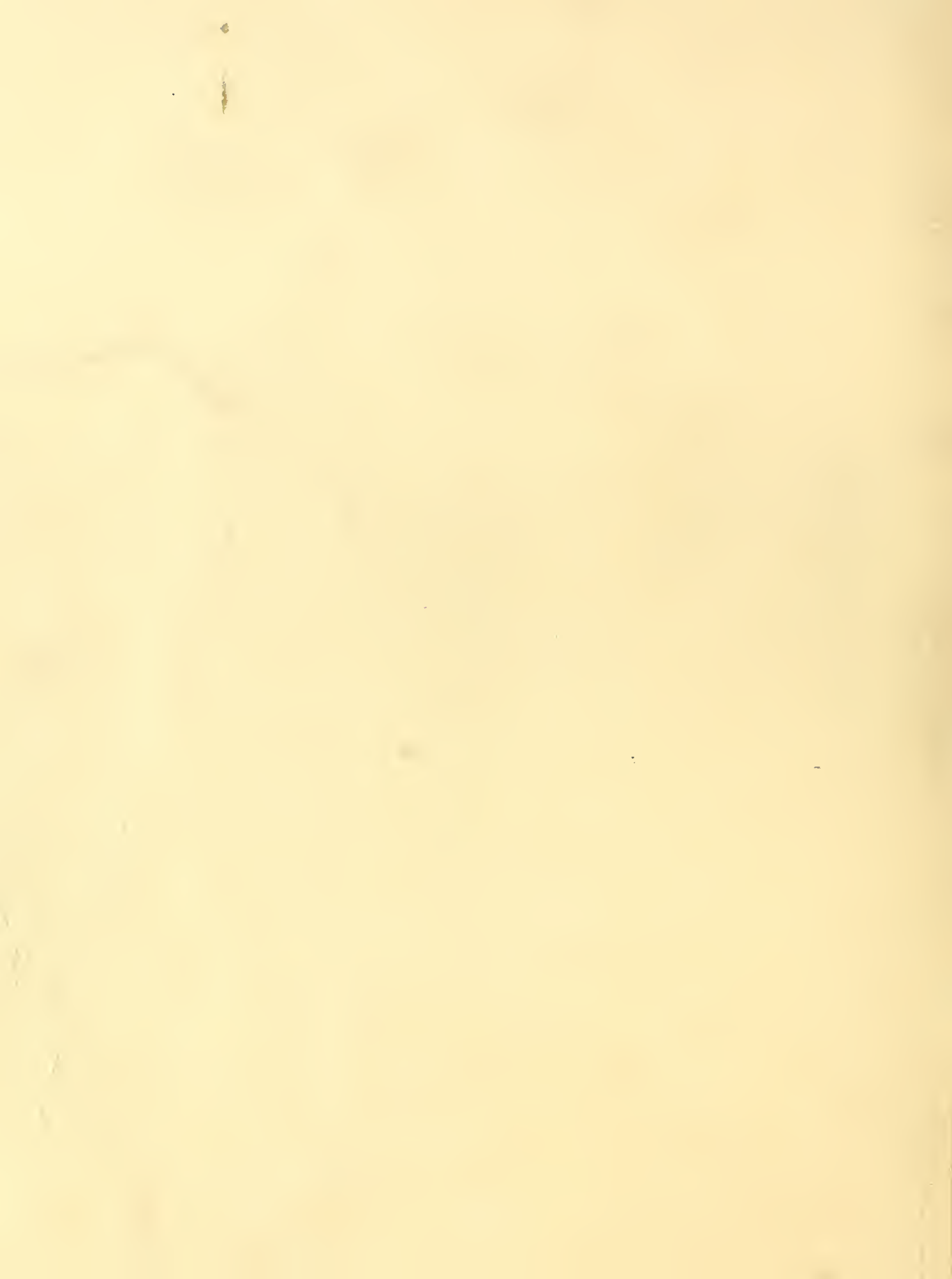


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# FRUIT Situation

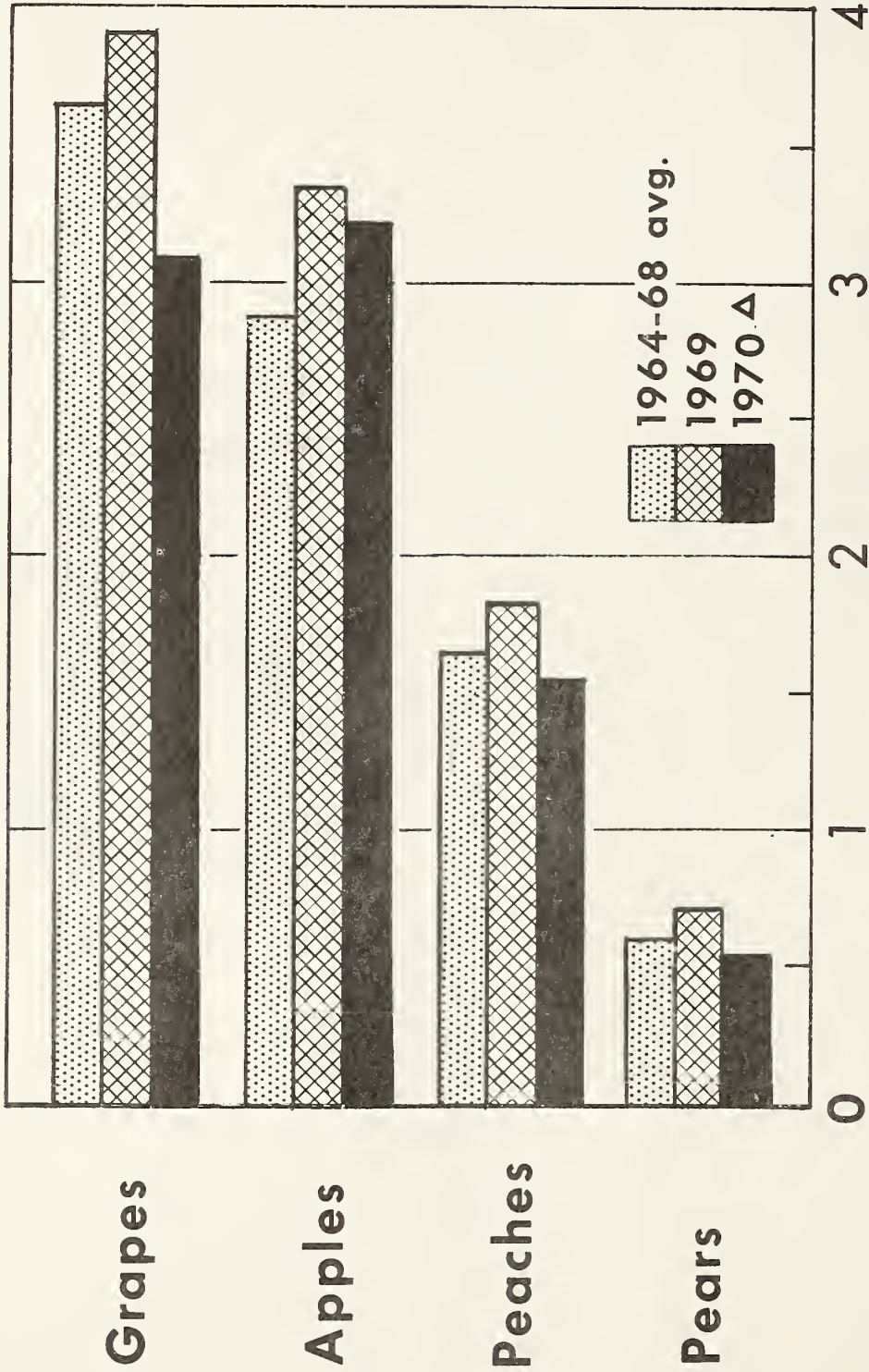
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# PRODUCTION OF DECIDUOUS FRUITS



MIL. TONS

Δ ESTIMATE AS OF AUGUST 1, 1970

# THE FRUIT SITUATION

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Approved by  
The Outlook and Situation Board  
August 26, 1970

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## SUMMARY

Supplies of most fresh and processed deciduous fruits are likely to be smaller in 1970/71. Indicated output of deciduous crops is substantially reduced, but processed stocks were generally large at midyear. Processed citrus supplies, larger than a year ago through summer, by fall will depend largely on the size of the 1970/71 crop, which has developed very well.

### Noncitrus Fruit

Fresh noncitrus fruit supplies this summer and fall are expected to be substantially below the large supplies of a year ago, but about the same as 1968. Production prospects for 10 major crops are down 12 percent. The indicated apple crop is down slightly, while grape production is sharply under last year; peach, pear, and cherry prospects are also off substantially.

Canned fruit supplies in 1970/71 are expected to be under last season's high level. This outlook is based on prospects that a smaller pack will more than offset larger carryin stocks. Supplies of tart cherries, peaches, fruit cocktail, and pears are likely to be somewhat below the levels of recent years. Canned fruit prices generally may exceed last season a little.

Dried fruit prospects are mixed. A decline in the grape crop indicates a smaller raisin pack, but dried prune production in California is expected to be up substantially.

Frozen fruit stocks at the end of July totaled 614 million pounds, above the quantity on hand a year earlier. Processors' receipts indicate that the frozen strawberry pack will exceed last year's small pack. But reduced packs are likely for most other items.



Season's projected tonnages of major noncitrus fruits--for fresh market and processing use

Crop	: 1968	: 1969	: Indi- cated 1970
	<u>1,000 tons</u>		
Apples	: 2,721	3,361	3,204
Apricots	: 149	231	169
Cherries, sweet	: 91	127	110
Cherries, tart	: 137	152	127
Cranberries	: 73	91	94
Grapes	: 3,549	3,903	3,092
Peaches	: 1,795	1,833	1,564
Pears	: 616	712	552
Prunes and plums	: 529	482	612
Strawberries	: 260	243	237
Total	: 9,920	11,135	9,761

Citrus

Fresh citrus shipments will originate principally in California until new crops become available this fall. Remaining supplies of oranges are less than a year ago and prices are higher. The 1970/71 citrus crop has developed excellently in Florida and prospects are good in Texas.

Processed citrus supplies are plentiful. Florida processors' frozen orange juice holdings are substantially above last year's levels, but their canned citrus stocks are down.

Tree Nuts

Production estimates to date for almonds and filberts suggest larger supplies, but the walnut crop is smaller.

**RECENT DEVELOPMENTS AND OUTLOOK**

**APPLES**

A smaller crop is in prospect this year than last. The nation's apple crop as of August 1 was forecast 5 percent below last year's large crop but still the second largest crop since 1937. Idaho, Utah, Washington, and Oregon are expecting smaller crops. California's crop is up slightly. In the Eastern and Central States, indicated production is slightly greater than last year. See table 12 for state crop estimates.

Fresh apple prices during the first half of 1970 were running substantially below last year, but in July climbed to the year earlier level. Early varieties are now being picked. In North Carolina and the Appalachian District, new crop F.O.B. prices during early August were near last year's level.

Regional apple production

Area	: 1968	: 1969	: Indi- cated 1970
	<u>Billion pounds</u>		
East	: 2.49	2.82	2.86
Central States	: 1.05	1.27	1.27
West	: 1.90	2.63	2.28
Total U.S.	: 5.44	6.72	6.41

The shorter 1970 crops of apples and other deciduous fruits may keep apple prices near year earlier levels. However, large supplies of canned and frozen apples and juice on hand will keep pressure on prices.

U.S. exports of fresh apples for the 1969/70 season were 112 million pounds, 48 percent over last year. Imports were 79 million pounds, down 23 percent. Increased supplies and lower prices stimulated exports in 1969/70.

## PEARS

Pear production is forecast at 552,000 tons for this year, 22 percent below 1969 and 10 percent below 1968. Although Washington's crop is sharply above last year, California and Oregon have sharply smaller crops. See table 13. Production of Bartletts in these states is down 21 percent. Harvest of Bartletts started in California about July 15, and during the first half of August in Washington and Oregon. Harvest of pears other than Bartletts began in late August.

In July U.S. average fresh pear prices opened 5 to 8 percent above last year but the volume out of California has been under last year. At mid-August, F.O.B. prices for Yakima Valley pears for fresh market were about one-fifth over last year. Cannery carryin stocks on June 1 amounted to a record large 3.5 million cases, 24 percent more than a year ago. Although a substantial reduction in pack is in prospect from this season's smaller crop, the total supply of canned pears is expected to be close to the average for the preceding 5 seasons.

U.S. exports of fresh pears for the 1969/70 season were 68 million pounds, 85 percent above last year while imports were 23.5 million pounds, 24 percent below.

## PEACHES

The 1970 peach crop is expected to be 3.1 billion pounds, 15 percent less than last year and 13 percent under 1968. The decline is fairly uniform in all production areas. See table 14.

By August 1, the Mid-Atlantic States were actively marketing midseason varieties and in the Central States, early peaches started moving to market. In the West, harvest was underway in all States by August 1, with California harvest of freestones having already peaked and the most active harvest of clingstones expected the end of August.

Peach prices have been falling since June but in mid-August were still well above year-earlier levels. California clingstone peach growers were faced with a serious over supply situation this season. To reduce available tonnage, approximately 9,000 acres of cling peach trees were pulled under provisions of the State marketing program. Further elimination of around 10 percent of the available tonnage was achieved by "green drop." It is anticipated that the canned cling peach pack will be reduced by approximately 25 percent from the level of the preceding season. However, with heavy carryin stocks in canners' hands on June 1, the total supply will be down by about 14 percent from last season's record.

The USDA has made 2 purchases of canned peaches from the 1970 packs for distribution to National School Lunch and other Child Feeding Programs. The total quantity of canned clingstone and freestone peaches, mostly clings, purchased amounted to 1,097,250 cases 6/10's.

## CHERRIES

By August 1 sweet cherry harvest was complete except in a few Western areas. The crop of 109,700 tons is 13 percent below 1969 but well above 1968. The biggest reductions in this year's harvest came in Oregon and California; Washington's and Michigan's crops were close to last year. See table 15. Fresh shipments through early August were about 15 percent under a year ago. Stocks of canned sweet cherries were large at midyear, while stocks of brined sweet cherries were about 15 percent under a year ago.

Production of tart cherries is estimated at 127,100 tons, 16 percent under last year and below 1968. Smaller crops in Michigan and Oregon are responsible for much of the reduction. By late July harvest was complete in many areas and advanced in the rest. At midyear stocks of canned and frozen tart cherries were larger than average.

## GRAPES

The U.S. grape harvest is forecast at 3.1 million tons, 21 percent less than last year and under 1968. A smaller crop in California accounts for most of the reduction. Early season frosts sharply cut the Tokay crop of table grapes and damaged wine varieties. California production of raisin varieties is down 14 percent, wine varieties down 28 percent, and table varieties down 49 percent.

### California grape production

Varietal type	1968	1969	Indicated 1970
	<u>1,000 tons</u>		
Wine	650	775	560
Table	470	665	340
Raisin	2,135	2,160	1,850
Total	3,255	3,600	2,750

Shipments of grapes from California to fresh markets are sharply below last year's level and prices much higher. California deliveries for crushing are expected to be 25 percent below last year. In the leading Great Lake States--New York, Pennsylvania, Ohio, and Michigan--where most of the grapes are crushed--production is expected to be 26 percent above last year. See table 16.

## PLUMS AND PRUNES

Prune production in California is forecast at 180,000 tons (dried basis), 38 percent above 1969 and the largest since 1964. The most active harvest is expected after mid-August. See table 19.

The California plum crop is set at 110,000 tons, 64 percent above 1969 and slightly above

1968. Harvest of most varieties was nearly complete in early August and prices of fresh plums were sharply under last year.

Michigan, Idaho, Washington, and Oregon are expected to produce 51,700 tons of prunes and plums, 42 percent under last year but well above 1968. In early August, Washington fresh prune prices were above a year ago.

## CRANBERRIES

The 1970 cranberry crop is forecast at 1.9 million barrels, up 3 percent from last year and 28 percent above 1968. Of the principal producing States, only Wisconsin's crop is reduced from last year. Last year, about one-fifth of the crop was consumed fresh and the rest processed. See table 18.

## BANANAS

Imports of bananas during the first half of 1970 were about 5 percent under last year. Supplies from Honduras were reduced by hurricane damage. Retail prices have been a little above last year, and about steady near 17 cents per pound since March.

## STRAWBERRIES

The 1970 strawberry crop is estimated at 474.4 million pounds, 2.5 percent under last year. The spring crop in California was nearly the same as last year while Washington and Oregon had slightly larger crops. Michigan's crop is down slightly. See table 17. During August, fresh shipments from California were above last year's volume. All other States have completed harvest.

Unloads including imports of fresh strawberries through mid-August were 15 percent over last year's level and deliveries for freezing through July up 11 percent. During July, farm prices of strawberries for fresh use averaged 13 percent under last year. For the first half of 1970, imports of fresh strawberries were 12 percent over last year and imports of frozen strawberries 19 percent larger.



## ORANGES

Remaining supplies of California-Arizona Valencias on August 15 totaled 8.7 million boxes compared with 11.0 million boxes last year. See table 21 for citrus production. F.O.B. fresh orange prices increased from \$5.30 in June to \$5.63 in July. In mid-August F.O.B. shipping point prices in California were above last year's level. During the first five months of 1970, retail fresh orange prices were below last year, but in June they moved higher.

Fresh orange exports this season through June were nearly at last year's level while imports were 21 percent under a year ago.

## GRAPEFRUIT

Grapefruit on-tree prices during June and July continued more than double last year's level although the crop was only 1 percent smaller. Retail prices of fresh grapefruit during 1970 have consistently been higher than last year. In early August, grapefruit shipments from California and Arizona were dwindling. Fresh grapefruit exports this season through June ran about 6 percent under last year.

