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(U.S.) Economic Research Service, Washington, DC

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#### Abstract

This seport presents historical data on food consumption, prices, and expenditures, and U.S. income and popatation. A retail price-weighted quantity index put the 1990 per capita food supply up 6 percent from 1970 , as consumption of crop-derived foods outpaced consumption of foods from animal products. Retail food prices rose 2.9 percent in 1991 , only hait the 1990 price increase ( 5.8 percent) and the lowest since 1985. Americans spent $\$ 570$ biliion for food in 1991 and another $\$ 85$ billion for alcoholic beverages. Away-from-home meals and snacks captured 45 percent of the U.S. food dollar in 1991, up from 39 percent in 1980 and 34 percent in 1970. The percentage of disposable personal income spent for food declined from 13.9 percent in 1970 to 11.6 percent in 1991.


Keywords: Food consumption, food supply, retail food prices, wholesale food prices, expenditures.

Data published this year supersede data published in previous issues.

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## Contents

Page
Introduction ..... I
The System for Mcasuring Food Consumption ..... 1
The Data ..... 2
Sources ..... 2
Usefulness ..... 2
Limitations ..... 3
Additions and Revisions ..... 4
Determinants of Food Consumption and Demand ..... 11
Food Prices ..... 12
Food Expenditures and Income ..... 12
Food Expenditures in 1991 ..... 12
Food Expenditures in Relation to Income ..... 12
Information About the ERS Food Expenditures Data Set ..... 13
World Food Expenditures ..... 13
Food Spending in American Households, 1980-88 ..... 14
Food Consumption ..... 14
Red Meat, Poultry, and Fish ..... 15
Eggs ..... 16
Dairy Products ..... 16
Fats and Oils ..... 18
Fruits ..... 18
Vegetables ..... 19
Flour and Cereal Products ..... 20
Caloric and Low-Calorie Sweeteners ..... 20
Beverages ..... 21
Charts ..... 22
Tables
Table
Per Capita Food Consumption, 1970-90
1 Per capita food consumption index ..... 26
2 Major foods ..... 28
3 Selected items, selected periods ..... 29
4 Conversion factors used to obtain retail weight from primary weight ..... 31
5 Red meat (carcass weight) and poultry (ready-to-cook weight), 1970-91 ..... 32
6 Red meat and chicken (retail cut equivalent), 1970-91 ..... 33
7 Red meat, poultry, and fish (boneless, trimmed equivalent), 1970-91 ..... 34
8 Fishery products (edible weight), 1970-91 ..... 35
9 Fish and shellfish, by selected country, 1987-89 annual average ..... 36
10 Red meat and poultry, selected periods, by 10 leading countries in 1991 ..... Page
11 Eggs, 1970-91
37
12 Dairy products
38
13 Fluid milk and cream
39
14 Selected cheeses, 1971-90
40
15 Food fats and oils
16 Fresh \&ruits ..... 41
17 Canned and chilled fruits ..... 42
18 Citrus juices ..... 43
19 Frozen fruits ..... 44
20 Dried fruits, 1971-90 ..... 45
21 Apples: Per capita ut ..... 46
by product, $1971-90$ ..... 47
equivalent ..... 48
23 Melons, 1970-91
24 Total U.S groce ..... 49
25 Total U.S. grocery store sales volume of processed fruits, 1983-90 ..... 50
26 Fresh commercial vegetables, 1970-91 processed vegetables, 1983-90 ..... 51
27 Selected commercially grown vegetable ..... 52
28 Mushrooms, 1970-91 ..... 53
29 Potates, swo . . . . . . . . . . . . . . . . . . . . ..... 54
y edible beans, and dry field peas ..... 55
3I Dry pasta products ..... 56
32 Breakfast cereals ..... 57
33 Caloric and low-calorie sweeteners, 1970-91 ..... 58
34 Candy and other confecteners, 1970-91 ..... 59
quantity, per capita consumption, and value of suear and supply and utilization, with ..... 60
35 Coffee, tea, and cocoa
36 Beverages ..... 61
37 Tree nuts and coconuts ..... 62
38 Peanuts ..... 63
Supply and Utilization, 1970-90
Beef, 1970-916439
40 Veal, 1970-91
41 Lamb and mutton, 1970-91 ..... 66
42 Pork, 1970-91 ..... 67
43 Total red meak, 1970-91 ..... 68
44 Fresh and frozen fis ..... 69
45 Canned fish and and shellfish, 1970-91 ..... 70
46 Cured fish and shellfish, 1970-91 ..... 71
47 Total fish and shellish, 1970-9 ..... 72
48 Young chicken, 1970-9] ..... 73
49 Otber chicken, 1970-91 ..... 74
50 Total chicken, 1970-91 ..... 75
51 Turkey, 1970-91 ..... 76
52 Eggs, 1970-91 ..... 77
53 All dairy products ..... 78
54 American cheese ..... 79
55 Other cheese ..... 80
56 Total cheese ..... 81
57 Condensed and evaporated whole milk ..... 82
58 Nonfat dry milk ..... 8384

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Bulletin

- Number 840


## Food Consumption, Prices, and Expenditures 1970-90

Judith Jones Putnam Jane E. Allshouse

59 Butter ..... 86
60 Lard (direct use) ..... 87
61 Margarine ..... 88
62 Shortening ..... 8
63 Salad and cooking oils ..... 90
64 Peanuts, 1970.91 ..... 91
65 Fresh citrus fruits ..... 92
66 Fresh apples ..... 93
67 Other fresh noncitrus fruits ..... 94
68 Total fresh fruits ..... 95
69 Frozen citrus juices ..... 96
70 Frozen fruits ..... 97
71 Dried prunes, 1971.90
98
98
72 Dried raisins, 1971-90 ..... 99
73 Total dried fruit, 1971-90 ..... 100
74 Almonds ..... 101
75 Hazelnuts (filberts) ..... 102
76 Pecans ..... 103
77 Walnuts ..... 104
78 Pistachios ..... 105
79 Total tree nuts ..... 106
80 Fresh watermelon, 1970-91 ..... 107
81 Fresh cantaloup, 1970-91 ..... 108
82 Fresh honeydew, 1970-91 ..... 109
83 Fresh mushrooms, 1970-91 ..... 110
84 Mushrooms for processing, 1970.91 ..... 111
85 Fresh potatoes ..... 112
86 Dry edible beans ..... 113
87 Dry edible peas ..... 114
88 Wheat, 1970-91 ..... 115
89 Wheat flour, 1970.91 ..... 115
90 Rye, 1970-91 ..... 117
91 Rice, 1970-91 ..... 118
92 Com, 1970-91 ..... 119
93 Oats, 1970-91 ..... 120
94 Barley, 1970-91 ..... 121
95 Total cane and beet sugar, 1970-91 ..... 122
96 Coffee ..... 123
97 Tea ..... 124
98 Cocoa ..... 125
99 Spices and herbs ..... 126
100 Import share of food disappearance for selected foods, selected years ..... 128
Prices, 1970-91
Consumer Price Index for all urban consumers ..... 130
102 Consumer Price Index for food, major groups ..... 131
103 Consumer Price Index for food and beverages at home, selected categories ..... 132
104 Consumer Price Index for food, 1979-91, quarterly ..... 135
105 Average retail food prices, individual items, 1984-91
137
137
106 Producer Price Index for food and beverages, by stage of processing ..... 139
Income and Expenditures, 1970-91
107 Food expenditures by families and individuals as a share of disposable personal income
141
141
108 Household expenditures for food in relation to income, after taxes, by income group, 1990 ..... 141
$2 x^{2}$

Total Expenditures, 1970-91
109 Percent of total personal consumption expenditures spent on food and alcoholic beverages that were consumed at home, by selected countries, 1989
142
110 Food and alcoholic beverages
143
143
111 Food for off-premise use ..... 144
112 Meals and snacks ..... 145
113 Alcoholic beverages
146
146
114 Food expenditures, by source of funds ..... 147
Other, 1970-92
115 Population: Total, resident, and civilian ..... 148

# Food Consumption, Prices, and Expenditures, 1970-90 

Judith Jones Putnam<br>Jane E. Allshouse

## Introduction

This bulletin revises and updates through 1990 the data published in Food Consumption, Prices, and Expenditures, $1968-89$, SB-825, issued in May 1991. ${ }^{1}$ It presents historical data on per capita consumption of major food commodities in the United States, including the basic data on supplies and disposition from which the consumption estimates are derived. In addition, information concerning population, income, prices, and expenditures related to food consuription through the period covered by the quantity data has been assembled to meet the need for a comprehensive and convenient source of data for people doing statistical and economic analysis of food consumption.

## The System for Measuring Food Consumption

The U.S. Department of Agriculture's Economic Research Service (USDA, ERS) annually calculates the amount of food available for human consumption in the United States. The U.S. food supply historical series measures national aggregate consumption of several hundred foods. It is the only source of time series data on food and nutrient availability in this country.

Total food supply in the United States, and in most other countries, is based on records of conmodity flows from production to end uses. This involves the development of supply and utilization balance sheets for each major commodity from which human foods are produced (tables 39-99). Total available supply is the sum of production, beginning inventories, and imports. These three components are either directly measurable or estimated by Govemment agencies using sampling and statistical methods. Production is often measured at the farm level; for some products, however, primary production measurement occurs at the first level of processing.

For most commodity categories, measurable uses are exports, industrial uses, farm inputs (seed and feed), and end-of-the-year inventories. Human food use normally is not directly measured or statistically estimated. The availability of food for human use is, therefore, a residual component after subtracting other uses from the available total supply. In a few cases, food supplies are measured directly and one of the other use components becomes the residual category. This is the case for wheat in which flour production is measurable and livestock feed use becomes the residual.

The availability of food for human use, which normally is the residual component of the commodity supplyutilization table, represents disappearance of food into the marketing system. Hence, it is often referred to as food disappearance. Per capita food consumption usually is calculated by dividing total food disappearance by the U.S. total population on July 1.

Estimates of consumption (disappearance) are prepared at two levels for most commodities: the primary weight and the retail-equivalent weight. The basic measurement is at the primary distribution level, which is dictated for each commodity by the structure of the marketing system and the availability of data. For some, measurement is at the farm gate. For most commodities that are processed, it is at the processing or manufacturing plant. Once

[^0]the primary level of distribution bas been selected, quantities of all other components in the balance sheet for that commodity are converted to the primary-weight basis, using appropriate conversion factors. For example, the primary distribution level for red meat is the slaughter plant, so all quantities are converted to carcass weight. Nearly all of the supply and utilization tables show per capita consumption on a primary-weight basis.

In most of the per capita food consumption tables (tables 1-38), we convert food consumption figures from this primary weight to a retail-weight equivalent, using conversion factors that allow for subsequent processing, from carcass to retail cuts (table 4).

For some uses, a more desirable basis of computation is boneless weight. We have calculated per capita consumption of red meat, poultry, and fish on that basis to facilitate comparisons between types of meats and retail cuts of red meat.

The index of per capita food consumption is a measure of changes in overall consumption of food at the retail level (table 1). The per capita index primarily measures quantity changes, but it also reflects certain changes in by average retail prices in a base period. The quantiessed to fresh vegetables. It is a quantity index weighted price-weighted index is superior to a simple index der used in the index are the retail-weight equivalents. A combines the various foods on the basis of their relative irom the total poundage of foods consumed because it and cost of production and marketing. The use of retail prichomic importance, reflecting consumer preference effects of shifts in consumption among foods having differices as weights, however, results in combining the quantitative changes.

## Major Statistical Series of the U.S. Department of Agriculture, Volume 5: Consumption and Utilization of Agricultural Products (Harry Harp and Karen Bunch, AH-671, ERS, USDA, October 1989) provides a detailed description of the construction and use of annual series on per capita consumption and total food expenditures.

## The Data

Primary information used in calculating food supplies comes from a variety of governmental and private sources. Since funds have not been available to measure directly food supplies on a continuous basis, the data used are collected for other purposes. Periodic surveys of food consumption and food expenditures provide useful checks, but no clear benchmark exists for checking the accuracy of the information.

## Sources

Information on farm production, stocks, and some processed products (including manufactured dairy products) comes from the National Agricultural Statistics Service (NASS), USDA. Data on flow and fats and oils production come from the Current Industrial Reports of the Census Bureau. Census compiles trade information from Customs Service reports. The Agricultural Marketing Service, USDA, reports sugar use. Finally, we use trade association data when they are available and appropriate.

## Usefuiness

Strictly speaking, the food disappearance estimates measure supplies moving through trade channels for domestic consumption. However, because most foods are perishable, changes in disappearance presumably are associated with changes in actual consumption, provided that the disappearance estimates are reliable. (As noted under Limitations" below, we are quite concerned at present about the reliability of food disappearance estimates for
fats and oils.)

Like many time series, the data are more useful as indicators of trends over time than as measurements of absolute levels. In other words, this series provides an indication of whether or not Americans, on average, are consuming more or less of various foods over time. It is not a direct measure of actual consumption nor of the
quantity ingested. The disappearance data for food have proved accurate enough to permit measurements of the average level of food consumption in the country as a whole, to show year-to-year changes in consumption of the major foods, to permit calculation of the approximate nutrient content of the food stipply, to establish long-term trends, and to permit statistical analyses of effects of prices and incomes on consumption of the principal foods.

The food supply data series is the only data set that is consistent; that is, supply and total use must balance. It measures utilization of basic commodities without getting involved with identifying all end use products and the problems of decomposing compound foods back to commodity ingredients. It measures food supplies for consumption through ail outets, at-home and away from home. It is a long, continuous series, published first in 1941 and extended back to 1909 for most commodities. It is the only data set available for determining longterm trends in supply and consumption by major food groups.

The series covers the complete spectrum of primary foodstuffs. Hence, it can be used to measure interrelationships beiween foods and for measuring total food supply and apparent use. It is particularly useful for estimating complete demand systems that measure price and income elasticities of demand in a consistent way.

## Limitations

The food supply is usually a residual which makes the supply-utilization commodity table balance. The disappearance method of calculation relegates to the food supply all residual uses for which data are not available, such as miscellaneous nonfood uses, stock changes at retail and consumer levels, and sanpling and measurement errors accumulated in the estimation of other components of the balance sheet. For example, an increasing proportion of the total turkey supply (especially backs, necks, and giblets) goes into pet foods. But since such use has yet to be officially estimated or entered as a nonfood-use component of the supply-utilization balance sheet, it is included in food disappearance. Thus, this report probably overstates turkey consumption. In contrast, the lack of reliable estimates of game fish supplies means that fish consumption is likely understated.

Food disappearance is often used as a proxy to estimate human consumption. Used in this manner, she food supply usually provides an upper bound on the amount of food available for consumption. Food disappearance estimates can overstate actual consumption because they include spoilage and waste accumulated through the marketing system and in the home. In general, food disappearance data serve more appropriately as indicators of trends in consumption over time than as measurements of absolute levels of food eaten. This is the case so long as changes in food production and marketing practices or consumer behavior over time do not alter the relative disparity between food disappearance and food actually eaten.

The food disappearance series may no longer be a reliable indicator of change over time in ingestion of food fats and oils. While food disappearance fairly accurately reflects trends in fats and oils sold for human food, it probably does not accurately measure trends in food eaten because the waste portion of food disappearance for fats and oils has increased during the past two decades with the growth in away-from-bome eating places, especially fast-food places. Foodservice establishments that deep-fry foods can generate significant amounts of waste grease, referred to as "reskaurant grease." A 1987 study by SRI, Intemational indicates that the quantity of used frying fat disposed of by restaurants and processed by renderers for use in animal feeds, pet foods, industrial operations, and for export now annually amounts to about 6 pounds per capita, or nearly 10 percent of the 1990 disappearance of food fats and oils.

Food supply data are aggregates of food obtained from all sources. Retail-weight equivalenis measure food availability as if all food were sold through retail foodstores. Much of this food, however, is consumed on farms where produced, or is sold through wholesale channels to restaurants, hotels, other away-from-home eating places, and to schools, camps, hospitals, and other institutions. The food categories tend to be aggregates according to the basic commodity definition, beef, for example. Final product forms and market channel flows are not usually known. Most available data are concentrated near the farm and primary processing levels. There are little or no data available for many further-processed products, such as bread, other bakery products, and soup. In short, relatively good data exist for many of the ingredients, but not for final products. If one is interested in domestic food use by households, or in food intake by individuals, then data from USDA's system
of Nationwide Food Consumption Surveys (NFCS), conducted by the Human Nutrition Information Service should be used

The annual per capita estimates of domestic disappearance inherently represent an aggregation, over time, over consuming units, over geographical space, and over various product forms. In any aggregation process, certain information is, inevitably, lost or rendered irretrievable. Consequently, the per capita disappearance may mask the influence on consumption of seasonal variation and socioeconomic and demographic characteristics such as Consumer Expenditures Surve, housebold income, and geographic region. Data from the periodic NFCS and effect of socioeconomic and demographic charactere bureau Labor Statistics are more useful for measuring the Stocks data are not available for some commodities. Farmer marketings are the only data available for estimating stocks of some commodities, and it is assumed that stocks are equal to the proportion of the crop not marketed by the end of the calendar year. For example, the supply-utilization table for dry edible beans (table 86), uses farmer marketings to estimate stocks. Use of mushrooms for processing is computed without stocks a smoothing effect on food of processed mushroom stocks estimates, were they available, probably would have do not include inventories of wholesalers, retailers, foodservice changes a little less erratic. In addition, stocks insufficient data.

