. Only 7 pounds per capita, or 16 percent, went into raisins, while another 7 pounds were utilized as fresh grapes, and only 4 pounds were utilized as grape juice.<sup>20</sup> The share of grapes sold for each use depends on prevailing prices for wine, table grapes, and raisins. It also depends on how long the grapes will "hold" on the vine in a fresh state. California grape-bearing acreage in 1997 consisted of 325,000 acres for wine varieties, 268,000 acres for raisin varieties, and 75,000 acres for table varieties.<sup>21</sup> Most of the currently nonbearing acreage is planted in wine varieties (67,212), with 13,515 acres planted in table varieties, and 7,099 acres planted in raisin varieties.<sup>22</sup>

Grape production is determined by yield per acre as well as by bearing acreage. While growth in California grape production has been driven by both factors, growth in yield per acre has surpassed growth in bearing acreage. Average grape production per acre increased steadily, from 11,648 pounds during 1940-49 to 18,368 pounds during 1990-96. Bearing acreage increased more slowly, from 501,785 acres during 1940-49 to 636,151 acres for the period 1990-96.<sup>23</sup>

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<sup>18</sup> Ibid., p.3.

<sup>19</sup> Ibid., p. 12.

<sup>20</sup> USDA, ERS, *Fruit and Tree Nuts Situation and Outlook Report, Yearbook Issue 1997*, USDA publication FTS-281, Oct. 1997, p. 86.

<sup>21</sup> RAC, p.10.

<sup>22</sup> Ibid., p. 11.

<sup>23</sup> Ibid., p. 10.

U.S. raisin production for the 1996/97<sup>24</sup> crop year totaled 263,510 tons, most of which consisted of Natural Seedless Raisins, an increase of 1 percent above the 1995/96 year. However, the 1995/96 and 1996/97 crops were the smallest in 14 years as a result of greater demand for grapes by wineries and the juice industry, and also because of the unusually small grape crops in these years. However, suppliers have been able to cover most orders.

Domestic raisin shipments in the 1996/97 year amounted to 160,864 tons, while exports were 117,816 tons, with Japan and the United Kingdom the largest buyers. Important world producers other than California include Turkey with production of 196,839 tons, Greece with 39,368 tons, and South Africa with 29,526 tons.<sup>25</sup> Afghanistan and Iran are also important raisin producers, but production and disposition statistics are not available. Australia produces Sultana raisins, but is reported to be replacing the Sultanas with wine varieties.<sup>26</sup>

### **Raisin administrative committee**

Raisins are regulated by a Federal marketing order administered by the Raisin Administrative Committee (Committee) in Fresno, California. The Committee is grower-funded by fees assessed according to the quantity of raisins shipped. The Committee sets standards for and regulates the quality of raisins. In addition, they set minimum prices that raisin farmers receive, in accordance with the destination of U.S. grown raisins. The prices are established according to the time of purchase and the countries of destination, allowing growers to lock in prices ahead of the marketing season. In recent years, up to one-half of U.S. raisins were sold under promotional programs that guaranteed farmers a market price.<sup>27</sup> The Committee also provides a cash incentive to the foreign purchaser of the raisins as well as funds to promote the raisins in the foreign country. For example, in 1998 the Committee authorized a cash incentive to Japanese raisin purchasers of \$25/ton, as well as an additional \$50/ton for raisin promotion in Japan.<sup>28</sup> The Committee is authorized to spend up to \$1.5 million to promote raisins in its current fiscal year which ends January 31, 1999.<sup>29</sup>

### **Market access program**

The USDA sponsors raisin exports under the Market Access Program (MAP). In fiscal year 1998, MAP funding for raisins is \$2.5 million.<sup>30</sup> This is a reduction from the fiscal 1993 year when MAP funding for raisins was \$10-12 million. The MAP reduction is in line with reductions in MAP funding for other agricultural commodities.

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<sup>24</sup> The crop season for dried raisins begins in August and runs through July of the following year.

<sup>25</sup> USDA, FAS, "World Raisin Situation in Selected Countries," *World Horticultural Trade and U.S. Export Opportunities*, found at <http://www.fas.usda.gov/htp/circular/1997>, May 27, 1998, p. 5.

<sup>26</sup> *Ibid.*, p. 6.

<sup>27</sup> *Ibid.*, p. 102.

<sup>28</sup> RAC, "Raisin Administrative Committee Marketing Incentive Programs for the Period of Feb. 1, 1998-Jan. 31, 1999," May 1998.

<sup>29</sup> *Ibid.*

<sup>30</sup> The fiscal year for MAP funding is Oct. 1 - Sept. 30 since it comes from the Federal budget.

## *Currants*

An offshoot of the raisin is the currant, which includes the Zante currant and the midget raisin. Greece is the world's largest supplier and produced 94 million pounds in 1997, of which about 34 million pounds were exported. The midget raisin is a close substitute to the currant and is a small Thompson variety of the white seedless grape, while the currant has traditionally derived from the dark red seedless corinth grape.<sup>31</sup> No separate consumption figures are available for currants.

## *Prunes*

A prune is a dried plum. The California prune plum is an offshoot of La Petite D'Agen, a prune plum native to Southwest France. Plum trees for making prunes were introduced to North America in 1856 by Louis Pellier, a French nurseryman who brought the original D'Agen plum graft stock to California. By 1900, California prune plum orchards covered approximately 90,000 acres, about the same as today.<sup>32</sup>

The D'Agen prune coming from California is known as the California French Prune and constitutes approximately 99 percent of the State's production. Other commercial varieties produced in California are Imperials, Robes de Sergeant, Sugar, and other varieties. The California French Prune is known for its maximum flavor, ideal fruit size, fine texture, high sugar content, and smooth small pits.

Plum trees take from 4 to 6 years to bear fruit and reach full productive capacity of between 150 to 300 pounds of raw fruit per year between the 8th and 12th years of maturity. They generally continue to be commercially productive for another 30 years. The prune-producing areas of North Central California depend on irrigation, particularly from late spring to early fall. While irrigation adds to the cost of production, it also allows exact control of the amounts of moisture applied. Plum harvesting is done over about 30 days, starting in mid-August. Prune plums are among the few fruits allowed to tree ripen fully before they are picked for processing. Fruit firmness and natural sugar content determine the picking date. Harvesting may be done mechanically by using a tree shaker, which shakes the plums into a fabric from which they are transferred by conveyor belt into bins to a dehydrator. After dehydration, 3 pounds of fresh plums are transformed into 1 pound of prunes.<sup>33</sup>

The principal growing areas in California include the North and South Sacramento Valley and the San Joaquin Valley. Total prune plum production area in California in the 1996/97 crop year, which runs from August 1 to July 31, was about 103,000 acres.<sup>34</sup> Of 220,000 tons of dried prunes produced in the 1996/97 crop year, 212,000 were of marketable quality.<sup>35</sup>

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<sup>31</sup> Foodnews, "Currant Shortage Looms," Tunbridge Wells, Kent, UK, The Foodnews Company Ltd., vol. 26, No. 16, Apr. 17, 1998, p. 1.

<sup>32</sup> The California Prune Board (CPB), *The California Prune Buyer's Guide*, Pleasanton, CA, 1997, p. 1.

<sup>33</sup> *Ibid.*, p. 4.

<sup>34</sup> Prune Marketing Committee(PMC), "Final Statistical Report 1996-97," Pleasanton, CA, Marketing Agreement and Order for California Dried Prunes, Nov. 4, 1997, Table 4.

<sup>35</sup> *Ibid.*, Table 3.

Domestic usage of prunes included 46,000 tons sold as pitted prunes, 35,000 tons sold for use in prune juice and concentrate, and 9,000 sold as dried prunes. Other prunes were canned, diced, or sold as prune butter, puree, or baby food. The final overall seasonal grower return for all 1996/97 crop prunes was \$838 per ton.<sup>36</sup>

California produces more than twice as many prunes as the rest of the world combined, about 70 percent of world production,<sup>37</sup> and about 35 percent of California production was exported in 1997/98.<sup>38</sup> Moreover, California accounts for approximately 99 percent of U.S. production.<sup>39</sup> California prune production was 23 percent above that in the previous year.<sup>40</sup> Because of concerns over high stocks and low prices, the industry has attempted to control production in recent years by discouraging and reducing plantings. It is reported that smaller prunes, which bring lower prices, are being diverted into cattle feed and other uses. It is hoped that eventually this will help reduce ending stocks that are expected to rise to a record 126,000 tons in 1997/98.

U.S. prune exports increased by 9 percent in 1996/97 to 65,893 tons, valued at nearly \$139 million, and about 41 percent of California prunes were exported.<sup>41</sup> The most important markets for U.S. prune exports included Japan, Germany, Italy, the United Kingdom, and Canada, respectively. Sales to Singapore increased dramatically from 744 tons in 1995/96 to 3,240 tons in 1996/97.<sup>42</sup> The Scandinavian countries are also a significant market for U.S. prunes.

### **Prune marketing committee**

The dried prune industry is regulated by a Federal Marketing Agreement (No. 110) and a Federal Marketing Order (No. 993). The Prune Marketing Committee and California Prune Board administer these provisions, which cover growing, handling, and processing. The Prune Marketing Committee is supervised by the U.S. Department of Agriculture, and has a mandate to set standards for and inspect California prunes for quality, size, texture, and color, as well as to promote California prunes in the United States and foreign markets. It is supported by grower fees and helps growers receive better prices by helping to negotiate better terms from prune buyers. In addition, the Committee assists growers in the advertisement and marketing of dried prunes. At the beginning of the 1996/97 season, the Prune Marketing Committee changed its field price policy for the 1996/97 and 1997/98 crop-years. The new pricing encourages growers to improve the quality of their product. The new policy comes in response to the 1995/96 crop, which was below average in quality with an unusually high number of undersized fruit and trash content, and required processors to sort and clean the crop more than once.<sup>43</sup>

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<sup>36</sup> PMC, "Final Statistical Report 1996-97," p. 1, as reported from the Walnut-Raisin-Prune Report State Summary, Oct. 17, 1997.

<sup>37</sup> CPB, "Handler Directory," June 1997, p. 2.

<sup>38</sup> USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities, Circular Series FHORT 03-98*, Mar. 1998, pp. 38-41.

<sup>39</sup> CPB, *The California Prune Buyer's Guide*, 1997, p. 1.

<sup>40</sup> USDA, FAS, pp. 38-41.

<sup>41</sup> PMC, Nov. 5, 1996, table 11.

<sup>42</sup> *Ibid.*, p. 41.

<sup>43</sup> The Food Institute, *Food Markets in Review 1997: Dried Fruits*, Fair Lawn, NJ, May 1997, (continued...)

## Prune export promotion program

During the 1997/98 crop year, the California Prune board received over \$2.5 million to market California prunes under the MAP. MAP funding is currently being used to market prunes in China, Germany, Italy, Japan, Mexico, Saudi Arabia, and the United Kingdom. Marketing focuses on encouraging the consumption of prunes as a healthy, convenient, and low-fat snack. In addition, prunes and prune puree are marketed in the United States and other countries as an ingredient in bakery products and other recipes. In Japan, the leading U.S. market, the target audience is women ages 20-59 and men 40-59. Prunes in Japan are marketed as Suzuke prunes which are pickled in vinegar/lemon juice.

## *Apricots*

Total apricot production in 1997 was 122,400 tons, valued at about \$49 million.<sup>44</sup> About 90 percent of apricots produced in the United States were grown in California with the other 10 percent coming from Washington State.<sup>45</sup> In 1997, the United States was a net importer of dried apricots with \$33.2 million in imports and \$4.5 million in exports. Of 11,970 tons in apricot imports in 1997, 11,312 were from Turkey. Only a small portion of U.S. grown apricots end up in the dried market, about 10 percent in 1997. Another 38 percent were canned, 23 percent were concentrated, 12 percent were frozen, and 17 percent went into the fresh market.