## LEMONS

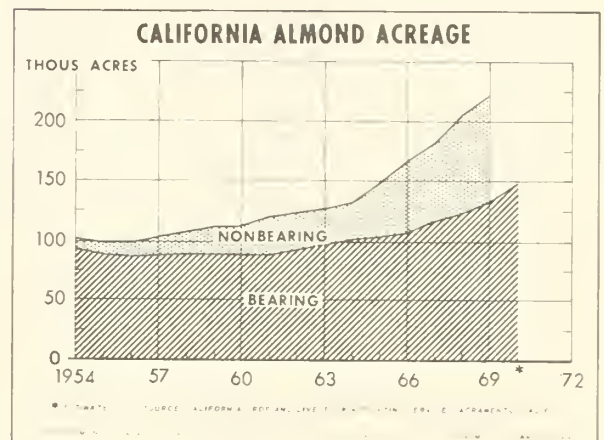
Lemons remaining for harvest in California and Arizona on August 15 totaled 2.3 million boxes compared with 1.7 million last year. Prices for fresh and processing lemons increased from June to July but were still well below last year. Through August 18, the season average F.O.B. price for fresh use was the same as a year ago. This season's crop was equal to last season's but utilization for processing has been down. Fresh lemon exports this season through June were 21 percent above a year ago.

## NEW CROP CITRUS CONDITION

Florida's citrus groves are in excellent condition and droppage has been light. Crop prospects in Texas continue good, the recent hurricane causing no citrus damage. The California crop has not been evaluated yet.

## TREE NUTS

Almond production in California is forecast at 130,000 tons (in shell) this year, 7 percent above 1969 and a new record. Harvest started the second week of August. Although the almond carryin this year is large, most of it is sold, so that stocks are not burdensome. The estimated bearing acreage for 1970 is 147,500 acres, 10 percent more than a year ago. The nonbearing acreage was much larger than preceding years during 1968 and 1969 so production should continue to increase. See table 20 for production data.



For the 1969-70 season through June, U.S. shelled almond exports were 26,017 tons, more than 3 times larger than last season, while imports were down sharply.

California's walnut crop this year is smaller than last year, while Oregon's is larger. The total crop is estimated at 101,800 tons, down 4 percent. The bearing acreage in California is estimated to be larger this year, continuing the uptrend.

The 1970 filbert crop is forecast at 7,760 tons, 5 percent over last year. In July the appearance of disease in many orchards caused a decline from early season prospects.

### Pecan Estimate due in September

The first estimate of 1970 pecan production will be released in the September 11 issue of Crop Production.

Tree nuts in cold storage,  
June 30

Kinds	1969	1970
	Million pounds	
Almonds		
In-shell	0.8	0.8
Nutmeats	16.4	20.6
Filberts		
In-shell	1.1	.7
Nutmeats	1.5	1.6
Walnuts		
In-shell	6.9	13.6
Nutmeats	13.9	17.0
Pecans		
In-shell	1/	45.9
Nutmeats	1/	14.2
Other tree nuts		
In-shell	45.3	4.3
Nutmeats	27.5	15.8
Total		
In-shell	54.1	65.3
Nutmeats	59.2	69.1

1/ Included in other tree nuts.

Note: Figures may not add to totals due to rounding.

Indicated 1970 crops of peaches, pears, apricots, and cherries are below last year, so with large canned stocks on hand it is likely that the 1970/71 pack will be smaller than last year. Although supplies have been larger, shipments of canned fruits also have been heavier for most items; so during the first half of 1970 retail prices were close to last year. Smaller prospective 1970 packs and continued good consumer demand are likely to make prices this fall exceed year-earlier levels.

Exports of canned fruits have increased in the 1969/70 season. Canned peaches and cherries showed remarkable gains, with fruit cocktail and apricots also doing well; pear exports were down. The Common Market received much larger shipments of canned fruits from the United States, resulting in our exports approaching the volume of the mid-sixties.

U.S. canned fruit exports

Season	Peaches:	Fruit cocktail:	Pine-apple
	Million cases (basis 24/2-1/2's)		
1962/63	6.4	3.3	2.4
1963/64	4.7	2.9	2.1
1964/65	5.2	3.7	2.1
1965/66	4.6	2.9	2.3
1966/67	5.1	3.5	2.0
1967/68	2.1	2.1	1.5
1968/69	2.5	2.5	1.3
1969/70	5.0	2.8	1.4

## PROCESSED NONCITRUS FRUIT

The total supply of canned noncitrus fruit during the 1969/70 season was about 10 percent larger than last year, reflecting both a larger pack and larger carryin. Fruits with above-average remaining canned stocks include applesauce, apricots, cherries, figs, fruit cocktail and salad, mixed fruits, peaches, pears, and purple plums. The pack of applejuice was sharply larger than last year. (See tables 22 and 23).

The California prune crop is indicated to be sharply larger than in recent years. The dried carryover for 1970 was smaller than last year, but the new crop should result in a larger 1970/71 supply of dried prunes.

Exports of dried prunes during 1969/70 have been substantially below last year but raisin exports have held close to last year's

level. Dried prune exports may recover some volume with the large prune crop to be harvested this year.

The domestic supply of raisins is expected to be sufficient next year but exports may drop somewhat. Stocks of raisins are currently larger but a smaller grape crop in California is forecast. Wine and table varieties will be in shorter supply than raisin varieties. Utilization of grapes for raisins will be less than last year due to shorter supplies.

The total frozen berry pack in 1970 may be very close to the 1969 pack. Deliveries of strawberries to processors in the 4 states shown below have been running 11 percent above last year, but deliveries of bushberries to processors in primary States lagged about 20 percent. Deliveries of red tart cherries to freezers through July were almost 40 percent larger because of the earlier season. See table 24 for the frozen pack and stocks.

#### Strawberry deliveries for freezing through late July

State	1969	1970
	<u>Million pounds</u>	
California	54.8	65.1
Michigan	12.2	10.0
Oregon	64.0	67.8
Washington	19.8	24.7
Total 4 States	150.8	167.6

Frozen strawberry imports have continued their increase in 1970. The total for 1969 was sharply above 1968 and the first 6 months of 1970 were 19 percent over last year. Stocks

of frozen strawberries are well above last year as a result of more imports and a larger domestic pack.

#### Frozen strawberry imports

Year	Jan.-June	Total
	<u>Million pounds</u>	
1962	28.0	35.5
1963	29.5	35.7
1964	35.0	40.8
1965	41.3	53.9
1966	67.0	85.7
1967	52.5	74.7
1968	55.7	75.2
1969	70.0	93.0
1970	83.5	

#### PROCESSED CITRUS FRUIT

Frozen concentrated orange juice stocks in Florida were near 70 million gallons in late July, more than 30 percent over last year. The 1969/70 orange crop was only slightly larger. But the increase in production came entirely from Florida, where most processing is done. Also, juice yield per box this season has been higher, resulting in a Florida pack of 125 million gallons of FCOJ, about 20 percent over last year. FOB cannery prices of FCOJ have been running about 15-20 percent under last year; movement has been up about 10 percent. See table 25.

Florida stocks of frozen grapefruit concentrate in late July were 1.7 million gallons--50 percent less than last year. Although this year's carryin was above a year ago, the pack has been smaller, giving less total supplies. Movement to late July was about 14 percent above last year.

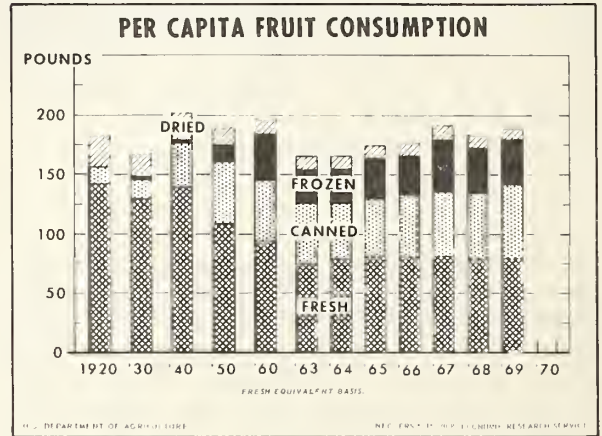


Canned citrus on hand in Florida in late July totaled 8.9 million cases (24/2's), 12 percent under a year ago. Stocks of grapefruit sections are over last year but nearly all other items are in shorter supply. The most significant change in stocks position is for grapefruit juice--down 22 percent from last year. The pack was larger this year but carryin was lighter and movement has been heavier. FOB cannery grapefruit juice prices in late July were \$4.65 for a dozen 46 ounce cans--41 percent above a year ago. In contrast, canned orange juice and grapefruit section prices were under last year's levels.

The movement of chilled orange juice from Florida through late July was 86 million gallons--9 percent more than last year. The pack this season is 14 percent larger than last, and more chilled juice is on hand. Still, retail prices have been close to a year ago, in contrast to frozen concentrate prices, which have dropped below those of last year.

## PER CAPITA CONSUMPTION

Detailed per capita consumption data on individual and broad categories of fresh and processed fruit and tree nuts are presented in tables 1 through 8 of this issue.



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## TRENDS AND PROSPECTS IN THE U.S. FRUIT INDUSTRY

By

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**ABSTRACT:** *The total production of fruits is expected to increase in the years ahead, with sharper gains for citrus than deciduous fruit production. Utilization of fruits for processing will increase moderately at the expense of fresh. Per capita fruit consumption in 1980 is projected to increase considerably as a sharp increase in citrus will offset a slight decrease in deciduous. Changes in production and demand will affect the marketing structure. This includes more direct purchase of fresh fruits by retailers and institutions, integration of grower-shipper operations, increasing importance in the role of trade and promotion associations, and cooperative marketing and bargaining associations.*

**KEY WORDS:** *Fresh fruits, processed fruits, citrus, deciduous, production, utilization, consumption, cooperatives, projections.*

The fruit industry, an important segment of the Nation's agricultural economy, has undergone significant changes during the last 2 decades. The industry has been characterized by such developments as new areas of production and new processed products, improved technology in producing and processing, shifts in consumer demand, better facilities for storage, improved packaging and transportation, and increased retailer buying at shipping points. These changes reflect the nature of the type of demand facing the fruit growers and the changing structure of markets. This article is an overall view of fruit industry developments and prospects. Attention is focused on significant changes over the last 2 decades, and prospects for the future.

#### Geographic and Varietal Shift in Production

Nearly every State is a commercial producer of some kind of fruit, but production is concentrated heavily in relatively few States. Citrus fruit production is especially limited geographically; production of deciduous fruits and berries is distributed more widely.

Wide fluctuation in fruit production has occurred. Total annual fruit production including the major berries increased from an annual average of 16.3 million tons in 1950-52 to 20.6 million tons in 1967-69 (table A). Output of noncitrus fruit, mostly deciduous, rose from 8.8 million to 9.9 million tons. Citrus production showed a remarkable 43 percent increase to 10.4 million tons. Berry output (strawberry and cranberry) is relatively small, but also showed a sharp gain of 31 percent.

Although total fruit production has trended generally upward, there have been shifts in producing areas. Only 3 of the 9 Census of Agriculture geographic regions have shown increases in fruit acreage since 1950.<sup>1/</sup> The Pacific region gained from 37 percent of total fruit acreage in 1950 to 42 percent in 1964.

<sup>1/</sup> New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific.

Table A.--Changes in the absolute and relative importance  
of individual fruits and berries 1950-52 and 1967-69

Kind of fruit	Production		Change in production	Share of total production	
	1950-52 average	1967-69 average		1950-52 average	1967-69 average
	-- <u>1,000 tons</u> --			-- <u>Percent</u> --	
Berries	248	325	+31	1.6	1.6
Strawberries	203	247	+22	1.3	1.2
Cranberries	45	78	+73	0.3	0.4
Deciduous fruit	8,847	9,890	+12	54.2	48.1
Apples	2,478	2,932	+18	15.2	14.3
Apricots	192	176	- 8	1.2	0.9
Avacados	34	57	+68	0.2	0.3
Cherries	228	238	+ 4	1.4	1.2
Dates	17	20	+18	0.1	0.1
Figs	96	50	-48	0.6	0.2
Grapes	3,071	3,507	+14	18.8	17.0
Nectarines	13	62	+377	0.1	0.3
Olives	54	57	+ 6	0.3	0.3
Peaches	1,405	1,658	+18	8.6	8.0
Pears	711	597	-16	4.4	2.9
Persimmons	3	2	-33	*	*
Plums and Prunes	542	531	- 2	3.3	2.6
Pomegranates	3	3	0	*	*
Citrus fruit	7,216	10,355	+43	44.2	50.3
Grapefruit	1,687	2,094	+24	10.3	10.2
Lemons	495	641	+29	3.0	3.1
Limes	10	25	+150	0.1	0.1
Oranges	1/5,024	2/7,595	+51	30.8	36.9
Total	16,311	20,570	+26	100.0	100.0

1/ Includes tangerines.

2/ Includes tangerines, tangelos and Temples.

\* Less than 0.1 percent.

The South Atlantic region showed an even more pronounced increase--up from 22 to 30 percent of the total. The Mountain region had a slight increase in total acreage, but it remained almost the same in relative terms.

Seven principal States (California, Florida, Washington, New York, Michigan, Oregon, and Pennsylvania) have maintained dominance in fruit production, reflecting comparative advantage in climate and to a lesser extent production facilities and marketing outlets. These States accounted for 88 percent of total U.S. fruit tonnage in 1967-69 compared with approximately 86 percent in the early 1950's. For deciduous fruit they accounted for 83 percent of total U.S. production in 1967-69, up from 81 percent in 1950-52. For citrus production, California and Florida are the leaders; small quantities are produced in Texas and Arizona. Florida has led in citrus output every year since 1942-43.

Production of oranges in Florida and California has been marked by divergent trends and the emergence of Florida as the leading producer. California reached a record production of 60 million boxes in 1944-45, then trended slowly downward. Both Navel and Valencia oranges have showed downward trends, but Navel oranges have increased their share of total California orange tonnage--up from less than 40 percent in the early 1950's to nearly 50 percent in recent years. The net production decline for oranges in California was due mainly to the removal of orange groves in southern California for use of the land for urban expansion, airfields, highways, factories, and the like. Thus, orange production in Florida has led California every year since the 1945-46 season. Production in Florida increased sharply in the early 1950's as heavy new plantings, made because of the marked success of frozen concentrate as a new outlet for oranges, started to bear.

The grapefruit crop has remained stable except for 2 peak years (1967 and 1969) with year-to-year fluctuations resulting mostly from varying weather conditions. Seedless grapefruit has accounted for an increasing share of the total grapefruit output

Apples and grapes are the 2 leading deciduous fruits, with grape tonnage above apples in most seasons. U.S. grape production has also fluctuated but generally shown an upward trend. Production rose nearly 14 percent from 1950-52 to 1967-69. Most grapes are grown in West Coast and Great Lakes States. California pro-

duces on the average approximately 90 percent of the total. California grows each of the 3 different varietal groups of grapes--wine, table and raisin. California production has trended generally upward with increases in wine and raisin varieties more than offsetting the declines in table varieties. Output of raisin and wine grapes was up 24 percent and 13 percent respectively in 1967-69 from 1950-52, while production of table grapes was down 21 percent. Raisin grapes took over a larger share of the total California grape crop--increasing from 56 percent to 62 percent during the period. Wine grapes held about the same share--approximately 21 percent.

Apple production fluctuated in a relatively narrow range until the 1969 season when it was the largest since the late 1930's. But some major shifts are in the making. Production by varieties is changing and old plantings are being replaced with dwarf and semi-dwarf trees which have greater per acre yield potentials than standard types do. The pattern of varietal changes has been relatively the same for all 3 regions (Eastern, Central, and Western), but the Western region may have the greatest production potential. Varieties increasing in production--Delicious, Golden Delicious, and McIntosh, are all suitable for fresh market utilization with the Golden Delicious in the East increasingly used for processing. The most dramatic change in apple production in the West and the Nation is with the Delicious and Golden Delicious. During the last 2 decades, production of Delicious and Golden Delicious increased 70 percent and 480 percent respectively.

In addition to apples and grapes the peach and pear crops are also large volume fruits.

The 2 main varietal groups of peaches are freestones and clingstones--most of the latter is processed. Total production has been in an upward trend, increasing from 1.4 million tons in the early 1950's to 1.7 million tons in recent years. This has been due primarily to a substantial increase in production of clingstone peaches in California--the dominant state in production and processing. From 1950-52 to 1967-69 total California cling peach production increased 60 percent. Its share of total U.S. peach production increased from 40 percent to 50 percent, reflecting the rapid increase in demand for processed peaches.

Trends in the production of peaches other than California clings have been less clear. Peach production in 9 Southern States, mostly



for the early-season fresh market, has fluctuated with weather conditions, but has held about 20 percent of total U.S. production. Freestone production in California has been in a mixed trend but its share of U.S. peach production declined from 18 percent in the early 1950's to 14 percent in the late 1960's.

U.S. pear production has shown no marked trend, but occasionally large year-to-year changes have occurred. The commercial growing of pears is concentrated on the West Coast. California's crop, approximately 90 percent Bartletts, is roughly one-half of all U.S. pear production. It has been relatively stable. However, Oregon with a substantial production of "late" varieties, has increased output considerably while Washington has shown a mixed production pattern. For the 3 States combined, Bartlett production has exhibited no significant trend, but has remained the leading variety, comprising approximately 75 percent of all types produced. Eastern and Central States have declined in their share of the total production from approximately 12 percent in the early 1950's to 7 percent in recent years.

Production of strawberries and cranberries, the major berries in this country, has increased; there have also been significant shifts in producing areas.

Strawberry production reached a record 560 million pounds in 1964 and then declined to 459 million pounds the following year, the lowest level since 1955. In the early 1950's, strawberry production for the commercial market was shared by approximately 31 States from coast to coast, but only 26 States have recently produced significant quantities. Important production areas are concentrated in the Far West. Twenty years ago, California, Oregon, and Washington produced approximately 40 percent of the U.S. strawberry crop, but in more recent years their share is about 75 percent. Production in the Southern States has been declining. The strawberry industry is becoming more highly commercialized. Furthermore, competition from Mexican strawberry imports has been increasing rapidly. Imports moved up from 12 million pounds in the early 1950's to 113 million in 1967-69.