The conversion factors used to derive retail weights from primary weights are averages over various varieties and qualities of product and methods of marketing. Though some year-to-year changes have been made in the factors (see "Updated Beef and Pork Conversion Factors" below), most of them are constant over the entire period since 1970 (table 4). As a result, many changes in quality and yield of product and in marketing procedures go undetected in the consumption estimates at retail and in the per capita food consumption index.

Annual food supply estimates are subject to revision in conforming to data from the Census of Agricuiture and the Census of Manufactures, which are available only in years ending with 2 or 7 . For example, our estimates of 1992 Census of capita supplies of breakfast cereals and pasta for $1988-90$ eventually may be revised based on data from the 1992 Census of Manufactures. Current per capita estimates for $1988-90$ use the annual change in grocery store sales volume of pasta and breakfast cereals as statistical movers of 1987 census data.

## Additions and Revisions

The food supply data base is continually evolving. Sometimes new information sources permit us to create new series or modify existing series to better reflect current market conditions. Sometimes traditional data sources are discontinued or substantially changed, forcing us to discontinue or modify longstanding series. ERS has revised USDA's historical food consumption series in recent years to reflect data availability and food distribution as follows.

## New and Revised Population Estimates Based on 1990 Census Count

The total population of the United States (inciuding Armed Forces overseas) was estimated to be approximately 254.1 million on January 1,1992 (table 115). This figure represents an increase of 2.7 mition or 1.1 percent over the estimate for the corresponding month a year ago. The yearly gain was the result of a natural increase of $1,946,000$ (excess of births over deaths) and estimated net civilian immigration of 759,000 . The rate of population increase in 1990 was also 1.1 percent. This compares with an average annual increase in population during 1991, compared with $4,1.0$ percent. An estimated 4,111,000 babies were born in the United States observed since $1964(4,027,490)$, the last year of the $1946-64$ in 1989. These are the highest levels of births year in the 1970's and in the 1980's was 3.3 millie 1946 - 64 baby boom. The average number of births per

Table 115 presents estimates for January 1 and July I, back to 1970, of the (1) total population, including Armed Forces overseas, (2) resident population, and (3) civilian population. The population estimates shown in table 115 for July 1, 1980, through January 1, 1992, are based on the April 1, 1990, population, as enlumerated in the 1990 census; statistics on births and deaths provided by the National Center for Health Statistics, U.S. Public

Health Service, statistics on immigration provided by the Immigration and Naturalization Service, Department of Justice, data on Federal civilian employees abroad and their dependents provided by the Department of Defense and the Office of Personael Management, data on movement between Puerto Rico and the 50 States (including the District of Columbia) provided by the Puerto Rico Planning Board, and data on the Armed Forces provided by the Deparment of Defense. For a discussion of the estimating procedure used in deriving these estimates, see Current Population Reports, Series P-25, No. 1045.

The revised poputation estimates based on the 1990 census count run as much as 1.4 million below the previous estimates used. Using the revised population estimates, especially those for the late 1980's and 1990's, slightly raises our estimates of U.S. per capita consumption. There is still some possibility that the official Census Bureau population estimates based on the 1990 census may be adjusted upward. Some cities impacted by the undercount are seeking redress in the couris. In addition, some population experts are looking at the possibility that the census data may support adjustment at the national level if not at the State and local levels.

Chunges in U.S. Trade Data Reporting
Effective January 1, 1989, the United States joined other countries in adopting a new export and import commodity classification yystem based on the international Harmonized Commodity Description and Coding System (HS). The HS is intended to serve as a universal product nomenclature superseding the Customs Cooperation and the Brussels Tariff Nomenclatures previously used by many other countries. Many HS commodities are now reported in more detailed form than under the old Schedule B system, while others have been combined into broader groups. For example, since the number of trade codes for wheat has increased dramatically with the HS, analysts now have far more detail about the types of wheat and wheat products traded, especially wheat imports. Meanwhile, veal trade is no longer reported separately but is combined with beef trade.

The HS also is used to report shipments to the U.S. territories. Shipments are transfers from the United States to the territories of Puerto Rico and the Virgin Islands. Shipments data are reported by the Department of Commerce and, since the adoption of the HS, have become increasingly more difficult to obtain on a timely basis. For this reason, ERS has made a change in the supply and utilization tables for red meat, poultry, and eggs that appear in the Livestock and Poultry Situation and Outlook Report (LPS) and the World Agricultural Supply and Demand Estimates (WASDE). The difference embodied in the new format is the removal of shipments to Puerto Rico and the Virgin Islands as a non-domestic use. Previously, such shipments were treated as a non-domestic use similar to exports. Beginning with the January 1, 1990, LPS, these shipments are included with domestic use, which is consistent with intemationally reported supply and utilization data used by the Foreign Agricultural Service of USDA, the United Nations, and the Organization for Economic Cooperation and Development. Untike the LPS and WASDE reports, this report still includes shipments as a non-domestic use in the annual supply and utilization estimates for red meat, poultry, and eggs (tables 39-43 and 48-52). This is done in order to make the quantity of food consumed correspond with the number of people doing the consuming. Annual per capita food disappearance estimates use U.S. total population, including the Amed Forces overseas, July 1. Residents of the U.S. territories are not included in the Census Bureau's estimates of the U.S. total population. Nor is the production of the U.S. territories included in the estimates of U.S. production. Because shipments to the territories are excluded from domestic food disappearance, both total and per capita domestic food disappearance estimates in this report may be lower than such estimates reported in LPS and WASDE.

Format of Meat and Poultry Tables Revised
Several years ago, we revised the historic format of the red meat and poultry per capita consumption tables to enhance comparison of red meat and poultry consumption.

Several meat and poultry consumption series are provided. Consumption of beef and other red meats is reported in three forms: carcass weight, retail weight, and boneless, trimmed weight. Consumption of chicken also is reported in three forms: ready-to-cook (RTC) weight, retail weight (new this year), and boneless weight. Consumption of turkey is reported in RTC weight and boneless weight. Consumption of fish and shellfish is reported by the National Marine Fisheries Service on an edible-weight, or boneless-weight, basis. All these
series have been reported for many years except the new retail series for chicken and the boneless, trimmed series for red meat and poultry, which were introduced in 1986 to facilitate comparison of red meat, poultry, and fish.

Red meat production is reported on a carcass-weight basis (tables 39-43), while poultry meat production is reported on an RTC basis (tables 48-51). Table 5 is set up to show that the carcass weight consumption series for beef is largely comparable with the RTC weight series for chicken. Beef carcass weight is defined as the chilled hanging carcass, which includes the kidney and attached internal fat [kidney, pelvic, and heart fat (KPH)], but not the skin, head, feet, and unattached internal organs. RTC chicken weight is the entire dressed bird, which includes bones, skin, fat, liver, heart, gizzard, and neck. These consumption series were historically associated with wholesale markets for beef and chicken.

Historically, RTC weight for poultry also sufficed as an estimate of retail weight, because consumers almost always bought whole dressed birds. However, beginning in the 1980 's, processing and marketing developments in the poultry industry caused RTC weight and actual retail weight to diverge significantly. Some poultry parts were available in the 1970's, but in the 1980's poultry processors' marketing strategies shifted dramatically, making more cut-up, further processed, and boneless poultry products available. Because of this changing product mix, more bones and some broiler meat now go to rendering and pet food manufacturing. Thus, the RTC poultry series no Ionger accurately reflects what consumers buy.

Since 1990, table 6 has shown per capita consumption of beef and other red meats on a retail equivalent basis along with a footnote that said "comparable data on retail-weight equivalent of poultry are not available." This year, we introduce in table 6 a new retail weight consumption series for broilers that excludes the amount of RTC chicken that is purchased by renderers and pet food manufacturers (see the "New Retail Weight Consumption Series for Broilers Developed" section). This new series was developed to improve the estimates of bow much chicken is purchased by U.S. consumers. Data were not available to estimate a retail weight series for "other chicken"; thus, the broiler conversion factors were used for all chicken. As with broilers, ERS anaiysts are investigating recent market developments regarding turkeys, and this may lead to the development of a new retail consumption series for turkey.

Finally, table 7 presents the boneless, trimmed series which puts beef, chicken, and fish on a fairly comparable basis. However, the boneless, trimmed beef series does not include certain intemal organs such as the liver and tongue, but the boneless chicken series does include some of the giblets.

The relative amount of bone in retail-weight product differs significantly among the meats. Overall, beef at the grocery store currently contains less than 5 percent bone and includes $1 / 4$-inch-or-less fat around the exterior of retail cuts. Note that, on a per capita basis, the ditis sence between retail weight (table 6) and boneless, trimmed weight (table 7) for beef is sinall; for example, 3.0 younds in 1991. Likewise for pork, the difference in 1991 is only 3 pounds. In contrast, note that, on a per capita basis, the difference between retail weight and boneless weight for chicken is considerable, 20 pounds in 1991, for example. The difference between retail weight and boneless weight for broilers reflects bone removal as well as some water leakage that occurs when broilers are cut up before packaging. This leakage has been subtracted from the boneless series but has not yet been subtracted from the retail weight series in this report.

## New Retail Weight Consumption Series for Broilers Developed

This year, we introduce a retail weight consumption series for broilers to facilitate economic comparisons with retail red meat series (table 6). The new consumption series more accurately reflects the pconds of broiler meat flowing into the domestic market for human consumption. Conversion factors are used to adjust ready-to-ecok (RTC) consumption (table 5) to a retail cut equivalent. The conversion factors reflect the increased share of total processor product diverted from the human food chain and into rendering and pet food use as more products are
cutup or boneless. cutup or boneless.

The portion of RTC-weight broilers used in pet food production bas increased significantly in recent years, whereas very little carcass-weight beef apparently has been so used. As consumer demand for chicken breasts
has increased, the less desirable parts, such as necks, backs, and giblets, have become increasingly economical ingredients for pet foods.

Results from the National Broiler Council's biennial processor and distributor surveys provide data on changes in product form and final markets for the products. According to the survey, 87 percent of broilers were sold whole in 1962, but the percentage dropped to only 18 percent by 1989. Cutup or parts represented over 50 percent of sales in 1989. Nearly 12 percent of the RTC poultry weight (inspected by USDA and certified for human consumption) was sold for pel food.

## Ready-to-Cook Series for Poultry Revised Downward

In conjunction with the development of the new retail series for broilers, revisions were made to the total RTC production series for broilers, mature chicken, and turkeys (tables 48-51). These revisions resolve a problem related to nonfederally inspected production, categorized as "other production" in the supply and utilization tables published in the Livestock and Poultry Situation and Outlook Report. "Other production" captures Stateinspected production and production for farm use. In the 1960 's, the estimates for "other production" of broilers represented $10-16$ percent of total RTC production. This share dropped rapidly during the mid-1970's, and by the 1980's and early 1990's represented less than 1 percent. Most State-inspected plants had converted to Federal inspection instead. Production for farm use has been a small fraction of other production. In this bulletin, we show total production only, not the subcategories.

The previous method for calculating total RTC production appears to have overestimated "other production." It did not adequately capture condemnations from the farm to the slaughtering plants. Large downward revisions in "other RTC production" using the new method, particularly for mature chicken and turkeys, resulted in significant decreases in total domestic disappearance. However, on a per capita basis, consumption for broilers, mature chicken, and turkeys each usually decreased less than a pound due to revisions.

For more detail about the new methods for estimating "other production" and for changing broiler RTC-weight data to retail-weight, see "Introducing a Broiler Retail Weight Consumption Series," Livestock and Poultry Situation and Outlook Report (Agnes Perez, Lawrence Duewer, and Mark Weimar, LPS-53, ERS, USDA, May 1992). For more detail on the new method for changing broiler RTC-weight data to boneless-weight, see "Food Consumption, 1980-91: A Harbinger of What's to Come," FoodReview (Judy Jones Putnam, 15:3, ERS, USDA, forthcoming).

## Updated Beef and Pork Conversion Factors

The basic measurement to estimate beef consumption is made at the primary distribution level, or slaughter plant, on a carcass-weight basis. To determine how much of the beef carcass is processed into beef products suitable for sale in grocery stores, in 1962 USDA updated the conversion factor to convert beef carcass weight data to retail-weight equivalents. Reevalusion of this conversion factor shows that the figure used since 1962 (0.74) was accurate through 1985 (table 4). The figure indicates that after fat, bone, and other trim have been removed from the carcass, 74 percent of it can be sold at retail. A few years ago, USDA developed a new method for evaluating the conversion factor that accounts for different classes of cattle and adjusts for trends in beef merchandising.

Based on this new method, the conversion factor changed for 1986 (to 0.73), for 1987 (to 0.71), and for 1988-90 (to 0.705), and may yet change for 1991. The figure should be recalculated each year to account for cbanges such as leaner cattle, closer trimming of fat, and more removal of bone.

The conversion factor estimates the portion of the beef carcass purchased by consumers. The drop in the conversion factor for 1988 represents 3.6 pounds less beef per capita purchased than if 0.74 were still being used. Of this 3.6 pounds, more exterior fat trimmed from beef cuts before retail sale accounts for 2.2 pounds, less bone accounts for 1 pound, and less fat in hamburger and processed beef accounts for 0.4 pound. To what extent, if any, the huge increase in the amount of fat trimmed from beef at retail affects the amount of beef fat ingested is unknown. In earlier years, consumers themselves may have trimmed much or all of the beef fat now being trimmed by meatpackers and food distributors. For more detail about the new method for changing beef
carcass-weight data to retail-weight, see Reevaluation of the Beef Carcass-to-Retail Weight Conversion Factor (Kenneth E. Nelson, Lawrence A. Duewer, and Terry L. Crawford, AER-623, ERS, USDA, October 1989). The weight conversion factor (tables 7 and 39).

Conversion factors used to adjust carcass-weight pork consumption (disappearance) to retail and boneless equivalent weights were revised last year to reflect the trends toward leaner hogs, closer trimming of fat, and more removal of bone. Results of an examination of merchandising practices indicated that pork consumption, Revisions, reflecting changes in the arstated in recent years and boneless weight consumption understated. 1990. The 1989 factors of 0.776 (retail weight) and 0.729 and skin sold at retail, were made for 1955 through periodical revision. For more detail about the new method (boneless weight) will be used until the next and boneless-weight, see "Revisions in Conversion Factors for changing pork carcass-weight data to retail-weight Situation and Outlook Report (Lawrence A. Duewer, Kevin Por Pork Consumption Series," Livestock and Poultry January 1991).

## Data Revisions, Losses, and Substitutions in Vegetables and Fruits

Data losses since 1981 regarding commercial production of fresh and processed fruits and vegetables pose a serious problem for estimating per capita disappearance.

## Per capita retail-weight series discontinued for processed vegetables. Consumption of canned vegetables, frozen

 vegetables, mushrooms, sweetpotatoes, dry edible beans, and field peas is estimated on a farm-weight basis only, because insufficient data exist to continue estimating retail-weight equivalents (tables 27-29). Historically, pack Food provided by such trade organizations as the National Food Processors Association and the American Frozen disclosure problems and used to estimate U.S, consumption of canned and frozen vegetables. Over the years, or consolidate statistics on several commodities. This reporting data have forced these organizations to drop using only NASS data on commercial production of selected veg of traditional data sources bas necessitated are collected at the processing level, where pack data originate.Data voids for processed vegetables. The loss of pack data has created data voids for many processed vegetables. This is because many of the vegetables for which pack data formerly were available are not part of the NASS production estimates program, and ERS researchers have been unable to find another way to estimate pimentos, pumpkin, sauerkas in canned vegetables include beets, field peas, lima beans, mixed vegetables, okra, include Brussels sprouts, field peas, lima beans, okra, onions, puetpotatoes. Data voids in frozen vegetables miscellaneous vegetables.

NASS has announced it will reinstate annual aureage, production, and value estimates for cabbage for kraut, beets, spinach, and green lima beans. This means that ERS will be able to provide per capita use estimates for these newly reinstated items, perhaps by 1994.

Sales of processed vegetables through grocery stores provide a partial measure of consumption for items not surveyed by NASS (table 25). These data are derived from scanner data from a national representative sample of supermarkets, projected to reflect total U.S. grocery store sales. Total consumption of an individual consumed through than grocery store sales of that commodity. Consumption also includes the portions canned chili with beans, and frozen TV dinners.

Data losses and substitutions for processed tomato products. Consumption of individually processed tomato products has not been estimated for several years. Data availability allowed us to make only an aggregate estimate of all tomatoes slated for processing. NASS data told us nothing about the distribution of tomatoes for processing among the various individual processed tomato products, including canned tomatoes, tomato paste, tomato sauce, ketchup, chili sauce, tomato juice, and tomato pulp. Furthemore, there was no available
information about further processing of imported tomato products. For example, the extent to which imported tomato paste was used in domestic production of tomato sauce or ketchup is unknown.

Last year, because data for stocks of canned tomato products were no longer reported by the California League of Food Processors, it was impossible to compute 1989 total per capita ise for canning tomatoes using established methods. Alternative measures have been explored to derive per capita use for this critical canning vegetable, which accounted for 74 percent of total reported canning vegetables in 1988. Because of the importance of processing tomatoes in the American diet, it was decided to estimate total stocks based largely on the bistorical relationship with production.