The entrance of Turkey into the U.S. dried apricot market in the mid-1980's has displaced a significant portion of U.S.-grown dried apricots and led to the diversion of U.S.-grown apricots to other end uses such as for fresh, canned, and frozen. Turkish apricots enter the United States at prices below the production cost for U.S.-grown product. Labor costs in Turkey are much lower than in the United States, and this has a large impact on production costs, particularly considering the high labor intensity of drying apricots. In addition, the low value of the Turkish Lira relative to the U.S. dollar helps to boost U.S. sales of Turkish dried apricots. Sales of fresh apricots to U.S. driers fell from 23,000 tons in 1984 to an estimated 9,000 tons in 1998. U.S.-grown dried apricots are sold domestically principally for use in gift packs, and exported to Japan where their use is similar. U.S.-grown dried apricots differ from those grown in Turkey in that they are smaller, have less sugar content, are cut in half to remove the pit, rather than the pit being squeezed out of the fruit, and have a lower sulfur content. A specialized market segment for U.S.-grown dried apricots is persons who have sulfur allergies and are therefore less tolerant of Turkish apricots.<sup>46</sup>

U.S. apricot production peaked in the 1971/72 crop year at about 178,000 tons.<sup>47</sup> Since then, U.S. production has been on a downward trend, falling as low as 50,000 tons in the 1995/96

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<sup>43</sup> (...continued)

p. 77.

<sup>44</sup> Apricot Producers of California (APC), *Apricot Producers of California 1998 Summary*, Modesto, CA, Gowans Printing, 1997.

<sup>45</sup> Bureau of the Census, *1992 Census of Manufactures, Industry Series 2034*, Apr. 1995, p. 113.

<sup>46</sup> Based on USITC staff conversation with APC on Nov. 2, 1998.

<sup>47</sup> Op. cit.

crop year. Bearing acreage declined steadily from about 29,000 acres in 1975 to 17,000 acres in 1990. The reasons for this decline are related, first, to a decline in the number of apricot canneries and demand for canned apricots beginning in the 1970's, and second, to the entrance in the mid-1980's of dried apricots from Turkey.<sup>48</sup> Since 1991, bearing acreage has been rising slowly to reach about 20,400 acres today.<sup>49</sup> However, offsetting the bearing acreage increases have been abnormal temperatures and rainfall patterns in California in recent years which reduced production until 1997, which was a good year.<sup>50</sup>

The apricot yield is sensitive to weather conditions. In years of favorable weather, the average yield per acre can reach 7 tons, while in other years yields may be less than 3 tons per acre.<sup>51</sup> The harvest season for fresh market apricots takes place from early May to mid-July, while the processing season runs from mid-June to early August. The processing industry consists of about 6 canners, 5 freezers, and 20 dryers, most of which are in California.<sup>52</sup> The three primary apricot varieties are Patterson, Blenheim, and Tilton.

Many California apricot growers are affiliated with the Apricot Producers of California, a nonprofit cooperative and bargaining association, which was organized in 1961 to provide information and services to its grower-members. In 1974, the cooperative became a bargaining association and it currently negotiates multiple-year contracts with processors on behalf of members.<sup>53</sup>

### ***Other Dried Fruit***

A recent and important trend in the dried fruit industry is the rapid rise in consumption and production of several dried berries, consisting primarily of dried blueberries and dried cranberries, and dried cherries, that were previously sold only as fresh or frozen, but are now being sold in the specialty sections of supermarkets as expensive snack items and ingredients in recipes for deserts, baked items, and stuffings. In addition, cereal manufacturers and snack food companies are adding these dried fruits to their more expensive candy bars, trail mixes, and bakery items. Most of these dried fruits are further processed from a frozen state, and their prices are closely correlated with prices in the respective frozen markets.<sup>54</sup> While the market for these products is rapidly growing, it still represents only a small percentage of the market for these fruits, which are still primarily sold as fresh or frozen.

Blueberries may be grown as cultivated or "tame berries," or picked as wild blueberries. Blueberries are grown by at least 750 growers<sup>55</sup> in the United States, primarily in Michigan,

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<sup>48</sup> Based on USITC staff conversation with APC on Nov. 2, 1998.

<sup>49</sup> PC, 1997.

<sup>50</sup> APC, facsimile transmission dated 8/28/97.

<sup>51</sup> APC, 1997.

<sup>52</sup> Ibid.

<sup>53</sup> Ibid.

<sup>54</sup> The Food Institute, *Food Markets in Review 1997: Dried Fruits*, May 1997, p. 65.

<sup>55</sup> This is the number listed as having membership in the Michigan Blueberry Growers Association, the largest blueberry growers' cooperative and marketer of fresh cultivated blueberries in the world, and which represents growers in seven States and in Chile.

but also in Indiana, Florida, Georgia, Mississippi, Louisiana, and North Carolina. Most blueberry imports originate in Chile, and most U.S. exports of dried blueberries are to Canada.<sup>56</sup> Dried blueberries are sold as a snack food, but also as an ingredient in packaged foods such as breakfast cereals. The low demand for dried blueberries can be explained, in part, by their relative expense, even when compared to dried cherries and dried cranberries, with a bulk price of about \$6.00 a pound.<sup>57</sup>

In 1996, Michigan grew about 80 percent of the tart cherries used for drying in the United States, followed by New York and Utah.<sup>58</sup> Imports of dried cherries are negligible, less than \$100,000 per year, and most are from Turkey, with smaller amounts coming from Canada and Austria.<sup>59</sup> Dried cherries may be sold either sweetened or unsweetened, and consumed as a snack or an ingredient in packaged foods. Unsweetened dried cherries sell for about \$4.00 a pound bulk, while sweetened dried cherries sell for about \$5.00 per pound.

Dried cranberries, which resemble raisins, are sold mainly by one company, Ocean Spray, and are marketed as Ocean Spray Craisins.<sup>60</sup> There are nearly 1,000 cranberry growers in the United States,<sup>61</sup> who cultivate the berries in bogs containing acidic peat soil. There are approximately 33,500 acres of land in the United States used for cranberry production, and the bulk of cranberries are grown in Massachusetts and Washington, with smaller amounts grown in New Jersey, Wisconsin, and Oregon.<sup>62</sup> Another 5,500 acres are cultivated in Chile, Quebec, and British Columbia. Cranberries float on water, so some bogs are flooded in the fall as a gathering method when the fruit is ready for harvesting. During winter months, growers will flood the bogs to prevent wind damage. Once frozen, the water forms an ice blanket that protects the bushes from wind and cold. The bogs are flooded again in the spring to control weed, fungus, and insects.<sup>63</sup> The end uses for dried cranberries are similar to those of dried blueberries and dried cherries, but demand is higher, in part because of aggressive marketing by Ocean Spray, but also because of a lower price, about \$4.00 or less a pound bulk.<sup>64</sup>

Relative to the rapid growth in demand for dried berries and dried cherries, the demand for some other dried fruits, such as dried apples, dried peaches, and dried pears, has been relatively stagnant, with virtually no growth in sales during the last decade. Far more dried apples are produced and consumed than either dried peaches or dried pears. Most of these

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<sup>56</sup> Michigan Blueberry Growers Association, found at <http://www.blueberries.com>, Oct. 22, 1998.

<sup>57</sup> The Food Institute, *Food Markets in Review 1997: Dried Fruits*, Fair Lawn, NJ, May 1997, p. 33.

<sup>58</sup> *Ibid.*, p. 32.

<sup>59</sup> *Ibid.*, 35.

<sup>60</sup> Ocean Spray is actually a growers cooperative of cranberry and grapefruit growers. The Craisin is a relatively new product marketed by Ocean Spray only since 1993. Ocean Spray claims to market 70 percent of all cranberries sold in the world.

<sup>61</sup> Ocean Spray Cooperative, *Company Profile: Ocean Spray at a Glance*, Lakeville-Middleboro, MA., 1998, found at <http://www.oceanspray.com>.

<sup>62</sup> The Food Institute, *Food Markets in Review 1997: Dried Fruits*, Fair Lawn, NJ, May 1997, p. 33.

<sup>63</sup> Ocean Spray Cooperative, *Company Profile: Ocean Spray at a Glance*, Lakeville-Middleboro, MA., 1998, found at <http://www.oceanspray.com>.

<sup>64</sup> *Op. Cit.*, p. 36.

products are sold for use in breakfast cereals, snack foods, confections, baking ingredients, and trail mixes. The stagnation in the sale of these products is related to the stagnation in sales of breakfast cereals, which is the principal source of demand.

Only a small portion of apples are dried; while U.S. per capita utilization of apples, on a fresh-weight equivalent basis, was 47 pounds in 1997, only 1.23 pounds, less than 3 percent, were utilized as dried apples, whereas 19 pounds were utilized as fresh apples and 21 pounds as apple juice.<sup>65</sup> Sales of dried apples in the United States have risen slightly in the past 10 years.

Dried peaches are produced mainly in California from freestone<sup>66</sup> peaches, but account for only a small portion of peach usage since less than 3 percent of processed peaches are dried, the majority being frozen or canned. The quantity of dried peach production depends on freestone peach production in California. During the 1996/97 season, about 2.9 percent of California's 316,500 tons of freestone peaches were dried, compared to 63 percent sold as fresh, 25 percent which was frozen, and 5 percent which was canned.<sup>67</sup> U.S. sales of dried peaches have remained relatively the same since 1985.

Dried pears are produced from bartlett pears which are predominantly grown in California. California pear dryers utilized 1.7 percent of the bartlett pear tonnage during the 1996/97 crop-year. Dried pear sales have changed very little since 1985.<sup>68</sup>

### ***Trail Mixes***

Trail mixes are dried fruits that may be mixed with other dried fruit or with nuts, seeds, baked ingredients, tropical dried fruit, or candy. Typically a trail mix will contain dried raisins, dried prunes, dried apricots, and dried apples. They are sold at supermarkets, health food stores, and sporting goods stores in small plastic or cardboard containers. Typically they are purchased as a snack food, and are particularly useful to campers and hikers because of their light weight and resistance to spoilage, even when subjected to temperature extremes and high levels of humidity.

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<sup>65</sup> USDA, ERS, *Fruit and Tree Nuts Situation and Outlook Report, Yearbook Issue 1997, FTS-281*, Oct. 1997, p. 86.

<sup>66</sup> Freestone may apply to any stone fruit, but applies particularly to peaches containing stones to which the peach flesh does not cling. The other category of peach is the cling peach.

<sup>67</sup> The Food Institute, *Food Markets in Review 1997: Dried Fruits*, May 1997, p. 65.

<sup>68</sup> *Ibid.*, pp. 73-75.

# U.S. MARKET

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## Consumer Characteristics and Factors Affecting Demand

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Dried fruits are consumed alone or in a large number of products such as breakfast cereals, confections, baked products, and desserts, by a wide range of consumers of all ages and income levels. Much of the demand for dried fruit derives from the demand for breakfast cereals, snacks, trail mixes, dried fruit gift packs, and baked products that include dried fruits. Consumer demand for many dried fruits is seasonally affected, with higher demand in November and December, when dried fruit is used to prepare holiday meals and celebrations.