Cranberry production has trended upward and reached a record high of 1.8 million barrels in 1969, a gain of 80 percent over the early 1950's. All 5 principal States (Massachusetts, New Jersey, Wisconsin, Washington, and Oregon) have shared in the upward trend.

### Changes in Production Technology

Technological developments and the increased use of capital, fertilizer, and other nonfarm inputs have contributed to a pronounced trend toward fewer, larger, and more efficient farms throughout agriculture. According to Census data, the number of fruit farms declined from 335,000 to 225,000 between 1954 and 1964 and the proportion of fruit farms over 20 acres increased from 10 to 18 percent. As fruit farms have been getting larger, they also have become more highly specialized and commercialized. Total value of fruit produced per farm increased from \$2,600 to \$6,847 during this period.

During the last 2 decades, production per acre for fruits has increased considerably. Yield per bearing acreage for all fruit increased from 5.5 tons in 1950-52 to 7.0 tons in 1967-69, a gain of 27 percent. For deciduous fruit, yield per bearing acreage had the more pronounced gain, up 30 percent during the same period. Citrus yield per bearing acreage, generally influenced more by weather conditions, gained approximately 10 percent.

The generally increasing yield trend clearly illustrates the effect of advances in production technology both in cultural practices and harvesting techniques. Improved cultural practices include better sprays for disease, insect, and weed control. More widespread use of irrigation and fertilizer led to improved productivity. The hormone treatments to control fruit set and spacing and preconditioning of plantings, varietal differences and mechanical aids are all harvesting considerations of present-day orchards and vineyards. Tree shakers together with catching frames have been used for cherries, plums and prunes. In addition growers are using more bulk containers, straddle carriers, fork trucks, and many other devices to reduce labor needs. With the replacement of farm labor by mechanical aids, together with other technological advances, labor efficiency on the fruit farm (as measured by production per man-hour) has increased sharply, 60 percent since 1950 and 40 percent since 1960.

### Shifts in Utilization

There has been a striking shift in utilization of both citrus and deciduous fruits over the last 20 years. The content of the "market basket" has been changing with the increased demand for convenience foods, and processing has become a larger outlet for those producing fruit as the convenience aspects appeal



to the more affluent buyers. At the same time the fresh market has been declining in importance. The proportion of total fruit sales for fresh use declined from approximately 45 percent in 1950-52 to 35 percent in recent years.

Sales of citrus fruits for fresh market declined more than those of noncitrus items--from 50 percent of the total to 32 percent. This was primarily caused by the sharply increased use of Florida oranges in processed form. After frozen concentrated orange juice was introduced commercially in the 1945/46 season, it resulted in rapid and dramatic changes in the Florida orange industry. The proportion of Florida oranges used for frozen concentrated juice has been increasing every year and is now approximately 70 percent of the crop. A significant increase in use of Florida oranges for chilled products, especially juice, has also occurred. Florida packed only 17 million gallons of chilled orange juice in the mid-1950's but last year's total pack reached approximately 90 million gallons. While there has been a sharp increase in use of oranges for frozen concentrated and chilled juice, the volume of Florida oranges used for canning has decreased substantially during the period. In California, fresh use of oranges is still dominant, but the trend in processing use is upward.

Florida grapefruit, accounting for approximately 75 percent of U.S. output, has also undergone changes in uses. Fresh use of Florida grapefruit has not changed greatly since the early 1960's, but use for processing has increased considerably, and now comprises approximately 60 percent of total sales. The canned grapefruit juice pack, accounting for half of the Florida grapefruit used for processing, has trended upward. However, frozen grapefruit concentrate has not achieved the popularity of frozen orange concentrate as an outlet.

Lemon production has fluctuated between 13 million and 19 million boxes during the last 10 years, but fresh use has not exhibited a marked trend. Changes in fresh use have been relatively small with annual quantity approximately 9 million boxes. In contrast, change in use for processing from year to year often has been large. To a considerable extent, changes in crop size have resulted in like changes in volume processed.

The relationship between fresh and total sales for deciduous fruit has been shifting in the same direction as citrus fruit. A steadily

decreasing percentage of total quantity sold has gone into fresh market disposition throughout the last 2 decades. From a high of 40 percent in the 1950-52 period, total fresh sales declined to only 34 percent in 1967-69.

Total deciduous fruit sold for processing use has trended upward. But within the processing use, there have been shifts in the relative importance of canning, drying, freezing, and other types of processing (crushing, brining, etc.). With the exception of drying, all processing uses have increased in both absolute and relative terms. Since the early 1950's the proportion of processed sales of deciduous fruit for drying has declined from 35 to 25 percent, while canning has increased from 30 to 35 percent of the total, and for other types of processing, use has gained from 35 to 40 percent.

This general increase in the share of deciduous fruit for canning has included most of the major types. Currently canning accounts for almost all sales of pears for processing, and over 90 percent of the peaches sold for processing. Although the proportion of apples used for canning has not been at the high level of peaches and pears, it also has trended upward from approximately 43 percent in the early 1950's to 50 percent in the late 1960's. Substantial increases in canned apples and apple-sauce generally contributed to the increase. The quantity of grapes used for canning, while relatively small, also has been increasing in relative importance. General increases in use of deciduous fruits for juice, jam, jelly, wine, and as ingredients for baked goods, fruit cocktail, and ice cream have also contributed to the increased processing utilization.

The quantity of deciduous fruit used for freezing has been relatively small, but since the early 1950's it has increased considerably in both absolute and relative terms. The major outlets for frozen deciduous fruits are in pies and related bakery goods.

#### Trends in Consumption

Past utilization trends provide the basis for examining the changing patterns of fruit consumption. Changes in consumption patterns generally reflect the interaction of various factors such as production, price, income, population, demand and consumer preference and taste.

The annual per capita disappearance of all fruits, fresh and processed combined on a fresh equivalent basis, declined from a record high of 225 pounds in 1946 to approximately 200 pounds in the early 1950's. The record high of 225 pounds in 1946 was partly the result of restocking pantry shelves and retail stores following the wartime scarcity of processed items, especially canned fruits and fruit juices-- and was moderately to substantially above actual consumption.<sup>2/</sup> During the last 2 decades, annual per capita consumption of all fruits combined fluctuated from a high of 203 pounds in 1952 to a low of 165 pounds in 1964 (table B). Citrus accounted for 40 to 50 percent of per capita consumption of all fruits.

Fresh per capita consumption trended downward from 114 pounds in 1950-52 to 79 pounds in 1967-69. It fell from approximately 58 to 42 percent of total per capita consumption on a fresh equivalent basis. The decrease reflected lower consumption of both citrus and noncitrus. But the drop in fresh citrus consumption was more than that of deciduous. Fresh citrus consumption declined from 45 to 30 pounds since the early 1950's and that of deciduous fell from approximately 70 to 50 pounds. Among individual kinds of fresh fruit, per capita consumption of oranges, lemons, apples, and pears decreased relatively more than that of other fruits.

In contrast, per capita consumption of processed fruit increased sharply, from 85 pounds (fresh equivalent basis) in 1950-52 to 108 pounds in 1967-69. This was due mainly to the sharp increase in processed citrus consumption. Consumption of processed deciduous fruit has remained relatively stable at around 50 pounds (fresh equivalent basis), but shifts have occurred among forms in which the products are used--dried, canned and frozen. Decreased consumption of dried deciduous fruit was offset by increased use of canned and frozen forms. Consumption of dried fruits decreased in both absolute and relative terms. Sharpest drops were in raisins and prunes, the major items.

Per capita consumption of canned deciduous products trended moderately upward from 1950 to 1969. Canned juice accounted for most of the increase, from approximately 7 pounds in 1950-52 to 10 pounds in 1967-69,

<sup>2/</sup> Ben H. Pubols, "A Half Century of Fruit Consumption," Fruit Situation, TFS-140, August 1961, p. 22.

while canned fruit remained relatively stable at approximately 24 pounds (fresh equivalent basis). The sharp increase in canned apple juice consumption was the main contributor to higher per capita consumption of canned deciduous. Frozen deciduous consumption also increased from 3 to 4 pounds (fresh equivalent basis) during this period.

Processed citrus consumption increased in both absolute and in relative terms. In 1950-52 per capita consumption of processed citrus was about 37 pounds (fresh equivalent basis), 44 percent of the total processed fruit. By 1967-69 it reached 59 pounds (fresh equivalent basis), 68 percent of the total. It had reached a record high of about 63 pounds (fresh equivalent basis) in 1967 when the Florida orange crop was record large. The rise in per capita consumption of processed citrus over the past 2 decades was marked by a sharp increase in frozen items.

The increase in frozen citrus consumption was mainly attributed to the successful introduction of frozen concentrated orange juice in the mid-1940's. Per capita consumption of frozen concentrated orange juice increased steadily every year to a peak of 5.1 pounds (product weight basis) in 1962. Consumption declined in the following 2 years due to the sharp decline in the Florida orange crop as a result of a severe freeze in December 1962. However, a record 5.5 pounds (product weight basis) was reached in 1967 following a record orange crop in Florida in the 1966/67 season. Currently, frozen orange concentrate accounts for about 90 percent of per capita frozen citrus consumption.

Chilled citrus products also have a great impact on processed citrus consumption. Since the introduction of chilled juice in the mid-1950's, per capita consumption has increased from 0.94 to 4.20 pounds (product weight basis). The major item is chilled orange juice.

Changes in composition of per capita fruit consumption during the last 20 years can be traced to several factors. The substitution of processed for fresh fruit is closely associated with changes in consumer tastes and preferences, living patterns which include more working wives, convenience in shopping, and changes in kitchen appliances. Processed fruits are essentially convenient and time-saving foods. As family income rises consumers are willing to pay higher prices if necessary to obtain these "built-in" services. The income



Table B.--Fruits, fresh weight equivalent: Per capita consumption, 1950-69

Year	Fresh			Processed			Canned			
	Citrus	Non-citrus	Total	Citrus	Non-citrus	Total	Citrus <u>1/</u>	Non-citrus	Total	
	<u>Pounds</u>									
1950-54	43.7	67.4	111.1	39.3	47.5	86.8	1.7	23.2	24.9	
1955-59	36.6	60.3	96.9	49.1	50.1	99.2	2.3	24.2	26.5	
1960-64	28.4	55.2	83.6	46.5	49.5	96.0	2.5	24.0	26.5	
1965	29.0	51.9	80.9	43.9	49.4	93.3	2.5	24.2	26.7	
1966	29.0	52.2	81.2	46.6	48.8	95.4	3.0	23.2	26.2	
1967	31.5	49.2	80.7	62.6	47.8	110.4	3.1	23.1	26.2	
1968	26.2	51.8	78.0	55.8	48.8	104.6	3.0	23.4	26.4	
1969 <u>2/</u>	28.5	50.6	79.1	59.2	<b>51.1</b>	110.3	2.5	25.1	27.6	
	Canned juice			Frozen			Dried	All fruits		
	Citrus <u>3/</u>	Non-citrus	Total	Citrus	Non-citrus	Total	non-citrus	Citrus	Non-citrus	Total
	<u>Pounds</u>									
1950-54	17.9	7.6	25.5	19.8	3.0	22.8	13.7	83.0	114.9	197.9
1955-59	16.4	9.7	26.1	30.5	3.9	34.4	12.5	85.7	110.4	196.1
1960-64	13.6	10.3	23.9	30.4	4.0	34.4	11.2	74.9	104.7	179.6
1965	11.8	10.0	21.8	29.6	4.1	33.7	11.1	72.9	101.3	174.2
1966	15.6	10.2	25.8	28.0	3.9	31.9	11.5	75.6	101.0	176.6
1967	19.5	9.1	28.6	40.0	4.2	44.2	11.4	94.1	97.0	191.1
1968	18.5	10.6	29.1	34.3	4.2	38.5	10.6	82.0	100.6	182.6
1969 <u>2/</u>	22.4	11.1	33.5	34.3	4.2	38.5	10.7	87.7	101.7	189.4

1/ Includes chilled fruit beginning 1956.

2/ Preliminary.

3/ Includes chilled juice beginning 1955.

elasticity of demand for these services is considerably higher than that of food itself.<sup>3/</sup> Furthermore, the shift from fresh to processed fruit also undoubtedly reflected increased urbanization.

Changes in retail prices of different product forms are, of course, also important. During the last 10 years, retail prices of fresh fruits and vegetables increased 31 percent, compared to an increase of only 15 percent for processed products. (Retail price indexes for fruits alone are not available, but indications are that the increase in prices for fresh was much larger than for processed.)

Development of new or modified product forms as well as quality improvement in processed products have also contributed greatly to the increase in consumption of processed fruits. The development of frozen concentrated and chilled orange juice and the increased concentration of frozen concentrate from 42° to 45° brix are examples. Furthermore, with the availability of new processing technology, consumers are afforded a wide array of choices throughout the year.

#### Changes in Marketing and Processing Industry

As a result of the changes in production and demand, many adjustments have taken place in marketing and processing of fruits.

The growth of supermarkets with their emphasis on mass merchandising of uniform quality products at low cost plus increased geographic concentration of fruit production, larger farm units, and improved transportation have resulted in a major shift to direct marketing of fruits at the shipping points. The old marketing system from grower through country buyer to terminal market, wholesaler and retailer no longer prevails. Most growers deliver to nearby shipping points where they have also become the assemblers and first handlers. At the same time, they are instrumental in determining farm prices, the number and quality of initial marketing services, and interregional shipment patterns.

<sup>3/</sup> "Marketing Fruits and Vegetables," Agricultural Markets In Change, Agricultural Economics Report 95, July 1966, Econ. Res. Serv., U.S. Dept. Agr., P. 195.

As a result of increases in retailers' direct purchases at shipping points, the volume handled by wholesalers has been declining. According to Census of Business data, fresh fruit shipping point assemblers sold 80 percent of supplies direct to wholesalers in 1948, 70 percent in 1954, and 57 percent in 1963. In contrast, retailers received only 11 percent of total supplies direct from shipping point assemblers in 1948, but their direct shipments increased to approximately 16 percent in 1954 and 28 percent in 1963. The decline in volume sold to wholesalers has been accompanied by a reduction in the number of wholesale firms. At the same time, fruit auctions at terminal markets have been disappearing.

With the growth of selling at shipping points, each individual grower is often in a weak bargaining position when he deals with only a few typically large shippers in his area. So cooperative marketing associations play a large role in handling the growers' produce. Cooperatives marketed an estimated 25 percent of all fresh fruit supplies during 1964. They marketed major shares of certain fruits: 59 percent of the fresh oranges, 34 percent of the fresh grapefruit, 21 percent of the apples, 19 percent of cherries and practically all of the cranberry crop.<sup>4/</sup> Although the number of fruit and vegetable cooperative marketing associations has been declining, down from 595 in 1952 to 416 in 1964, the average volume of business of marketing cooperatives doubled from \$622,000 in 1952 to \$1,255,000 in 1964.<sup>5/</sup> Much of the decline in number of marketing cooperatives has been the result of mergers.

Shifts in consumption from fresh to processed fruits have been also associated with changes in marketings of fruits for processing use. As an increasing proportion is marketed for processing use, growers want to be reasonably assured of markets and prices of their products, and packers want the growers to maintain quality and insure a dependable supply. Thus, the use of contracts between producers and processors is becoming more important. According to an Economic Research Service

<sup>4/</sup> Food from Farmer to Consumer, Report of the National Commission on Food Marketing, June 1966, P. 51.

<sup>5/</sup> Charles H. Meyer, "Cooperatives in the Fruit and Vegetable Industry" Service Report 93, Jan. 1968, Farmers Coop. Serv., U.S. Dept. Agr., P. 41.



survey, contracts covered approximately 75 percent of the raw fruit and vegetable products going to freezers in 1964 and 70 percent of that for canners. The survey also indicated that since 1954, 30 percent of the packers using contract procurement reported an increase in proportion of raw products acquired in this manner. The trend toward more contracting probably has continued in recent years.

To gain bargaining power in establishing contract terms with the processors, growers in many areas have formed cooperative bargaining associations. Most such associations have been organized since 1950. Although the membership of fruit and vegetable bargaining associations only changed slightly between 1954 and 1964, the value of crops negotiated increased from \$35 million to \$120 million.<sup>6/</sup> It further increased to \$164 million in 1969.<sup>7/</sup>

Changes in the marketing system and equipment have brought striking changes in the transportation of fresh fruits. An increasing portion of fresh fruit moves to market by truck rather than rail. During the last 10 years, truck shipments have increased from 49 to 60 percent of total fresh fruit shipments while the share moved by rail has decreased from approximately 51 to 39 percent. The increased share of truck shipment reflects improvements in highways, increases in truck size with well-equipped mechanical refrigeration units to keep fruits in better quality, and lower costs of trucking for short hauls. In addition, as decentralization of marketing activity increases, truck shipments are particularly adapted to receive fruits directly from producing areas. However, railroads began piggy-back shipments of fresh fruits from some areas in the 1950's and the recent data indicate that such shipments have become increasingly important. Recently the quantity of fresh fruit shipped by air has been getting larger and in 1969, air shipment accounted for approximately 1 percent.

Increased demand for processed fruits is not only having significant impact on the structure of fruit marketing for processing use, but there also have been many changes in the processing industry. The number of plants (establishments) canning fruits was much smaller in 1967 than 10 years earlier, although

the utilization of fruits for processing has been increasing. But the number of plants freezing and drying these products increased during the same period. According to Census of Manufacture data, the number of canning plants decreased from 1,630 in 1958 to 1,228 in 1967, but the volume processed increased substantially. This generally reflects the increased canning plant capacity. Many canning firms have built new plants designed to improve efficiency or have modernized and enlarged existing facilities. The value of production in 1967 was \$3.5 billion compared with only \$2.3 billion in 1958.