Because of the back-to-back record crops in 1989, 1990, and 1991 estimated stocks increased greatly and per capita use apparently also increased to new highs (table 27). However, it is difficult to confirm the increase in use during these 3 years since a large portion of tomato sauces and paste is used in commercially prepared foods and in the foods trvice industry in such items as pizza, tomato-based pasta sauces, and Mexican and other ethnic dishes. According to privately reported supermarket retail sales, overall tomato product movement increased only 2.9 percent trom 1988-90, on a per capita basis, with growth occurring only for spaghetti sauce (up 10 percent), Mexican sauces (up 34 percent), and ketchup and chili sauce (up 1 percent). Per capita movement of tomato sauce, paste, juice, and canned tomatoes was flat or downward during the same period.

With the majority of pask going into foodservice sizes where demand has been growing, a large part of tomato movement remains unconfirmed. At worst, if total per capita use were less than estimated for 1989 and 1990, stocks for tomato products would be larger than the record-large levels presently estimated. With another huge California crop processed in 1991, stocks probably grew larger and added to the current world glut of processed tomato products. Tomato processors have contracted with U.S. farmers to grow 274,000 acres of processing tomatoes in 1992, down nearly 25 percent from 1991, indicating that stocks are quite high.

New per capita consumption estimates for canned fruits. Beginning in 1990, pack and stock data for a variety of canned fruits were no longer available from several key industry participants and, therefore, the per capita consumption figures for canned fruits were not updated for 1989. This year, analysts in the Fruit Analysis Section, ERS, developed an alternative procedure for estimating canned fruit consumption using data on utilization for canning as reported by NASS (table 17).

Domestic consumption of a commodity, for the designated time period (calendar or crop year), is typically estimated by taking domestic production, adding beginning stocks and imports, and then subtracting ending stocks and exports. Until discontinued in 1990, industry pack and stock data for canned fruit (apples, apricots, sweet and tart cherries, fruit cocktail, peaches, plums and prunes, and olives) were used as the measures of domestic canned production and stocks.

With the new procedure, the NASS estimates of the amount of selected fruits used for canning is used as the measure of canned fruit production or pack. The fresh weight of fruits used for canning is converted into its product-weight-equivalent using standard conversions. There still are no measures of canned fruit stocks. Therefore, stock adjustments are excluded from the per capita calculations. Imports and exports, as in the past, are obtained directly from U.S. Department of Commerce trade data.

Because the new procedure does not reflect beginning or ending stocks, the consumption estimates can be biased for any given year, but not necessarily biased for the general trend of consumption. For example, when stocks increase from the beginning to the end of the period, consumption estimates would be overstated, as the stock buildup would be erroneously in the consumption estimate. Likewise, when stocks decrease, consumption would be understated, as the drawdown on stocks would be erroneously excluded from the consumption estimates. However, over time, stocks tend to fluctuate around a relatively constant desired level.

This same estimating procedure was used last year to reestablish per capita consumption measures for apple products (table 21) and for fresh and processed pineapple (table 22).

The transfer from industry to NASS utilization data changed somewhat the mix of canned fruit products for which per capita consumption numbers are calculated, reflecting the availability of data. Canned utilization data
are estimated by NASS for apples, apricots, cherries, peaches, plums and prunes, olives, and pears. For pears, only total processed utilization is reported by NASS and canned pears are not broken out as a separate processed total processed utilization and meang canned pears, the amount of pears utilized for drying is subtracted from estimated as a separate canned fruit item. However to be canned. Fruit cocktail had previously been cocktail will be included with the processed utilization for the new procedure, all fruits used in canned fruit new procedures provide similar estimates of per capit for each canned fruit. Results indicate that the old and For cherries and pears, the new estimates are more thansumption for apricots, peaches, and prunes and plums. due to a number of factors, including previous underreporting the old estimates. The discrepancies could be pears, the NASS processed-pear utilization data include pears of the pack by the industry. Also, in the case of included with industry pack used in the previous prude pears canned in fruit cocktail, but these were not identical to the old as NASS utilization estimates procedure. For canned apples and olives, the new estimates are and une both the old and necedures.
continue to review data availability for canned noncitros fruit juices also was discontinued after 1988. ERS will Meanwhile, as with processed vegetables, this report also in an attempt to resume some of the series. processed fruits and juices (table 24).

## Revised export series change per capita consumption series for fresh vegetables. Data for U.S. exports of

 vegetables to Canada were underreported for many years. This was especially troublesome in fresh vegetables 1980's with U.S. exports of many over 90 percent of U.S. foreign sales. The problem became acute in the early Despite the switch to the harmonized trade sysg less than half the levels reported in Canadian trade statistics. Bureau of the Census began substituting data on Canas, U.S. export reporting did not improve. In 1990, the customs data. The improved reporting resulted in a huge jumports from the United States in place of U.S. some to erroneously credit the rise solely to the U.S.-Canada Free Trade Agreement. 1989 to 1990, prompting The solutionCanadian imports from the United States prior to replace the underreported U.S. exports to Canada with from 1978 to 1989. This yielded a smoter to 1990. ERS updated the major fresh vegetable export series vegetable trade. Since exports are a component of which is much more representative of actual U.S. fresh was to reduce U.S. per capita use estimates for most fresh and use tables, the immediate result of this change vegetables were not changed at this time although data for a fetables (table 26). Exports for processed export market may be updated within the next year.

## Reinstatement of nine fresh vegetables and melon

production, and value for many fresh and procesing 1981, USDA discontinued reporting of national acreage, these commodities have also been discontinusing vegetables. Sirce that time, per capita use estimates for the importance of some of these commodicies and the avain the lack of national production statistics. Because of States, ERS has been able to estimate per capita ue availability of production data from some of the major Commodities reinstated this year include cabbage, for some of the missing fresh market commodities.
23 and 26). Last year, we reinstated artichokes, eggplant, gepers, cucumbers, green beans, and cantaloup (tables beets, Brussels sprouts, escarole, green peas, kale, lima beans, and watemelon. Current data voids include and miscellaneous vegetables.
Analysts in the Vegetable Analysis Section have devised a new method of estimating watermelon consumption, which NASS production data ares representing about 70 percent of U.S. production in 1981 (the last year for watermelons increased roughly 3 percent per The State data indicate that production and utilization of estimating watermelon consumption, see The Uear during the 1980 's. For more detail on the new method of Report AGES-9015, ERS, USDA, March 1990). Thatermelon Industry (Amy Allred and Gary Lucier, Staff declined from 1960 to 1980. However recent . The report indicates that watermelon production and utilization domestic utilization have expanded. That study reviews indicates that since 1080 both aggregate production and packaging, marketing, cash receipts, and costs of produs supply and utilization trends, prices, transportation, changes, and reviews the research and promotion program watermelons. It also documents historical industry capita watermelon consumption seties appears in tables 23 and 80 . by the industry in April 1989. The new per

Also retumed to the fresh vegetable and melon per capita series in the last two years are artichokes, green peppers, cabbage, cantaloup, cucumbers, eggplant, garlic, and watermelon (tables 23 and 26). These vegetables production statistics. The new estimeries in 1982 due to cutbacks in the NASS budget for collection of reports and from the California County Agricuta reported by the State departments of agriculture in their annual detailing supply and use estimates for each of the Commissioners' reports. ERS plans to publish a report will include estimates and methodology for the nine vegetables and which per capita use is estimated. This report

## Food Consumption Data Revised to Include U.S. Military !Jse

The 1989 report, for the first time, reported per capita consumption of all farm foods except fluid milk and cream on a U.S.-total-population (including Armed Forces overseas) basis. Earlier editions had reported anim product consumption on a civilian-population basis. Fuid milk and cream estimates use the U.S. resident balance sheets. The main reason makes an adjustment for military consumption in the supply and utilization military food purchases or consumption. The dange is that available data on nilitary food use do not reflect all purchasing office for troop feeding, but exclude local purchases fors by the Defense Department's central commissaries, clubs, exchanges, and civilian distribution purchases for troop feeding and purchases through incompleteness of the data tended to distort binbution channels for personal or household use. The most years, changing the statistical series to reth military and civilian per capita consumption estimates. For capita consumption. The main exception is the war years of the 1940's, fresults in very small changes in per consuraption because of abnormalities created by the war.

## New Table on Import Share of Food Disappearance for Selected Foods

New in the 1990 edition is a table that shows the import share of the food supply for 70 commodities for selected years (table 100). Publication of tis information is mandated by the Omnibus Trade and
Competitiveness Act of 1988 . Compeutiveness Act of 1988.

The act directs the Secretary of Agriculture to compile and report to the public statistics on the total value and quantity of imported raw and processed agricultural products. In addition, statistics on the total quantity of data are to be reported to correlate statistics for the quantity and value of agricultural products are required. The and consumption of domestic agricultural products.

Statistics on the value and quantity of agricultural imports are published bimonthly in Foreign Agricultural Trade
of of the United States, (ERS, USDA), while statistics on domestic production and consumption are published
annually in $F$ ood percentage of consurnption accounted for by imporits, will (ERS, USDA). The new table, which reports the Adding the table to these publications will facilitate the comparison each year in these two publications. production and consumption of domestic production.

The import share of domestic food disappearance varies greatly among commodities. Less than 1 percent of eggs, butuer, and iceberg lettuce is imported, but imports make up more than 99 percent of the U.S. domestic
food supplies of coffee, tea, cocoa calculated from commodity supply and utilization balance sheets. by the quantity available for domestic food consumption.

## Determinants of Food Consumption and Demand

Food consumption and prices are determined by the complex interaction of the market forces of supply and demand. In he short run, supplies are relatively fixed and inflexible, and prices adjust so products clear the Conversely, smaller supplies consumed. When supplies go up, price goes down and consumers buy more. production in response to market prices, producing more of piothases. In the long ron, farmers adjust

Demand for food in the aggregate is not very responsive to price changes because there is little room for substitution beiween food and nonfood goods in the consumer's budget. However, demand for individual foods is more responsive to prices as consumers substitute among alternative food commodities. Rising incomes increase expenditures on more expensive foods as consumers demand more convenience and quality. Shor-period changes in consumption reflect mostly changes in supply rather than changes in consumer lastes. Demographic factors, such as changes in household size and in the age distribution of the population, can bring about changes in consumption over time.

## Food Prices

The rise in retail food prices slowed dramatically in 1991 under the pressure of large food supplies and recession-weakened consumer demand. Food prices in 1991, as measured by the Consumer Price Index (CPI), averaged 2.9 percent above those in 1990 , half the 1990 price increase of 5.8 percent (fig. 3) (table 101). Moreover, the 1991 increase was the lowest since 1985.

Food prices in 1991 rose more slowly at supermarkets and other grocery stores than at eating places, reversing the trend over the previous 4 years (fig. 4) (table 102). Food prices in grocery stores went up 2.6 percent, and prices for restaurant meals advanced by 3.4 percent. In both cases, prices increased more slowly than they had the year before. For restaurant meals, the 1991 price increase was the smallest since 1965.

There were two principal reasons for the slowdown. Production of livestock, poultry, and fish and shellish increased, generating record total meat supplies. At the same time, the recession cut into consumer buying power and, thus, food spending. Per capita disposable income, adjusted for inflation, fell about 1 percent in 1991. This drop forced food marketers to limit price increases or watch already weak sales erode.

Four food groups caused most of the rise in grocery-store prices in 1991: red meat retail prices rose 3.1 percent, cereal and bakery prices went up 4.1 percent, prepared foods prices rose 4.5 percent, and prices of fresh fruit jumped 13.5 percent (table 103). Lower prices for dairy products, poultry, and eggs helped slow the rate of price increases in 1991.

Food prices in 1991 rose by less than the CPI for all consumer products and services. Helped by the 2.9 percent rise in food prices, which make up 16 percent of the CPI, overall inflation averaged 4.2 percent in 1991, down from 5.4 percent in 1990. Among major items in the CPI, housing prices, the major component, went up 4 percent, and apparel and upkeep prices rose 3.7 percent, but medical costs climbed 8.7 percent in 1991.

## Food Expenditures and Income

## Food Expenditures in 1991

Americans spent $\$ 570$ billion for food in 1991 and another $\$ 85$ billion for alcoholic beverages (table 110). Of this $\$ 570$ billion spent for food, families and individuals paid 81 percent, governments and businesses spent 18 percent, and 1 percent was produced and consumed at home with relatively little cash outlay (fig. 7) (tabie 114).
Away-from-home meals and snacks captured 45 percent of the U.S. food doliar in 1991, up from 34 percent in 1970 and 24 percent in 1950. The share of food dollars going for away-from-home meals and snacks has been increasing for more than a century, but because restaurant meals include many more services than food purchased at the grocery store, the stares of value and quantity of food away from bome are quite different (fig. 8).

## Food Expenditures in Relation to Income

Disposable personal income in the United States totaled $\$ 4,218$ billion in 1991, neariy six times the $\$ 722$ billion in 1970 (table 107). Per capita disposable income advanced from an average of $\$ 3,540$ in 1970 to $\$ 16,176$ in
1991. In real terms (after adjustment for inflation), per capita income increased 43 percent between 1970 and 1991. During the same period, real food expenditures per capita increased 21.6 percent, much of it due to the switch to more away-from-home eating.

Although food spending has increased considerably over the years, the increase bas not matched the gain in disposable income. As a result, the percentage of income spent for food has declined (table 107). Food expenditures by families and individuals were 13.9 percent of disposable personal income in 1970, compared with 13.5 percent in 1980 and 11.6 percent in 1991. The decline is the direct result of the inelastic nature of the aggregate demand for food: as income rises, the proportion spent for food declines. Expenditures for food require a large share of income when income is relatively low. As income rises, there is more money to spend on personal services and other discretionary items. Some of these additional services ordinarily are purchased along with food. This reasoning largeiy explains the slight increase from 1970 in the percentage of income spent on food away from bome. The share of income going for food is often used as an indicator of affluence, of either a family or a nation. The figure has sometimes been misused to prove that food is a bargain. For further analysis, see U.S. Food Spending and Income: Changes Through the Years (Alden Manchester, AIB-618, ERS, USDA, Jamuary 1991).

The proportion of income spent for food varies widely among households of different sizes and incomes (table 108). Data from the 1990 Consumer Expenditure Survey conducted by the U.S. Department of Labor showed that the percentage of after-tax income spent for food varied from 14.4 percent for households with incomes of $\$ 40,000-\$ 49,999$ to 32.6 percent for households with incomes of $\$ 5,000-\$ 9,999$.

## Information About the ERS Food Experiditures Data Set

ERS estimates of food expenditures by families and individuals (table 107) differ from the U.S. Deparment of Commerce estimates of personal consumption expenditures (PCE) previously used to compute the percentage of disposable income (DPI) spent for food. The trend in food expenditures is similar, but the ERS series shows a lower level of spending for food than the PCE series, particularly for food consumed at home. The ERS estimate of at-home expenditures is lower partly because it excludes pet food, ice, and prepared feeds which are included in the PCE estimates. ERS estimates also deduct more from grocery store sales for nonfoods, such as drugs and household supplies, in arriving at the estimate of food purchases for at-home consumption.

To provide information on all food, ERS also calculates total expenditures for food in the United States (tables 110-114). In comparison, the PCE for food includes only foods purchased by individuals and families using their own funds. It does not include food paid for by business funds, mostly for travel and entertainment expenses, food donated by the Govermment, and food used in hospitals and other institutions, either where there is no charge or where the charge is not stated separately (as in the case of hospital food service). The ERS measure of total food expenditures includes all food expenditures by consumers, other private sources, and governments. For more detail about the ERS expenditure series, see Developing an Integrated Information System for the Food Sector (Alden Manchester, AER-575, ERS, USDA, August 1987).

## World Food Expenditures

Table 109 compares average expenditures for food and alcoholic beverages to be consumed at home in selected countries. The data are computed by ERS mainly from data provided by the United Nations (UN) System of National Accounts. We show two sets of expenditures data for the United States: the ERS series (which we believe to be the more accurate of the two) from tables 107 and 113, and the PCE series. Data for the former Soviet Union, Eastem Europe, and China are collected from the statistical yearbooks for those countries and interpreted by ERS.

In 1989, the latest year for which comparable information is available, Americans spent only 7.8 percent of their personal consumption expenditures for food to be eaten at home (table 109). This compares with 11.3 percent for Canada, 12.5 percent for the United Kingdom, and 13.4 percent for Luxembourg. In less-developed countries, such as the Sudan, India, and the Philippines, at-home food expenditures often account for more than 50 percent of a household's budget.

Americans do not have the highest per capita income (he Swiss do). Yet, in relation to total per capita personal consumption expenditures, Americans spend the least on food. Other factors besides income influence food expenditures in developed nations. Thanks to abundant arable land and a varied climate, Americans do not have to rely as heavily on imported foods as some other nations. The American farm-to-consumer distribution system is highly successful at moving large amounts of perishable food over long distances with a minimum of spoilage or delay. Finally, American farmers have a tremendous wealth of agricultural information and state-of-the-art farming equipment at their disposal, allowing them to produce food efficiently.

In table 109, food expenditures are shown as a percentage of total personal consumption expenditures, reflecting individuals' spending on goods and services in the domestic marketplace. Disposable personal income in table 107, on the other hand, includes both personal consumption expenditures and personal savings. Total personal consumption expenditures are used as the basis of comparison because personal savings is seldom reported in the UN System of National Accounts.