## Consumption

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Overall per capita nontropical dried fruit consumption rose slightly from 2.75 pounds in 1992/93<sup>69</sup> to 2.77 pounds in 1996/97.<sup>70</sup> Twenty-year trends show a gradual uptrend in consumption, from 2.53 pounds in 1976/77 to a peak of 3.31 pounds in 1989/90, followed by a gradual decline to 2.77 pounds in 1996/97.<sup>71</sup> Consumption of major dried fruits has been declining by about 2 percent annually since the early 1990's, owing mostly to declining raisin consumption. Raisin consumption, which fell 5 percent in 1996/97, accounted for over one-half of total dried fruit consumption. The drop in raisin consumption resulted from higher prices as more grapes were diverted to the fresh market or crushed for wine which resulted in a decline in U.S. raisin production.<sup>72</sup> Supermarket prices for raisins rose steadily from \$1.78 per pound in 1992 to \$2.05 per pound in 1996. U.S. per capita consumption of raisins was 1.60 pounds per person in 1997, down from 1.78 in 1993.<sup>73</sup> During the same period, per capita prune consumption rose from 0.53 to 0.59 pounds, but per capita consumption held steady for dried apples at 0.15 pounds and dried apricots at 0.10 pounds.<sup>74</sup> U.S. per capita dried peach consumption is relatively low and remained at only 0.02 pounds between 1993 and 1997,<sup>75</sup> while consumption of dried pears is even lower, only 0.01 pounds per capita, and has remained the same for the past 10 years.<sup>76</sup>

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<sup>69</sup> Season beginning July for apples, apricots, peaches, and pears; August for prunes and raisins.

<sup>70</sup> USDA, ERS, *Fruit and Tree Nuts Situation and Outlook Report, Yearbook Issue 1997, FTS-281*, Oct. 1997, p. 85.

<sup>71</sup> *Ibid.*, p. 82.

<sup>72</sup> *Ibid.*, p. 3.

<sup>73</sup> *Ibid.*, p. 82.

<sup>74</sup> *Ibid.*, p. 85.

<sup>75</sup> USDA, ERS, *Fruit and Tree Nuts Situation and Outlook Report, Yearbook Issue 1997, FTS-281*, Oct. 1997, p. 85.

<sup>76</sup> The Food Institute, *Food Markets in Review 1997: Dried Fruits*, May 1997, p. 73.

The fastest selling dried fruit category in 1996 remained raisins, totaling \$211 million in supermarket sales, followed by prunes, with sales of \$99 million, and apricots with sales of \$31 million.<sup>77</sup> Other important sales were of glazed fruits (\$15 million), dried cranberries (\$14 million), mixed fruits (\$12 million), dried apples (\$11 million), and dried peaches (\$4 million). Among the more specialized supermarket dried fruit sales were dried cherries (\$1.2 million), dried blueberries (\$403,978), dried pears (\$290,341), dried plums (\$285,070), dried Bing cherries (\$222,307), and dried strawberries (\$82,082), and other dried berries (\$61,348).

Among the most important consumption trends was an explosion in supermarket sales of dried cranberries, which increased from \$4.5 million in 1995 to \$13.9 million in 1996, an increase of 210 percent. Similarly, sales of dried cherries increased from \$725,856 in 1995 to \$1.2 million in 1996 (up by 61 percent), sales of dried blueberries increased by 55 percent, and sales of other dried berries increased 1,489 percent. These trends suggest a shift in sales from the more traditional dried fruits of dried raisins, prunes, apples, and apricots to dried berries and cherries. This shift occurred partly as a result of Ocean Spray Cranberry's entrance into the dried cranberry market in 1993, which led to the introduction of dried fruit alternatives, such as dried cranberries, and partly because of promotional programs that made consumers aware of the new products.<sup>78</sup>

In the highest volume dried fruit categories of raisins and prunes, the United States is the dominant world exporter as well as supplier to the U.S. market. The overall ratio of imports to consumption for dried fruits was 8.1 percent in 1997, down from 9.1 percent in 1993 (table 1). Raisin imports accounted for 6.8 percent of domestic consumption in crop year 1996/97, up from 3.3 percent in crop year 1992/93 (table 2).<sup>79</sup> Prune imports supplied about 0.5 percent of domestic consumption in crop year 1996/97, down from 3.7 percent in crop year 1992/93 (table 3).<sup>80</sup> Although import penetration for prunes and raisins is low, the opposite is true of dried apricots, with most of U.S. consumption supplied by imports from Turkey. U.S.-grown apricots tend to go into the fresh, canned, or frozen markets where they are more competitive with imported apricots from Turkey than they are in the dried market, given the higher transportation cost of these products. Turkey does not supply a significant amount of fresh market apricots to the U.S. market.

Table 1 and figure 2 show U.S. apparent consumption of nontropical dried fruits. U.S. apparent consumption increased from 253,214 tons in 1993 to 345,173 tons in 1997. Tables 2 and 3 show raisin and prune apparent consumption. Dried raisin consumption fell from 200,548 tons in 1993 to 169,851 tons in 1997, while dried prune consumption increased from 60,947 tons in 1993 to 95,770 in 1997.

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<sup>77</sup> Ibid., p. 130.

<sup>78</sup> Ocean Spray Cooperative, *Company Profile: Ocean Spray at a Glance*, Lakeville-Middleboro, MA., 1998, found at <http://www.oceanspray.com>.

<sup>79</sup> USDA, ERS, *Fruit and Tree Nuts Situation and Outlook Report, Yearbook Issue 1997, FTS-281*, Oct. 1997, p. 82.

<sup>80</sup> Ibid.

**Table 1**

**Dried fruits: U.S. shipments, exports of domestic merchandise, imports for consumption, apparent U.S. consumption, ratio of imports to consumption, and ratio of exports to shipments, 1993-97**

Year	U.S. shipments <sup>1</sup>	U.S. exports	U.S. imports	Apparent U.S. consumption <sup>2</sup>	Ratio of imports to consumption	Ratio of exports to shipments
	Quantity (tons)			Percentage		
1993	440,632	210,456	23,038	253,214	9.1	47.8
1994	533,956	194,310	26,009	365,655	7.1	36.4
1995	423,692	202,303	29,442	250,831	11.7	47.7
1996	464,848	202,308	28,730	291,270	9.9	43.5
1997	520,148	203,044	28,069	345,173	8.1	39.0

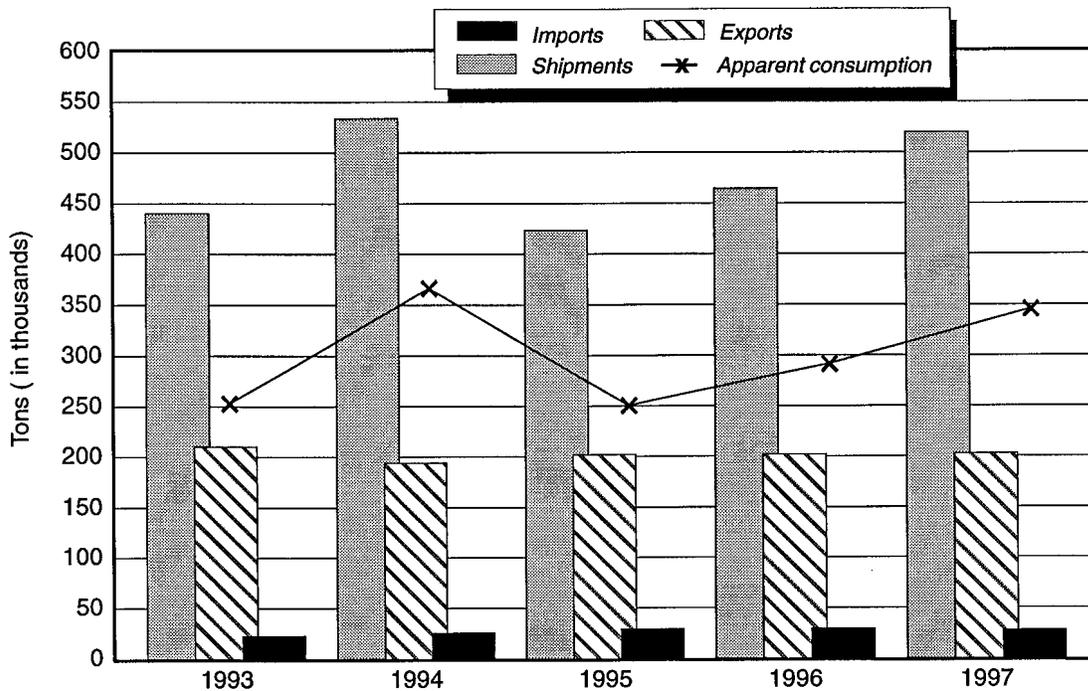
<sup>1</sup> Estimated by the staff of the USITC.

<sup>2</sup> Does not include changes in stock levels.

Source: Trade statistics were compiled from official statistics of the U.S. Department of Commerce. Production statistics were compiled from USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities*, various issues, and USDA, FAS, *Fruit and Tree Nuts Situation and Outlook Report*, Oct. 1997.

**Figure 2**

**Dried fruits: U.S. shipments<sup>1</sup>, exports, imports, and apparent consumption<sup>2</sup>, 1993-97**



<sup>1</sup> Estimated by the staff of the USITC.

<sup>2</sup> Does not include changes in stock levels.

Source: Trade statistics were compiled from official statistics of the U.S. Department of Commerce. Production statistics were compiled from *World Horticultural Trade and U.S. Export Opportunities*, USDA/FAS, various issues, and *Fruit and Tree Nuts Situation and Outlook Report*, USDA/ERS, Oct. 1997

## Production

Table 1 and Figure 2 show U.S. nontropical dried fruit shipments. U.S. shipments of dried fruit increased from 440,632 tons in 1993 to 520,148 tons in 1997. Tables 2 and 3 show raisin and prune beginning and ending stocks and U.S. production. Although raisin stocks have been declining, prune stocks have increased, reflecting the shortage of raisins in the world market, and the glut of prunes.

U.S. dried fruit production has been in a long-term uptrend for at least the past 20 years; however, the period has been characterized by sharp year-to-year fluctuations within the long-term trend, in large part owing to fluctuations in weather, prices, and alternative uses for the fruit. Twenty-year trends show raisin shipments increasing from 153,125 tons in

**Table 2**  
Dried raisins: Beginning stocks, U.S. production, imports, exports, apparent U.S. consumption, ending stocks, ratio of imports to consumption, and ratio of exports to production, 1993-97

Year	Beginning stocks	U.S. production	U.S. imports	U.S. exports	Apparent U.S. consumption	Ending stocks	Ratio of imports to consumption	Ratio of exports to production
1992/93 . . . . .	155,333	327,881	6,611	123,810	200,548	165,467	3.3	37.8
1993/94 . . . . .	160,613	321,873	6,845	123,128	239,998	126,205	2.9	38.3
1994/95 . . . . .	141,349	352,817	9,988	118,961	206,223	178,970	4.8	33.7
1995/96 . . . . .	178,970	255,787	11,916	116,749	226,253	103,671	5.3	45.6
1996/97 . . . . .	103,671	259,346	11,529	115,954	169,851	88,741	6.8	44.7

Source: USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities*, various issues.

**Table 3**  
Dried prunes: Beginning stocks, U.S. production, imports, exports, apparent U.S. consumption, ending stocks, ratio of imports to consumption, and ratio of exports to production, 1993-97

Year	Beginning stocks	U.S. production	U.S. imports	U.S. exports	Apparent U.S. consumption	Ending stocks	Ratio of imports to consumption	Ratio of exports to production
1992/93 . . . . .	30,848	139,955	2,232	67,634	60,947	44,454	3.7	48.3
1993/94 . . . . .	44,454	83,691	3,255	57,651	50,519	23,230	6.4	68.9
1994/95 . . . . .	23,230	152,713	490	66,347	60,355	49,731	0.8	43.4
1995/96 . . . . .	49,731	161,606	252	60,694	88,573	62,322	0.3	37.6
1996/97 . . . . .	62,322	199,105	459	65,893	95,770	100,223	0.5	33.1

Source: USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities*, Mar. 1998, p. 41, and USDA, ERS, *Fruits and Tree Nuts Situation and Outlook Report*, Oct. 1997, p. 82.

crop year 1976/77 to 259,346 tons in 1996/97. U.S. production of dried raisins peaked in the 1994/95 crop year at 352,817 tons. These production trends for dried raisins are similar to the respective consumption trends.<sup>81</sup>

As with raisins, production of dried prunes has increased over the last 20 years, more than doubling from 89,509 tons in 1976/77 to 199,105 tons in 1996/97. Dried prune production shows more year-to-year variability than the production of dried raisins.<sup>82</sup> U.S. dried prune production increased from 139,955 tons in crop year 1992/93 to 199,105 tons in crop year 1996/97, but fell to as low as 83,691 tons in crop year 1993/94. Ending stocks for prunes were quite high in 1996/97, totaling 100,223 tons, or more than one-half of yearly production. The high inventory reflects the nearly record high production and relatively low prices that caused growers to hold inventory in the hope of better prices in the future.