The number of plants freezing fruits and vegetables increased from 426 to 650 between 1958 and 1963, but decreased to 610 in 1967. The value of shipments also increased substantially and proportionally more than the number of plants during the same period. The number of plants drying and dehydrating fruits and vegetables during the same period also increased slightly--generally reflecting more plants dehydrating vegetables. The quantity of dried and dehydrated fruits declined from approximately 850 to 795 million pounds between 1963 and 1967. (Bureau of the Census started to collect this information in 1963.)

Processing fruit cooperatives have maintained a large share of the manufactured fruit product business. A survey by USDA's Farmer Cooperative Service in 1964 indicated that cooperatives packed approximately 46 percent of dried fruits (figs, prunes, and raisins), 31 percent of canned deciduous fruit and juice, 18 percent of frozen deciduous fruit, berry and juice, and 42 percent of processed citrus fruit and juice. In some cases, cooperatives are dominant. Between 1952 and 1964, the business volume of fruit and vegetable processing cooperatives increased from \$171.6 million to \$476.3 million, although the number of cooperatives processing fruits declined.<sup>8/</sup>

The growth of large regional cooperatives has brought about increased attention to improvement of processing efficiency and more effective product marketing. In plants processing fruits and vegetables, output per man-hour gained 67 percent between 1947-49 and 1964.<sup>9/</sup> Most plants use forklift trucks and conveyor systems and other mechanical devices to handle

<sup>6/</sup> Ibid., P. 35.

<sup>7/</sup> Farmers Coop. Serv., U.S. Dept. Agr.

<sup>8/</sup> Ibid., P. 25.

<sup>9/</sup> Ibid., P. 198.

raw materials and finished products to reduce the man-hour requirements. New equipment and economies of scale in processing operation also contributed to lower unit labor costs. With increases in volume of processing of fruit and improvement in plant and equipment, the value added by manufacture has continued to increase. Data from the Census of Manufactures show that between 1963 and 1967 value added by manufacture for canning, freezing, and drying increased 38 percent, 42 percent, and 55 percent respectively.

### Prospective Developments for Fruit Industry in the 1970's

With the preceding review of trends on production, utilization, consumption and marketing as background, further changes can be anticipated for the 1970's.

Greatly increased efficiency together with continued increases in use of capital will contribute to more specialization and commercialization in fruit production. Many small and marginal growers will go out of business so that the total number of fruit farms is likely to decrease and more of the production will be concentrated in larger commercial holdings. The number of farms with larger sales will increase. Relatively high costs for labor will lead to increased substitution of machinery. Mechanized cultural and harvesting operations will be increasingly evident in orchards. As a result, fruit production per acre and output per man-hour can be expected to increase further.

Deciduous fruit production in the long run probably will increase slightly less than population growth. But total citrus production can be expected to increase considerably more than population.

Due to climatic conditions, citrus production will continue to be concentrated in Florida, California, Texas, and Arizona. The increase in citrus production in Florida in the 1970's is likely to be larger than that in California as heavy plantings in Florida after the severe 1962 freeze plus continued subsequent increase should become more productive after they reach 15 years age. The total Florida orange crop in 1968 could be around 40 percent above the 1969 level.

The production of other citrus is also likely to increase but not as much as oranges. Other specialty citrus like tangelos, tangerines and

murcotts have enjoyed wide acceptance which has resulted in favorable prices. This has stimulated increased plantings in recent years. Thus, a substantial increase in total citrus production--perhaps 30 to 35 percent--can be expected in 1980.

Production of deciduous fruit will continue to be concentrated heavily in West Coast States, and California will remain the dominant producer--probably further increasing its share of the market. Among the important deciduous fruits, apple production will be trending upward at a faster rate than population growth. More dwarf and semi-dwarf apple trees planted during the past few years are expected to have greater per acre production potentials. Production of grapes, peaches, and pears will also increase but probably not as fast as population growth. Use of strawberries will continue to expand but the domestic industry will face keen competition from foreign sources. Imports of strawberries from Mexico have increased rapidly in recent years, and further increases are likely. Domestic strawberry growers will face increasing labor costs and the level of U.S. production may decline somewhat during the 1970's.

Increased demand for processed fruits has stimulated the processing industry to improve plants and equipment. And the rate of capital expenditures by manufacturers during the 1970's will likely accelerate. Some small packers will either discontinue operations or merge with larger, more efficient operating units. More efficient processing, development of new products, and improvements in the product quality will contribute to expanded processing of fruits. For example, since frozen concentrated and chilled orange juices were developed, use of oranges for processing has had a dynamic growth.

Additional new methods of freezing, such as freeze drying and dehydrofreezing, are likely to stimulate further use of processed fruits. Freeze drying is commonly used to process berries and other fruits for use by bakeries and other food manufacturers. The dehydrofreezing process, used to remove the water before freezing to reduce weight and bulk, is potentially a big outlet for fruit. In the decade ahead, it seems that processing of fruits by freezing will grow more rapidly than canning. Drying will continue to decline in relative importance.



A rising standard of living, increased employment of women, and the desire for more leisure time will contribute to the growing demand for convenience foods, such as processed fruits. Besides, processed fruits with their reduced perishability, standardization, and longer shelf life provide the housewife with year-round choice for many fruits.

The total demand for fruit will increase in the years ahead due mainly to the population growth and continued increase in personal disposable income. Per capita fruit consumption is expected to increase some during the 1970's, with most of the increase in citrus. (Figure I) Per capita deciduous consumption is likely to decline slightly. Shifts in consumer preference from fresh to processed fruits will continue. Some further reduction in fresh use of both citrus and deciduous fruit is likely.

citrus items like canned fruits may also increase, but canned orange juice--already being edged out by frozen and chilled juice--will likely decline.

Per capita consumption of deciduous fruit in fresh weight equivalent is projected to decline slightly and account for slightly less than half of total fruit consumption in 1980 compared with about 54 percent in 1969. Among the processed deciduous forms, per capita frozen fruit consumption--a relatively small quantity now--is expected to increase substantially, but use of canned deciduous fruit is likely to remain relatively stable. Per capita consumption of canned deciduous fruit juice may grow gradually. Continued increases in canned or bottled apple juice and cider can be expected as a result of a prospective large increase in apple production during the 1970's. Dried fruit, long a year-round staple, will likely continue a downward trend.

As technological changes take place in the production, processing and transportation of fruits, marketing systems will continue to change. Many large fruit growers, due to increasing specialization and commercialization, will get bigger and increase their share of production. Many growers are likely to extend their operation into shipping. And on the other hand, shippers will integrate with growing. The grower-shipper integration will stimulate the growth of more grower-shipper firms which will locate in concentrated areas of production.

With retail chains getting larger through mergers and opening of new stores, more of the fresh fruits going to nearby markets likely will be bought direct. Large institutional buyers will also tend to buy direct. However, wholesalers with a decreasing share of the market will continue to exist as outlets for specialty and prepackaged items, and will offer a wider range of services, including back-up supplying for the supermarkets.

As the size and number of large buyers are likely to increase in the 1970's, increasing numbers of growers are likely to take collective action to maintain or improve their competitive and bargaining positions. Thus, the role of trade and promotion associations, and cooperative marketing and bargaining associations will grow in importance.

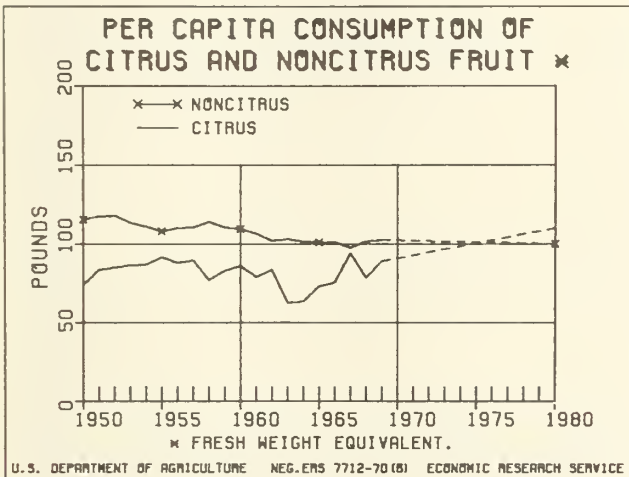


Figure I

Per capita consumption of citrus in fresh weight equivalent is projected to increase about a fourth by 1980. Citrus will likely account for approximately a little over half of per capita fruit consumption by 1980, compared with 46 percent in 1969. Among the citrus items, per capita consumption of frozen concentrated orange juice will continue as a leading item, and will increase substantially. With a considerable increase in Florida orange production in prospect, a larger proportion likely will be processed for frozen concentrated orange juice. Because of the convenience and good flavor, chilled orange juice will likely gain in importance. Other processed

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Table 1. ---Fresh fruits: Per capita consumption, fresh weight basis, 1920-69 1/2

Year	Citrus fruits										Other fruits										Total 2/			
	Oranges	Tangerines	Tangelos	Lemons	Limes	Grapefruit	Total citrus	Apples	Apricots	Avocados	Bananas	Cherries	Cranberries	Figs	Grapes	Nectarines	Peaches	Pears	Pineapples	Plumprunes		Strawberries	Total other	
	Pounds																							
1920	16.7	0.4	---	3.8	3/	5.1	26.0	63.0	0.2	---	15.7	2.7	0.4	3/	8.0	---	14.0	6.7	0.6	---	2.1	3.2	53.6	142.6
1921	20.8	.6	---	3.9	3/	5.2	30.5	36.1	.2	---	16.9	2.7	.4	3/	6.5	---	9.7	4.5	.7	---	2.4	3.7	16.2	112.8
1922	15.2	.4	---	3.7	3/	5.3	24.6	57.5	.2	---	17.5	2.5	.5	3/	8.9	---	18.1	7.1	.7	---	2.5	4.7	62.7	144.8
1923	22.0	.4	---	3.6	3/	6.3	32.5	54.7	.3	---	16.7	2.3	.6	3/	9.0	---	16.5	6.4	.9	---	3.7	4.5	57.3	144.5
1924	23.0	.4	---	3.8	0.1	6.6	33.9	54.1	.2	0.1	17.6	1.9	.5	3/	9.0	---	16.5	6.4	1.0	---	2.1	4.7	60.0	148.0
1925	17.5	.5	---	4.0	.1	6.6	28.9	46.3	.2	.1	20.0	1.8	.6	3/	8.3	---	12.7	6.0	1.2	---	2.5	4.7	57.0	132.2
1926	20.8	.5	---	4.2	.1	5.8	31.4	62.3	.2	.1	19.5	2.5	.6	3/	9.7	---	18.1	7.8	1.2	---	3.5	3.9	67.1	160.8
1927	22.1	.7	---	3.1	3/	6.3	32.2	37.4	.3	3/	20.9	1.8	.4	3/	9.1	---	10.7	5.5	.9	---	2.8	4.4	56.4	126.0
1928	19.6	.6	---	3.7	3/	5.6	29.5	48.9	.3	.1	22.4	1.8	.4	3/	10.9	---	16.5	6.8	.8	---	3.3	4.4	67.7	146.1
1929	27.5	1.1	---	3.5	3/	7.7	39.8	39.7	.4	.1	21.8	1.3	.4	0.1	9.1	---	13.0	5.7	.9	---	2.5	4.4	59.7	139.2
1930	19.9	.6	---	4.1	3/	6.6	31.2	42.1	.4	.1	20.6	1.2	.4	.1	8.7	---	10.3	6.7	1.0	---	3.8	3.3	56.6	129.9
1931	27.6	1.7	---	3.5	.1	9.4	42.3	51.7	.5	.1	18.7	1.4	.5	.1	8.4	---	21.5	7.2	1.1	---	2.8	4.0	66.3	160.3
1932	24.6	1.4	---	3.2	.1	7.4	36.7	39.2	.5	.1	16.8	1.7	.4	.1	7.8	---	9.3	5.3	.9	---	2.8	4.3	50.0	125.3
1933	26.6	1.4	---	3.5	3/	7.9	39.4	40.0	.3	.1	13.9	1.5	.5	.1	6.9	---	10.0	5.1	.6	---	2.3	4.1	45.4	124.8
1934	30.7	1.4	---	3.6	.1	7.7	39.8	25.3	.4	.2	16.5	1.2	.3	.1	7.4	---	11.3	6.8	.6	---	2.5	3.5	57.2	116.3
1935	30.7	1.4	---	4.1	.1	8.3	44.6	32.9	.4	.4	20.1	1.2	.3	.1	7.4	---	14.5	6.2	.6	---	2.7	3.5	57.7	133.2
1936	30.1	1.5	---	4.3	.1	10.2	46.2	27.6	.4	.2	18.9	1.0	.3	.1	6.3	0.1	10.9	6.0	.8	---	2.7	3.9	51.8	134.2
1937	26.6	2.1	---	3.4	.1	12.3	44.5	33.6	.5	.3	20.5	1.0	.4	.1	7.4	---	11	6.6	1.0	---	2.6	5.4	61.8	139.6
1938	33.5	1.6	---	4.3	.1	9.6	49.1	23.4	.6	.3	23.1	.8	.3	.1	7.4	---	13.1	6.4	.8	---	2.1	3.9	61.2	134.7
1939	41.1	2.3	---	4.2	.1	13.7	61.4	30.7	.5	.2	18.8	1.2	.4	.1	6.0	.2	15.3	6.5	.9	---	2.7	5.3	56.1	148.2
1940	39.4	1.6	---	4.5	.1	11.1	56.7	29.7	.4	.3	17.3	1.1	.3	.1	6.3	.1	13.1	7.1	.8	---	2.5	3.3	52.7	139.1
1941	38.9	1.8	---	4.7	.1	12.2	57.7	31.7	.4	.4	16.2	1.1	.4	.1	6.2	.2	10.6	6.4	.8	---	2.4	3.1	56.6	146.0
1942	39.8	1.4	---	4.3	.1	12.1	57.7	28.1	.5	.4	8.0	1.1	.3	.1	5.2	.2	18.4	5.4	.4	---	2.4	3.4	44.2	130.0
1943	39.7	2.9	---	5.0	.2	12.5	60.3	24.9	.5	.4	6.9	1.3	.3	.1	5.2	.2	18.4	5.4	.2	---	2.2	1.8	33.2	118.4
1944	47.6	2.5	---	4.9	.2	13.0	68.2	25.5	.9	.3	9.0	1.3	.2	.1	4.2	.2	16.9	7.1	.6	---	2.7	1.2	46.4	140.1
1945	45.1	2.7	---	5.1	.2	13.5	66.6	22.9	.9	.3	12.1	1.1	.2	.1	4.2	.2	16.2	7.3	.9	---	2.3	1.3	50.4	139.9
1946	37.9	2.4	---	4.7	.1	14.0	59.1	23.0	.8	.3	14.7	1.0	.2	.1	2.7	.2	14.8	6.8	1.2	---	2.7	1.6	51.8	133.9
1947	41.5	1.9	---	4.8	.1	13.9	62.2	22.4	.6	.3	23.1	.8	.3	.1	6.8	.2	14.8	5.9	.9	---	2.3	1.9	56.1	143.7
1948	35.7	1.8	---	4.5	.1	12.3	54.4	26.3	.6	.3	21.4	.8	.3	.1	6.8	.2	11.3	4.4	.8	---	2.1	1.8	50.9	131.6
1949	30.7	2.1	---	4.1	.1	10.9	47.9	24.7	.6	.3	20.8	1.1	.4	.1	5.2	.2	11.6	5.5	.6	---	2.3	1.6	50.3	122.9
1950	26.9	2.2	---	4.0	.1	8.5	41.7	22.7	.3	.4	20.9	.8	.4	.1	5.4	.2	7.8	4.1	.7	---	1.7	1.6	44.4	108.8
1951	28.8	2.0	---	4.0	.2	10.8	49.8	25.7	.4	.5	20.2	.7	.3	.1	2.9	.1	9.4	4.1	.5	---	2.2	1.8	46.5	118.0
1952	27.9	2.1	---	3.7	.1	11.1	45.1	21.6	.4	.5	20.6	.8	.2	.3	6.0	.2	10.8	4.4	.5	---	1.7	1.6	47.7	114.4
1953	24.3	2.3	---	3.7	.2	10.5	44.1	20.9	.4	.5	19.5	.7	.3	.3	4.8	.2	10.3	3.9	.4	---	2.0	1.4	44.4	109.4
1954	24.3	2.1	---	3.6	.1	11.7	42.0	20.0	.3	.8	18.9	.7	.3	.3	5.1	.2	10.0	3.7	.5	---	1.4	1.2	43.1	105.1
1955	24.2	2.2	---	3.4	.1	11.5	41.8	19.6	.4	.4	17.8	.7	.3	.3	5.0	.3	6.1	3.4	.7	---	1.7	1.2	38.0	99.4
1956	22.0	2.0	0.1	3.1	.2	11.1	39.1	18.9	.2	.3	18.0	.5	.3	.3	4.7	.2	9.0	3.7	.6	---	1.5	1.5	40.9	98.9
1957	24.2	1.9	.1	3.3	.1	10.1	37.1	19.3	.3	.7	18.0	.6	.3	.3	3.9	.4	8.6	3.7	.6	---	1.9	1.7	40.3	96.7
1958	17.6	1.0	.1	3.0	.2	9.1	31.0	22.5	.2	.5	17.2	.5	.2	.3	4.1	.3	10.5	3.5	.6	---	1.1	1.5	40.5	94.0
1959	19.8	1.5	.1	2.9	.1	9.6	34.0	21.1	.3	.9	18.2	.4	.2	.3	3.8	.4	9.7	3.2	.5	---	1.6	1.4	40.6	95.7
1960	19.3	1.2	.2	2.9	.1	10.0	33.7	18.2	.2	.4	20.5	.4	.2	.3	3.9	.5	9.5	2.6	.6	0.1	1.2	1.3	41.4	93.3
1961	16.1	1.8	.2	2.8	.1	9.8	30.8	16.4	.2	.6	19.9	.5	.3	.3	3.5	.6	9.7	2.6	.4	.1	1.3	1.6	41.3	88.5
1962	15.6	1.6	.4	2.8	.1	9.0	29.5	17.4	.2	.6	16.3	.5	.3	.3	4.0	.5	8.1	2.6	.4	.1	1.3	1.6	36.4	83.3
1963	11.9	.9	.3	2.5	.1	6.4	22.1	16.7	.2	.6	16.3	.6	.2	.3	4.0	.6	7.6	2.0	.4	.1	1.3	1.6	35.6	74.4
1964	14.3	1.3	.3	2.6	.1	7.5	26.1	17.8	.2	.4	16.8	.6	.2	.3	3.6	.7	6.0	2.4	.5	.1	1.6	1.4	34.7	78.6
1965	16.4	1.5	.4	2.4	.1	8.2	29.0	16.3	.1	.6	17.9	.4	.2	.3	3.8	.6	6.9	1.8	.5	.1	1.4	1.3	35.6	80.9
1966	16.0	1.4	.4	2.3	.1	8.4	29.0	15.9	.2	.8	18.3	.5	.2	.3	3.8	.7	6.3	2.4	.5	.1	1.2	1.3	36.3	81.2
1967	18.0	1.6	.6	2.2	.1	9.0	31.5	16.1	.1	.1	18.3	.5	.2	.3	3.1	.5	4.8	1.8	.5	.1	1.3	1.5	33.1	80.7
1968	14.1	1.1	.7	2.2	.1	8.0	26.2	15.6	.1	.7	18.5	.5	.1	.3	3.4	.6	6.7	2.0	.5	.1	1.2	1.0	36.2	78.0
1969 4/	16.6	1.2	.5	2.2	.2	7.8	28.5	15.0	.1	.5	17.8	.5	.2	.3	3.2	.6	6.9	2.4	.6	.1	1.0	1.7	35.6	79.1

1/ All data on calendar-year basis with exception of citrus fruits, beginning 1941, which start October or November prior to year indicated. Civilian consumption only, beginning 1941. Beginning 1960, includes Alaska and Hawaii. 2/ Beginning 1934 includes only apples from commercial areas sold and used in farm households. 3/ Less than 0.05 pound. 4/ Preliminary.