## Food Spending in American Households, 1980-88

Average weekly food expenditures in urban households rose from $\$ 18.94$ per person in 1980 to $\$ 25.68$ in 1988. Weekly spending per person for food consumed at home increased from $\$ 12.82$ to $\$ 15.85$ and from $\$ 6.11$ to $\$ 9.83$ for food consumed away from home. This information is from Food Spending in American Households, 1980.88 (David M. Smallwood, Noel Blisard, and James R. Blaylock, SB-824, ERS, USDA, May 1990). This bulletin presents information on trends in household food expenditures for major food groups by selected demographic factors for 1980-88. Information is also presented on food price trends. Detailed tabulations are presented for 133 food categories by 10 household socioeconomic characteristics for 1987 and 1988. Several measures of food item expenditures and prices are presented. The data are from the 1980-88 Continuing Consumer Expenditure Diary Surveys prepared by the Bureau of Labor Statistics, U.S. Department of Labor.
Another ERS report that analyzes data from the BLS annual consumer expenditure surveys is How Did Household Characteristics Affect Food Spending in 1980-88? (James R. Blaylock, David M. Smallwood, and W. Noel Blisard, AIB-643, ERS, USDA, February 1992). It looks at trends in U.S. per capita consumption of total food, food at home, and food away from home using the latest data from annual surveys of urban household food spending from 1980 to 1988. Actual household spending was adjusted to 1988 food price levels to focus on consumption changes. Total food spending rose sharply for one-person households but declined steeply for households with six or more persons. Households headed by people 65 years old and over spent most on food at home and the least on food away from home.

## Food Consumption

Long-term trends in per capita total food supplies are measured with a price-weighted per capita food consumption index based on $1982-84=100$ (fig. 9) (table 1). To assure consistency, the index includes only those items for which data exist over the entire time period (1970-90). The index primarily shows changes in quantity, although it also reflects shifts among major food categories such as the move from higher priced beef to lower priced poultry or from processed to fresh, particularly for fruits and vegetables. The index includes foods eaten away from home and foods produced and consumed on farms. However, food items in the index are weighted by their retail prices in foodstores.

As measured by the index, per capita food supplies increased about 6 percent during the $1970-90$ period. A trend having significant mutrition implications is the steadily increasing importance of crop-derived foods compared with foods from animal products. In 1970, the index of food supplies from animal products exceeded the crop foods index by 8.6 percent. By 1990, the index of foods from crops exceeded the animal products index by 9.1 percent. Between 1970 and 1990, crop-derived foods increased 17 percent while animal-based foods decreased 2 percent on a per capita basis.

Consumption of foods in most crop categories has risen steadily in the last 20 years, especially frozen potatoes, flour and cereal products, fresh and frozen vegetables, peanuts and tree nuts, fresh and processed fruits, vegetable
fats and oils, and sweeteners. Crop products whose consumption declined between 1970 and 1990 are fresh potatoes, coffee, sweetpotatoes, dry beans and peas, and vegetables for canning.

In contrast, Americans used less whole milk, animal fats, eggs, and red meat. Increased consumption of lowfat milk, cheese, poultry, cream products, and fish and sbellfish moderated the decrease in animal product consumption.

## Red Meat, Poultry, and Fish

In 1991, each American consumed, on average, 64 pounds of beef, 47 pounds of pork, 43 pounds of chicken, 15 pounds of fish and shellfish, 14 pounds of turkey, and about 1 pound each of lamb and veal (boiteless, crimmed equivalent) (table 7).

Red meat accounted for 61 percent of the total meat supply in 1991, on a boneless-weight basis, compared with 70 percent in 1980 and 74 percent in 1970 (fig. 10). By 1991, chicken and turkey accounted for 31 percent of the total meat consumed, up from 23 percent in 1980 and 19 percent in 1970. Fish and shellish accounted for 8 percent of total meat consumption in 1991 and 7 percent in 1980 and 1970. In 1991, Americans averaged 20 pounds less red meat, 23 pounds more poultry, and 3 pounds more fish and shellfish than in 1970.

## Red Meat and Poultry

Per capita consumption of beef in 1991 was 9 pounds, or 12 percent, lower than in 1980. Moreover, it was 25 pounds, or 28 percent, below the all-time high 89 pounds consumed in 1976 when beef supplies were at record levels because of the liquidation of the Nation's beef herd. Estimates for 1990 and 1991 put red meat and beef per capita consumption at the lowest levels since the late 1950's.

In contrast, per capita consumption of chicken in 1991 was 10 pounds, or 31 percent, higher than in 1980. On a per capita, boneless-weight basis, chicken consumption totaled 34 percent of beef consumption in 1970, compared with 45 percent in 1980, and 67 percent in 1991.

Year-to-year fluctuations in pork consumption are often quite large, but the consumption level has been fairly stable in the long run. Between 1970-79 and 1991, average annual pork consumption declined by 1.1 pounds per person on a carcass-weight basis and by 0.5 pound per person on a retail-weight basis but increased by 2 pounds per person on a boneless-weight basis. This apparent incongruity is explained by the trends toward bigger and leaner hogs that provide more meat per pound of carcass weight, closer trimming of fat, and more removal of bone from the retail-weight product.

## Fish and Shellfish

U.S. per capita seafood consumption for 1991 is estimated at 14.8 pounds, down from a record high of 16.1 pounds in 1987 (tables 8 and 44-47). Despite the 8 -percent decline from the 1987 level, average consumption in 1991 was still 19 percent and 26 percent above consumption in 1980 and 1970, respectively. Several important factors account for this. Advances in aquaculture, changing demographics, Americans' continued focus on foods perceived as healthful, better merchandising by supermarkets and other retailers, and greater availability are some of them. Growing populations of ethnic groups that traditionally consume larger amounts of seafood are helping to fuel growth. Another factor is the "greying of America." The health benefits of seafood are more attractive to an aging and more affluent population.

During the last 5 years, prices for fish and seafood products rose 14 percent, slightly less than the 16 - and 17 percent increases for pork and chicken, and considerably less than the 25 percent for beef (tables 102 and 103). With these changes in relative prices, one would expect seafood consumption to increase somewhat compared with the other products mentioned. However, the decline in beef consumption seems to have been captured by higher poultry consumption. The poultry industry may have been in a better situation to expand the number of products it produces and to bring out new products desired by consumers. The poultry industry was also aided
by the expansion of poultry use in the away-from-home industry, especially in fast food restaurants. Frequent negative news articles on the safety of seafood may also have induced some consumers to buy less seafood.
U.S. per capita consumption of total edible fish and shellfish increased 26 percent between 1970 and 1991. Over the last 20 years, increased consumption of fresh and frozen fish and shellfish accounted for most of the growth, rising 39 percent, while canned products were up 11 percent, and consumption of cured items fell. Per capita canned tuna consumption rose 44 percent from 1970-91, from 2.5 to 3.6 pounds. The 26 -percent rise in average seafood consumption from 1970-91 occurred even thou ${ }^{\text {in }}$ seafood prices outpaced those of other protein sources during those years. CPI's for fish, red meat, and poultry climbed 373 percent, 203 percent, and 147 percent, respectively, from 1970 to 1991.

## World Meat Consumption

The Republic of Maldives, Iceland, St. Helena, and Japan are the world leaders in per capita fishery products consumption (table 9). In 1986-88, the typical Maldivian consumed an average 286 pounds of fish and shellfish (live weight equivalent) a year, more than six times as much as that consumed by the typical American.

In 1991, the United States led the rest of the world with an annual per capita consumption of poutry of 95 pounds per person, ready-to-cook weight, followed by Israel, 82 pounds, Hong Kong, 77 pounds, and Singapore, 75 pounds (table 10). The U.S. 1991 beef and veal per capita consumption of 97 pounds, carcass weight, put Americans third behind the Argentines, 154 pounds, and Uruguayans, 123 pounds, but ahead of Australians, 84 pounds, Canadians, 80 pounds, and New Zealanders, 77 pounds. Many countries, European countries in particular, rank above the United States in terms of per capita pork consumption. The typical Hungarian and Dane, for example, consume more than two times as much pork as does the typical American. New Zealanders lead the rest of the world in per capita consumption of lamb, mutton, and goat, averaging 55 pounds per person in 1991. Americans averaged just under 2 pounds per person of these meats.

## Eggs

U.S. per capita egg consumption has declined steadily since the end of World War II from an all-time recorded high of 403 eggs in 1945. Population growth and increasing per capita consumption of egg products have kept total production and sales from declining sharply (table 52 ). Total egg production (total production minus hatching egg production) was 5.7 billion dozen in 1970 and 5.8 billion dozen in 1991.

Between 1970 and 1991, total annual per capita egg consumption decreased from 309 to 231 eggs, while annual per capita consumption of eggs in the form of egg products rose from 33 to 51 eggs (fig. 11) (table 11). As with red meat, some people correlate the decline in shell egg use with concenns about cholesterol intake.

Egg product consumption changed little during the 1960 's and climbed only slowly during the 1970 's. Since 1983, however, it has jumped 47 percent, reflecting expanded use as manufaciuring ingredients in a number of food products (such as pasta and sweet baked goods) and increased use in fast food outlets and other foodservice establishments.

## Dairy Products

Over the long term, supplies of commodities and particular product forms are expecied to change in response to changes in consumer demana and preferences for the commodity or product form. For example, if demand declines, prices will drop, and producers will have less incentive to produce the product. Thus, there is some tendency to interpret long-term trends in food supplies as a reflection of consumer neaction to particular stimuli. A connection to health and nutrition concerns is often implied. Careful study of trends in dairy product consumption, however, shows how difficult it is to draw conclusions about the effects of any one factor on food demand and supply.

Figure 12 illustrates the trends in per capita consumption of total dairy products. The lower segment of the chart represents the supply of dairy products to commercial markets and that produced and consumed on farms,
converted to a milk-equivalent, milkfat basis. The upper portion represents the amounts of products supplied to consumers through Govermment commodity conation programs.

The 24 -year period between 1965 and 1990 can be divided into four sections. The first extended from 1965-74, a period of steadily declining per capita consumption (fig. 12) (tables 12 and 53). The second period exbibited stagnant per capita consumption. For total disappearance, it extended from 1975 through 1981. For disappearance from commercial markets only, it extended 2 years longer to 1983. The third period, a period of rising per capita consumption, extended from 1982-87 for total consumption and from 1984-87 for commercial markets only. Per capita Government donations grew from 1982-87, with the establishment of the Temporary Emergency Food Assistance Program but dropped in 1988-91 as surplus dairy product supplies plummeted. The fourth period, 1988-91, is a period of declining per capita disappearance. Even so, per capita consumption in 1991 is nearly 5 percent above the 1980's low in 1981.

Various reasons have been postulated for the upturn in the mideighties. Most cite demand forces and include increased generic advertising of dairy products, reduced relative prices, awareness of the importance of calcium in the diet and dairy products as a source of calcium, demographic changes in the population, and increased use of dairy products, especially cheese, as ingredients in other foods (pizza, for example).

Dairy products come in various forms, each of which exhibited particular supply trends during the past two decades. Within the beverage milk category, a significant and steady substitution of lowfat milk and skim milk for whole milk occurred between 1970 and 1990 (tables 13 and 36 ). While whole milk represented 81 percent of all beverage milk in 1970, its share dropped to 41 percent in 1990. The lowfat and skim milk share increased from 19 percent to 59 percent. If yogurt, most of which is lowfat or nonfat, is grouped with beverage milks, the trend toward lowfat milk beverages is even greater. These changes seem to be consistent with increased public concern about cholesterol and animal fat consumption. Also, the decline in total fluid milk per capita consumption may be partially attributed to the changing age demographics of the U.S. population during the last two decades.

While Americans are switching to lowfat beverage milk, they are also using more fluid cream products (half and half, light cream, heavy cream, and sour cream and dip). Per capita fluid cream consumption jumped 2 pounds doring the 1980 's, from 5.2 pounds per person in 1980 to 7.1 pounds in 1990.

In contrast to steadily decining supplies of fluid milk, per capita cheese supplies show consistent year-to-year increases over the past two decades. Average consumption of cheese (excluding full-skim American and cottage, pot, and baker's cheese) more than doubled from 11.4 pounds in 1970 to 24.7 pounds in 1990 (table 12). From 1971 to 1990 , consumption of cheddar cheese, Americans' favorite cheese, increased 54 percent, per capita, to 9.2 pounds (table 14). Per person use of Italian cheeses nearly quadrupled during the same period. Per capita consumption of Mozzarella in 1990 was 6.9 pounds, five times higher than in 1971, making it Americans' second favorite cheese. These estimates represent the natural equivalent of cheese and cheese products. Total product weight, shown in table 14, is greater than natural equivalent because processed cheese and cheese food are made from natural cheese and other dairy products. Average consumption of cottage cheese, on a productweight basis, declined 36 percent from 1971 to 1990 to 3.4 pounds per person.

If one considers long-term changes in food supplies a reflection of health concerns, the fluid cream products and cheese consumption trends seem to conflict with fluid milk, yogurt, and red meat-poultry consumption trends. American and other whole or part-skim milk cheeses tend to be high in fat, and cottage cheese usually contains low levels of fat. Thus, it becomes clear that many forces besides health concerns influence consumption and supply trends. For cheese, some evidence exists that the growth is concentrated in the ingredient and away-from-home markets. Rapidly expanding pizza sales and changes in lifestyles that emphasize convenience foods are probably major forces affecting cheese trends. Meanwhile, industry is responding to consumer concems about health in recent years by introducing many new dairy product alternatives that are lower in calories, fat, and cholesterol than traditional products.

Per capita consumption of all dairy products in 1990 came to 571 pounds (milk equivalent, milkfat basis), up 5 pounds from 1989 and down 31 pounds from 1987.

Consumption data for cheese, butter, and nonfat dry milk include USDA donations of these products. The level of donations in 1990 was considerably below 1987 levels, accounting for 17 percent of butter, 2 percent of nonfat dry milk, and less thani 1 percent of cheese (fig. 12) (tables 56, 58, and 59). In 1987, the corresponding percentages were 20 percent, 25 percent, and 10 percent.

## Fats and Oils

Emphasizing the current concems about high levels of fat consumption in the United States, U.S. per capita food supplies of tats and oils increased 19 percent from 1970 to 1990 to 62.7 pounds per person (on a fat-content basis) (fig. 13) (table 15). Americans consumed 10 pounds more fats and oils per person in 1990 than in 1970. A 36 -percent increase in use of vegetable fats arid oils (mainiy, salad and cooking oils and shortening) more than offset a 28 -percent decrease in use of animal fats (lard and butter). In 1990, animal fat constituted 16 percent of total fat consumption from food fats and oils, compared with 27 percent in 1970. In contrast vegetable fats and oils constituted 73 percent of total fats and oils consumption in 1970, compared with 84 percent in 1990. The switch reflects increased consumer emphasis on unsaturated fats. The increase in total fats and oils supplies probably results from the greatly expanded consumption of fried foods in food service outlets and the increased use of salad oils on salads consumed both at home and away from home.

Average use of salad and cooking oils (table 63) increased 57 percent from 1970 to 1990 and the average use of shortening (table 62) increased by almost a third. Over the same period, average direct use of lard (table 60) dropped by half and average use of table spreads (butter, table 59; and margarine, table 61) fell 6 percent.

The 1990 average per capita level of fat consumption from food fats and oils dropped 2.5 percent ( 1.6 pounds) from a record high of 64.3 pounds in 1985 and 1986. However, vegetable fats and oils contimued to displace animal fats. Refer to the earlier section on "The Data-Limitations" concerning the refiability of the fats and oils food disappearance series as an indicator of change in fats and oils eaten.

## Fruits

Fresh fruit consumption gained 22 pounds per capita from the 1970.74 annual average to a total of 116 pounds (retail-weight equivalent) in 1985-89; the rise was due entirely to sharp increases in consumption of fresh noncitrus fruits and melons (tables 3,16, and 23). A small apple crop and supply shortages as a result of a severe freeze in Florida and Texas in December 1989 and cool, damp weather that retarded growth of spring 1990 crops in Callforia caused per capica consumption of fresh frvits in 1990 to drop 3.4 percent below trend.

Per capita use of selected canned fruits declined 14 percent from 1970-74 to 1990 as use of frozen fruits increased 26 percent during the same period (tables 3,17 , and 19). Strawberries continue to be the most heavily consumed frozen fruit. U.S. per capita dried fruit consumption reached 3.2 pounds in 1990 , unchanged from 1989, which was the highest level in 20 years (tables 20 and 73 ). On a per capita basis, use of dried prunes increased 31 percent in 1990, as use of raisins fell 8 percent (tables 71 and 72).

Per capita consumption estimates for processed apple and pineapple products have been unavailable since the two industries ceased disclosure of pack and stock data early in the 1980's. However, it is possible to approximate the trend and general level of consumption over time by using crop utilization data published by USDA, adjusted by imports and exports. The user is cautioned against interpreting these numbers as reflecting actual year-to-year changes in consumption (domestic disappearance), because the data do not reflect year-to-year changes in stocks and thus, can be highly variable between years.

In general, utilization data (adjusted for U.S. imports and experts) for apples in table 21 indicate that U.S. per capita consumption of fresh and processed apples has trended upward since 1971, but consumption remains bighly variable across products. While per capita canned apple consumption has remained fairly flat over the past 20 years; per capita consumption of apple juice has dramatically increased, surpassing (on a farm-weight basis) fresh apple consumption in 1987. In 1990, apple juice (farm-weight basis) accounted for 37 percent of total U.S. apple consumption, at 17.4 pounds per person, compared with only 20 percent in 1971.