Dried apple production has shown a gradual upward trend over the past 20 years, from 102,232 tons in 1976/77 to 138,393 tons in 1996/97, with a peak in 1994/95 of 185,268 tons.<sup>83</sup> Grower prices for apples utilized for drying (fresh weight basis) are quite volatile, falling as low as \$76 a ton in 1987 and rising as high as \$216 a ton in 1991.<sup>84</sup>

U.S. apricots sold into the dried market (fresh weight basis) fell from 16,000 tons in 1992/93 to 15,000 tons in 1996/97, although tonnage was as high as 30,600 in 1994/95 and as low as 9,500 in 1995/96.<sup>85</sup> Twenty-year trends for dried apricots (dry weight basis) show production declining, from 4,152 tons in 1976/97 to 1,937 tons in 1996/97, with peak production in 1979/80 of 4,732 tons.<sup>86</sup>

Dried peach production also declined, from 2,232 tons (dry weight basis) in 1976/77 to 1,518 in 1996/97, with peak dried peach production occurring in 1982/83 of 2,321 tons.<sup>87, 88</sup> Dried pear production (dry weight basis) has declined over the past 20 years, from 1,134 tons in 1976/77 to 625 tons in 1996/97, with peak production of 1,384 in 1991/92.<sup>89</sup>

Prices for dried fruit are as volatile as those for fresh fruit, in spite of the fact that dried fruit can be stored for up to 2 years or more, in contrast to perishable fruits that must be sold and consumed before they spoil. However, a number of factors cause supplies and prices of dried fruits to be volatile; for most fruits, utilization for drying is quite small compared to utilization as fresh, frozen, or canned fruit, or fruit juice. That is, the supply of fruit going into the dry market is a residual share of fruit not used for other purposes. Large fluctuations from year to year in supply and price can result even if the overall crop of fruit remains relatively unchanged. Because dried fruit is more easily traded in world markets than nondried fruit,

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<sup>81</sup> USDA, ERS, *Fruit and Tree Nuts Situation and Outlook Report, Yearbook Issue 1997, FTS-281*, Oct. 1997, p. 82.

<sup>82</sup> *Ibid.*, p. 82.

<sup>83</sup> Dried apple weights are the weight of the fresh apples that were utilized to produce the dried apples.

<sup>84</sup> USDA, ERS, *Fruit and Tree Nuts Situation and Outlook Report, Yearbook Issue 1997, FTS-281*, Oct. 1997, p. 22.

<sup>85</sup> APB, *Apricot Producers of California 1998 Summary*.

<sup>86</sup> USDA, ERS, *Fruit and Tree Nuts Situation and Outlook Report, Yearbook Issue 1997, FTS-281*, Oct. 1997, p. 20.

<sup>87</sup> The Food Institute, *Food Markets in Review 1997: Dried Fruits*, May 1997, p. 68.

<sup>88</sup> *Op. cit.*, p. 20.

<sup>89</sup> *Ibid.*, p. 22.

U.S. producers are influenced more by world supply and demand conditions that can fluctuate rapidly depending on growing factors in other supplying countries, world stocks, and demand in user countries. Also, growers can more easily withstand low prices for dried fruit as long as they receive higher prices for the larger alternative utilization of the fruit. In contrast to fresh market fruit that is only available at certain times of the year, dried fruit is traded year-round. Finally, the United States is the principal world supplier of dried raisins, dried prunes, and dried apples, so consumers in the United States are competing for supplies with consumers from around the world.

## U.S. TRADE

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### Overview

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The United States maintained a large trade surplus during 1993-97 for the fruit products covered by this report, as shown in table 4. Figure 3 presents U.S. imports and exports of dried fruits by major trading countries during 1997. Although imports are relatively small compared to exports, on a percentage basis, U.S. imports grew more rapidly than exports during 1993-97. U.S. imports increased by about 45 percent, from \$42 million in 1993 to \$61 million in 1997, while U.S. exports grew more modestly, from \$360 million in 1993 to \$386 million in 1997, an increase of about 7 percent. The surplus in the overall merchandise trade balance increased slightly, from \$318 million in 1993 to \$325 million in 1997. Turkey was the only major trading country with which the United States maintained a trade deficit; this was largely related to trade in dried apricots, the deficit of which grew from \$23 million in 1993 to \$32 million in 1997. The largest U.S. trade surplus was with Japan; this grew from \$70 million in 1993 to \$80 million in 1997.

### U.S. Imports

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#### *Principal Suppliers and Import Levels*

Table 1 and figure 2 show U.S. imports of nontropical dried fruits. U.S. imports increased from 23,038 tons in 1993 to 28,069 tons in 1997. During this same period, the ratio of imports to consumption fell slightly from 9.1 percent to 8.1 percent. In 1997, over one-half of U.S. imports of products included in this summary consisted of dried apricots. Such imports totaled \$32 million in 1997, most of which came from Turkey. Other imports include dried raisins, which totaled \$13.6 million in 1997, and originated mainly from Mexico, Chile, and South Africa, and dried apple imports which totaled \$9.2 million in 1997, and were primarily imported from Argentina and Chile. Turkey supplied more than half the value of dried fruit imported into the U.S. market in 1997, followed by Chile, Argentina, Mexico, China, and South Africa. During 1993-97, Turkish exports to the

United States increased by 39 percent, while those of Chile increased by 29 percent, and those of Argentina increased by 13 percent. Exports to the United States from Mexico and China increased by 39 percent and 189 percent, respectively.

### ***U.S. Trade Measures***

Table 5 shows the U.S. column 1 rates of duty, as of January 1, 1998, for the articles included in this summary, and U.S. imports for 1997. An explanation of tariff and trade agreement terms is set forth in Appendix A. In 1998, the general (normal trade relations) tariff rates applicable to dried fruits ranged from 1.04 cents per kilogram for dried apples to 11.5 cents per kilogram for dried cherries,<sup>90</sup> with a 15.2 percent ad valorem rate for some dried prunes. None of these products has a general rate of free. In 1997, duties on U.S. imports of dried fruit were relatively low, with a trade-weighted average duty rate on dried fruit products equivalent to 1.08 percent ad valorem. This figure is based on calculated import duties of \$655,915 and total customs values of \$60.9 million.<sup>91</sup> U.S. imports of dried fruits are not subject to special quotas, embargoes, or other nontariff measures. No U.S. Government trade-related investigations specific to the dried fruit industry have been conducted in recent years. In order to improve market access, the United States agreed, under the Uruguay Round of multilateral trade negotiations, to reduce tariffs on imports of fruits and vegetables, including dried fruits. The reductions, which must reach at least 15 percent, are being implemented in equal annual installments over a 6-year period, beginning in 1995.<sup>92</sup>

## **U.S. Exports**

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### ***Principal Markets and Export Levels***

Table 1 and figure 2 show U.S. nontropical dried fruit exports. U.S. exports fell slightly, from 210,456 tons in 1993 to 203,044 tons in 1997. The ratio of exports to shipments fell from 48 percent in 1993 to 39 percent in 1997. Tables 2 and 3 show raisin and prune exports as well as the ratio of exports to production for these products.

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<sup>90</sup> Prices for dried fruits change frequently, but assuming \$1.00 per pound, the respective ad valorem equivalent would be 0.5 percent for dried apples, and 5.2 percent for dried cherries.

<sup>91</sup> These figures are based on official U.S. Department of Commerce data.

<sup>92</sup> Based on USDA, FAS, *FAS-Online*, found at <http://www.fas.usda.gov>, last modified Apr. 9, 1998.

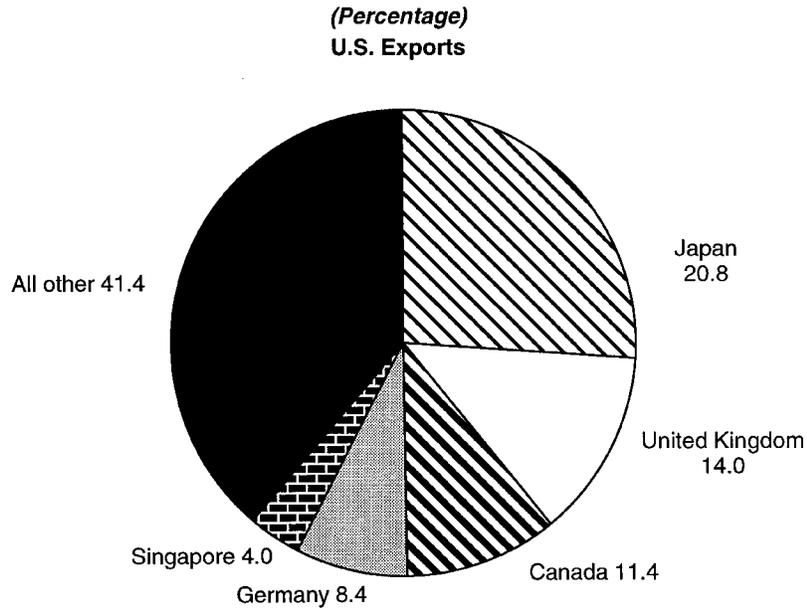
**Table 4**  
**Dried fruits: U.S. exports of domestic merchandise, imports for consumption, and merchandise trade balance, by selected countries, 1993-97**