Table 2.--Canned and chilled fruits: Per capita consumption, product weight basis, 1920-69 1/

Year	Canned fruit												Total	Chilled citrus sections 2/	
	Apples and apple-sauce	Apricots	Berries	Cherries	Cranberries	Figs	Salad and cocktail	Peaches (including spiced)	Pears	Pine-apple	Plums and prunes	Olives			Citrus sections
	Pounds														
1920	0.9	0.9	0.6	0.5	3/	3/	---	2.1	1.1	2.8	0.2	0.3	---	9.4	---
1921	1.0	.7	.6	.2	3/	3/	---	1.9	.4	2.9	.2	.3	3/	8.2	---
1922	.8	.6	.6	.5	3/	3/	---	2.0	.3	2.2	.2	.3	3/	7.5	---
1923	1.1	.5	.6	.6	3/	0.1	0.1	2.4	.4	2.5	.1	.5	0.1	9.0	---
1924	.9	.5	.8	.6	0.1	.1	.2	2.1	.3	2.7	.1	.4	.1	8.9	---
1925	.9	.7	.6	.6	3/	.2	.2	3.2	.6	3.4	.2	.4	.1	11.1	---
1926	.9	.8	.8	.9	.1	.2	.2	3.2	.9	3.2	.2	.4	.2	12.0	---
1927	.8	.7	.7	.4	.1	.2	.3	4.2	.7	3.6	.2	.5	.2	12.6	---
1928	1.0	.8	.7	.7	.1	.2	.3	3.7	.7	3.3	.3	.6	.2	12.6	---
1929	1.1	.8	.7	.7	.1	.1	.4	2.9	.9	3.2	.4	.6	.4	12.3	---
1930	.8	.8	.5	.8	.1	.1	.4	3.2	.9	3.8	.3	.5	.6	12.8	---
1931	.7	.6	.7	.7	.1	.1	.2	2.0	.7	4.1	.3	.5	.2	10.9	---
1932	.8	.6	.3	.7	.1	3/	.3	2.8	.9	2.7	.2	.4	.4	10.2	---
1933	.9	.7	.4	1.0	.1	3/	.5	2.6	1.0	3.5	.4	.4	.3	11.8	---
1934	1.0	.7	.5	.8	.2	.1	.5	2.6	1.0	3.6	.4	.5	.6	12.5	---
1935	1.0	.7	.5	1.0	.2	3/	.7	2.8	1.0	3.9	.6	.5	.5	13.4	---
1936	1.2	1.0	.5	1.1	.3	.1	.9	3.5	1.3	4.9	.7	.5	.7	16.7	---
1937	1.0	1.0	.3	1.0	.3	.1	.9	2.7	1.1	3.5	.6	.4	.6	13.5	---
1938	1.1	1.0	.5	1.0	.4	.1	1.1	3.5	1.2	3.6	.5	.6	.8	15.4	---
1939	1.2	.9	.4	1.2	.5	.1	1.2	3.5	1.1	4.3	.6	.5	.6	16.1	---
1940	1.5	.9	.4	1.4	.6	.1	1.6	4.4	1.5	4.7	.5	.7	.8	19.1	---
1941	1.4	1.0	.5	1.3	.5	.1	1.5	3.3	1.5	4.4	.6	.6	1.1	17.8	---
1942	1.7	1.1	.6	1.1	.6	.3	1.9	4.4	1.3	2.8	.6	.6	.3	17.3	---
1943	1.6	.3	.4	.7	.3	.2	1.3	3.2	1.4	2.0	.6	.6	3/	12.6	---
1944	1.0	1.0	.1	.9	.3	.1	1.0	1.3	.4	2.0	.5	.7	3/	9.3	---
1945	1.1	1.3	.1	.8	.5	.3	2.4	4.9	.9	.8	.7	.6	3/	14.4	---
1946	1.4	2.8	.2	1.8	.8	.2	2.7	5.4	1.7	3.4	.7	.7	.5	22.3	---
1947	1.7	.9	.3	1.0	.8	.3	2.1	4.5	1.2	3.3	.6	.7	.3	18.2	---
1948	1.9	1.0	.5	1.2	.5	.1	2.2	4.6	1.2	3.4	.5	.8	1.0	18.9	---
1949	2.1	1.1	.6	1.5	.5	.1	2.3	4.9	1.4	3.0	.5	.5	.9	19.4	---
1950	2.4	1.1	.4	1.8	.7	.1	2.6	5.9	1.6	3.0	.4	.8	.8	21.6	---
1951	2.3	.9	.4	1.4	.8	.2	2.0	4.8	1.2	3.0	.3	.8	.9	19.0	---
1952	2.7	.9	.4	1.5	.8	.2	2.4	5.1	1.7	3.1	.4	.9	.7	20.8	---
1953	2.4	1.1	.4	1.5	.8	.1	2.1	5.3	1.7	3.3	.5	.9	.9	21.0	---
1954	2.5	1.0	.5	1.4	.8	.1	2.1	5.6	1.7	3.4	.4	.7	1.0	21.2	---
1955	2.8	1.1	.3	1.5	.9	.1	2.4	5.5	1.9	3.4	.5	.9	1.2	22.5	---
1956	3.1	1.1	.3	1.2	.9	.1	2.6	5.3	1.6	3.3	.5	.6	1.1	21.7	0.2
1957	3.1	1.0	.3	1.3	.8	.1	2.6	5.8	1.8	3.2	.5	1.0	.8	22.3	.3
1958	3.3	.9	.3	1.3	.8	.1	2.6	5.8	2.0	3.3	.4	.8	1.1	22.7	.2
1959	3.2	.9	.3	1.3	.8	.1	2.7	5.9	1.9	3.1	.3	.8	.8	22.1	.2
1960	3.4	1.1	.2	1.1	.6	.1	2.7	6.1	2.0	3.2	.3	.8	1.0	22.6	.4
1961	3.6	1.2	.2	1.2	1.0	.1	2.7	6.2	1.8	3.1	.2	1.0	.9	23.2	.4
1962	3.4	.9	.2	1.2	.8	.1	2.8	6.3	2.1	2.8	.4	.8	.9	22.7	.4
1963	3.6	1.1	.1	1.0	.8	.1	2.8	6.5	2.0	3.2	.3	.8	.6	22.9	.3
1964	3.7	1.0	.1	1.3	.7	.1	2.6	6.5	1.6	3.2	.3	1.0	.8	22.9	.4
1965	3.8	1.1	.1	1.1	.8	.1	2.9	6.6	1.9	3.1	.3	.7	.9	23.4	.3
1966	3.2	1.1	.2	1.0	.8	.1	3.0	6.2	1.9	3.1	.4	.8	1.0	22.8	.5
1967	3.7	.9	.2	.8	.8	.1	2.7	6.0	1.8	3.1	.4	.9	1.1	22.5	.5
1968	3.5	.9	.1	.7	.9	.1	3.1	6.2	1.5	3.6	.3	.6	1.1	22.6	.4
1969 4/	3.6	1.1	.1	1.0	.8	.1	3.2	6.6	2.2	3.4	.3	1.2	.8	24.4	.4

1/ Data on pack year, 1920-42; calendar-year basis, 1943 to date. Civilian consumption only beginning 1941. Beginning 1960, includes Alaska and Hawaii. 2/ Produced commercially in Florida. 3/ Less than 0.05 pound. 4/ Preliminary.

Table 3.--Canned and chilled fruit juices (excluding frozen): Per capita consumption, product weight basis, 1920-69 1/

Year	Canned											Chilled 2/					
	Citrus						Pineapple					Total 4/	Orange	Grape-fruit	Total		
	Orange	Grape-fruit	Blended orange and grape-fruit	Lemon and lime	Tangerine	Citrus concentrate 3/	Total	Apple	Fruit nectars	Grape	Single strength					Concentrate 3/	Prune
1920										0.59				0.59			
1921										.34				.34			
1922										.16				.16			
1923										.29				.29			
1924										.12				.12			
1925										.16				.16			
1926										.17				.17			
1927										.32				.32			
1928										.13				.13			
1929		0.05					0.05			.28				.33			
1930	0.01	.05					.06			.27				.33			
1931	.02	.11					.13			.30				.43			
1932	.01	.11					.12			.31				.45			
1933	.02	.16					.18			.27				.45			
1934	.07	.21					.28		0.01	.22			0.01	.52			
1935	.22	.62		0.01			.85		.01	.29	0.82		.02	1.99			
1936	.20	.56	0.02	.01			.79		.05	.35	1.17		.04	2.40			
1937	.28	1.29	.06	.04			1.67		.20	.39	2.05		.18	4.49			
1938	.19	1.55	.12	.05			1.91		.26	.42	1.85		.20	4.64			
1939	.23	2.61	.15	.03			3.02	0.05	.13	.54	2.11		.07	5.92			
1940	.68	2.34	.25	.02			3.29	.10	.24	.65	2.52		.06	7.23			
1941	.74	3.08	.42	.04		0.42	4.70	.20	.25	.59	2.67		.06	8.50			
1942	.94	2.63	.48	.08		.44	4.57	.37	.34	.64	2.14		.43	8.54			
1943	.27	3.03	.27	.02		.43	4.02	.44	.14	.71	1.58		.46	7.43			
1944	1.46	4.80	1.11	.03		.19	7.59	.62	.21	.33	.94		.57	10.33			
1945	2.75	3.19	1.08	.06		.76	7.84	.26	.06	.43	1.12		.89	10.94			
1946	4.15	4.93	2.36	.10	0.11	.97	12.62	.35	.19	.49	2.36		.90	17.77			
1947	4.11	3.38	2.28	.07	.21	1.09	11.04	.26	.29	.68	2.26		.75	15.63			
1948	5.03	3.83	2.28	.08	.16	1.88	13.26	.20	.37	.65	1.85		.74	17.07			
1949	3.87	2.84	1.86	.10	.22	1.82	10.71	.47	.55	.57	2.03		.80	15.13			
1950	3.37	2.02	1.01	.07	.23	1.95	8.65	.56	.92	.50	1.89		.93	13.45			
1951	3.81	2.73	1.30	.08	.20	1.86	9.98	.50	.84	.50	2.43		.78	15.03			
1952	3.58	2.05	.95	.09	.15	1.63	8.45	.54	.62	.82	2.82		.87	14.12			
1953	3.13	1.97	.86	.09	.13	1.65	7.83	.51	.56	.73	2.80		.94	13.37			
1954	3.08	2.28	.89	.08	.10	1.36	7.79	.71	.57	.73	2.41		.97	13.18			
1955	2.95	2.18	.78	.11	.09	1.16	7.27	.54	.73	.73	2.78		1.01	13.06	0.94		0.94
1956	2.42	2.12	.66	.09	.09	1.57	6.95	.66	1.27	.85	2.69		1.26	13.68	1.05	0.07	1.12
1957	2.45	1.94	.58	.12	.09	1.66	6.84	.68	1.37	.59	2.32	0.79	1.21	13.80	1.72	.05	1.77
1958	2.66	1.74	.72	.12	.07	1.62	6.93	.77	1.24	.84	2.38	1.29	1.05	14.50	1.60	.04	1.64
1959	1.91	1.56	.49	.15	.08	1.07	5.26	.97	1.03	.78	1.92	1.27	.87	12.10	1.87	.03	1.90
1960	2.12	1.51	.51	.13	.07	1.45	5.79	.89	1.06	.76	2.15	1.25	1.06	12.96	2.10	.02	2.12
1961	1.70	1.39	.45	.13	.06	1.52	5.25	.95	.52	.71	2.07	1.19	1.05	11.74	1.65	.03	1.68
1962	1.92	1.48	.47	.13	.06	1.05	5.11	1.05	.52	.65	2.09	1.18	1.06	11.66	2.19	.08	2.27
1963	1.69	1.30	.42	.13	.04	1.70	5.28	1.21	.36	.63	2.61	1.74	1.11	12.94	1.14	.03	1.17
1964	1.17	1.09	.30	.11	.04	1.61	4.32	1.49	.28	.65	1.97	1.64	1.11	11.46	1.29	.07	1.36
1965	1.24	1.39	.30	.10	.02	.97	4.02	1.53	.38	.74	1.84	1.19	1.16	10.86	1.90	.05	1.95
1966	1.53	1.73	.34	.10	.02	.99	4.71	1.17	.40	.63	1.92	1.73	1.10	11.66	3.04	.14	3.18
1967	1.57	2.33	.39	.10	.02	1.08	5.49	1.35	.39	.67	1.76	.96	1.09	11.71	4.15	.23	4.38
1968	1.19	2.22	.32	.10	.01	1.35	5.19	1.69	.37	.55	2.14	1.51	.75	12.20	3.96	.24	4.20
1969 5/	1.30	2.92	.33	.10	.01	2.52	7.18	2.40	.40	.57	1.63	1.65	.73	14.56	3.86	.29	4.15

1/ Civilian consumption beginning 1941. Calendar-year basis except for citrus juices which are on a pack-year basis beginning in October or November of year prior to that indicated, and grape juice which in the years 1920-33 and 1948 to date begins November prior to year indicated. Beginning 1960, includes Alaska and Hawaii.

2/ Chilled fruit juice produced commercially from fresh fruit in Florida; does not include reconstituted frozen juice or fresh juice produced for local sale.

3/ Single-strength equivalent.

4/ Includes berry juice as follows: 1940--0.37; 1941--0.03; 1942--0.05; 1943--0.08; 1944--0.07; 1945--0.34; 1946--0.86; and 1947--0.35.

5/ Preliminary.

Table 4.--Frozen fruits: Per capita consumption, product weight basis, 1937-69 1/

Year	Black-berries	Blue-berries	Rasp-berries	Straw-berries	Other berries	Apple	Apricots	Cherries	Grapes and pulp	Peaches	Miscellaneous 2/	Total
Pounds												
1937	0.02	0.03	0.04	0.21	0.03	0.01	---	0.16	0.01	---	0.01	0.52
1938	.11	.04	.18	.29	.03	.04	0.01	.19	.05	0.01	.07	1.02
1939	.03	.08	.09	.39	.08	.01	3/	.29	.05	.03	.08	1.13
1940	.07	.07	.09	.44	.11	.02	3/	.32	.07	.06	.03	1.28
1941	.08	.07	.14	.52	.07	.04	3/	.24	.08	.04	.06	1.34
1942	.04	.01	.13	.58	.08	.07	.01	.29	.08	.05	.05	1.39
1943	.03	.02	.14	.32	.01	.12	.04	.27	.04	.10	.04	1.13
1944	.05	.09	.17	.33	.10	.30	.17	.32	3/	.18	.26	2.01
1945	.09	.01	.09	.24	.15	.49	.40	.26	.04	.38	.20	2.31
1946	.14	.13	.15	.38	.12	.60	.30	.35	.12	.56	.23	3.08
1947	.11	.09	.21	.73	.13	.34	.14	.56	.10	.31	.42	3.14
1948	.14	.11	.19	.79	.12	.33	.10	.62	.10	.28	.13	2.91
1949	.08	.04	.16	.98	.15	.28	.06	.51	.06	.17	.10	2.59
1950	.10	.14	.22	.89	.12	.29	.06	.60	.05	.16	.13	2.76
1951	.06	.04	.21	1.03	.10	.21	.04	.60	.03	.16	.09	2.57
1952	.07	.14	.22	1.25	.11	.28	.03	.63	.04	.20	.12	3.10
1953	.08	.11	.14	1.28	.09	.24	.04	.58	.08	.22	.14	2.99
1954	.10	.06	.13	1.48	.12	.31	.04	.52	3/	.17	.11	3.04
1955	.12	.19	.24	1.51	.10	.41	.04	.66	.10	.26	.15	3.78
1956	.07	.19	.20	1.57	.13	.51	.04	.69	.04	.23	.29	3.96
1957	.05	.11	.14	1.61	.06	.34	.05	.66	.13	.24	.27	3.66
1958	.10	.08	.23	1.61	.26	.39	.03	.52	.12	.14	.15	3.63
1959	.10	.12	.20	1.37	3/	.39	.04	.62	.08	.22	.23	3.37
1960	.14	.10	.21	1.28	.12	.40	.07	.71	.03	.24	.20	3.50
1961	.10	.16	.20	1.38	.08	.37	.06	.64	.12	.27	.19	3.57
1962	.14	.19	.17	1.42	.11	.32	.06	.74	.08	.30	.23	3.76
1963	.14	.21	.17	1.56	.09	.41	.07	.71	.08	.32	.14	3.90
1964	.12	.18	.17	1.31	.07	.44	.06	.62	.12	.24	.26	3.59
1965	.07	.19	.13	1.39	.07	.45	.06	.78	.06	.32	.16	3.68
1966	.07	.15	.15	1.40	.03	.39	.10	.74	.05	.30	.17	3.55
1967	.12	.17	.17	1.40	.07	.55	.10	.54	.05	.30	.23	3.70
1968	.17	.25	.18	1.42	.12	.49	.08	.53	.12	.29	.19	3.84
1969 4/	.14	.20	.14	1.42	.10	.54	.06	.60	.07	.29	.20	3.76

1/ Civilian consumption beginning 1941. Beginning 1960, includes Alaska and Hawaii.