The utilization data (adjusted for exports and imports) for pineapples shown in table 22 suggest that per capita pineapple consumption has increased 25 percent over the past 20 years. While U.S. consumers use considerably more processed pineapple than fresh, shifts in consumer demand between processed pineapple forms are not readily evident from this data series, as pineapple utilization data for processing are not available for canned pineapple or pineapple juice.

Consumption of tree nuts continues to set new records. Total 1990 domestic consumption, including imports, reached nearly 622 million pounds (shelled basis), a record 2.48 pounds per person. The 1990 consumption level was 6 percent more than in 1989, 37 percent more than in 1980, and 42 percent more than in 1970 (tables 37 and 74-79). Consumption of almonds, filberts, pecans, and pistachios increased from 1970-90, while consumption of walnuts and macadamias fell. Use of other nuts, including Brazil nuts, cashews, and pignolias (Chinese pine nuts) also increased.

Average annual citrus juice consumption increased 23 percent between 197074 and 1985-89; the 17-percent decline in per capita use in 1990 is a result of supply shortages due to the December 1989 freeze in Florida (tables 3 and 18). Noncitrus juice use also increased sharply from 1970 to 1981 (the last year for which disappearance data are available on apple, pineapple, and cranberry juices). Disappearance estimates for grape juice, fruit nectars, and prone juice were discontinued in 1989 because pack and stock data are no longer available from several key industry participants. Per capita apple juice consumption estimates, based on the new data series in table 21, are shown in the beverage consumption table (table 36). Average apple juice consumption jumped 1.3 gallons from 1971-90, to 2 gallons in 1990.

Consumers paid more for fresh and processed fruit in 1990. The CPI for fresh fruit hit a record 170.9 (1982$84=100$ ) for the year, up 12 percent from 1989 , boosted by a 55 -percent increase in retail prices for fresh oranges and by strong retail prices for apples, bananas, and grapes, among others (table 103). The CPI for processed fruit also advanced 9 percent, with consumers paying higher prices for frozen fruits and juices, and canned and dried fruits. By comparison, the CPI for all food was 132.4 in 1990, up 6 percent from 1989.

## Vegetables

Total per capita consumption of 16 major commercial fresh vegetabies in 1990 was near 1989's record high, and 25 percent above the 1970 level (fig. 14) (table 26). Between 1970 and 1990, the biggest gains were for onions, up 5.8 pounds per person; iceberg lettuce, 5.1 pounds; tomatoes, 2.8 pounds; broccoli, 2.6 pounds; green peppers, 2.2 pounds; and carrots, 2 pounds. Americans also ate more artichokes, asparagus, cauliflower, cucumbers, eggplant, garlic, and mushrooms, while use of cabbage, celery, corn, and green beans declined. Supply shortages owing to weather problems caused per capita availability of fresh vegetables in 1991 to drop 5 percent below average annual use for 1989-90.

On a per capita basis, consumption of processing vegetables increased 8 percent between 1970 and 1991, as per person consumption of vegetables used for freezing and canning rose 43 percent and 8 percent, respectively (table 27). Per capita consumption of vegetables for canning excluding tomatoes declined 19 percent during the past 20 years. ERS now uses NASS data on production of vegetables slated for processing rather than industry data on the quantity packed, since the NASS estimates are thought to be more complete. Consumption of processed vegetables is now estimated on a farm-weight basis rather than a packed-weight basis.

Per capita consumption of mushrooms (farm weight) nearly tripled between 1970 and 1991, with most of the growth in the fresh market (tables 28 and 83 -84). Per capita use of fresh mushrooms was seven times higher in 1991 than in 1970, whereas per capita use of processing mushrooms increased only 80 percent during the same period.

Per capita use of fresh potatoes declined 26 percent from 1970-90, as consumption of frozen potatoes nearly doubled, to 25 pounds per person (retail weight) in 1990 (tables 29 and 85). 1990 was the first year in which, on a farm-weight basis, use of potatoes for freezing surpassed fresh market use.

## Flour and Cereal Products

Consumption of flour and grains increased in recent years, after falling dramatically from the levels of the first balf of the century. Per capita use of flour and cereal products was 184 pounds in 1991, compared with an annual average of 135 pounds in 1970-74, 204 pounds in 1945-49, and 287 pounds in 1910-15 (fig. 15; tables 3 and 30 ).

The expansion in supplies reflects ample grain stocks and strong consumer demand. This category benefits from larger population numbers in older age brackets. Our research shows that, in 1988, households whose head was 45 years or older spent, on average, 36 percent more per person for cereals and bakery products than did younger households. Demand for flour and cereal products might be expected to rise in the 1990 's as the first of the baby boom generation, the largest U.S. population cohort, reached age 45 in 1991--that is, if aging boomers follow their predecessors' path. The physiology of aging often includes health problems, such as irregularity, that predispose older people to consume more roughage in grain products and vegetables.

Wheat is the major grain product eaten in the United States, with wheat flour and other producis representing nearly 74 percent of total grain consumption in 1991. However, wheat's share of total grain consumption has declined 6 percentage points since 1980, as rice, com products, and oats products have gained momentum. Consumption of wheat flour in 1991 was 136 pounds per person, up 23 percent from 1970 (tabies 30 and 89). One reason for the increased use of flour was the rise in consumption of dry pasta products, up from 7.7 pounds per person in 1970 to 13.1 pounds in 1990 (table 31).

Consumption increased for other cereal products as well. Fer capita use of corn products (com flour, cornmeal, hominy, grits, and starch) increased 70 percent in the last decade, to 22 pounds per capita in 1991. Per capita use of rice and oats products (rolled oats, ready-to-eat cereals, oat flour, and oat bran) climbed 81 percent and 61 percent, respectively, from 1980-91. In contrast, consumption of rye flour and barley products (barley flour, pearl barley, and barley malt and malt extract used in food processing) have continued to decline.

Per capita consumption of breakfast cereals climbed 23 percent between 1980 and 1990 (table 32). Consumption of ready-to-eat cereal was 11.7 pounds in 1990, compared with 9.7 pounds in 1980, an increase of 21 percent. Consumption of cooked cereal increased 39 percent over the same period, to 3.2 pounds per capita in 1990.

## Caloric and Low-Calorie Sweeteners

Total per capita consumption of caloric sweeteners, comprised of refined (cane and beet) sugar, com sweeteners, pure honey, maple syrup, and edible molasses, increased 18 pounds (dry basis), or 14 percent, during 1970-91, from 123 pounds to a record 140 pounds (table 33). The substitution of high-fructose com syrup (HFCS) for sugar and sbifts in sweetener demand have changed the quantity and relative importance of sugar in different uses (fig. 16).

Per capita food use of refined sugar dropped from 102 pounds per person in 1972 to a low of 60 pounds per person in 1986. Since 1986, consumption has increased in each year except 1988, reaching 65 pounds per person in 1991 (tables 33 and 95). Conversely, per capita corn sweetener use rose from 21 pounds in 1972 (dry basis) to a record 74 pounds in 1991. Most of this increase is accounted for by increased use of HFCS. HFCS use totaled 0.7 pound per person in 1970 compared with 50 pounds per person in 1991. Refined sugar's share of total caloric sweetener consumption dropped from 83 percent in 1970 to 46 percent in 1991. In contrast, corn sweeteners' market share increased from 16 percent in 1970 to 53 percent in 1991. Honey, maple syrup, and molasses maintained a 1-percent market share during the same period.

Com sweeteners became economical as a result of abundant corn supplies and low com prices. Moreover, sales of byproducts, corn oil and com gluten feed and meal, made com sweetener production even less expensive. At the same time, Federar sugar programs maintained high support prices and import quotas on refined sugar. Total com sweetener use (HFCS, glucose, and dextrose) surpassed cane and beet sugar use for the first time in 1985.

Much of the displacement has been in soft drinks, where less costly HFCS has almost totally displaced sugar. In 1980, sugar deliveries to the beverage industry accounted for 23 percent of all sugar deliveries for food and
largest industrial user of sugar. Bakery and cereal products in 1990 accounted for 20 percent of total sugar deliveries for food and beverages (up from 14 percent in 1980); confectionery products, 16 percent (up from 10 percent in 1980); dairy products, 6 percent; canned, bottled, and frozen foods, 4 percent; other foods, 8 percent; beverages, 3 percent; restaurants and institutions, 1 percent; wholesale grocers, 27 percent; retail grocers, 14 percent, and other, including govemment agencies, 1 percent.

Low-calorie sweeteners have a sweetness so highly intense that only a fraction is needed to provide the same degree of sweetness as sugar. U.S. per capita consumption of low-calorie sweeteners (mainly aspartame and saccharin) increased faster than caloric sweetener use in the 1980's. By 1991, low-calorie use was 24 pounds per person in sugat-sweetness equivalent (SSE), accounting for about 15 percent of overall caloric and lowcalorie sweetener consumption, compared with 6 percent in 1980.

The rapid rise of low-calorie sweetener use reflects the accelerated adoption of aspartame which was introduced for U.S. commercial use in 1981. Aspartame is $180-200$ times as sweet as sucrose, compared with saccharin's 300, but bas a taste considered superiot to saccharin. Another high-intensity, low-calorie sweetener, acesulfamek (ace-k) entered U.S. commercial use in 1988. Ace-k is equal to aspartame in sweetness but, unlike aspartame, does not lose its sweemess when heated; its taste quality, however, is said to be below that of sucrose or aspartame.

## Beverages

Americans drink more commercially produced feverages than ever (table 36). Since 1970, the rise in per capita consumption of soft drinks and fruit juices and drinks has mote than offset declines in per capita consumption of milk and coffee.

Average total use of alcoholic beverages among adults 21 years and over reached a record high of 43.1 gallons in 1981 but has decined steadily to 39.5 gatlons in 1990 . Nevertheless, average total use of alcoholic beverages among adalits 21 years aud over in 1990 is 11 percent higher than in 1970. Between 1970 and 1990, wine use increased by one-third, to 2.9 gallons per adult, and beer use increased 12 percent, to 34.4 gallons per adult In contrast, average use of distilled spirits declined 27 percent between 1970 and 1990, to 2.2 gallons per adult (near 1989's 20 -year low of 2.1 galions).


## Fiowe 8

## U.S. food expenditures by families artd indlviduals, 1960-91 $1 /$



1/Total food expenditures have been increasing, yet the percent of income spent for food has been decreasing.

## figure 7 <br> Who pays for food?



1/ Families and individuals. 2 Includes philanthropic donations.

Figura 0
Share of income spent for food $1 /$


1/ Total food spending by families and individuals declined to 11.6 percent of disposable income in 30 years.

Figure : Away from home food expendiliures
Percent



N
Figure 11
Par capita consumption of eggs


I/ Total may not add due to rounding.

Figure 10

## Per caplta consumption of meat, poultry, and fish, boneless, trimitist equivaleni



1/Total may not add due to rounding. 2 Includes skin, neck meat, and giblets.

Fipure 12 Per capla consumption of all dalry products $1 /$
Pounds


1/ Milk-equivalent, millffat basis.
$2 /$ includes donated butter, cheese, nonfat dry milk, and evaporated milk.
3 includes milk produced and consumed on farms.


N

## Figure ${ }^{15}$ Per capita consumption of grain products 1/

Pourds


[^1]Figure 14

## Per capita consumption of fresh fruit, vegetables, and potatoes $1 /$



1/ Retail-weight equivalent.

Per capta consumption of swesteners $1 /$
Pounds


Table 1--Per capita food consumption index, 1970-90 $1 /$


Continued-

Table 1--per capita food conaumption index. 1970-90 1/--continued

$1982-84=100$

| 1970 | : | 87.5 | 113.3 | 126.9 | 97.3 | 97.3 | 103.1 | 94.7 | 99.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1971 | : | 89.1 | 111.2 | 122.7 | 97.9 | 103.2 | 104.4 | 95.2 | 100.1 |
| 1972 | : | 93.4 | 105.6 | 127.9 | 108.9 | 104.0 | 103.4 | 95.5 | 99.7 |
| 1973 | : | 93.3 | 121.8 | 126.6 | 103.1 | 105.5 | 98.3 | 97.0 | 97.8 |
| 1974 | : | 88.1 | 89.6 | 126.4 | 91.5 | 106.4 | 100.6 | 95.4 | 98.2 |
| 1975 | ; | 96.0 | 110.1 | 119.6 | 80.8 | 106.6 |  |  |  |
| 1976 | : | 91.2 | 104.4 | 123.6 | 93.2 | 109.9 | 102.6 | 99.6 | 101.2 |
| 1977 | : | 88.6 | 106.0 | 93.0 | 82.6 | 107.0 | 102.1 | 96.2 | 99.5 |
| 1978 | : | 90.9 | 87.3 | 104.1 | 83.8 | 103.5 | 100.9 | 96.5 | 98.9 |
| 1979 | : | 91.8 | 105.5 | 111.5 | 83.3 | 98.8 | 99.6 | 98.3 | 99.0 |
|  | : |  |  |  |  |  |  |  |  |
| 1980 | : | 80.8 | 89.6 | 102.7 | 84.3 | 104.7 | 99.5 | 97.4 | 98.6 |
| 1981 | : | 90.4 | 91.5 | 99.0 | 89.7 | 103.1 | 99.2 | 96.8 | 98.1 |
| 1982 | : | 98.6 | 107.4 | 98.5 | 93.4 | 99.2 | 97.8 | 98.7 | 98:2 |
| 1983 | : | 99.8 | 107.7 | 99.9 | 99.6 | 99.4 | 100.3 | 100.1 | 100.2 |
| 1984 | : | 101.6 | 84.9 | 101.6 | 107.1 | 101.4 | 101.8 | 101.3 | 101.6 |
| 1985 | : | 104.8 | 117.5 |  |  |  |  |  |  |
| 1986 | : | 106.4 | 111.3 | 104.3 | 119.4 | 101.2 | 103.9 | 104.8 | 104.3 |
| 1987 | : | 104.0 | 87.0 | 101.4 | 120.7 | 99.8 | 103.4 | 108.7 | 105.8 |
| 1988 | : | 111.0 | 115.4 | 97.6 | 119.4 | 101.6 | 103.1 | 309.3 | 105.9 |
| 1989 | . | 112.7 | 92.0 | 102.1 | 121.9 | 101.8 | 102.2 | 110.5 | 105.9 |
| 1990 | : | 105.1 | 99.2 | 101.3 | 130.2 | 99. | 101.5 |  |  |
| 199 |  |  |  | 101.3 |  | 9.1 | 101.5 | 110.6 | 105.6 |

[^2]Table 2~-Major foods: Per capita consumption, 1970-90 1/

1/ Data are on Not able.
primary food groups, such washt basis uniess otherwise indicated. Final consumer products from a combination of such as flour, shortening, and shipments to the u.s. territories. 5/ Computed from unrou equivalent. 3/ Excludes edible offals. \$/ Excludes butter. $7 /$ Fat-content basis. Includes butter. 8/ Dry basis data. cof milk equivalent, milkfat basis. Includes level. Excludes quantities useg in alcoholic beverages, fuel. g/ consumption of most items at the processing strength basis. $12 /$ Parm weight. $13 /$ Includes artichokes, asparagweeteners., io/ Shelled basis. 11/ Singlecelery, corn, cucimbers, eggplant, garlis, green beans, green peppers, broccoli, cabbage, carrots, cauliflower, 14/ Includes asparagus, carrots. cucumbers for pickling, green peas, iettuce, onions, and tomatoas. products. 25/ Includes asparagus, broccoll, carrots, caulitiower, green beans, corn, and processed tomato


Table 3--Selected items: Average annual per capita conoumption, eelected periods i/--continued

rimmed equivalent. 4/ Excludes gare merwise indicated. 2/ Total may not add due to rounding. 3/ Boneless, 6/ Excludes game fish, 7/ Milk equivat and edible offals. S/Excludes ahipments to U.s. territories. g/ Includes eggnog, not shown separately. Milk- fat basis. Items ahown beparately are product-weight bagis. half. 11/ Naturai equivalent of cheese and plain and flavored. io/ Heavy cream, light cream, and half and baker's cheese. $12 /$ cheddar, Colby, washe miscellaneous cheeses as Swiss, Gouda, blue, and creamed curd, Monterey, and Jack. 13/ Italfan cheeses and such dairy products. 15/ Fat content of butter and mariarinese. $14 /$ Inciudes mellorine and nonstandardized frozen excludes use in maxgarine and shortening. i7/ single-et is 80 percent of product weight. $16 /$ Direct uee equivalent. 18/ Artichokes, asparagus, broccoli, onions, and comatoes. 19/ Includes use in such tomato esgplant, garlic. grean beane, green peppera, lettuce, 20' Asparagus, carrots, cucumbers for piekifng, areen carrots, cauliflower, green peas, bnap beans, and sweet cornap beans, and aweat corn. 21/ Abparagus, broccoli, starch; excludes corn sweeteners. 23/ Oatmeal, reatrflour, pearl barley, and malt and malt extract used in foode, oat cereal, oat flour, and oat bran. 24/ Barley syrups. 26/ Sugar-sweetness equivalent.