<b>Item and country</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
<b>U.S. exports of domestic merchandise:</b>					
Japan .....	70,425	71,045	73,974	78,113	80,339
United Kingdom .....	49,053	49,794	59,721	64,042	54,106
Canada .....	48,054	42,296	46,108	43,192	43,793
Germany .....	40,534	39,098	42,311	40,361	32,472
Turkey .....	358	259	368	728	427
Singapore .....	4,833	7,812	7,779	9,401	15,281
Italy .....	18,612	15,982	19,231	15,495	14,447
Denmark .....	12,342	10,985	13,049	12,914	12,961
Hong Kong .....	6,247	10,998	11,224	10,674	12,899
All other .....	109,835	121,204	107,844	113,222	118,799
<b>Total .....</b>	<b>360,292</b>	<b>369,472</b>	<b>381,610</b>	<b>388,143</b>	<b>385,525</b>
EU-15 .....	176,575	177,607	186,188	184,206	156,453
OPEC .....	4,483	4,304	4,343	3,177	2,981
Latin America .....	15,673	17,897	14,239	15,356	26,478
CBERA .....	6,053	4,499	5,560	6,368	13,289
Asian Pacific Rim .....	104,222	113,174	116,352	122,980	136,838
ASEAN .....	11,444	14,098	13,717	16,010	23,296
Eastern Europe .....	360	518	1,589	3,226	3,802
<b>U.S. imports for consumption:</b>					
Japan .....	86	74	44	55	57
United Kingdom .....	8	0	31	6	460
Canada .....	285	141	207	116	112
Germany .....	287	338	355	350	412
Turkey .....	23,097	24,432	27,662	30,895	32,208
Singapore .....	55	22	39	38	73
Italy .....	346	48	393	309	136
Denmark .....	0	0	2	0	10
Hong Kong .....	268	231	384	798	553
All other .....	17,826	21,209	18,109	25,848	26,921
<b>Total .....</b>	<b>42,258</b>	<b>46,496</b>	<b>47,228</b>	<b>58,417</b>	<b>60,943</b>
EU-15 .....	1,248	794	1,050	785	1,274
OPEC .....	0	10	10	0	10
Latin America .....	13,447	17,096	13,973	20,165	17,734
CBERA .....	14	0	45	108	23
Asian Pacific Rim .....	2,958	2,709	3,740	5,725	5,519
ASEAN .....	391	321	400	455	324
Eastern Europe .....	576	315	112	0	41
<b>U.S. merchandise trade balance:</b>					
Japan .....	70,339	70,971	73,930	78,058	80,283
United Kingdom .....	49,045	49,794	59,890	64,036	53,647
Canada .....	47,769	42,154	45,901	43,076	43,681
Germany .....	40,246	38,760	41,956	40,011	32,060
Turkey .....	-22,739	-24,173	-27,294	-30,167	-31,781
Singapore .....	4,778	7,790	7,741	9,363	15,207
Italy .....	18,266	15,934	18,838	15,185	14,311
Denmark .....	12,342	10,985	13,047	12,914	12,950
Hong Kong .....	5,979	10,767	10,839	9,876	12,346
All other .....	92,009	99,995	89,735	87,374	91,878
<b>Total .....</b>	<b>318,034</b>	<b>322,976</b>	<b>334,382</b>	<b>329,727</b>	<b>324,582</b>
EU-15 .....	175,327	176,813	185,139	183,421	155,179
OPEC .....	4,483	4,294	4,333	3,177	2,972
Latin America .....	2,226	800	266	-4,809	8,745
CBERA .....	6,039	4,499	5,514	6,260	13,266
Asian Pacific Rim .....	101,263	110,465	112,612	117,255	131,319
ASEAN .....	11,054	13,778	13,317	15,555	22,972
Eastern Europe .....	-216	203	1,478	3,226	3,761

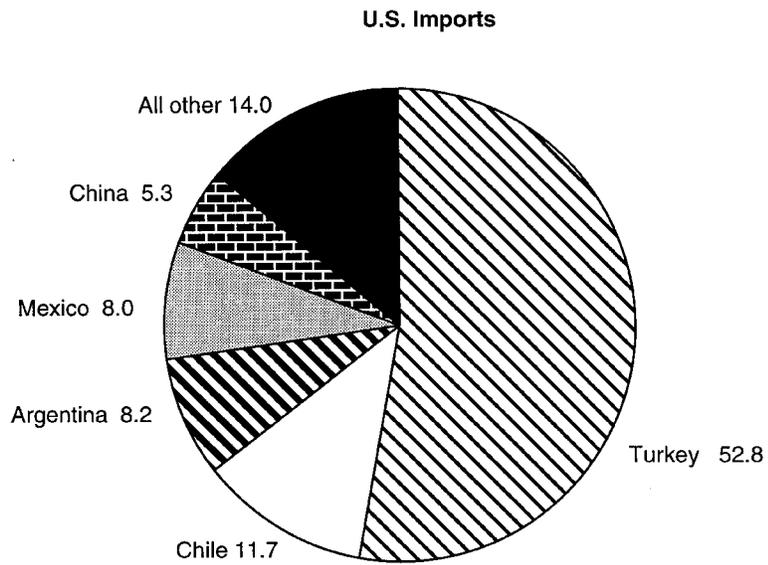
Note.—Because of rounding figures may not add to totals shown. Import values are based on customs value; export values are based on f.a.s. value, port of export.

Source: Compiled from official statistics of U.S. Department of Commerce.

**Figure 3**  
**Dried fruits: U.S. exports and imports, by major countries, 1997**



**Total \$386 Million**



**Total \$61 Million**

Source: Compiled from official statistics of the U.S. Department of Commerce.

**Table 5**

**Dried fruits: Harmonized Tariff Schedule subheading; description; U.S. column 1 rate of duty as of Jan. 1, 1998; U.S. exports, 1997; and U.S. imports, 1997**

Subheading	Description (abridged)	Col. 1 rate of duty as of Jan. 1, 1998		U.S.	U.S.
		General	Special <sup>1</sup>	exports 1997	imports 1997
— 1,000 dollars —					
0806.20.10	Dried raisins made from seedless grapes . . . . .	1.9¢/kg	Free (A+, CA, E, IL, J, MX)	<sup>2</sup> 199,804	13,388
0806.20.20	Dried raisins made from grapes other than seedless . . . . .	3.3¢/kg	Free (A+, CA, E, IL, J, MX)		208
0806.20.90	Dried grapes other than raisins . . . . .	4.2¢/kg	Free (A+, CA, E, IL, J, MX)		10
0813.10.00	Dried apricots . . . . .	1.9¢/kg	Free (A*, CA, E, IL, J, MX)	4,009	33,181
0813.20.10	Prunes soaked in brine and dried . . . . .	2.8¢/kg	Free (A+, CA, E, IL, J, MX)	<sup>3</sup> 139,191	656
0813.20.20	Other dried prunes . . . . .	15.2%	Free (A+, CA, E, IL, J, MX)		386
0813.30.00	Dried apples . . . . .	1.04¢/kg	Free (A*, CA, E, IL, J, MX)	9,640	9,193
0813.40.15	Dried barberries . . . . .	3.5¢/kg	Free (A+, CA, E, IL, J, MX)	<sup>4</sup> 11,936	30
0813.40.20	Other dried berries . . . . .	1.7¢/kg	Free (A, CA, E, IL, J, MX)	2,367	446
0813.40.30	Dried cherries . . . . .	11.5¢/kg	Free (A+, CA, E, IL, J, MX)		84
0813.40.40	Dried peaches . . . . .	1.7¢/kg	Free (A+, CA, E, IL, J, MX)		54
0813.40.90	Other dried fruit . . . . .	3%	Free (A+, CA, E, IL, J, MX)		2,802
0813.50.00	Mixtures of dried fruit, which may also contain nuts . . . . .	15.2%	Free (A+, CA, E, IL, J, MX)	18,576	504

<sup>1</sup> Programs under which special tariff treatment may be provided, and the corresponding symbols for such programs as they are indicated in the "Special" subcolumn, are as follows: Generalized System of Preferences (A,A+,A\*); North American Free Trade Agreement, country of origin Canada (CA); Caribbean Basin Economic Recovery Act (E); United States-Israel Free Trade Area (IL); Andean Trade Preference Act (J); and North American Free Trade Agreement, country of origin Mexico (MX). The symbol "A+" in parenthesis indicates that all least-developed beneficiary countries of the Generalized System of Preferences are eligible for preferential treatment with respect to all articles provided for in the designated provisions. The symbol "A\*" in parenthesis indicates that certain beneficiary developing countries may not be eligible for preferential treatment with regard to certain articles provided for in the designated provision.

<sup>2</sup> Exports reported herein correspond to imports entered under HTS subheadings 0806.20.10, 0806.20.20, and 0806.20.90.

<sup>3</sup> Exports reported herein correspond to imports entered under HTS subheadings 0813.20.10 and 0813.20.20.

<sup>4</sup> Exports reported herein correspond to imports entered under HTS subheadings 0813.40.15, 0813.40.30, 0813.40.40, and 0813.40.90.

Source: Trade data compiled from official statistics of the U.S. Department of Commerce.

U.S. exports to most important markets remained relatively stable through the period. Japan was the principal purchaser of U.S. product, followed by the United Kingdom, Canada, and Germany. Exports of raisins and dried grapes were valued at about \$200 million in 1997, or more than one-half the \$386 million of total exports of products in this summary. The principal buyers of raisins and dried grapes were the United Kingdom, Japan, and Canada. Another export, dried prunes, amounted to \$139 million in 1997. Major markets for U.S. prune exports include, by order of sales, Japan, Germany, Italy, the United Kingdom, and Canada.<sup>93</sup> Dried berry exports totaled \$14.6 million in 1997, the majority of which consisted of dried blueberries sold to Canada. Exports of dried apples totaled \$9.6 million in 1997, most of which were sold to the United Kingdom and Canada, and exports of dried apricots totaled \$4 million, about half of which went to Japan.

### ***Foreign Trade Measures***

U.S. exports of nontropical dried fruits go largely to developed countries. Japan, the United Kingdom, Canada, Germany, and Singapore were the five leading markets for these products, together purchasing about 60 percent of the \$386 million of U.S. exports in 1997 (table 4 and figure 3).

### ***Tariff measures***

Tariff rates on dried fruits vary considerably by country and by type of fruits. Among major trading partners, 1997 bound<sup>94</sup> tariff rates (the rates that will apply in the year 2000) in Japan were 1.2 percent ad valorem for dried raisins, 2.4 percent for dried prunes, 9 percent for dried apples and apricots, and 6 percent for mixed dried fruits such as trail mixes.<sup>95</sup> Canadian duties are free for most dried fruit except dried apples and dried fruit mixed with nuts, each of which has a bound rate of 10 percent ad valorem. Under provisions of the North American Free Trade Agreement (NAFTA), U.S. exports of all dried fruits included in this summary enter both Canada and Mexico free of duty. European Union 1997 bound rates varied from 2.4 percent for dried raisins to 9.6 percent for dried prunes, with other dried fruits falling in between these rates; for example, additional 1997 rates for the EU were 5.6 percent for dried

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<sup>93</sup> USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities, Circular Series FHORT 03-98*, Mar. 1998, pp. 38-41.

<sup>94</sup> These are the maximum tariff rates legally committed to under the WTO. These rates cannot be exceeded unless a negotiated waiver is arranged, or a concession is withdrawn based on one of the exceptions in GATT 1994. However, tariff rates can be and often are lower than the "Bound Rates." These are known as "Applied Tariff Rates" and represent the duty that is actually imposed on imported products. Some developing countries also apply a "Ceiling Binding," a single tariff rate for all agricultural products. Applied rates less than the ceiling binding may exist for specific items of interest to that country. The timetable to reach the bound rate is the year 2000 for developed countries and 2004 for developing countries, to be staged in equal increments from the 1995 base rates.

<sup>95</sup> USDA, FAS, *FAS-Online*, found at <http://www.fas.usda.gov>, last modified Sept. 28, 1998.

apricots, 6.4 percent for dried apples, 5.6 percent for dried peaches, 6.4 percent for dried pears, and 6.4 percent for most other categories, including mixed dried fruits.<sup>96</sup>

During the Uruguay Round, quotas and many nontariff trade barriers were replaced with tariffs, making import protection less arbitrary and perhaps allowing trade negotiators in future trade agreements to further liberalize agricultural markets by negotiating down tariff rates. All agricultural tariffs were bound and reduced at the end of the Round. Each tariff, including those established under "tariffication" of quotas, was subject to a minimum reduction of 15 percent for developed countries and 10 percent for developing countries, and an average tariff reduction of 36 percent for developed countries and 24 percent for developing countries was required.<sup>97</sup>

Among some of the highlights of the Uruguay Round agreements that apply to dried fruits, Korea agreed to reduce its 1993 applied tariff rates on prunes and raisins by 40 percent, to 21 and 18 percent ad valorem, respectively. The Philippines agreed to reduce its applied rate on raisins from 50 percent to 45 percent ad valorem. Thailand agreed to cut its applied tariff rate on raisins by half, and its rate on prunes by one-third. Switzerland's concessions included the elimination of its tariffs on raisins, prunes, and dried pears. Finland agreed to remove its tariff on dried apples. Poland agreed to open a 600-ton-per-year tariff-rate quota for prunes beginning in 1995; the quota will grow to 1,000 tons during the implementation period, a quantity substantially above current trade levels. Uruguay will reduce its tariff on runes from 15 percent to 12 percent ad valorem.<sup>98</sup>

### *Nontariff measures*

Dried fruits do not, in general, face the same level of trade restrictions and barriers as for many perishable agricultural commodities that are subject to sanitary and phytosanitary inspections and standards.<sup>99</sup> However, it is reported that some countries, such as Korea, have in the past used arbitrary, unscientific or discriminatory phytosanitary and sanitary measures to restrict the import and sale of many previously liberalized products such as raisins.<sup>100</sup> Another Korean trade barrier was government-mandated shelf-life dates on raisins and other products. In the past, these requirements effectively prohibited shipping because expiration dates were so short that, by the time a product cleared Korean customs, the dates had expired. This issue resulted in the filing of a petition with the United States Trade Representative (USTR) under section 301 of the Trade Act of 1974 in November 1994 by the U.S. meat industry.<sup>101</sup> This rule was one of the few nontariff barriers cited for dried fruit in the USTR annual review. After consulting under WTO dispute settlement procedures, the United States and Korea reached a settlement agreement on shelf life in July 1995. Under the 1995 agreement, Korea agreed to phase in the common international

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<sup>96</sup> Based on USITC electronic files of recent official tariff schedules for foreign countries.