2/ Includes plums, prunes, pineapple, noncitrus purees, and miscellaneous fruits and berries; prior to 1946 includes small quantities of citrus juices.

3/ Less than 0.005 pound.

4/ Preliminary.



Table 5 .--Frozen citrus juices: Per capita consumption, product weight and single strength basis, 1947-69 1/

Year	Orange		Grapefruit		Blend		Lemon	
	Product : weight	Single : strength	Product : weight	Single : strength	Product : weight	Single : strength	Product : weight	Single : strength
	<u>Pounds</u>							
1947	0.05	0.08	---	---	---	---	0.01	0.01
1948	.08	.21	2/	2/	---	---	.01	.01
1949	.90	3.07	2/	2/	2/	2/	.02	.02
1950	1.36	4.74	0.05	0.18	0.04	0.14	.03	.03
1951	1.89	6.64	.07	.25	.05	.18	.03	.03
1952	3.06	10.76	.04	.14	.03	.11	.06	.11
1953	3.36	11.82	.07	.25	.03	.11	.10	.20
1954	3.59	12.65	.08	.28	.04	.14	.11	.26
1955	4.08	14.33	.08	.28	.05	.18	.10	.25
1956	3.96	13.96	.10	.35	.04	.14	.10	.23
1957	4.32	15.23	.15	.53	.04	.14	.13	.31
1958	3.31	11.67	.16	.56	.03	.11	.05	.18
1959	4.11	14.49	.23	.81	.04	.14	.11	.29
1960	4.43	15.62	.16	.56	.03	.11	.12	.35
1961	4.34	15.30	.14	.49	.01	.04	.05	.13
1962	5.10	17.98	.16	.56	.01	.04	.05	.13
1963	3.36	11.84	.12	.42	.01	.04	.06	.16
1964	3.00	10.58	.13	.46	2/	2/	.05	.15
1965	4.00	14.10	.15	.53	.01	.04	.05	.13
1966	3.82	13.47	.16	.56	2/	2/	.04	.09
1967	5.53	19.49	.22	.78	2/	2/	.05	.13
1968	4.83	17.03	.15	.53	2/	2/	.04	.09
1969 3/	4.86	17.13	.14	.49	2/	2/	.04	.09
Year	Lemonade base		Limeade		Tangerine		Total	
	Product : weight	Single : strength	Product : weight	Single : strength	Product : weight	Single : strength	Product : weight	Single : strength
	<u>Pounds</u>							
1947	---	---	---	---	---	---	0.06	0.09
1948	---	---	---	---	---	---	.09	.22
1949	---	---	---	---	---	---	.92	3.09
1950	0.04	0.03	---	---	---	---	1.52	5.12
1951	.15	.12	---	---	---	---	2.19	7.22
1952	.33	.28	---	---	0.01	0.04	3.53	11.44
1953	.49	.36	---	---	.03	.11	4.08	12.85
1954	.52	.38	0.03	0.11	.03	.11	4.40	13.93
1955	.52	.38	.07	.25	.04	.14	4.94	15.81
1956	.55	.41	.07	.25	.04	.14	4.86	15.48
1957	.58	.43	.04	.14	.06	.21	5.32	16.99
1958	.71	.53	.03	.11	.03	.11	4.32	13.27
1959	.85	.63	.04	.14	.04	.14	5.42	16.64
1960	.76	.56	.04	.14	.04	.14	5.58	17.48
1961	.61	.45	.04	.14	.05	.18	5.24	16.73
1962	.48	.36	.04	.14	.08	.28	5.92	19.49
1963	.44	.33	.02	.07	.05	.18	4.06	13.04
1964	.51	.38	.06	.21	.05	.18	3.80	11.96
1965	.51	.38	.02	.07	.05	.18	4.79	15.43
1966	.44	.33	.02	.07	.05	.18	4.53	14.70
1967	.48	.36	.03	.11	.05	.18	6.36	21.05
1968	.41	.30	.02	.07	.04	.14	5.49	18.16
1969 3/	.39	.29	.02	.07	.04	.14	5.49	18.21

1/ Civilian consumption. Beginning 1960, includes Alaska and Hawaii. Product weight includes concentrated and single strength juices. Concentrated fruit juices converted to single strength on basis of 3.525 pounds to 1; lemonade base, 0.84 to 1 through 1952 and 0.74 beginning 1953. 2/ Less than 0.005 pound. 3/ Preliminary.

Table 6. --Dried fruits: Per capita consumption, product weight basis, pack years, 1920-69 1/

Pack year	Apples	Apricots	Dates 2/	Figs	Peaches	Pears	Prunes 3/	Raisins And currants	Total
<u>Pounds</u>									
1920	0.2	0.1	0.3	0.4	0.5	0.1	1.7	3.4	6.7
1921	.1	.1	.4	.6	.4	4/	1.2	2.7	5.5
1922	.3	.2	.5	.5	.5	.1	1.9	2.6	6.6
1923	.1	.2	.4	.4	.4	4/	1.4	2.6	5.5
1924	.2	.2	.5	.5	.4	.1	1.5	3.0	6.4
1925	.1	.1	.6	.5	.3	.1	1.8	2.8	6.3
1926	.1	.2	.4	.5	.4	.1	1.6	2.8	6.1
1927	.1	.2	.4	.4	.2	.1	2.3	2.6	6.3
1928	.1	.2	.4	.4	.4	.1	1.7	2.9	6.2
1929	.2	.2	.4	.4	.2	.1	1.3	2.5	5.3
1930	.1	.2	.4	.3	.4	0	1.9	2.1	5.4
1931	.1	.3	.4	.2	.2	4/	1.6	1.9	4.7
1932	.1	.3	.4	.3	.3	4/	1.7	2.3	5.4
1933	.1	.3	.4	.3	.3	4/	1.5	2.3	5.2
1934	.1	.2	.5	.3	.3	4/	1.6	2.1	5.1
1935	.1	.2	.5	.3	.3	4/	2.2	2.3	5.9
1936	.2	.3	.5	.3	.4	4/	1.8	1.9	5.4
1937	.2	.3	.4	.4	.3	0	2.2	2.0	5.8
1938	.1	.1	.4	.4	.3	4/	1.6	2.6	5.5
1939	.3	.4	.4	.3	.3	.1	2.1	2.5	6.4
1940	.1	.1	.4	.4	.4	4/	2.0	2.6	6.0
1941	4/	.2	.2	.4	.1	0	1.6	1.8	4.3
1942	0	0	.2	.5	0	0	1.3	2.2	4.2
1943	.1	4/	.2	.4	.1	4/	2.1	3.0	5.9
1944	.1	.2	.4	.4	.2	4/	1.8	3.0	6.1
1945	.2	.1	.4	.4	.3	.1	2.0	2.5	6.0
1946	.2	.2	.5	.3	.1	4/	1.4	1.8	4.5
1947	.2	.1	.3	.3	.2	4/	.9	1.7	3.7
1948	.1	.2	.5	.3	.1	4/	.8	1.9	3.9
1949	.2	.2	.4	.4	.1	4/	1.0	1.8	4.1
1950	.15	.15	.56	.34	.11	.01	1.06	1.68	4.06
1951	.13	.12	.51	.32	.12	.01	.81	1.79	3.81
1952	.11	.10	.51	.30	.10	.01	.96	1.73	3.82
1953	.11	.13	.46	.31	.10	.01	.84	1.80	3.75
1954	.12	.10	.51	.31	.10	.02	.95	1.76	3.87
1955	.11	.14	.51	.30	.09	.01	.71	1.73	3.60
1956	.09	.09	.53	.33	.07	.01	.82	1.75	3.68
1957	.09	.08	.60	.33	.07	.01	.87	1.52	3.57
1958	.10	.04	.39	.35	.06	.01	.66	1.38	2.99
1959	.10	.06	.40	.31	.07	.01	.71	1.58	3.24
1960	.10	.07	.45	.34	.06	.01	.62	1.42	3.07
1961	.09	.07	.34	.33	.05	5/	.62	1.60	3.10
1962	.12	.05	.36	.26	.06	5/	.68	1.47	3.00
1963	.08	.06	.37	.30	.05	5/	.58	1.49	2.93
1964	.09	.06	.31	.27	.04	5/	.66	1.45	2.88
1965	.09	.06	.31	.33	.05	5/	.59	1.53	2.96
1966	.15	.05	.31	.27	.04	5/	.54	1.64	3.00
1967	.10	.05	.31	.20	.03	5/	.56	1.52	2.77
1968	.11	.06	.27	.25	.03	5/	.66	1.43	2.81
1969 6/	.17	.06	.26	.24	.01	5/	.50	1.40	2.64

1/ Production begins midyear. Civilian consumption 1941 to date. Beginning 1959, includes Alaska and Hawaii.  
 2/ Pits-in basis. 3/ Excludes quantities used for juice. 4/ Less than 0.05 pound. 5/ Less than 0.005 pound.  
 6/ Preliminary.

Table 7.--Fruits, per capita consumption: Fresh-weight equivalent, 1920-69 1/2

Year	Citrus				Apples				Other fruit				All fruit 2/5				
	Fresh 2/	Canned 3/	Chilled Juice 4/	Frozen	Total	Fresh 5/	Canned	Juice	Dried	Total	Fresh	Canned		Juice	Frozen	Dried	Total
1920	26.0	---	---	---	26.0	63.0	1.6	---	3.0	67.6	53.6	10.1	0.9	---	23.8	88.4	182.0
21	30.5	---	---	---	30.5	36.1	1.4	---	1.6	39.1	42.2	9.7	0.5	---	14.8	79.2	148.8
22	24.6	6/	---	---	24.6	57.5	1.4	---	1.7	62.7	62.7	8.8	---	---	20.8	92.3	177.5
23	32.5	0.1	---	---	32.6	54.7	1.4	---	2.0	58.1	57.3	9.6	---	---	21.6	86.1	176.8
24	33.9	---	---	---	34.1	54.3	1.6	---	1.1	60.8	60.0	9.6	---	---	21.0	90.8	183.7
25	28.9	---	---	---	29.2	46.3	1.4	---	1.7	49.4	47.0	11.1	0.2	---	22.0	100.5	163.1
26	31.4	---	---	---	32.7	49.3	1.7	---	1.2	39.9	36.1	12.7	---	---	21.9	102.1	198.6
27	24.4	---	---	---	24.7	31.4	1.4	---	1.1	29.9	26.4	13.6	0.3	---	21.3	102.1	182.1
28	29.4	---	---	---	30.0	48.9	1.4	---	1.0	31.3	27.7	13.8	0.2	---	22.0	104.3	185.5
29	39.8	0.1	---	---	40.4	39.7	1.6	---	1.4	42.7	39.7	13.2	0.4	---	20.7	177.7	177.7
1930	31.2	1.8	---	---	32.2	42.1	1.7	---	1.5	45.3	36.6	13.5	0.4	0.6	18.5	89.6	167.1
31	42.3	1.2	---	---	43.9	51.7	1.2	---	1.6	53.7	66.3	13.5	0.4	0.4	17.8	98.2	195.8
32	36.7	0.5	---	---	37.5	39.2	1.2	---	0.7	41.1	50.0	12.0	0.5	0.7	17.4	80.6	159.2
33	39.4	0.8	---	---	40.7	40.0	1.4	---	0.7	42.1	45.4	12.0	0.4	0.6	19.3	160.5	177.7
34	39.8	1.6	---	---	41.2	29.3	1.5	---	0.9	27.7	51.2	13.2	0.4	0.5	18.5	83.8	152.7
35	44.6	1.2	---	---	48.2	35.9	1.5	---	1.0	35.4	55.7	14.0	1.8	0.6	18.5	90.6	174.2
36	46.2	2.4	---	---	49.4	27.6	1.6	---	1.2	30.4	51.8	16.2	2.6	0.7	19.6	90.9	170.7
37	44.5	1.0	---	---	50.6	33.6	2.0	---	1.3	36.9	60.5	16.0	4.4	0.5	18.7	100.1	187.6
38	49.1	1.2	---	---	55.7	28.2	1.8	---	1.2	31.3	54.4	15.2	4.2	1.0	18.1	94.1	181.1
39	61.4	1.4	---	---	71.3	30.7	1.9	0.1	0.9	33.6	56.1	16.5	4.6	1.1	20.7	99.0	203.9
1940	56.7	1.2	---	---	67.1	29.7	2.2	0.2	1.7	33.8	52.7	18.7	6.0	1.2	21.2	99.8	200.7
41	57.7	1.7	---	---	72.5	31.7	2.5	0.3	1.8	35.4	56.6	19.0	5.7	1.3	18.6	101.2	209.1
42	57.7	1.8	---	---	72.1	28.1	2.6	0.6	1.4	31.7	44.2	17.7	4.4	1.3	14.5	83.1	186.9
43	60.3	1.1	---	---	71.6	24.9	2.3	0.7	1.2	28.2	33.2	12.6	4.4	1.0	16.9	68.1	167.9
44	68.2	5/	---	---	89.3	29.5	1.4	1.0	1.4	28.8	46.6	9.4	3.0	1.7	21.3	81.8	199.9
45	66.6	1.1	---	---	88.3	22.9	1.7	1.4	1.8	26.6	50.4	13.6	4.0	1.9	20.1	206.1	206.1
46	59.1	1.1	---	0.3	94.1	23.0	1.9	0.5	1.0	27.9	51.8	22.4	7.0	2.6	18.3	91.2	225.3
47	62.2	1.5	---	0.2	95.3	25.4	2.4	0.4	1.3	30.1	56.1	17.8	6.4	2.8	14.0	102.1	221.3
48	54.4	2.0	---	0.5	93.1	26.3	2.8	0.3	1.3	31.3	50.9	18.3	5.2	2.5	13.1	90.0	214.4
49	47.9	1.8	---	6.7	82.6	24.7	2.9	0.7	1.1	29.9	50.3	19.1	5.6	2.2	13.5	90.7	203.2
1950	41.7	1.5	---	10.8	73.8	22.7	3.5	0.9	1.2	28.8	44.4	20.6	5.9	2.4	13.3	86.6	189.2
51	45.8	1.7	---	15.2	83.5	25.7	3.4	0.8	1.2	31.5	46.5	17.9	6.5	2.2	12.7	85.8	200.8
52	45.1	1.5	---	24.5	85.1	21.6	4.0	0.8	1.0	27.9	47.7	19.6	7.4	2.7	12.5	89.9	202.9
53	44.1	1.8	---	16.0	86.3	20.9	3.5	0.8	1.2	26.5	44.4	20.0	7.3	2.6	12.5	86.8	199.6
54	42.0	1.9	---	27.1	86.8	20.0	3.6	1.1	0.9	26.1	43.1	20.0	6.6	2.6	12.5	197.7	197.7
55	41.8	2.2	---	30.9	91.5	19.6	4.0	0.8	1.2	26.0	38.0	20.7	7.5	3.2	12.4	81.8	199.3
56	39.1	2.0	---	30.3	88.1	18.9	4.4	1.0	0.8	26.0	40.9	19.4	8.4	3.3	11.9	84.0	198.1
57	37.1	1.5	---	33.0	89.3	19.3	4.4	1.0	0.6	26.0	40.3	20.0	8.9	3.2	11.9	84.3	199.6
58	31.0	2.1	---	25.8	77.0	22.5	4.7	1.2	0.7	29.8	40.5	19.8	9.8	3.1	10.8	84.0	190.8
59	34.0	1.6	---	32.6	82.9	21.1	4.5	1.5	0.8	28.6	40.6	19.5	8.5	2.9	10.3	81.8	193.3
1960	33.7	2.0	---	34.2	85.9	18.2	4.8	1.4	0.8	25.9	41.4	19.3	9.0	3.1	10.8	83.6	195.4
61	30.8	1.8	---	32.1	79.1	16.4	5.0	1.5	0.6	24.3	41.3	19.4	8.0	3.2	10.8	85.7	185.7
62	29.5	1.9	---	37.2	83.6	17.4	4.8	1.6	0.9	25.1	36.4	18.8	8.0	3.5	10.6	77.3	186.0
63	26.1	1.7	---	25.1	63.7	16.7	5.1	1.9	0.9	23.3	35.6	19.0	9.6	3.5	10.2	77.9	165.9
64	26.1	1.7	---	23.5	63.5	17.8	5.1	2.3	0.7	23.7	34.7	18.6	8.3	3.3	10.4	75.0	165.1
65	29.0	1.8	---	28.6	72.5	16.3	5.1	2.1	0.8	23.6	35.6	18.8	7.6	3.3	10.4	75.7	176.7
66	29.0	2.0	---	28.0	76.0	15.9	4.5	1.8	0.9	23.8	32.3	18.7	6.5	3.2	10.4	76.7	176.7
67	24.5	2.2	---	40.3	84.1	14.0	4.8	2.1	1.0	23.1	33.1	18.0	7.0	3.3	10.4	71.8	191.1
68	24.5	2.1	---	34.3	82.0	15.0	4.8	2.6	0.9	24.7	32.1	18.6	6.0	3.4	9.7	75.9	182.6
69 1/2	23.5	1.7	---	34.3	87.7	13.0	5.0	3.7	1.1	25.7	35.6	20.1	7.4	3.3	9.6	76.0	189.4

1/ Excludes quantities consumed as baby food. Unless otherwise noted, data represent a calendar year (adjustments to a cal. yr., when necessary, were made by combining proportional parts of each pack year involved. Civilian consumption only, beginning 1960, includes Alaska and Hawaii. 2/ Beginning 1941, crop year beginning October or November prior to year indicated. 3/ Pack year beginning October or November prior to year indicated. 4/ Includes juice beginning 1955 and fruit beginning 1956. 5/ Beginning 1954, includes only apples grown in commercial areas. 6/ Less than 0.05 pound. 7/ Preliminary.