Thable 4--Conversion factors used to obtain retail weight from primary weight 1/


1/ These factors, which were based on information from various sources, were first assembled during world war II. Later, they were published in Conversion Eactors and Weights and Measures for Agricultural Commodities and Thefr Products, SB-362. ERS, USDA, June 1965. Revisions of this publication (SB-616 and $\mathrm{AH}-697$ ) were published by USDA in March 1979 and June 1992, respectively. current revisions were based on spectal industry surveys and appraisals by commodity specialiscs. $2 /$ The points in the marketing system at which primary data are obtained. 3/ Factor of 0.74 used Erom 1962-85, 0.73 in 1996, 0.71 in 1987, and 0.705 1n 1988-91. 4/ Conversion factors for the pork retail wetght series for 1955-90 were revised in the January 1991 Livestock and Poultyy Situation and Outlook Report (LPS-45, ERS, USDA). These new factors are in table 42. The 1989 factor of 0.776 will be used until the next periodical revision. 5/ The conversion factor changes in relation to the proportion of ready-to-cook product moving out of the human consumption channel to the pet food or rendering industries. The factor changes from 1.00 in 1979 to 0.852 in 1991 and will continue to be updated periodically. 6/ Excludes such offals as bones, viscera, and shells. i/ Factor (rice milling rate) estimated each marketing year based on quality of crop (see tabie 91). 8/ Corn flour. meal, hominy, grits, and corn starch. 9/ Rolled oats, ready-to-eat oat cereal, oat flour, and oat bran. 10/ This factor is a composite; each ttem in the group has its own factor. $\frac{11 / / B a r l e y ~ f l o u r, ~ p e a r l ~ b a r l e y, ~}{33}$, and mait and malt extract used in foods, such as crackers. $12 /$ Factor of 0.333 used for $1963-73$ and 0.40 used for 1974 and later. 13/ Chocolate liquor equivalent (53-percent fat content). 14 / Factor of 0.41 used in 1966; thereafter, $\frac{13}{1 t}$ was increased 0.01 per year untif 0.50 was reached in 1975 .

Table 5-Red meat (carcass weight) and poultry (ready-to-cook weight)


Table 6--Red meat and chicken (retail cut equivalent): Per capita consumption, 1970-91 1//

$\mathrm{P}=$ Preliminary.
I/ Includes processed meats on a fresh basis. Excludes shipments to U.S. territories, as shown in commodity supply and utilization tables (tables 39-42 and 48-51). Uses U.S. total population, July 1, which does not include the U.S. territories. Comparable data on retailweight equivalent of turkey are not yet available. To compare turkey consumption and red meat consumption, use carcass and ready-to-cook (table 5) or boneless equivalent (table 7).
2/ Skeletal meats; excludes edible offals. 3/Computed from unrounded data.

Table 7-Red meat, poultry, and fish (boneless, trimmed equivalent): Per capita consumption, 1970-91 1/


## $\mathrm{P}=$ Preliminary.

$\underline{\underline{1} / \text { Excludes shipments to U.S. territories. Uses U.S. total popalation, July 1, which does not include the U.S }}$ territories. Boneless equivalent for red meat derived from carcass weight, using conversion factors shown in tables 39-42. Boneless equivalent for chicken and turkey derived from ready-to-cook weight, using conversion factors shown in tables 48-51. Boneless equivalent, or edible weight, for fish is calculated by the U.S.
ready-to-cook chicken going to pet food as well as some weck meat, and giblets. 3/ Excludes amount of
packaging. $4 /$ Computed from unrounded data

Tatie 8--Fishery products (edible weight): Per capita consumption, 1970-91 if


P = Preliminary
1/ The figures are calculated on the basis of raw edible meat, that is, excluding such offals as bones, viscera, and shells. Excludes game fish consumption. Uses U.S. cotal population, July 1. Computed by ERS from data provided by the No edible weights isheries Service. Series revised back through 1980, reflecting changes in conversion factors from live to edible weights. $\underline{2}^{/}$Computed from unrounded numbers

Table 9--Fish and shellfish: Per capita consumption by selected country. 1987-89 annual average 1/


Table 10--Red meat and poultry: Per capita consumption, selected periods, by 10 leading countries in 199.1 //


1/ Carcass-weight equivalent for red meat; ready-to-cook equivalent for poultry. U.s. figures include shipments to u.S. territories. Computed by ERS mainly from data provided by USDA's Foreign Agricultural Service (FAS). Annual data for this table are available from Shayle Shagam (202-219-0767). 2/ U.S. per capita consumption of pork was 66 pounds per person in 1991; lamb and mutton, 2 pounds per person.


[^3]Table 12--Dairy products: Per capita consumption, 1970-90 I/



Table 13-FFluid milk and cream: Fer capita consumption, 1970-90 1/


1/ Uses U.S. resident population, July 1. 2/ Computed from unrounded data. 3/ Flavored lowfat milk includes flavored skim milk.

Table 14--Selected cheeses: Per capita consumption, 1971-90 1



Table 15--Food fats and oils: Per capita consumption, 1970-90


NA $=$ Not available. Consumption was thought to be neglible.
1/ Direct use excludes use in margarine, shortening, and nonfood products. Uses if.S. total population,
Juily 1. 2/ Computed from unrounded data. 3/ Fat content of butter and margarine is 80 percent of product weight.

Table 16--Fresh fruits: Per capita consumption, 1970-90


Table 17--Canned and chilled fruite: Per caplta coneumption, 1970-90 $1 /$


NA = Nó avallable.
$\frac{1 / 2}{1 /}$ Product-welght bais. Usee U.S. total population, January 1 of year following that indicated. This year a now method is used for calculating consumption of the items at the top of the table. For a discuesion of the new method, refer to "New per caplta consumption eatimate日 for canned fruit. : regetablei and Fruss Data--Additions and Revietiona--Data Reviaions, Losbes and Substitutions in tart, July and Fruits.: 2/ Season beginning June 1 of year indicated, for all iteme except cherries, tart, July 1, and olives, Auguct 1. 3/ Includes aweet and tart cherries. Numbers revised to exclude cherries in brine for entire 1970 to 1990 period. 4/ Excludes spiced peaches. 5/ The peaches and pears ueed in frute cocixtatl are included in the coneumption estimates for peachere and pears. 6/ Computed from unrounded data.

Table 18--Citrus juices: Per capita consumption, 1970-90 1/

|  | ; | Canned 3/ |  |  |  |  | : | Chilied |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Year } \\ 21 \\ \hline \end{gathered}$ | : | Orange | $\begin{array}{ll} : & \text { Grape- } \\ : & \text { fruit } \end{array}$ | $\begin{array}{cc} : & \text { Blend } \\ : & 4 / \\ \hline \end{array}$ | $\begin{array}{cc} : & \text { Lemon } \\ : & \text { lime } \\ \hline \end{array}$ | $\begin{array}{cc} : & \text { Total } \\ : & 5 / \\ \hline \end{array}$ | $:$ | Orange | : Grape- <br> : fruit |  | Total $5 /$ |
|  | : | Pounds |  |  |  |  |  |  |  |  |  |
|  | : |  |  |  |  |  |  |  |  |  |  |
|  | : |  |  |  |  |  |  |  |  |  |  |
| 1970 | : | 1.75 | 2.99 | 0.33 | 0.10 | 5.18 |  | 4.28 | 0.33 |  | 4.61 |
| 1971 | : | 1.66 | 3.24 | 0.31 | 0.10 | 5.30 |  | 4.28 | 0.42 |  | 4.70 |
| 1972 | : | 1.51 | 3.25 | 0.25 | 0.10 | 5.11 |  | 4.51 | 0.61 |  | 5.12 |
| 1973 | : | 1.74 | 3.42 | 0.24 | 0.10 | 5.50 |  | 4.61 | 0.54 |  | 5.16 |
| 1974 | : | 1.48 | 3.49 | 0.22 | 0.10 | 5.29 |  | 4.59 | 0.52 |  | 5.11 |
|  | : |  |  |  |  |  |  |  |  |  |  |
| 1975 | : | 1.52 | 3.34 | 0.23 | 0.12 | 5.22 |  | 4.96 | 0.61 |  | 5.57 |
| 1976 | : | 1.37 | 3.33 | 0.32 | 0.08 | 5.10 |  | 5.31 | 0.72 |  | 6.03 |
| 1977 | : | 1.46 | 3.13 | 0.21 | 0.08 | 4.88 |  | 4.92 | 0.69 |  | 5.62 |
| 1978 | : | 1.74 | 3.50 | 0.17 | 0.06 | 5.47 |  | 5.25 | 0.74 |  | 6.00 |
| 1979 | : | 2.04 | 3.35 | 0.08 | 0.05 | 5.53 |  | 4.83 | 0.57 |  | 5.40 |
|  | : |  |  |  |  |  |  |  |  |  |  |
| 1980 | : | 1.98 | 2.93 | 0.09 | 0.05 | 5.05 |  | 5.15 | 0.64 |  | 5.79 |
| 1981 | : | 2.26 | 2.42 | 0.07 | 0.06 | 4.81 |  | 3.62 | 0.49 |  | 4.11 |
| 1982 | : | 1.58 | 2.24 | 0.02 | 0.03 | 3.87 |  | 3.17 | 0.30 |  | 3.47 |
| 1983 | : | 1.25 | 1.59 | 0.04 | 0.04 | 2.92 |  | 3.87 | 0.23 |  | 4.10 |
| 1984 | : | 1.47 | 1.21 | 0.04 | 0.04 | 2.76 |  | 3.42 | 0.23 |  | 3.65 |
|  | : |  |  |  |  |  |  |  |  |  |  |
| 1985 | : | 0.85 | 1.30 | 0.04 | 0.05 | 2.23 |  | 3.01 | 0.19 |  | 3.20 |
| 1986 | : | 0.82 | 1.14 | 0.04 | 0.05 | 2.04 |  | 3.56 | 0.23 |  | 3.77 |
| 1987 | : | 0.91 | 1.02 | 0.03 | 0.05 | 2.01 |  | 4.23 | 0.24 |  | 4.47 |
| 1988 | : | 0.78 | 0.85 | 0.01 | 0.03 | 1.67 |  | 4.87 | 0.20 |  | 5.08 |
| 1989 | : | 0.77 | 0.75 | 0.01 | 0.04 | 1.57 |  | 6.20 | 0.32 |  | 6.52 |
|  | . |  |  |  |  |  |  |  |  |  |  |
| 1990 | : | 1.05 | 0.62 | 0.01 | 0.13 | 3.80 |  | 6.11 | 0.20 |  | 6.30 |
|  | : | Frozen : All citrus juice |  |  |  |  |  |  |  |  |  |
|  | ; | Orange. | $\begin{aligned} & \text { : Grape- : } \\ & : \\ & \text { Eruit }: \end{aligned}$ | Lemon : | Lemonade base | $\begin{aligned} & \text { : Tanger- } \\ & : \quad \text { ine } \\ & \hline \end{aligned}$ |  | $\begin{array}{cc} \text { Total } \\ 5 / & \\ \hline \end{array}$ | Orange | $\begin{aligned} & \text { Grape- : Total } \\ & \text { fruit }: 5 / 6 / \end{aligned}$ |  |
|  | : |  | Pounds |  |  |  |  |  |  |  |  |  |
|  | : |  |  |  |  |  |  |  |  |  |  |  |
|  | $: 0$ - 0 |  |  |  |  |  |  |  |  |  |  |
| 1970 | : | 20.72 | 0.76 | 0.06 | 0.25 | 0.17 |  | 21.95 | 26.75 | 4.09 | 31.75 |
| 1971 | : | 24.21 | 0.82 | 0.08 | 0.25 | 0.18 |  | 25.54 | 30.14 | 4.48 | 35.54 |
| 1972 | : | 27.69 | 1.10 | 0.08 | 0.28 | 0.18 |  | 29.32 | 33.71 | 4.96 | 39.55 |
| 1973 | : | 26.87 | 1.11 | 0.06 | 0.34 | 0.17 |  | 28.55 | 33.22 | 5.07 | 39.21 |
| 1974 | : | 29.45 | 1.17 | 0.06 | 0.31 | 0.15 |  | 31.24 | 35.52 | 5.18 | 41.54 |
|  | : |  |  |  |  |  |  |  |  |  |  |
| 1975 | : | 32.77 | 0.98 | 0.24 | 0.72 | 0.22 |  | 34.93 | 39.26 | 4.94 | 45.72 |
| 1976 |  | 34.34 | 0.27 | 0.03 | 0.38 | 0.10 |  | 35.12 | 41.01 | 4.33 | 46.25 |
| 1977 | : | 34.12 | 1.82 | 0.15 | 0.28 | 0.26 |  | 36.63 | 40.50 | 5.65 | 47.13 |
| 1978 | : | 27.52 | 1.82 | 0.24 | 0.50 | 0.24 |  | 30.31 | 34.51 | 6.06 | 41.78 |
| 1979 | : | 30.33 | 1.81 | 0.19 | 0.38 | 0.20 |  | 32.90 | 37.20 | 5.73 | 43.83 |
|  | : ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |  |
| 1981 | : | 30.15 | 2.32 | 0.15 | 0.28 | 0.30 |  | 33.20 | 36.03 | 5.23 | 44.61 42.12 |
| 1982 | : | 33.27 | 2.55 | 0.26 | 0.53 | 0.32 |  | 36.93 | 38.02 | 5.09 | 44.28 |
| 1983 | : | 38.83 | 2.34 | 0.15 | 0.28 | 0.08 |  | 41.69 | 43.95 | 4.16 | 48.70 |
| 1984 | : | 33.50 | 1.58 | 0.19 | 0.29 | 0.11 |  | 35.66 | 38.39 | 3.01 | 42.06 |
|  | : ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |
| 1985 | : | 36.24 | 3.55 | 0.21 | 0.35 | 0.11 |  | 40.46 | 40.10 | 5.03 | 45.88 |
| 1986 | : | 39.82 | 2.60 | 0.49 | 0.25 | 0.09 |  | 43.24 | 44.21 | 3.94 | 49.06 |
| 1987 | : | 35.92 | 3.58 | 0.27 | 0.26 | 0.16 |  | 40.19 | 41.06 | 4.84 | 46.66 |
| 1988 | : | 37. $=$ | 2.13 | 0.26 | 0.30 | 0.08 |  | 40.12 | 43.01 | 3.18 | 46.87 |
| 1989 | : | 30.18 | 3.73 | 0.11 | 0.22 | 0.06 |  | 34.31 | 37.16 | 4.80 | 42.40 |
|  | , |  |  |  |  |  |  |  |  |  |  |
| 1990 | : | 25.11 | 1.89 | 0.04 | 0.10 | 0.04 |  | 27.18 | 26.35 | 2.51 | 35.28 |

[^4]Table 19-Frozen fruits: Per capita consumption, 1970-90 $1 /$

| Year |  |  |  | errie |  |  | Other |  |  |  |  |  | $\begin{gathered} \text { Total } \\ 3 / \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | : | Black- <br> berries | Raspberrie | Straw <br> errie | Blueerries | $\begin{aligned} & \text { Total } \\ & 2 / 3 / \\ & \hline \end{aligned}$ | Apples | prico | Cherrie | Peach | Miscel <br> laneous <br> 41 | Total $3 /$ |  |
| : |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | : |  | Pounds |  |  |  |  |  |  |  |  |  |  |
|  | : |  |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | : | 0.10 | 0.16 | 1.19 | 0.21 | 1.73 | 0.47 | 0.06 | 0.61 | 0.28 | 0 |  |  |
| 1971 | : | 0.16 | 0.16 | 1.41 | 0.18 | 1.99 | 0.53 | 0.07 | 0.68 | 0.28 | 0.20 | 1.62 | 3.35 |
| 1972 | : | 0.11 | 0.12 | 1.35 | 0.18 | 1.83 | 0.66 | 0.05 | 0.63 |  | 0.16 | 1.70 | 3.69 |
| 1973 | : | 0.08 | 0.10 | 1.19 | 0.16 | 1,58 | 0.61 |  | 0.63 | 0.31 | 0.17 | 1.81 | 3.64 |
| 1974 | : | 0.06 | 0.09 | 1.13 | 0.14 | 1.56 | 0.61 | 0.08 | 0.82 | 0.23 | 0.20 | 1.93 | 3.51 |
| $\begin{array}{llllllllll}1.46 & 0.33 & 0.06 & 0.49 & 0.28 & 0.14 & 1.30 & 2.76\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1975 | : | 0.08 | 0.09 | 1.40 | 0.19 | 1.80 | 0.45 | 0.07 | 0.44 | 0.28 |  |  |  |
| 1976 | : | 0.12 | 0.13 | 1.28 | 0.13 | 1.71 | 0.39 | 0 | 0.67 | 0.28 | 0.15 | 1.40 | 3.21 |
| 1977 | * | 0.12 | 0.13 | 1.16 | 0.13 | 1.59 | 0.44 | 0.06 | 0.67 | 0.13 | 0.11 | 1.36 | 3.07 |
| 1978 | : | 0.10 | 0.10 | 1.37 | 0.11 |  | 0.44 | 0.07 | 0.62 | 0.28 | 0.20 | 1.60 | 3.19 |
| 1979 | : | 0.06 | 0.08 | 1.37 | 0.11 | 1.73 | 0.39 | 0.07 | 0.64 | 0.27 | 0.18 | 1.53 | 3.25 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1980 | ; | 0.02 | 0.08 | 1.39 | 0.18 | 1.70 | 0.35 | 0.07 | 0.48 | 0.27 |  |  |  |
| 1981 | : | 0.04 | 0.08 | 1.32 | 0.17 | 1.63 | 0.37 | 0.05 | 0.48 | 0.27 | 0.19 | 1.35 | 3.05 |
| 1982 | : | 0.09 | 0.07 | 1.14 | 0.11 | 1.44 | 0.43 | 0.06 | 0.4 | 0.19 | 0.15 | 1.25 | 2.89 |
| 1983 | : | 0.08 | 0.07 | 1.17 | 0.04 | 1.41 |  | 0.06 | 0.61 | 0.23 | 0.17 | 1.51 | 2.95 |
| 1984 | : | 0.04 | 0.06 | 1.25 | 0.04 | 1.41 | 0.32 | 0.07 | 0.63 | 0.31 | 0.19 | 1.52 | 2.92 |
| $\begin{array}{llllllllllll}1.25 & 1.62 & 0.38 & 0.06 & 0.58 & 0.28 & \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1985 | ; | 0.06 | 0.10 | 1.22 | 0.22 | 1.61 | 0.35 | 0.07 | 0.59 | 0.41 | 0.26 |  |  |
| 1986 | : | 0.04 | 0.09 | 1.27 | 0.39 | 1.81 | 0.40 | 0.07 | 0.67 | 0.41 | 0.26 | 1.67 | 3.28 |
| 1987 | : | 0.05 | 0.07 | 1.29 | 0.29 | 1.72 | 0.53 | 0.08 | 1.00 | 0.41 | 0.21 | 1.75 | 3.56 |
| 1988 | : | 0.08 | 0.09 | 1.33 | 0.20 | 1.73 | 0.50 | 0.08 | 1.00 | 0.27 | 0.27 | 2.16 | 3.88 |
| 1989 | : | 0.11 | 0.17 | 1.51 | 0.31 | 2.13 | 0.50 | 0.06 |  | 0.33 | 0.44 | 2.05 | 3.78 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1990 | : | 0.07 | 0.16 | 1.30 | 0.33 | 1.96 | 0.40 | 0.07 | 0.80 | 0.35 |  |  |  |
| $\begin{array}{llllll}0.4 & 0.80 & 0.35 & 0.67 & 2.29 & 4.26\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |

1/ Processed welght. Uses U.S. total population, July 1. 2/ Includes other berries not Ilsted separately. 3/ Computed from unrounded data. 4/ Includes prunes and plums, other miscellaneous truits, and berries.