<sup>97</sup> USDA, FAS, *FAS-Online*, found at <http://www.fas.usda.gov>, last modified Apr. 9, 1998.

<sup>98</sup> *Ibid.*

<sup>99</sup> United States Trade Representative (USTR), *1997 National Trade Estimate Report on Foreign Trade Barriers*, U.S. Government Printing Office, 1997, pp. 1-4.

<sup>100</sup> USTR, *1995 National Trade Estimate Report on Foreign Trade Barriers*, U.S. Government Printing Office, 1995, p. 211.

<sup>101</sup> *Ibid.*, p. 213.

practice of manufacturer-determined "sell-by" dates for many food products, beginning in October 1995 and ending July 1996.<sup>102</sup>

Although Korea has made changes to its import clearance procedures over the last two years, it is reported that clearance times are still excessively slow and clearance procedures still arbitrary.<sup>103</sup> Import clearance typically takes two to four weeks, and sometimes up to three months. U.S. exporters also cite Korea's country-of-origin and general labeling regulations as barriers to entry for agricultural and processed food products. The Korean Customs Service's unannounced, unpublished, and arbitrary changes in customs classifications are also of great concern.<sup>104</sup>

## WORLD INDUSTRY PROFILE

### Major Foreign Producers

A large portion of the dried fruit grown in the major producing countries goes into export markets because many of the major consuming countries do not produce significant quantities of dried fruit. Trade in dried fruit is likely to increase along with world demand, which has been slowly rising. Table 6 and figure 4 show dried raisin production and export share by major producers. The most important world raisin producers include the United States, Turkey, Greece, Mexico, Australia, South Africa, and Chile.<sup>105</sup> Raisin/sultana

**Table 6**  
**Dried raisins: World production by major producers, in tons (packed weight), 1992/93- 1996/97**

Country	1992/93	1993/94	1994/95	1995/96	1996/97
United States . . . . .	327,881	321,873	352,817	255,787	259,346
Turkey . . . . .	147,629	172,234	173,219	196,839	196,839
Greece . . . . .	37,399	36,415	25,589	29,526	32,478
South Africa . . . . .	26,596	31,967	37,931	28,153	29,526
Australia . . . . .	41,459	10,692	32,085	57,280	22,636
Chile . . . . .	21,652	27,557	34,594	31,002	19,684
Mexico . . . . .	12,794	9,842	22,636	19,684	12,794
Total . . . . .	615,410	610,580	678,871	618,271	573,303

Source: USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities*, various issues.

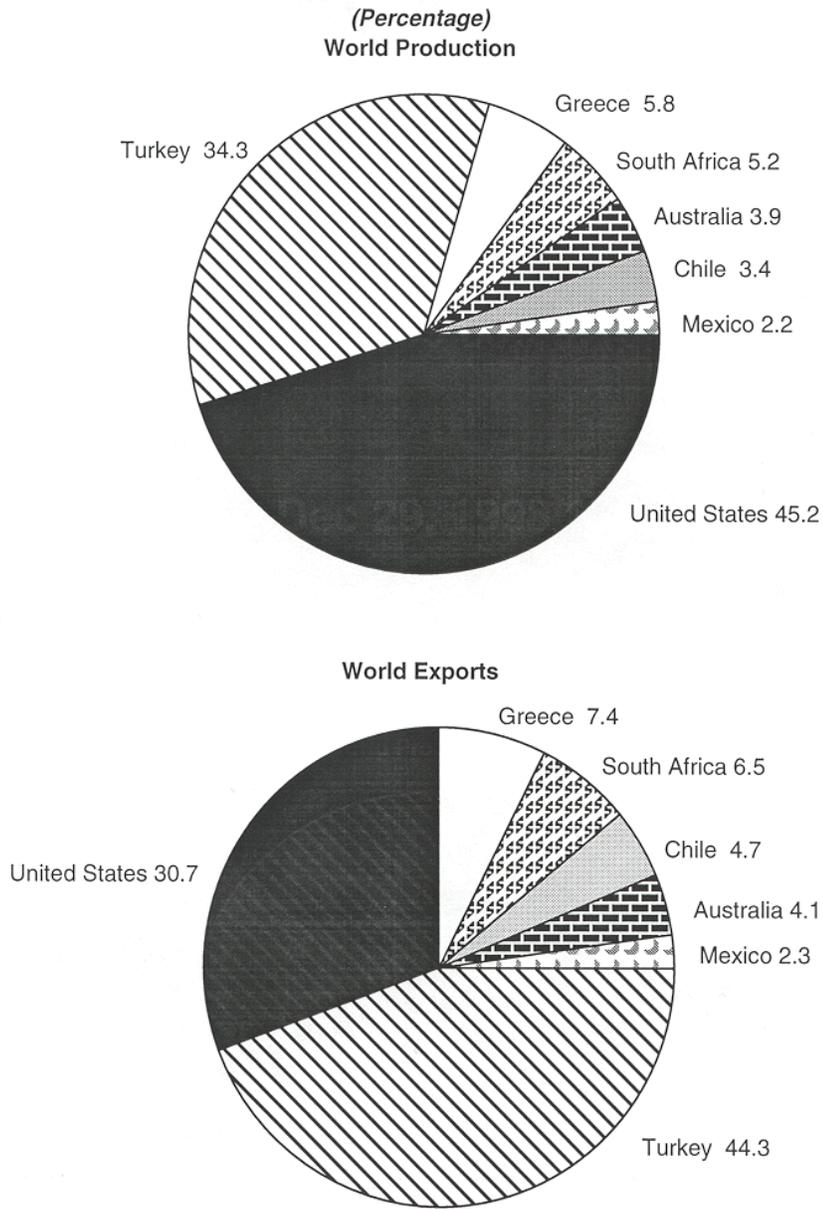
<sup>102</sup> USTR, *1997 National Trade Estimate Report on Foreign Trade Barriers*, 1997, p. 239.

<sup>103</sup> *Ibid.*, pp. 236.

<sup>104</sup> *Ibid.*, pp. 233-245.

<sup>105</sup> USDA, FAS, "World Raisin Situation in Selected Countries," *World Horticultural Trade and U.S. Export Opportunities*, May 1998, found at <http://www.fas.usda.gov>, p. 4.

**Figure 4**  
**Dried raisins: World production and export share, by producing countries, 1996-97**



Source: Compiled from USDA/FAS.

**Table 7**  
**Dried raisins: World exports by major producers, in tons (packed weight), 1992/93-1996/97**

Country	1992/93	1993/94	1994/95	1995/96	1996/97
Turkey . . . . .	108,715	137,787	165,977	178,768	167,313
United States . . . . .	123,810	123,128	118,961	116,749	115,954
Greece . . . . .	34,447	34,447	26,081	27,557	28,050
South Africa . . . . .	29,244	23,586	19,482	21,652	24,605
Chile . . . . .	19,147	24,605	28,421	29,213	17,715
Australia . . . . .	44,669	23,621	12,440	23,032	15,157
Mexico . . . . .	4,921	3,937	8,858	12,794	8,858
Total . . . . .	364,953	371,111	380,220	409,765	377,652

Source: USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities*, various issues.

production in 1996/97 in the major commercial producing countries was 573,303 tons (packed-weight basis), down 7 percent from the 1995/96 season. Total exports of these countries fell by nearly 8 percent during the same period (table 7). The United States and Turkey dominate world dried raisin production and exports. In the 1996/97 crop year, the United States produced 259,346 tons, out of total world production of 573,304 tons, or about 45 percent, and Turkey produced another 196,839 tons, or 34 percent.<sup>106</sup> Turkey, which exports most of its raisins, accounted for 44.3 percent of world exports, while the United States, which exports less than one-half of its raisins, accounted for 30.7 percent (figure 4). U.S. raisin production declined 21 percent from 1992/93 to 1996/97, while Turkish production increased by 33 percent during this same period. At the same time, U.S. raisin exports declined by 6 percent, but Turkish exports increased by 54 percent.

Major world prune producers include the United States, France, Chile, and Yugoslavia (table 8 and figure 5). World prune production increased in 1996/97 by an estimated 20 percent to 287,683 tons, but is expected to decline for 1997/98. A decline would be looked upon favorably by the prune industry, especially in France and the United States, which have been plagued in recent years by excessively high stocks, high production, and lower prices, especially for small-sized prunes.<sup>107</sup> Production and exports also increased in Chile in 1996/97. World stocks of dried prunes increased from 89,654 tons in 1995/96 to 136,756 tons in 1996/97. World exports increased by 9 percent in 1996/97 to 99,643 tons, boosted by strong international demand and promotional campaigns.

## *Turkey*

Turkey is the second world supplier of nontropical dried fruits, after the United States, and dominates world exports of raisins and apricots. Turkish raisin production has increased steadily, from 148,000 tons in 1992/93 to 207,000 tons in 1997/98, when it comprised about 34 percent of world supply. The Turkish dried fruit industry is organized around quasi-governmental cooperatives that buy dried fruit from the many small-scale growers, set

<sup>106</sup> USDA, FAS, "World Raisin Situation in Selected Countries," Dec. 1997, p. 7.

<sup>107</sup> USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities, Circular Series FHORT 03-98*, Mar. 1998, pp. 38-41.