Table 8 .--Tree nuts (shelled basis): Per capita consumption, crop years, 1920-69 1/

Year	Almonds	Filberts	Pecans	Walnuts	Macadamia	Other <u>2/</u>	Total
Pounds							
1920	.20	.07	.04	.31	---	.36	1.0
1921	.31	.11	.16	.49	---	.36	1.4
1922	.29	.11	.05	.44	---	.34	1.2
1923	.30	.12	.19	.42	---	.39	1.4
1924	.26	.07	.13	.48	---	.35	1.3
1925	.23	.10	.17	.51	---	.29	1.3
1926	.26	.08	.30	.37	---	.35	1.4
1927	.24	.10	.11	.51	---	.14	1.1
1928	.26	.09	.21	.38	---	.30	1.2
1929	.20	.06	.16	.44	---	.23	1.1
1930	.21	.06	.17	.33	---	.29	1.1
1931	.17	.04	.26	.32	---	.33	1.1
1932	.14	.05	.20	.36	---	.27	1.0
1933	.12	.03	.23	.26	---	.25	.9
1934	.11	.03	.17	.33	---	.35	1.0
1935	.17	.04	.36	.34	---	.44	1.4
1936	.16	.05	.17	.28	---	.47	1.1
1937	.19	.03	.30	.38	---	.46	1.4
1938	.14	.03	.21	.32	---	.49	1.2
1939	.21	.05	.27	.38	---	.45	1.4
1940	.12	.03	.35	.32	---	.55	1.4
1941	.09	.04	.35	.42	---	.40	1.3
1942	.22	.03	.23	.35	---	.14	1.0
1943	.23	.05	.38	.38	---	.07	1.1
1944	.35	.10	.41	.42	---	.16	1.4
1945	.34	.11	.37	.38	---	.24	1.4
1946	.36	.14	.20	.38	---	.40	1.5
1947	.30	.08	.31	.34	---	.45	1.5
1948	.29	.08	.44	.39	---	.50	1.7
1949	.30	.10	.31	.49	---	.53	1.7
1950	.32	.06	.30	.37	---	.57	1.6
1951	.26	.08	.36	.43	---	.49	1.6
1952	.28	.09	.38	.46	---	.50	1.7
1953	.25	.06	.46	.33	---	.50	1.6
1954	.24	.07	.33	.39	---	.58	1.6
1955	.23	.07	.26	.35	---	.59	1.5
1956	.19	.05	.35	.33	---	.49	1.4
1957	.24	.07	.37	.32	---	.59	1.6
1958	.20	.07	.37	.36	---	.57	1.6
1959	.27	.08	.30	.36	0.01	.52	1.5
1960	.30	.07	.36	.32	.01	.52	1.6
1961	.28	.07	.44	.30	.01	.53	1.6
1962	.27	.05	.27	.32	.01	.56	1.5
1963	.22	.05	.45	.32	.01	.56	1.6
1964	.27	.05	.43	.32	.01	.54	1.6
1965	.28	.06	.52	.32	.01	.54	1.7
1966	.30	.07	.41	.35	.01	.53	1.7
1967	.31	.07	.40	.35	.01	.58	1.7
1968	.33	.07	.40	.30	.02	.66	1.8
1969 <u>3/</u>	.34	.05	.43	.33	.02	.57	1.7

1/ Crop year beginning July of year indicated. Civilian per capita consumption beginning 1941. Beginning 1959, includes Alaska and Hawaii. 2/ Includes the following nuts: Brazil, pignolia, pistachios, chestnuts, cashews, and miscellaneous. 3/ Preliminary.

Table 9.--Production and utilization of specified fruits, United States, crops of 1965-69 1/

Commodity and crop year	Production 2/	Farm home use	Sold	Fresh sales	Utilization of sales						Total processed	
					Canned	Dried	Frozen	Crushed	Other			
Tons												
Apples												
1965	2,996,650	19,450	2,977,200	1,668,000	654,300	32,100	109,100	---	3/513,700	---	1,309,200	
1966	2,823,200	18,050	2,805,150	1,589,100	521,600	127,200	103,350	---	3/463,900	---	1,216,050	
1967	2,697,450	16,650	2,680,800	1,567,600	553,000	79,800	128,950	---	3/351,450	---	1,113,200	
1968	2,720,950	17,350	2,703,600	1,577,350	587,400	86,850	114,000	---	3/338,000	---	1,126,250	
1969	3,360,900	18,250	3,342,650	1,838,500	699,150	140,100	103,800	---	3/561,100	---	1,504,150	
Avocados												
1965	60,800	335	60,465	4/60,465	---	---	---	---	---	---	---	
1966	80,300	335	79,965	4/79,965	---	---	---	---	---	---	---	
1967	52,100	360	51,740	4/51,740	---	---	---	---	---	---	---	
1968	73,700	340	73,360	4/73,360	---	---	---	---	---	---	---	
1969	46,000	325	45,675	4/45,675	---	---	---	---	---	---	---	
Cranberries												
1965	71,140	---	71,140	19,480	---	---	---	---	---	---	5/51,660	
1966	78,880	---	78,880	16,400	---	---	---	---	---	---	4/62,480	
1967	70,215	---	70,215	13,915	---	---	---	---	---	---	2/51,745	
1968	73,390	---	73,390	15,095	---	---	---	---	---	---	2/55,560	
1969	91,155	---	91,155	17,105	---	---	---	---	---	---	5/70,895	
Grapes												
1965	4,325,960	6,045	4,319,915	593,529	54,800	1,297,000	---	2,374,586	---	---	3,726,386	
1966	3,753,340	5,706	3,747,634	591,644	62,000	1,185,700	---	1,888,290	---	---	3,135,990	
1967	3,062,190	5,020	3,057,170	461,730	54,000	751,800	---	1,789,640	---	---	2,595,440	
1968	3,549,040	5,104	3,543,936	532,863	64,000	1,111,100	---	1,815,973	---	---	2,951,073	
1969	3,902,510	5,084	3,897,426	557,179	66,300	1,015,200	---	2,258,747	---	---	3,340,247	
Nectarines												
1965	64,800	200	64,600	63,500	---	---	---	---	---	---	1,100	
1966	68,000	200	67,800	4/67,800	---	---	---	---	---	---	---	
1967	55,000	200	54,800	4/54,800	---	---	---	---	---	---	---	
1968	64,000	200	63,800	62,900	---	---	---	---	---	---	900	
1969	66,000	200	65,800	64,800	---	---	---	---	---	---	1,000	
Olives												
1965	50,000	200	49,800	700	37,800	---	---	3,800	6/7,500	---	49,100	
1966	63,000	200	62,800	600	45,500	---	---	4,800	6/11,900	---	62,200	
1967	14,000	100	13,900	200	10,230	---	---	1,470	6/2,000	---	13,700	
1968	86,000	200	85,800	400	62,800	---	---	4,600	6/18,000	---	85,400	
1969	70,000	200	69,800	400	51,700	---	---	5,200	5/12,500	---	69,400	
Strawberries												
1965	214,572	---	214,572	135,679	---	---	---	---	---	---	78,893	
1966	232,071	---	232,071	138,713	---	---	---	---	---	---	103,358	
1967	226,813	---	226,813	139,079	---	---	---	---	---	---	97,734	
1968	261,470	---	261,470	167,340	---	---	---	---	---	---	94,130	
1969	242,838	---	242,838	157,453	---	---	---	---	---	---	85,385	
Bush berries 1/												
1965	41,541	---	41,541	1,437	---	---	---	---	---	---	40,104	
1966	49,026	---	49,026	1,402	---	---	---	---	---	---	47,624	
1967	41,982	---	41,982	1,907	---	---	---	---	---	---	40,075	
1968	37,444	---	37,444	1,881	---	---	---	---	---	---	35,563	
1969	42,952	---	42,952	1,895	---	---	---	---	---	---	41,057	

1/ Production and utilization of apricots, cherries, peaches, pears, plums, and prunes, 1965-69 crops, published in the July 1970 Fruit Situation. 2/ Having value.  
 3/ Mostly crushed for vinegar, cider, and juice. 4/ Includes some quantities processed. 5/ Mostly canned. 6/ California Spanish Green, Sicilian Style, chopped, minced, brined and other cures. 7/ Washington and Oregon.

Table 10 .--Apples, commercial crops 1/: Production by varieties,  
United States, 1967, 1968 and 1969

Variety	1967	1968	1969	Variety	1967	1968	1969
<u>Million pounds</u>				<u>Million pounds</u>			
Summer:				Winter, cont'd:			
Gravenstein	34.0	162.4	120.0	Cortland	148.0	115.0	154.9
Other summer	87.7	91.2	104.4	Delicious	1,452.3	1,390.4	2,073.6
Total	121.7	253.6	224.4	Golden Delicious	636.5	631.5	883.7
				McIntosh	691.4	645.2	650.8
Fall:				Northern Spy	154.1	117.9	141.3
Grimes Golden	25.0	26.2	32.9	R.I. Greening	128.4	100.4	141.5
Jonathan	327.0	360.8	447.4	Rome Beauty	447.9	438.7	540.1
Wealthy	36.8	42.7	45.1	Stayman	197.8	236.5	310.2
Other fall	64.9	61.7	72.3	Winesap	249.0	261.4	257.9
Total	453.7	491.4	597.7	Yellow Newtown 2/	168.0	171.4	202.8
				York Imperial	271.3	312.3	344.0
Winter:				Other winter	209.2	209.6	250.0
Baldwin	66.2	69.6	42.1	Total	4,849.7	4,719.2	6,010.0
Ben Davis and Gano	29.6	19.3	17.1				
				Total all varieties:	5,425.1	5,464.2	6,832.1

1/ Estimates of commercial crop refer to the total production of apples in commercial orchards of 100 or more bearing age trees. Data include small quantities of mature fruit not harvested and excess cullage of harvested fruit not included in data in table 12. 2/ Albermarle Pippin.

Table 11 .--Apples: End of month cold storage holdings, 1962 to date

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						<u>Million bushels</u>						
1962	24.9	17.2	10.1	5.3	1.6	0.3	0.2	0.3	15.0	51.9	44.5	35.5
1963	25.5	18.0	11.1	5.9	2.0	.7	.2	.2	14.8	59.1	49.2	40.2
1964	30.0	20.4	14.4	6.2	2.4	.7	.3	.3	17.1	55.9	48.7	39.5
1965	30.5	22.1	14.0	8.2	3.5	1.5	.7	.4	22.6	56.4	50.3	38.8
1966	29.1	20.1	12.3	6.6	2.6	.4	.3	.6	16.8	55.3	48.5	38.6
1962-66 av.	28.0	19.6	12.4	6.4	2.4	.7	.3	.4	17.3	55.7	48.2	38.5
						<u>Billion pounds</u>						
1967	1.26	.97	.66	.39	.19	.05	.02	.01	.60	2.35	2.00	1.54
1968	1.11	.81	.50	.28	.11	.03	.01	.01	.91	2.30	1.98	1.57
1969	1.19	.85	.55	.31	.14	.04	.01	.02	1.23	3.11	2.80	2.24
1970	1.72	1.27	.81	.45	.19	.05	.01					

Note: Prior to 1967, holdings were reported on bushel basis; net weight of bushel of apples ranges from 40-50 lbs.



Table 12.--Apples, commercial crop: Production, 1968, 1969, and indicated 1970

State and area	1968	1969	1970	State and area	1968	1969	1970
	<u>Million pounds</u>				<u>Million pounds</u>		
Maine	66.0	61.0	64.0	Wisconsin	63.0	65.0	63.0
New Hampshire	46.0	38.0	53.0	Minnesota	22.4	19.1	25.0
Vermont	36.3	38.0	42.0	Iowa	15.4	15.0	15.0
Massachusetts	89.3	100.0	106.0	Missouri	59.2	59.2	56.2
Rhode Island	4.8	4.0	8.0	Kansas	15.9	14.4	13.0
Connecticut	47.9	48.2	54.0	N. Central	1,015.5	1,232.6	1,243.2
New York	830.0	855.0	925.0	Kentucky	19.1	20.9	17.0
New Jersey	100.5	119.7	120.0	Tennessee	10.4	10.4	8.4
Pennsylvania	390.0	525.0	500.0	Arkansas	7.1	9.1	6.5
N. Atlantic	1,610.8	1,788.9	1,872.0	S. Central	36.6	40.4	31.9
Delaware	10.8	14.0	13.0	Total Central	1,052.1	1,273.0	1,275.1
Maryland	57.5	72.0	68.0	Idaho	28.0	134.0	60.0
Virginia	413.0	472.0	431.0	Colorado	74.0	77.0	70.0
West Virginia	220.8	260.0	232.0	New Mexico	36.5	24.9	38.0
North Carolina	169.8	204.0	226.0	Utah	28.0	42.0	32.0
South Carolina	8.6	8.0	13.0	Washington	1,025.0	1,645.0	1,400.0
S. Atlantic	880.5	1,030.0	983.0	Oregon	87.0	167.0	118.0
Total Eastern	2,491.3	2,818.9	2,855.0	California	620.0	540.0	560.0
Ohio	130.0	147.0	135.0	Western	1,898.5	2,629.9	2,278.0
Indiana	58.0	90.0	85.0	United States	5,441.9	6,721.8	6,408.1
Illinois	96.6	102.9	101.0				
Michigan	555.0	720.0	750.0				

1/ Estimates of the commercial crop refer to the total production of apples in commercial orchards of 100 or more bearing age tree.

Table 13.--Pears: Production by States and Pacific Coast, variety composition, 1968, 1969, and indicated 1970

State	1968	1969	1970	Pacific Coast	1968	1969	1970
	<u>Tons</u>				<u>Tons</u>		
Connecticut	1,600	2,150	1,800	Washington:			
New York	9,300	18,000	14,000	Bartlett	97,500	69,700	97,000
Pennsylvania	3,250	3,200	3,200	Other	44,040	38,200	44,000
Michigan	11,000	23,000	19,000	Total	141,540	107,900	141,000
Idaho	700	2,100	1,200	Oregon:			
Colorado	5,700	7,800	5,500	Bartlett	44,000	82,000	44,000
Utah	6,300	5,500	5,300	Other	49,000	109,000	58,000
Washington	141,540	107,900	141,000	Total	93,000	191,000	102,000
Oregon	93,000	191,000	102,000	California:			
California	344,000	351,000	259,000	Bartlett	322,000	336,000	245,000
				Other	22,000	15,000	14,000
United States	616,390	711,650	552,000	Total	344,000	351,000	259,000
				3 States:			
				Bartlett	463,500	487,700	386,000
				Other	115,040	162,200	116,000
				Total	578,540	649,900	502,000

Table 14.--Peaches: Production, 1968, 1969, and indicated 1970

State	1968	1969	1970
<u>Million pounds</u>			
9 Early States:			
North Carolina	77.8	56.0	46.0
South Carolina	400.0	338.0	290.0
Georgia	234.5	175.2	145.0
Alabama	39.0	50.0	40.0
Mississippi	12.5	17.5	16.0
Arkansas	36.4	42.0	40.0
Louisiana	7.3	7.5	7.0
Oklahoma	10.0	12.0	9.5
Texas	30.2	32.3	33.0
Total 9 States	847.7	730.5	626.5
25 Late States:			
New Hampshire	0.8	0.1	0.9
Massachusetts	2.9	2.6	4.0
Rhode Island	.6	.7	.6
Connecticut	6.2	6.3	5.6
New York	18.0	20.8	19.2
New Jersey	100.5	104.5	95.0
Pennsylvania	106.1	120.0	84.0
Ohio	15.0	28.0	17.0
Indiana	5.5	11.0	10.0
Illinois	16.0	25.2	18.5
Michigan	34.5	97.0	100.0
Missouri	18.0	21.6	20.1
Kansas	6.2	9.5	8.6
Delaware	3.5	4.0	3.0
Maryland	20.5	22.0	21.0
Virginia	50.0	44.7	45.0
West Virginia	21.6	27.4	25.0
Kentucky	16.3	16.5	12.5
Tennessee	6.7	9.4	7.7
Idaho	6.5	15.0	11.0
Colorado	31.6	32.8	25.0
Utah	16.0	15.0	14.0
Washington	27.0	4.8	26.0
Oregon	5.0	16.0	10.0
California:			
Clingstone <u>1/</u>	1,708.0	1,800.0	1,478.0
Freestone	500.0	480.0	440.0
Total California	2,208.0	2,280.0	1,918.0
Total 25 States	2,743.0	2,934.9	2,501.7
United States	3,590.7	3,665.4	3,128.2

1/ Includes culls and cannery diversions as follows: (Million pounds) 1968--172.6; 1969--228.0.