Table 20--Dried fruits: Per capita consumption, 1971-90 1/

-- Less than 0.05 pound.
1/ Processed weight. Uses U.S. total population, January 1. $2 /$ Beginning in year preceding that indicated; July 1 for apricots, peaches, and pears; September 1--dates; August 1-figs, prunes, and raisins. 3/ Pits-in basis. 4/ Excludes quantities used for juice. 5/ Computed from unrounded

Table 21-Apples: Per capita utilized production plus imports and minus exports, farm weight equivalent, by product, 1971-90 1/


Table 22--Pineapples: Per capita utilized production adjustea for imports and exports, farm weight equivalent, 1970-90 1/


[^5]Table 23--Melons: Per capita consumption, 1970-91 1/


Table 24-~Total U.S. grocery store sales volume of processed fruit:
Per capita consumption, 1983-90 $1 /$

supermarkets to compute the data for this sanner data from a nationally representative sample of
2,200 stores. 4/ Includes nectar, juice blende. 2/ Sample size $=150$ stores. 3/ Sample size $=$ 5/ Single-strength equivalent. 6/ Does not inciude frut milk, and fruit-punch bases and syrups.
breakfast cereals, and baxery products.

Table 25--Total U.S. grocery store sales volune of processed vegetables
Per capita consumption, 1983-90 $1 /$



Table 27--Selected commercially grown vegetables for proceseing: Per capita consur


Table 28--Mushrooms: Per capita consumption, 1970-91 1/


Table 29--Potatoes, sweetpotatoes, dry edible beans, and dry field peas: Per capita consumption, 1970-90 $\mathbf{1}^{\prime}$


Table 30--Flour and cereal products: Per capita consumption, 1970-91 $1 /$

$\mathrm{P}=$ Preliminary.
1/ Consumption of most itens at the processing level. Excludes quantities used in alcoholic beverages and fuel. 2/ Semolina and durum flour in products such as macaroni, spaghetti, and noodles. For data on per capita use of indicated. 4/ Based on Census of Mant basis. Rice consumption for marketing year beginning August prior to year rolled oats, ready-to-eat cereals, Manufactures. See table 33 for data on corn sugar and corn syrup. 5/ Includies and malt extract used in food procasing for example, shredded wheat breakfast cereals.

Table 31--Dry pasta products: Supply and utilization, 1970-90 $1 /$

frozen and canned macaroni, spaghetti, noodles, and other dry pasta products. Excludes wet pasta, and percent moisture.) Total food disappearance is wet pasta. (Wet pasta is a product with more than 14 products may be purchased by consumers at retaid domestic disappearance of dry pasta products. Such prepared-foods processors who use dry pasta products to make such foodservice establishments, or by macaroni and cheese. 2/ Production data is based on Census of Manufactures canned spaghetti or frozen census years. 3/ Uses U.S. total population, July on Census of Manufactures, and is interpolated between disappearance was estimated by the change in U.S. 1. 4/ Since 1987 (last census year), total food residual. $\quad$ was estimated by the change in U.S. grocery store sales volume, and production is the


Table 33--Caloric and low-calorie sweeteners: per capita consumption, 1970-91 I/


Table 34--Candy and other confectionery products: Sales, value, and aupply and utilization, with quantity,
per capita consumption, and value of sugar use, $1970-90$


Table 35--Coffee, tea, and cocoa: Per capita consumption, 1970-90 $1 /$


1/ Uses U.S. total population, July 1. 2/ Quantity processed for soluble use minus net exports. 3/ Computed it is sometimes called ground or bitter chocolate.

Tabia 36--Beveragas: Per capita conaumption, 1970-90 1/


Ma $=$ Not avallable.
1/' Soft drink and aicoholic beverage per capita Ifqures are conetructed by ERS besed on induatry date. M1Ik, soft drinke, and alcoholic beverages are based on U.s. reaident population, fuly 1. Cotfee, tea, and irult fuicea are baced on u.s. total population, July 1. $2 /$ Includes buttormilk and mikim milk. 3/ Computed irom unrounded data. 4/ Pluid equivalent convereton factor is 2006 -oz: cupa per pound of tea, leat equivalerit. 5/ Includet instant and dectiffeinated coffee. Converted to fluid equivalent on the basis of $60-6$ oz. cupt per pound of ragular roasted coffee and 187.5 6-oz. cups per pound of instant coftee. 6/ Revised in accord with the Censua of Hanufactures. I/ Beginning in 1983, includes wine coolers.

Table 37--Tree nuts and coconuts: Per capita consumption, 1970-90 1/


Table 38--Peanuts: Per capita consumption, 1970-90 1/


1/ Kernel basis. Uses J.S. total population, January 1 of year following that indicated. 2/ Beginning August of year indicated. 3/Domestic disappearance of roasting stock; shelled equivalent. 4/ Includes peanut butter made by manufacturers for use in cookies and sandwiches but excludes peanut butter used in candy. 5/ Includes grated and granulated peanuts and peanut flour. 6/ Computed from unrounded data.

Table 39--Beef: Supply and utilization, 1970-91 $1 /$

$1 /$ Carca
data include veal. 3/ Cold-storage holdings in public and private therefore are not included. 2/ Beginning 1989, trade stores, locker plants days or more. Excluded are stocks in space maintained by whole food products are inventories are turned over to U.S. territories for $1970-75$ than once a month, and the Armed Forces. 4/ Comput food processors whose entire the U.S. territories. I/ Source: Reevaluationder exports. 6/ Uses U.S. total population July I, which does/ Shipments October 1989.

Table 40--veal: Supply and utilization, 1970-91 $\dot{\underline{1}} /$


NA $=$ Not available. $\quad P=$ Preliminary
1/ Carcass-weight basis except as noted in footnote 2. Edible offals are not part of the carcass and therefore are not included. $2 /$ Cold-storage holdings in public and private warehouses and packing plants whose food products are normally stored for 30 days or more. Excluded are stocks in space maintained by wholesalers, jobbers, distributors, chain stores, locker plants containing individual lockers, meatpacker branch houses, frozen food processors whose entire inventories are turned over more than once a month, and the Armed Forces. Stocks data are reported on a product-weight basis for all years. 3/ Computed from unrounded data. 4/ Shipments to U.S. territories for $1970-75$ are included under exports. 5/ Uses U.S. total population, July 1, which coes not include the U.S. territories. 6/ Source Weights, Measures, and Conversion Factors for Aqricultural Commodities and Their Products, AH-697, ERS, USDA, June 1992.

Table 41--Lamb and muteon: Supply and utilization, 1970-91 1/


Table 42--Pork: Supply and utilization, 1970-91 $1 /$


1/ Carcass weight
in public and private warehouses and packing plants whose food products are nore not included. $\underline{2}^{2}$ Cold-storage holdings Excluded are stocks in space maintained by wholesalers,
individual lockers, meatpacker branch houses, frozen food processors once a month, and the Armed Forces. 3/ Computed from unrounded data. 4/ Shipments inventories are turned over more than Livestock and exports. 5/ Uses U.S. total population, July 1, which does not include th. Uerrtories for 1970-75 are Livestock and Poultry Situation and outlook Report. LPS-45, ERS, USDA, January 1991. the U.S. territories. 6/ Source:

Table 43--Total red meat:
Supply and utilization, 1970-91 1/



Table 44-Fresh and frozen fish and shellfish: Supply and utilization, 1970-91 1/

$\mathrm{P}=$ Preliminary.
I/ Edible-meat weight. Edible-weight finfish is equal to 45 percent of live weight. Shellfish reported on a meat-equivalent basis. Includes cultivated catfish beginning in 1973. Data provided figures. 2/ Uses Fisheries Service (Steve Koplin, 301-713-2328); ERS computed per capita figures. $\underline{2} /$ Uses U.S. total population, July 1.

Table 45--Canned fish and shellfish: Supply and utilization, 1970-91 1


National Marine weight. Excludes the nonfish content of canned fishery 2/ Includes producheries Service (Steve Koplin, 301-713-2328). ERS reported or estimated stocks Puerto Rico and American Samoa. 3/Canned fited per capita figures. at wholesale. Sardine stocks salmon, tuna, sardines, and mackerel Salmon data include July 1. 5/ Beginning stocks in 1975 do not equal ending stocks in 1974 due to data revision 10 , Salmon stocks include those

Table 46--Cured fish and shellfish: Supply and utilization, 1970-91 1/

$\mathrm{p}=$ Preliminary.
1/ Edible-meat weight. Excludes intermediate products whirh may be in the final stage of processing, including mild-cured salmon and green, salted cod, haddock, hake, pollock, and cusk. Data provided by National Marine Fisheries Service (Steve Koplin, 301-713-2328); ERS computed per capita figures. $\underline{2} /$ Uses U.S. total population, July 1.

Table 47--Total fish and shellfish: Supply and utilization, 1970-91 1 /


Table 48--Young chicken: Supply and utilization, 1970-91 1/

$\mathrm{P}=$ Preliminary.
1/ Ready-to-cook weight, 2/ Computed from unrounded data. 3/ Uses U.S. total population, July 1, which does not Poultry Situation and Outlook Report. ERS, USDA, LPS-53, May 1992. 5/ Source: Fonsumption Series, Livestock and USDA, 15:3, forthcoming.

Table 49--orher chick


Table 50--Total chicken: Supply and utilization, 1970-91 I/


Table 51--Turkey: Supply and utilization, 1970-91 $1 /$

$\mathrm{p}=$ Preliminary
1/ Ready-to-cook weight, 2/ Includes the quantity sold from and consumed on farms where produced. 3/ Stocks July 1, which does not include the reported. 4/ Computed from unrounded data. 5/ Uses U.S. total population, Composition of foods: Poultry Products...Raw Processed Conversion factor estimate is based on data from USDA, revised August 1979.

Table 52--Eggs: Suatly and utilization, 1970-91 $1 /$


Table 53--All dairy products: Supply and utilization, 1970-90 1/


Table 54--American cheese: Supply and utilization, 1970-90


[^6]


Table 56--Total cheese: Supply and utilization, 1970-90 $\mathbf{1 /}$


Table 57--Condensed and evaporated whole milk: Supply and ucilization, 1970-90 $1 /$


Table 58--Nonẽat dry milk: Supply anđ utilization, 1970-90


Table 59--Bitter: Supply and utilization, 1970-90


Table 60--Lard (direct use): Supply and utilization, 1970-90


Table 61--Margarine: Supply and utilization, 1970-90 1/


PB92-229038
USDA/SE-840 FOOD CONSUMPTION, PRICES, AND EXPENDITURES, 1970-90. (STATISTICAL BULEETIN.) / J. J. RUTNAM, ET AL. ECONOMIC RESEARCH SERVICE, WASHINGTON, DC. COMMODITY ECONOMICS DIV, AUG 92157 P

$$
\begin{aligned}
& 2 \text { OF } 2 \\
& \text { PB } 92 \\
& 229038
\end{aligned}
$$



Table 63--Salad and cooking oils: Supply and utilization, 1970-90


Table 64--Peanuts: Supply and utilization, 1970-91 1 /



Table 66--Fresh apples: Supply and utilization, 1970-90 $\underline{1 /}$


NA $=$ Not available.
1/ Farm weight. Comnercial production only. 2/ Data are on a crop-year basis beginning August of year indicated. 3/ Computed from unrounded data. 4/ Uses U.S. total population January 1 of the year following that indicated.

Table 67--Other fresi noncitnus fruits: Supply and utilization, 1970-90

mangoes, nectarines, olives, papayas, peaches, bananas, cherries, cranberries, figs, grapes, kiwifnuits,
strawberries, and other fruit. $\underline{2} /$ Ali fruit are on a calendar y, pineapples, plums, prapes, kiwifruits,
total population (beginning July of year indicated) basis. total population, July 1, for everything except grapesis. 3/ computed from unrounded data. pears, which are on that indicated.
pears, which use January 1 of the $4 /$ Uses U.S.

Table 68--Total fresh fruits: Supply and utilization, 1970-90 $\mathbf{1 /}$

| Year 2/ |  | Supply |  |  |  |  | : |  | Utilization |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | : | Production | : | Imports | : | $\begin{gathered} \text { Total } \\ \text { supply } \\ 3 / \\ \hline \end{gathered}$ | : | Exports | ; | ```Shipments to U.S. territories``` | :_._Food disappearance 3/ | Food disappearance 3/ |  |  |
|  | : |  | : |  | : |  | : |  | ; |  | : | Total | - | $\qquad$ |
|  | : |  | : |  | : |  | : |  | : |  | : |  | : |  |
|  | : |  | : |  | : |  | ; |  | : |  | : |  | : |  |
|  | : | Million pounds |  |  |  |  |  |  |  |  |  |  |  | Pounds |
|  | : |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | : |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | : | 13,901 |  | 4,014 |  | 17,916 |  | 1.577 |  | 32 |  | 16.307 |  | 79.4 |
| 1971 | : | 14,241 |  | 4,127 |  | 18,368 |  | 1,590 |  | 33 |  | 16,745 |  | 80.5 |
| 1972 | : | 13,578 |  | 4.179 |  | 17.756 |  | 1,948 |  | 47 |  | 15,762 |  | 75.0 |
| 1973 | : | 14.414 |  | 4,249 |  | 18,662 |  | 2,114 |  | 46 |  | 16,502 |  | 77.8 |
| 1974 | : | 14.947 |  | 4,360 |  | 19.307 |  | 2,343 |  | 39 |  | 16,926 |  | 79.0 |
|  | : |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1975 | : | 16,919 |  | 4,254 |  | 21.173 |  | 2,755 |  | 38 |  | 18.380 |  | 85.0 |
| 1976 | : | 16,540 |  | 4,616 |  | 21,156 |  | 2,794 |  | 35 |  | 18.328 |  | 83.9 |
| 1977 | : | 16,082 |  | 4,767 |  | 20,848 |  | 2,878 |  | 32 |  | 17.938 |  | B1. 3 |
| 1978 | : | 16,267 |  | 5.107 |  | 21,374 |  | 2,662 |  | 41 |  | 18,671 |  | 83.7 |
| 1979 | : | 16.296 |  | 5,384 |  | 21,680 |  | 2.874 |  | 51 |  | 18,755 |  | 83.2 |
|  | : |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1980 | : | 18,325 |  | 5,397 |  | 23.721 |  | 3.136 |  | 55 |  | 20,531 |  | 90.0 |
| 1981 | ; | 17.653 |  | 5.626 |  | 23,278 |  | 3.244 |  | 38 |  | 19,996 |  | 86.8 |
| 1982 | : | 17,194 |  | 6.090 |  | 23,285 |  | 2,878 |  | 34 |  | 20,373 |  | 87.6 |
| 1983 | : | 19,001 |  | 6,002 |  | 25,003 |  | 3.098 |  | 30 |  | 21,874 |  | 93.2 |
| 1984 | : | 18,044 |  | 6,392 |  | 24,436 |  | 2.712 |  | 28 |  | 21,697 |  | 91.7 |
|  | : |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1985 | : | 16,994 |  | 6,890 |  | 23,884 |  | 2.517 |  | 25 |  | 21,341 |  | 89.3 |
| 1986 | : | 18,121 |  | 7,774 |  | 25,895 |  | 2.758 |  | 30 |  | 23,107 |  | 95.9 |
| 1987 | : | 20,205 |  | 7.754 |  | 27.959 |  | 3.333 |  | 31 |  | 24.595 |  | 101.1 |
| 1988 | : | 20,213 |  | 7,639 |  | 27,851 |  | 3.513 |  | NA |  | 24,338 |  | 99.2 |
| 1989 | : | 20,619 |  | 8. 019 |  | 28,638 |  | 4.064 |  | NA |  | 24,574 |  | 99.2 |
|  | : |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1990 | : | 19,308 |  | 7,886 |  | 27,194 |  | 4,070 |  | NA |  | 23,124 |  | 92.3 |
|  | . |  |  |  |  |  |  |  |  |  |  |  |  |  |

NA = Not available.
1/ Farm weight. 2/Citrus fruits are on a crop-year basis besinning in year preceding that indicated. Noncitrus fruits are on a calendar-year basis except apples (August) grapes and pears (July), which are on a crop-year basis. 3/ Computed from unrounded data. q/ Uses $^{\text {3/S. total population, July } 1 \text {, for everything }}$ except apples, grapes and pears, which use January 1 of the year following that indicated.