**Table 8**

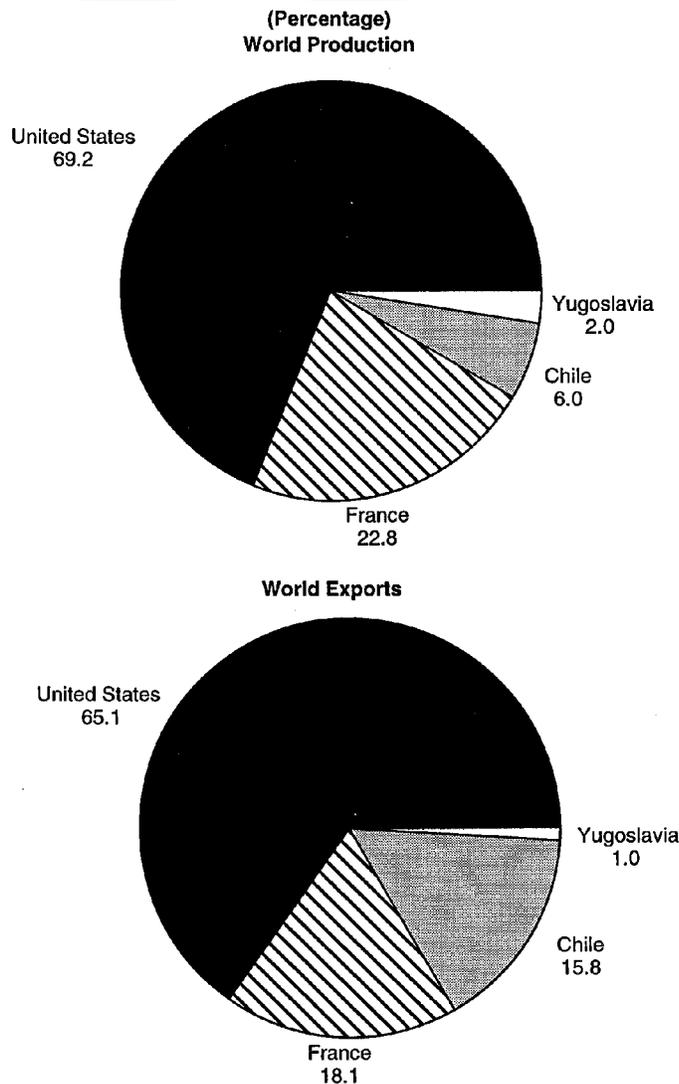
**Dried prunes: 1996/97 world stocks, production, imports, exports, domestic consumption, and ending stocks, by major producers, in tons**

Country	Beginning stocks	Production	Imports	Exports	Domestic consumption	Ending stocks
United States . . . . .	62,322	199,105	459	65,893	95,770	100,223
France . . . . .	26,199	65,646	574	18,273	38,676	35,470
Yugoslavia . . . . .	1,083	5,610	0	984	4,725	984
Chile . . . . .	79	17,322	0	15,993	1,300	108
Total . . . . .	89,683	287,683	1,033	101,143	140,471	136,785

Source: USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities*, Mar. 1998, p. 41.

**Figure 5**

**Dried prunes: World production and export share, by producing countries, 1996-97**



Source: Compiled from USDA/FAS.

prices, and help market and export dried fruit. They also serve as purchasing points for dried fruit buyers. On August 6, 1997, TARIS, the Aegean growers cooperative for olives, cotton, figs, and sultanas, announced the 1997/98 procurement price of 160,000 Turkish lira per kilogram (about US \$0.90 per kilogram) for type #9 raisins.<sup>108</sup> This price represents a slight decrease over the 1996/97 price in real terms. Turkish raisin exports are estimated to be about 172,000 tons for the 1997/98 crop year. Primary Turkish export markets include the EU countries of Germany, the United Kingdom, the Netherlands, Italy, France, and Belgium. Outside the EU, Turkey's most important sultana raisin markets include Australia and Canada. The elimination of the EU minimum import price (MIP) in 1998 should help Turkish raisin exports to the EU, particularly because the EU is the most important market for Turkish sultanas. The ongoing depreciation of the Turkish lira against major foreign currencies continues to encourage exports.

Turkey was the world's largest supplier of dried apricots during the 1995/96 marketing year, exporting 50,000 tons of product, or about 89 percent of total world exports. Other major suppliers include the United States, South Africa, France, and Germany. Roughly 95 percent of Turkish production is exported, with domestic consumption accounting for only about 5 percent. In Turkey, there is no tradition of eating dried fruit; rather fruit is bought fresh. In addition, the local price of dried apricots is comparatively high.

Output in Turkey is extremely volatile and ranges from 30,000 to 100,000 tons, depending on the growing conditions.<sup>109</sup> The Turkish apricot differs from that supplied by other producers in that it tends to be larger, sweeter and is pitted without being cut in half. The town of Malatya contains a bourse where apricots are sold on the open market, and most apricot trees are grown in the areas around Malatya.<sup>110</sup> Further tree planting is taking place around Malatya to keep pace with increasing world demand. Industry forecasts suggest the number of apricot trees is growing by about 5 percent a year.<sup>111</sup> The cultivation of apricots is basically as a peasant cash crop. Each farmer might produce only 1,000 pounds or so of dried apricots each year. Farmers may either sell apricots on the open bourse in Malatya or to the state cooperative, Kayis Berlik. Recently, the weakness of the Turkish lira relative to the U.S. dollar and high dried apricot production in Turkey have meant lower dried apricot prices in the United States. Turkish exporters were asking about \$2,900 per ton as of the end of 1997.<sup>112</sup> Prices a year earlier had been about \$3,400 per ton.<sup>113</sup>

Although Turkish dried apricots have much in common with dried apricots from other countries, purchasing Turkish product is particularly difficult since certification is not provided by Turkish authorities and because of the large number of small growers with varying fruit standards. Three factors that experienced buyers of Turkish apricots examine

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<sup>108</sup> This is based on USD 1.00=TL 178,000.

<sup>109</sup> *Foodnews*, "Sales are Showing a Healthy Growth, Nuts and Dried Fruit Review '96" Tunbridge Wells, Kent, U.K., The Foodnews Co. Ltd., vol. 24, No. 46, Nov. 22, 1996, p. 7.

<sup>110</sup> *Foodnews*, "Turkey Expands its Apricot Supplies," Oct. 24, 1997, p. 17.

<sup>111</sup> *Foodnews*, "Sales are Showing a Healthy Growth, Nuts and Dried Fruit Review '96," Nov. 22, 1996, p. 7.

<sup>112</sup> *Foodnews*, "Weak Lira Squeezes Turkish Apricots," Nov. 14, 1997, p. 5.

<sup>113</sup> *Foodnews*, "Dried Apricots Rise Sharply," Oct. 25, 1996, p. 2.

carefully are residual pits and pit fragments, sulphur content, and moisture content. Since Turkish apricots are unique in that the pits are removed without first cutting the fruit in half, manufacturers who purchase chopped apricots must be particularly wary because if the apricots are chopped without patient inspection to make sure the pits were removed, any remaining pits will result in sharp pit fragments in the fruit. As unsulphured apricots do not keep well and appear dark brown in color, apricots are dried on the internal shelves of a large kilnroom containing burning sulphur candles. The resulting sulphur coating gives the apricots their bright orange appearance, and also helps preserve them. Sulphur content can vary greatly, and because farmers like to sulphur their fruit excessively to keep the fruit brighter and make it last longer, importers need to perform tests and provide certification. The U.S. and Australian markets, for example, permit higher sulphur levels than do European markets, so exporters have to purchase special stocks for the European markets. Finally, moisture content must be measured because whole dried apricots that contain more than 25 percent moisture may be affected by fermentation, and even fruit of less than 25-percent moisture may ferment if condensation occurs or if the wrong type of packaging is used.<sup>114</sup> Assuming other criteria are met, size determines the quality, with larger apricots regarded as higher quality fruit.<sup>115</sup>

## *Greece*

Greece is the world's third major raisin producer after the United States and Turkey. Most Greek raisins originate on the island of Crete. Greek sultana production in 1997/98 was estimated at 37,000 tons, about 15 percent above the previous year's output. It continues to recover from a phylloxera infestation. Greek raisin production fell from 37,000 tons in 1992/93 to 26,000 tons in 1994/95, before recovering to 32,478 tons in 1996/97, and is expected to continue growing in the upcoming years.<sup>116</sup> The Greek Government is working with vine growers to replace vines lost to phylloxera with phylloxera-resistant vines, and projects that by the year 2000, 80 to 90 percent of the vines will have been replaced, and Greek raisin production will be between 50,000 and 60,000 tons per year. In the past 5 years, 85 percent or more of Greek raisins have been exported, and on average, about 90 percent of Greek sultanas are exported each year.<sup>117</sup> Germany accounted for approximately 40 percent of Greek exports in 1997/98, with other important export markets being the United Kingdom, the Netherlands, and other European Union countries.

## *Australia*

Another major world producer and exporter of raisins is Australia. The Australian 1997/98 raisin harvest recovered about 41 percent from the previous year to approximately 34,000

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<sup>114</sup> *Foodnews*, "Turkey Expands its Apricot Supplies," Oct. 24, 1997, p. 17.

<sup>115</sup> *Foodnews*, "Sales are Showing a Healthy Growth, Nuts and Dried Fruit Review '96," Nov. 22, 1996, p. 7.

<sup>116</sup> USDA, FAS, "World Raisin Situation in Selected Countries," *World Horticultural Trade and U.S. Export Opportunities*, Aug. 1998, found at <http://www.fas.usda.gov>, p. 3, and July 1994, p. 34.

<sup>117</sup> *Ibid.*, p. 1.

tons. Prior to this year, the Australian raisin crop experienced several years of depressed harvests, in part because some sultana vines were replaced with premium wine varieties in response to the high export demand for Australian wines. The sharp recovery this year in the raisin harvest was the result of more nonsultana varieties being made available for dried raisins, as well as favorable weather for harvesting and drying which resulted in higher yields.<sup>118</sup>

Australia exports less than half of its dried raisin production, with the rest consumed domestically. For the 1997/98 crop year, it is estimated that Australia will export about 15,000 tons of dried raisins. Major markets for Australian raisins include Germany, New Zealand, Canada, the United Kingdom, and Japan. The Australian Dried Fruit Board (ADFB) has increased its overseas promotional efforts in recent years with activities carried out in the United Kingdom, Germany, and New Zealand. Overseas promotions have taken the form of an Australian export logo quality seal, in-store advertising, advertising in major magazines, and participation in trade shows. The ADFB also brings overseas buyers to Australia to meet with sales agents and visit the major production areas.

### *South Africa*

South Africa, along with Australia and Chile are the major world raisin producers in the Southern Hemisphere and have the advantage of being able to ship raisins when Northern Hemisphere producers are out of season. South Africa's 1997/98 raisin/sultana pack was 28,000 tons, down by 26 percent from the previous year, because of adverse weather conditions associated with El Nino.<sup>119</sup> Because of the bad weather, more grapes than usual are expected to go to wineries. Exports for 1997/98 are estimated to be 20,000 tons, 30 percent below the previous year's total. Generally, about 70 percent of South Africa's production is exported, and the value of the rand against the stronger U.S. dollar has helped South African exports, as has the elimination of the MIP system in Europe. South Africa ships more than 60 percent of its raisin exports to the EU. The United Kingdom, Germany, France, Japan, Singapore, and the Netherlands are the most important markets.<sup>120</sup>

In 1997, South Africa enacted the Agricultural Products Marketing Act. This act changed agricultural marketing from a controlled system to a free market system, and it is expected to allow more individuals and institutions to participate in the industry. The Dried Fruit Board in South Africa has now been transformed from a government-supported institution into a private company, but it will continue to market dried fruit. The Act allows dried fruit producers to market their products without the Dried Fruit Board if they wish and also facilitates the entrance of new traders in the South African export/import market.<sup>121</sup> However, dried fruit exporters are no longer eligible for the South African export promotion program, known as the General Export Incentive Scheme (GEIS).

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<sup>118</sup> Ibid., p. 5.

<sup>119</sup> USDA, FAS, "World Raisin Situation in Selected Countries," *World Horticultural Trade and U.S. Export Opportunities*, Aug. 1998, found at <http://www.fas.usda.gov>, p. 2.

<sup>120</sup> Ibid., p. 2.

<sup>121</sup> USDA, FAS, "World Raisin Situation in Selected Countries," May 1998, p. 5.