Table 15.--Cherries: Production by types, 12 States, 1968, 1969, and indicated 1970

State	Sweet			Tart			All varieties		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Tons			Tons			Tons		
New York	4,900	7,300	4,000	14,300	15,300	24,000	19,200	22,600	28,000
Pennsylvania	1,089	1,100	800	7,500	11,000	9,000	8,589	12,100	9,800
Ohio	---	---	---	1,300	800	900	1,300	800	900
Michigan	22,000	21,500	20,000	100,000	106,000	80,000	122,000	127,500	100,000
Wisconsin	---	---	---	6,000	2,740	4,500	6,000	2,740	4,500
5 Great Lake States	27,989	29,900	24,800	129,100	135,840	118,400	157,089	165,740	143,200
Montana	1,300	350	1,600	---	---	---	1,300	350	1,600
Idaho	1,100	3,200	1,600	384	950	500	1,484	4,150	2,100
Colorado	200	650	400	1,800	1,760	1,350	2,000	2,410	1,750
Utah	7,700	3,300	2,300	4,700	6,180	5,200	12,400	9,480	7,500
Washington	11,900	23,800	23,000	320	700	550	12,220	24,500	23,550
Oregon	15,700	35,000	30,000	1,100	6,200	1,100	16,800	41,200	31,100
California	25,000	30,600	26,000	---	---	---	25,000	30,600	26,000
7 Western States	62,900	96,900	84,900	8,304	15,790	8,700	71,204	112,690	93,600
12 States	90,889	126,800	109,700	137,404	151,630	127,100	228,293	278,430	236,800

Table 16.--Grapes: Production in principal States, 1968, 1969, and indicated 1970

State	1968	1969	1970	State and variety	1968	1969	1970
	Tons				Tons		
New York	116,000	121,000	130,000	Arkansas	8,500	11,000	8,700
New Jersey	870	960	1,050	Arizona	13,600	15,200	12,000
Pennsylvania	37,400	25,000	39,000	Washington	73,500	69,400	66,000
Ohio	10,000	9,300	10,000	California:			
Michigan	23,000	38,000	65,000	Wine	650,000	775,000	560,000
				Table	470,000	665,000	340,000
Missouri	3,750	4,500	3,000	Raisin	2,135,000	2,160,000	1,850,000
				Dried <sup>1/</sup>	264,000	252,000	---
North Carolina	2,000	2,200	2,100	Not dried	1,025,000	1,148,000	---
South Carolina	4,000	4,800	4,000	All	3,255,000	3,600,000	2,750,000
Georgia	1,420	1,150	1,180	United States	3,549,040	3,902,510	3,092,030

<sup>1/</sup> Dried Basis: 1 ton of raisins is equivalent to 4.02 tons of fresh grapes for 1969 and 4.20 tons for 1968.



Table 17.--Strawberries: Acreage, yield per acre, and production, 1968, 1969, and indicated 1970 <sup>1/</sup>

Season	Acreage			Yield per acre			Production		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	1,000 acres			1,000 pounds			Million pounds		
Strawberries									
Winter:									
Florida	1.9	1.6	1.8	8.0	10.0	7.5	15.2	16.0	13.5
Spring:									
California	8.6	8.4	8.5	33.7	32.0	31.5	289.8	268.8	267.8
Early spring:									
Louisiana	3.5	2.7	2.1	3.1	2.9	4.0	10.9	7.8	8.4
Texas	.5	.5	.4	2.5	2.4	2.5	1.3	1.2	1.0
Group total	4.0	3.2	2.5	3.1	2.8	3.8	12.2	9.0	9.4
Mid-spring:									
Illionis	1.5	1.5	1.5	2.2	2.2	2.4	3.3	3.3	3.6
Missouri	.8	.8	.6	2.5	2.8	3.2	1.9	2.1	1.9
Maryland	.7	.7	.6	4.0	3.1	3.2	2.8	2.2	1.9
Virginia	1.3	1.1	1.0	3.4	3.2	3.3	4.4	3.5	3.3
North Carolina	1.9	1.7	1.5	3.1	2.3	2.0	5.9	3.9	3.0
Kentucky	1.0	.8	.7	2.9	3.6	3.7	2.9	2.9	2.6
Tennessee	1.7	1.2	.9	2.5	2.5	2.7	4.3	3.0	2.4
Arkansas	2.3	2.1	1.5	2.5	2.9	2.8	5.8	6.1	4.2
Oklahoma	.9	.9	.7	4.0	4.8	2.4	3.6	4.3	1.7
Group total	12.0	10.8	9.0	2.9	2.9	2.7	34.9	31.3	24.6
Late spring:									
Massachusetts	.4	.3	.3	2.9	3.7	3.7	1.0	1.2	1.2
New York	2.0	1.8	1.7	3.0	3.0	4.0	6.0	5.4	6.8
New Jersey	2.1	1.8	1.7	4.1	4.4	4.0	8.6	7.9	6.8
Pennsylvania	1.7	1.6	1.6	2.8	2.9	3.0	4.8	4.6	4.8
Ohio	1.4	1.3	1.4	2.5	3.3	2.8	3.5	4.3	3.9
Indiana	1.1	1.0	.9	4.3	2.6	3.1	4.7	2.6	2.8
Michigan	6.5	6.3	6.2	4.1	5.3	5.0	26.7	33.4	31.0
Wisconsin	1.8	1.8	1.8	2.4	2.9	2.5	4.3	5.2	4.5
Washington	5.3	4.5	4.1	7.2	5.8	6.6	38.2	26.1	27.1
Oregon	12.6	12.7	12.1	5.6	5.5	5.8	70.6	69.9	70.2
Group total	34.8	33.1	31.8	4.8	4.8	5.0	168.4	160.6	159.1
All States <sup>2/</sup>	61.4	57.1	53.6	8.5	8.5	8.8	520.5	485.7	474.4

<sup>1/</sup> Includes processing. <sup>2/</sup> Excludes Alabama, Connecticut, and Maine. Note: Figures may not add to totals due to rounding.

Table 18.--Cranberries: Production in principal States, 1968, 1969, and indicated 1970

State	1968	1969	1970
	Barrels		
Massachusetts	660,000	755,000	815,000
New Jersey	155,000	160,000	186,000
Wisconsin	438,000	746,000	673,000
Washington	163,000	105,000	130,000
Oregon	51,800	57,100	70,800
5 States	1,467,800	1,823,100	1,874,800

Table 19.--Prunes and plums: Production in principal States, 1968, 1969, and indicated 1970

Crop and State	1968	1969	1970
	<u>Tons</u>		
Prunes and plums: <u>1/</u>			
Michigan	13,000	14,500	9,000
Idaho	6,480	17,500	12,000
Washington	9,800	27,200	10,700
Oregon	11,000	30,300	20,000
Total 4 States	40,280	89,500	51,700
Dried prunes: <u>2/</u>			
California	153,000	130,000	180,000
Plums:			
California:	106,000	67,000	110,000
United States	528,780	481,500	611,700

1/ Mostly prunes, however, estimates include small quantities of plums in all States. 2/ In California the drying ratio is approximately 2½ pounds of fresh fruit to 1 pound dried.

Table 20.--Tree nuts: Production in principal States, 1968, 1969, and indicated 1970

Crop and State	1968	1969	1970	Crop and State	1968	1969	1970
	<u>Tons</u>				<u>Tons</u>		
Pecans:			<u>1/</u>	Almonds:			
North Carolina	400	1,300		California	74,500	122,000	130,000
South Carolina	800	1,500		Filberts:			
Georgia	21,000	44,000		Oregon	7,000	7,100	7,500
Florida	3,100	2,000		Washington	600	300	260
Alabama	15,750	16,750		2 States	7,600	7,400	7,760
Mississippi	5,500	5,750		Walnuts:			
Arkansas	1,200	4,300		English:			
Louisiana	8,250	14,850		California	92,000	103,000	98,000
Oklahoma	750	7,250		Oregon	3,600	2,500	3,800
Texas	34,500	11,500		2 States	95,600	105,500	101,800
New Mexico	5,000	3,350		Macadamia nuts:			
Total	96,250	112,550		Hawaii	5,222	5,239	n.a.
Improved varieties <u>2/</u>	47,365	67,650		Total 5 tree nuts	279,172	352,689	---
Native and seedling	48,885	44,900					

1/ Available September 11. 2/ Budded, grafted, or topworked varieties.  
n.a.--Data not available temporarily.

Table 21.--Citrus fruits: Production, 1967/68, 1968/69, and indicated 1969/70 1/

Crop and State	1967/68	1968/69	1969/70
		<u>1,000 boxes <u>2/</u></u>	
<u>Oranges:</u>			
Early, Midseason and			
Navel varieties: <u>3/</u>			
California	9,150	18,600	21,200
Florida	51,400	69,700	72,900
Texas	970	2,800	2,800
Arizona	880	1,270	1,100
Total	62,400	92,370	98,000
Valencias:			
California	10,000	25,700	20,000
Florida	49,100	60,000	65,000
Texas	830	1,700	1,400
Arizona	2,240	4,110	3,800
Total	62,170	91,510	90,200
All Oranges:			
California	19,150	44,300	41,200
Florida	100,500	129,700	137,900
Texas	1,800	4,500	4,200
Arizona	3,120	5,380	4,900
Total oranges	124,570	183,880	188,200
<u>Grapefruit:</u>			
Florida, all	32,900	39,900	37,500
Seedless	23,700	27,700	28,000
Pink	9,400	10,700	10,200
White	14,300	17,000	17,800
Other	9,200	12,200	9,500
Texas	2,800	6,700	8,100
Arizona	3,740	2,510	2,900
California, all	4,618	5,060	5,300
Desert Valleys	2,918	3,260	3,100
Other areas	1,700	1,800	2,200
Total grapefruit	44,058	54,170	53,800
<u>Lemons:</u>			
California	13,600	12,300	13,000
Arizona	3,250	3,510	2,800
Total lemons	16,850	15,810	15,800
<u>Limes:</u>			
Florida	720	700	725
<u>Tangeloes:</u>			
Florida	1,700	1,800	2,500
<u>Tangerines:</u>			
Florida	2,800	3,400	3,100
Arizona	150	170	220
California	560	640	750
Total tangerines	3,510	4,210	4,070
<u>Temples:</u>			
Florida	4,500	4,500	5,100

1/ The crop year begins with the bloom of the first year shown and ends with completion of harvest the following year. 2/ Net content of box varies. Approximate averages are as follows: Oranges - California and Arizona, 75 lbs.; other States, 90 lbs.; Grapefruit - California, Desert Valleys, and Arizona, 64 lbs.; other California areas, 67 lbs.; Florida, 85 lbs., and Texas, 80 lbs.; Lemons - 76 lbs.; Limes - 80 lbs.; Tangelos - 90 lbs.; Tangerines - California and Arizona, 75 lbs.; Florida, 95 lbs.; and Temples - 90 lbs. 3/ Navel and Miscellaneous varieties in California and Arizona. Early and Midseason varieties in Florida and Texas, including small quantities of tangerines in Texas.



Table 22 .--Canned fruit: Pack and stocks, 1969/70 and earlier seasons

Commodity	Pack			Stocks					
	1967	1968	1969	Canners			Distributors		
				June 1, 1969	June 1, 1970	July 1, 1970	June 1, 1969	June 1, 1970	July 1, 1970
				<u>1,000 24/2½ cases</u>			<u>1,000 actual cases</u>		
Canned fruits:									
Apples	3,382	3,316	2,877	1,919	1,996	1,840	415	348	335
Applesauce	13,885	14,119	16,758	5,664	7,413	6,172	1,617	1,671	1,643
Apricots	<u>1/4</u> ;213	<u>1/4</u> ;513	<u>1/5</u> ;543	<u>1/1</u> ;037	<u>1/2</u> ;405	n.a.	n.a.	464	n.a.
Cherries, tart	784	1,132	1,505	147	209	152	201	219	221
Cherries, sweet	832	531	947	112	352	n.a.	n.a.	158	n.a.
Citrus sections <u>2/</u>	2,596	2,550	2,499	1,163	1,432	1,253	<u>3/333</u>	<u>3/332</u>	<u>3/326</u>
Cranberries	3,533	3,768	3,519	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mixed fruits <u>4/</u>	14,319	17,877	18,202	3,708	4,668	n.a.	n.a.	1,909	n.a.
Peaches:									
Total ex. spiced	26,543	35,855	37,163	7,536	10,347	n.a.	n.a.	3,065	n.a.
California only									
Clingstone	22,566	29,867	31,488	5,637	8,328	n.a.	n.a.	n.a.	n.a.
Freestone	3,307	3,986	5,675	1,562	1,636	n.a.	n.a.	n.a.	n.a.
Pears	5,756	10,262	10,590	2,784	3,457	n.a.	n.a.	1,242	n.a.
Pineapples (Hawaii)	16,378	16,464	16,871	5,864	6,917		1,896	1,904	1,811
Purple plums	1,858	731	2,209	251	917	n.a.	<u>5/168</u>	<u>5/233</u>	n.a.

1/ California only. 2/ Includes grapefruit sections, citrus salad and orange sections. 3/ Grapefruit sections. 4/ Includes fruit cocktail, fruits for salad and mixed fruits. 5/ Plums.

n.a.--Data not available.

Canners' stock and pack data from National Canners Association, Florida Canners Association, and Pineapple Growers Association of Hawaii. Distributors' stock from Bureau of the Census.

Table 23 .-- Canned fruit juices: Pack and stocks, 1969/70 and earlier seasons

Commodity	Pack			Stocks					
	1967/68	1968/69	1969/70	Canner <u>1/</u> August 1			Distributors July 1		
				1968	1969	1970	1968	1969	1970
				<u>1,000 24/2½ cases</u>			<u>1,000 actual cases</u>		
Canned juices:									
Apple	8,726	9,365	13,390	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Blended orange and grapefruit	2,187	2,578	<u>2/2</u> ;192	819	744	639	275	265	273
Grapefruit	15,826	20,535	<u>2/17</u> ;241	5,778	4,233	3,118	882	1,132	1,155
Orange	10,414	13,453	<u>2/11</u> ;223	2,534	3,320	3,017	774	780	819
Tangerine	49	92	47	18	41	34	n.a.	n.a.	n.a.
Pineapple	15,081	13,954	15,014	<u>3/5</u> ;690	<u>3/3</u> ;643	<u>4/</u>	875	776	705
Pineapple concentrate, s.s. basis	6,965	9,825	10,208	<u>3/5</u> ;209	<u>3/4</u> ;055	<u>4/</u>	n.a.	n.a.	n.a.

1/ Canners' stocks of citrus juices are Florida only. 2/ Florida pack only through August 1. 3/ July 1 stocks. 4/ Data not available temporarily.

n.a.--Data not reported.

Canners' stock and pack from National Canners Association, Florida Canners Association, and Pineapple Growers Association of Hawaii. Distributors' stocks from Bureau of the Census.

Table 24.--Frozen fruits and berries: Packs and cold storage holdings, 1969 and earlier seasons

Commodity	Pack			Stocks		
				July 31		
	1967	1968	1969	1968	1969	1970
	<u>1,000 pounds</u>					
Apples and applesauce	97,634	117,218	122,293	51,843	67,671	71,696
Apricots	13,349	14,293	17,325	17,033	17,505	18,765
Cherries, tart	97,792	141,515	140,688	53,144	87,919	110,271
Cherries, sweet	3,332	1,287	2,265			
Grapes	8,490	21,544	11,149	4,731	3,537	1,512
Peaches	73,358	82,035	53,572	27,550	33,579	25,843
Plums	9,939	7,371	6,061	<u>1/</u>	<u>1/</u>	<u>1/</u>
Prunes	555	---	640	<u>1/</u>	<u>1/</u>	<u>1/</u>
Purees, noncitrus	12,626	20,527	16,842	<u>1/</u>	<u>1/</u>	<u>1/</u>
Blackberries <u>2/</u>	24,991	26,827	32,694	17,826	11,761	15,352
Blueberries	31,828	27,750	37,663	21,299	17,978	18,082
Boysenberries	8,433	8,953	9,253	13,818	9,749	8,508
Raspberries, black	3,711	2,966	6,405	3,089	4,816	3,975
Raspberries, red	27,394	23,078	27,657	31,513	29,862	26,495
Strawberries	213,340	213,275	178,693	200,962	197,179	232,697
Other fruits and berries	15,041	19,818	15,083	49,233	58,683	80,936
Total	641,813	728,457	678,283	492,041	540,239	614,132

1/ Included with "other fruits and berries." 2/ Include olallieberries.

Pack data from the American Frozen Food Institute. Stocks from Statistical Reporting Service.

Table 25.--Frozen concentrated citrus juices: Florida packs and stocks, 1969/70 and earlier seasons

Item	Pack					Packer's stocks		
	Total season		December through July <u>1/</u>			Aug. 3, 1968	Aug. 2, 1969	Aug. 1, 1970
	1967/68	1968/69	1967/68	1968/69	1969/70			
	<u>1,000 gallons</u>							
Orange <u>2/</u>	83,697	103,750	83,692	103,702	124,934	43,079	50,165	66,555
Grapefruit	1,814	5,920	1,808	5,903	4,292	2,085	3,300	1,587
Blend	10	36	10	36	16	---	---	---
Tangerine	582	1,051	582	1,051	785	176	236	279
Limeade	983	852	<u>3/</u> 571	<u>3/</u> 290	<u>3/</u> 593	<u>3/</u> 237	n.a.	<u>3/</u> 274

1/ Through date specified in columns headed "Packers' stocks." 2/ Includes frozen concentrated orange juice for manufacture. 3/ Packs and stocks November through July 31.

n.a.--Data not available temporarily.

Compiled from Florida Canners Association reports.



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