South Africa has about 15,547 hectares planted to grapes for drying in the current 1997/98 season, up nearly 4 percent from the previous season. This area includes 13,000 hectares along the Orange River, where 97 percent of the crop is grown, and another 2,000 hectares south along the Elephants River. About 70 percent of South Africa's sultana grape crop is dried. The remainder goes into the fresh market or to wineries, especially when the weather is not suitable for drying. Development plans along the Orange River will extend the irrigation area available for raisin/sultana production over the next 10 years.<sup>122</sup>

## *France*

France is the second largest prune producer, after the United States. French prune production for the 1997/98 crop year is estimated to have declined by more than 57 percent, to 28,000 tons, because of excessive rains and cold temperatures during the blossoming and harvesting seasons. However, because of large beginning stocks, it is estimated that French prune exports increased in 1997/98 to about 20,000 tons. Most French prunes are exported to nearby EU countries such as Italy, Spain, Belgium-Luxembourg, Germany, and the Netherlands. Promotional efforts in these countries focus on the health benefits of French prunes. The French Prune Marketing Board develops promotional activities such as commercials, seminars, and supermarket promotions, using funds from producer and industry taxes which totaled FF 32.5 million in 1997/98.<sup>123</sup> Although France does not restrict prune imports, prunes must pass an inspection and meet quality standards, as well as receive an import certificate from the French Interprofessional Fruits and Vegetables Association and prune importers must provide a deposit of 9.57 French francs per 100 kilograms. The French customs duty on imported prunes is 11.2 percent ad valorem.<sup>124</sup>

Although the French prune crop fell in 1997/98, the French prune industry is concerned about the long-term trend which has been towards over-production of prunes, excessively high stocks, gluts in world markets, and low prices for French prune growers. Prune producers and processors working with the French Economic Committee for Prunes developed an agreement under which approximately 700 hectares of prunes were uprooted this season and an additional 3,000 hectares will be uprooted in the next 2 years as part of a plan to control production and maintain prices. In addition, the processors have committed to purchase from producers a minimum percentage of the previous year's harvest and destroy small fruits which have low value; the producers have agreed to store the surplus production rather than selling it, which could further depress prices.<sup>125</sup>

## *Chile*

Chile is one of the world's leading producers and exporters of fresh and processed fruits. For the 1996/97 crop year, Chile was the world's third producer and exporter of dried prunes, after

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<sup>122</sup> USDA, FAS, "World Raisin Situation in Selected Countries," June 1997, p. 9.

<sup>123</sup> U.S. \$1 = FF5.11

<sup>124</sup> USDA, FAS, *World Horticultural Trade and U.S. Export Opportunities, Circular Series FHORT 03-98*, Mar. 1998, p. 39.

<sup>125</sup> *Ibid.*, p. 38.

the United States and France, and the fifth most important exporter of dried raisins. The Chilean prune crop in 1997/98 is estimated at 17,000 tons, 10 percent above the previous year's total. Chilean prunes are harvested between February and April, and shipped between April and November. They are primarily sun dried and hand picked, which reportedly increases their sugar content and overall quality. About 90 percent of Chilean prune production is exported, with the remaining 10 percent sold in the domestic market. The principal export markets for Chilean prunes in 1996/97 were Brazil (35 percent) and Mexico (28 percent), with much of the remainder going to other Latin American countries.<sup>126</sup> Approximately 12 firms export Chilean prunes, one of which accounts for half of all of Chile's prune exports.

The Chilean raisin crop is estimated to have declined by 25 percent in 1997/98 to about 24,000 tons owing largely to a reduction in the availability of table grapes for dried fruit production as such grapes were diverted to the grape juice concentrate industry. Recently, increased demand for grape juice concentrate has stepped up competition for non-export table grape supplies. In addition, demand for grapes from nonvarietal wine producers has further driven up prices. Finally, unfavorable weather conditions attributed to El Nino delayed maturity and increased humidity, hampering the drying of the crop.<sup>127</sup> Over 90 percent of Chile's raisin production is exported, and because Chilean raisins can bring higher prices in the export market, the domestic market usually receives raisins rejected for export.<sup>128</sup> Based on lower production, exports are estimated to have fallen 19 percent to about 22,000 tons in 1997/98. Latin America absorbs about 65 percent of Chile's raisin exports. Brazil alone has taken as much as 20 percent of Chile's raisin exports. Peru, Colombia, Mexico, and the United States are Chile's other important export markets in the Americas. EU markets, including the Netherlands and the United Kingdom, are also becoming important export markets because of the increasing quality of Chilean raisins.<sup>129</sup>

The dried fruit industry receives no price supports or other direct assistance from the Chilean Government. However, the Government established an Export Promotion Fund to address the difficult economic situation of many Chilean farmers. The fund, which began operation in January 1995, is managed by the Chilean Government export promotion agency, ProChile. The initial funding level was \$10 million.<sup>130</sup>

## *Yugoslavia*

Yugoslavia (Serbia and Montenegro) is the fourth world producer and exporter of dried prunes. Production there fell from 7,000 tons in 1995/96 to 5,700 tons in the 1996/97 season, in part because of credit shortages. Exports are expected to increase from 1,000 tons in 1996/97 to 2,200 tons in 1997/98 because of lower domestic consumption. The Yugoslavian economy had been adversely affected by United Nations sanctions (suspended Oct. 1, 1996). These sanctions limited exports, including those of dried prunes. In 1996/97, about 80 percent of Yugoslavian prunes were exported to Russia in exchange for natural gas. The

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<sup>126</sup> USDA, FAS, Apr. 1998, p. 3.

<sup>127</sup> USDA, FAS, Aug. 1998, p. 2.

<sup>128</sup> USDA, FAS, June 1997, p. 9.

<sup>129</sup> USDA, FAS, June 1997, p. 8.

<sup>130</sup> *Ibid.*, p. 9.

remaining prunes were exported to Austria, Macedonia, and Slovenia.<sup>131</sup> Although the future of the prune industry remains uncertain, the Yugoslavian Government is expected to contribute more financial support next season to the prune industry and other export-oriented sectors. The United States imports a negligible amount of prunes from Yugoslavia. Products of Serbia or Montenegro entering the United States are subject to column 2 duty treatment.<sup>132</sup> In the case of prunes, U.S. column 2 duty rates are approximately twice as high as the general rate, either 4.4 cents per kilogram or 35 percent ad valorem equivalent.

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<sup>131</sup> USDA, FAS, Mar. 1998, p. 40.

<sup>132</sup> Pursuant to Public Law 102-420, Oct. 16, 1992 (106 Stat. 2149), nondiscriminatory treatment was withdrawn from goods that are products of Serbia or Montenegro effective Oct. 31, 1992.

**APPENDIX A**  
**EXPLANATION OF TARIFF AND TRADE**  
**AGREEMENT TERMS**

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# TARIFF AND TRADE AGREEMENT TERMS

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In the *Harmonized Tariff Schedule of the United States* (HTS), chapters 1 through 97 cover all goods in trade and incorporate in the tariff nomenclature the internationally adopted Harmonized Commodity Description and Coding System through the 6-digit level of product description. Subordinate 8-digit product subdivisions, either enacted by Congress or proclaimed by the President, allow more narrowly applicable duty rates; 10-digit administrative statistical reporting numbers provide data of national interest. Chapters 98 and 99 contain special U.S. classifications and temporary rate provisions, respectively. The HTS replaced the *Tariff Schedules of the United States* (TSUS) effective January 1, 1989.

Duty rates in the *general* subcolumn of HTS column 1 are most-favored-nation (now referred to as normal trade relations) rates, many of which have been eliminated or are being reduced as concessions resulting from the Uruguay Round of Multilateral Trade Negotiations. Column 1-general duty rates apply to all countries except those listed in HTS general note 3(b) (Afghanistan, Cuba, Laos, North Korea, and Vietnam), which are subject to the statutory rates set forth in *column 2*. Specified goods from designated general-rate countries may be eligible for reduced rates of duty or for duty-free entry under one or more preferential tariff programs. Such tariff treatment is set forth in the *special* subcolumn of HTS rate of duty column 1 or in the general notes. If eligibility for special tariff rates is not claimed or established, goods are dutiable at column 1-general rates. The HTS does not enumerate those countries as to which a total or partial embargo has been declared.

The *Generalized System of Preferences* (GSP) affords nonreciprocal tariff preferences to developing countries to aid their economic development and to diversify and expand their production and exports. The U.S. GSP, enacted in title V of the Trade Act of 1974 for 10 years and extended several times thereafter, applies to merchandise imported on or after January 1, 1976 and before the close of June 30, 1999. Indicated by the symbol "A", "A\*", or "A+" in the special subcolumn, the GSP provides duty-free entry to eligible articles the product of and imported directly from designated beneficiary developing countries, as set forth in general note 4 to the HTS.

The (CBERA) affords nonreciprocal tariff preferences to developing countries in the Caribbean Basin area to a *Caribbean Basin Economic Recovery Act* id their economic development and to diversify and expand their production and exports. The CBERA, enacted in title II of Public Law 98-67, implemented by Presidential Proclamation 5133 of November 30, 1983, and amended by the Customs and Trade Act of 1990, applies to merchandise entered, or withdrawn from warehouse for consumption, on or after January 1, 1984. Indicated by the symbol "E" or "E\*" in the special subcolumn, the CBERA provides duty-free entry to eligible articles, and reduced-duty treatment to certain other articles, which are the product of and imported directly from designated countries, as set forth in general note 7 to the HTS.

Free rates of duty in the special subcolumn followed by the symbol "IL" are applicable to products of Israel under the *United States-Israel Free Trade Area Implementation Act* of 1985 (IFTA), as provided in general note 8 to the HTS.

Preferential nonreciprocal duty-free or reduced-duty treatment in the special subcolumn followed by the symbol "J" or "J\*" in parentheses is afforded to eligible articles the product of designated beneficiary countries under the *Andean Trade Preference Act* (ATPA), enacted as title II of Public Law 102-182 and implemented by Presidential Proclamation 6455 of July 2, 1992 (effective July 22, 1992), as set forth in general note 11 to the HTS.

Preferential free rates of duty in the special subcolumn followed by the symbol "CA" are applicable to eligible goods of Canada, and rates followed by the symbol "MX" are applicable to eligible goods of Mexico, under the *North American Free Trade Agreement*, as provided in general note 12 to the HTS and implemented effective January 1, 1994 by Presidential Proclamation 6641 of December 15, 1993. Goods must originate in the NAFTA region under rules set forth in general note 12(t) and meet other requirements of the note and applicable regulations.

Other special tariff treatment applies to particular *products of insular possessions* (general note 3(a)(iv)), *products of the West Bank and Gaza Strip* (general note 3(a)(v)), goods covered by the *Automotive Products Trade Act* (APTA) (general note 5) and the *Agreement on Trade in Civil Aircraft* (ATCA) (general note 6), *articles imported from freely associated states* (general note 10), *pharmaceutical products* (general note 13), and *intermediate chemicals for dyes* (general note 14).

The *General Agreement on Tariffs and Trade 1994* (GATT 1994), pursuant to the Agreement Establishing the World Trade Organization, is based upon the earlier GATT 1947 (61 Stat. (pt. 5) A58; 8 UST (pt. 2) 1786) as the primary multilateral system of disciplines and principles governing international trade. Signatories' obligations under both the 1994 and 1947 agreements focus upon most-favored-nation treatment, the maintenance of scheduled concession rates of duty, and national treatment for imported products; the GATT also provides the legal framework for customs valuation standards, "escape clause" (emergency) actions, antidumping and countervailing duties, dispute settlement, and other measures. The results of the Uruguay Round of multilateral tariff negotiations are set forth by way of separate schedules of concessions for each participating contracting party, with the U.S. schedule designated as Schedule XX. Pursuant to the *Agreement on Textiles and Clothing* (ATC) of the GATT 1994, member countries are phasing out restrictions on imports under the prior "Arrangement Regarding International Trade in Textiles" (known as the **Multifiber Arrangement** (MFA)). Under the MFA, which was a departure from GATT 1947 provisions, importing and exporting countries negotiated bilateral agreements limiting textile and apparel shipments, and importing countries could take unilateral action in the absence or violation of an agreement. Quantitative limits had been established on imported textiles and apparel of cotton, other vegetable fibers, wool, man-made fibers or silk blends in an effort to prevent or limit market disruption in the importing countries. The ATC establishes notification and safeguard procedures, along with other rules concerning the customs treatment of textile and apparel shipments, and calls for the eventual complete integration of this sector into the GATT 1994 over a ten-year period, or by Jan. 1, 2005.