Table 69--Frozen citrus juices: Supply and utilization, 1970-90 $1 /$


1) Product weigh
as hotels, bakeries, and confectioners. 3/ Commercial Excludes quantities frozen by industrial users such
5/ Uses U.S. total population, July 1. 6/ Beginning stocks only. 4/ Computed from unrounded data.
due to data revision.

Table 70--Frozen fruits: Supply and utilization, 1970-90 1/

| Year | Supply |  |  |  | Utilization |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production | Imports | : Begin- : : ning $:$ : stocks : : | $\begin{gathered} \text { Total } \\ \text { supply } \\ 2 / \\ \hline \end{gathered}$ | Exports | : Shipments : to U.S. : terri- : tories | Ending <br> stocks | : Food disapp $:$ $:$ Total $:$ | Parance 2/ <br> Per <br> capita <br> $3 /$ |
| : |  |  | -- | - Mill | pounds |  |  |  | Pounds |
| 1970 | 621 | 121 | 631 | 1,372 | 5 | 1 | 680 | 686 | 3.35 |
| 1971 | 666 | 93 | 680 | 1,439 | 6 | 1 | 665 | 767 | 3.69 |
| 1972 | 612 | 95 | 665 | 1,373 | 11 | 2 | 597 | 764 | 3.6 |
| 1973 | 650 | 123 | 597 | 1,370 | 19 | 3 | 605 | 743 | 3.51 |
| 1974 | 602 | 125 | 605 | 1,332 | 21 | 1 | 720 | 590 | 2.76 |
| 1975 4/: | 567 | 102 | 607 | 1.276 | 25 | 0 | 558 | 693 | 3.21 |
| 1976 : | 633 | 56 | 558 | 1,246 | 37 | 1 | 539 | 670 | 3.07 |
| 1977 | 687 | 107 | 539 | 1,333 | 22 | 1 | 608 | 703 | 3.19 |
| 1978 : | 543 | 118 | 608 | 1,269 | 26 | 1 | 515 | 726 | 3.26 |
| 1979 4/: | 575 | 120 | 518 | 1,213 | 42 | 2 | 564 | 605 | 2.69 |
| 1980 | 654 | 93 | 564 | 1,310 | 41 | 2 | 573 | 695 | 3.05 |
| 1981 | 626 | 66 | 573 | 1,265 | 54 | 2 | 546 | 664 | 2.89 |
| 1982 | 774 | 44 | 546 | 1,363 | 54 | 2 | 624 | 684 | 2.95 |
| 1983 | 680 | 56 | 624 | 1,359 | 29 | 1 | 645 | 685 | 2.92 |
| 1984 | 729 | 69 | 645 | 1.442 | 31 | 2 | 691 | 719 | 3.04 |
| 1985 4/: | 760 | 80 | 689 | 1,529 | 26 | 1 | 721 | 782 | 3.28 |
| 1986 : | 807 | 84 | 721 | 1,612 | 34 | 1 | 721 | 857 | 3.56 |
| 1987 4/: | 1.038 | 102 | 718 | 1,859 | 64 | 1 | 852 | 942 | 3.88 |
| 1988 : | 994 | 81 | 852 | 1,926 | 66 | NA | 934 | 927 | 3.78 |
| 1989 : | 981 | 66 | 934 | 1,981 | 54 | NA | 799 | 1.128 | 4.56 |
| 1990 : | 1,014 | 99 | 799 | 1,911 | 54 | NA | 793 | 1,064 | 4.26 |

NA $=$ Not available.
1/ Product weight. 2/Computed from unrounded data. 3/Uses U.S. total population, July 1.
4/ Beginning stocks are not equal to ending stocks in previous year due to data revision.

Table 71--Dried prunes: Supply and utilization, 1971-90 $\underline{1 /}$


1/ Processed weight. $\underline{2 /}$ Beginning August 1 of year preceding that indicated. $\underline{3}^{/}$Uses U.S. total population, January 1.

Source: Commodity Economics Division, ERS, USDA, and Prune Marketing Committee.

Table 72--Dried raisins: Supply and utilization, 1971-90 1/


Table 73--Total dried fruit: Supply and utilization, 1971-90 1 /


Table 74--AImonds: Supply and utilization, 1970-90 1/


1/ Shelled basis. 2/ Beginning August 1 of year indicated. 3/Excludes quantities unharvested on account of economic conditions, sent to oil mills, and culls and blows not used. 4/ Uses U.S. total population, January 1 of year following that indicated.

Table 75--Hazelnuts (filberts): Sipply and utilization, 1970-90 1 /


Table 76--Pecans: Supply and utilization, 1970-90 1/

|  | Supply |  |  |  |  | Utilization |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Marketable |  | Begin- | Total |  | Ending stocks | Food disappearance |  |
| year <br> 2/ | : | production 3/ | Imports | ning stocks | supply | Exports |  | Total | $\qquad$ |
|  | : |  |  |  | 1,000 pou |  |  |  | Pounds |
|  | : |  |  |  |  |  |  |  |  |
| 1970 | : | 68,744 | 1,190 | 33,200 | 103.134 | 2,432 | 17,431 | 83,271 | 0.40 |
| 1971 | : | 110,632 | 682 | 17.431 | 128,745 | 2,064 | 34,031 | 92, 118 | 0.43 |
| 1972 | : | 80,257 | 42 | 34, 031 | 114,330 | 2,301 | 20.911 | 91,118 | 0.43 |
| 1973 | ; | 122,190 | 199 | 20,911 | 143,300 | 2,652 | 49,360 | 91,288 | 0.43 0.39 |
| 1974 | : | 62.514 | 6 | 49,360 | 111,880 | 3,252 | 24,149 | 84,479 | 0.39 |
| 1975 | : | 106.996 | 1 | 24,149 | 131,146 | 3,659 | 42,646 | 84,841 | 0.39 |
| 1976 | : | 48,454 | 2,121 | 42,646 | 93,221 | 2,628 | 17,387 | 73.206 | 0.33 |
| 1977 | : | 106,456 | 553 | 17,387 | 124,396 | 4,065 | 38,199 | 82,132 | 0.37 |
| 1978 | : | 114.702 | 796 | 38,199 | 153,697 | 3,411 | 63,192 | 87,094 | 0.39 |
| 1979 | : | 92,160 | 331 | 63,192 | 155,683 | 3,260 | 47,245 | 105,178 | 0.46 |
| 1980 | : | 85,150 | 952 | 47,245 | 133,347 | 4,665 | 30.852 | 97.830 | 0.43 |
| 1981 | ; | 149,804 | 849 | 30,852 | 181,505 | 4.194 | 73.406 | 103.905 | 0.45 |
| 1982 | : | 102,848 | 1,625 | 73,406 | 177,879 | 7.298 | 57.289 | 113,292 | 0.49 |
| 1983 | : | 122,670 | 5,789 | 57.289 | 185,748 | 3,376 | 69.715 | 112,657 | 0.48 |
| 1984 | : | 108,620 | 1,934 | 69.715 | 180,269 | 2.720 | 50.370 | 127.179 | 0.54 |
| 1985 | : | 110,868 | 14.298 | 50,370 | 175,536 | 2,264 | 59,952 | 113.320 | 0.47 |
| 1986 | : | 125,544 | 10,918 | 59,952 | 196,414 | 2,755 | 63,423 | 130.236 | 0.54 |
| 1987 | : | 121,194 | 12,966 | 63.423 | 1.97,583 | 3.935 | 62,520 | 131.128 | 0.54 |
| 1988 | : | 135,030 | 2,718 | 62,520 | 200,268 | 5,884 | 70,776 | 123,508 | 0.50 |
| 1989 | : | 101,954 | 9,992 | 70,776 | 182,722 | 9,508 | 58,253 | 114,961 | 0.46 |
| 1990 | : | 97,580 | 27,816 | 58,253 | 183,649 | 17,393 | 45,900 | 120,356 | 0.48 |

[^7]Table 77--Walnuts: Supply and utilization, 1970-90 1/



Table 78--Pistachios: Supply and utilization, 1970-90 $1 /$


NA $=$ Not available.
1/ Shelled basis. 2/ Beginning September 1 of year indicated. 3/ Excludes quantities unharvested on account of economic conditions, sent to oil mills, and culls and blows not used. 4/ Uses U.S. total population, January 1 of year following that indicated.

Table 79--Total tree nuts: Supply and utilization, 1970-90 1 /


Table 80-Fresh watermelon: Supply and utilization, 1970-91 1/



Table 82--Fresh honeydew: Supply and utilization, 1970-91 $1 /$

|  |  | Suppl |  |  | Util | ation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  |  |  |  | Shipments | : Food di | arance 3 |
| Year | $\begin{aligned} & \text { Produc- } \\ & \text { cion } \\ & 2 / \\ & \hline \end{aligned}$ | Imports | Total <br> supply <br> 3/ | Exports | to U.S. <br> terri- <br> tories | Total |  |
|  |  |  |  |  |  |  |  |
|  |  |  | - Mill | unds |  | ---- | Pounds |
| 1970 | 193.1 | 18.9 | 212.0 | 26.2 | NA |  |  |
| 1971 | 203.9 | 14.9 | 218.8 | 26.3 | Na | 185.8 | 0.9 |
| 1972 | 230.7 | 13.0 | 243.7 | 25.5 | NA | 192.5 | 0.9 |
| 1973 | 245.3 | 17.6 | 262.9 | 27.9 | NA | 218.2 | 1.0 |
| 1974 | 218.5 | 24.1 | 242.6 | 27.4 | NA | 215.2 | 1.0 |
| 1975 | 239.5 | 12.0 | 251.5 | 22.3 |  |  |  |
| 1976 | 234.6 | 15.0 | 249.6 | 27.2 | NA | 229.1 | 1.1 |
| 1977 | 259.1 | 18.1 | 277.2 | 28.8 | NA | 222.3 | 1.0 |
| 1978 | 341.3 | 24.4 | 365.7 | 19.6 | NA | 248.3 346.0 | 1.1 |
| 1979 | 347.7 | 28.7 | 376.4 | 19.3 | NA | 357.1 | 1.6 1.6 |
| 1980 | 318.0 | 26.5 | 344.5 | 22.1 |  |  |  |
| 1981 | 341.9 | 29.0 | 370.9 | 17.2 | NA | 322.4 | 1.4 |
| 1982 | 378.0 | 78.6 | 456.6 | 31.7 | NA | 353.7 424.9 | 1.5 |
| 1983 | 391.8 | 39.9 | 431.7 | 17.8 | 0.3 | 424.9 413.6 | 1.8 |
| 1984 | 403.1 | 41.3 | 444.4 | 15.2 | 0.7 | 428.6 | 1.8 |
| 1.985 | 475.8 | 42.7 |  |  |  |  |  |
| 1986 | 543.8 | 62.7 | 606.5 | 20.0 | 0.3 | 498.2 | 2.1 |
| 1987 | 481.1 | 77.8 | 558.9 | 27.6 | 0.8 | 585.1 | 2.4 |
| 1988 | 524.1 | 83.8 | 607.9 | 32.0 | 0.3 1.0 | 531.0 | 2.2 |
| 1989 | 513.1 | 134.3 | 647.4 | 30.6 | 0.7 | 616.1 | 2.3 |
| 1990 |  |  |  |  |  |  |  |
| 1991 | 373.7 | 115.0 | 565.3 | 49.6 | 0.0 | 515.7 | 2.1 |
|  |  |  | 533.9 | 53.3 | 0.0 | 480.6 | 1.9 |

NA $=$ Not available.
1/ Farm weight. Includes processing uses. Excludes quantity produced in home gardens.
$2 /$ Source: National Agricultural Statistics Service, USDA. 3/ Computed from unrounded data.

Table 83--Fresh mushrooms: Supply and utilization, 1970-91 1/


Table 84--Mushrooms for processing: Supply and utilization, 1970-91 $1 /$


NA $=$ Not available.
1/ Farm weight. 2/ Beginning August 1 of year indicated. 3/ Source: National Agricultural Statistics Service, USDA. 4/ Uses U.S. total population, January 1 of year following that indicated.

Table 85--Fresh potatoes: Supply and utilization, 1970-90 1/


Table 86--Dry edible beans: Supply and utilization, 1970-90 1 /


3/ Computed weight. 2/ stocks on farms and in commercial warehouses estimated from data on monthly marketings. 3/ Computed from unrounded data. 4/ Seeding rates for dry beans times acres planted. 5/Uses U.S. total population, July 1.

Table 87--Dry edible peas: Supply and utilization, 1970-90 $\underbrace{\text { Supply }}$


Table 88-Wheat: Supply and utilization, 1970-91 1/


Table 89--Wheat flour: Supply and utilization, 1970-91


Table 90--Rye: Supply and utilization, 1270-91 $1 /$


Table 91--Rice: Supply and stilization, 1970-91 $1 /$


Table 92--Corn: Supply and utilization, 1970-91 1/


P = Preliminary.
I/ Grain equivalent. 2/ Years Defore 1975 are calendar years; 1975 and beyond are marketing years (beginning September of year indicated). 3/ Includes grain and primary products before 1975, but grain only in 1975 and thereafter. Bureau of the Census, U.S. Department of Comerce. 4/ Includes stocks at mills, elevators, warehouses, terminals, and processors. 5/ Residual; includes corn used for alcoholic beverages, induserial products, seed, and feed. 6/ Uses U.S. total population, July 1 for 1970-74 and January 1 of year following that indicated for 1975 and beyond. Bushels converted at 56 pounds.

Table 93--Oats: Supply and utilization, 1970-91 I/

$\mathrm{P}=$ Preliminary.
1975, but oats $\frac{1}{7}$, $\frac{2}{} /$ Beginning June 1 of year indicated. $3 /$ Includes oats and oat products before and processors. 5 / Computed from unrounded data Includes stocks at mills, elevators, warehouses, terminals, population, January 1 of year following that indicated. Feed, seed, alcohol, and residual. I/ Uses U.S. total converting grain equivalent to oat products (includes rolled oats converted at 34 pounds. Factor for oat bran) is 0.60 .

Table 94--Barley: Supply ani utilization, 1970-911


Table 95--Total cane and beet sugar: Supply and utilization, 1970-91 1

| Year | Production | Receipts <br> from of fshore |  |  | Begin ning stock $2 /$ | Total suppl | Utilization |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Exports $3 /$ |  | Net change in invisible | $\begin{gathered} \text { Refining } \\ \text { loss } \\ \text { adjust- } \\ \text { ment } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { : Ending } \\ & \text { : stocks } \\ & : \quad 2 / \\ & \hline \end{aligned}$ | Domestic disappearance |  |  |
|  |  |  | Puer |  |  |  |  |  |  | Nonfoo |  | a use |
|  | , | Oreign : Rico : To |  |  |  |  |  |  |  | $\begin{array}{r} \text { use } \\ 5 . \\ \hline \end{array}$ | Total | Per capita refined 6 |
|  |  |  |  |  |  |  |  |  |  |  |  |  | refined $6 /$ |
|  |  |  |  |  |  | short | 6. raw vil | e ---- |  |  |  |  | Pounds |
| 1970 | 5,874 | 5,296 | 353 | 5,649 |  |  |  |  |  |  |  |  | Pounds |
| 1971 | 5,815 | S.587 | 144 | 5,731 | 2.869 2.835 | 14.392 14.381 | 66 | 185 -7 | 60 | 2,835 | 83 | 11,163 | 101.8 |
| 1972 | 6,015 | 5,459 | 149 | 5,608 | 2,823 | 14.446 | 89 50 | -7 | 70 | 2.823 | 61 | 11,345 | 102.1 |
| 1973 | 6,061 5,662 | 5,329 | 79 | 5,400 | 2,823 | 14.446 | 26 | -21 91 | 45 | 2,823 | 62 | 11.487 | 102.3 |
| 1974 | 5,662 | 5.770 | 157 | 5,927 | 2.646 | 14.235 | 72 | 305 | 69 | 2.646 | 31 | 11.429 | 100.8 |
| 1975 | 6,300 | 3.882 |  |  |  |  |  | 305 | 51 | 2,854 | 8 | 10.945 | 95.7 |
| 1976 | 6.798 | 4,658 | 203 | 3,978 | 2.854 | 13,132 | 216 | -277 | 35 | 2,856 | 0 |  |  |
| 1977 | 5,089 | 6.138 | 102 | 4,861 6.240 | 2,856 | 14,515 | 76 | -24 | 72 | 3.498 | 0 | 10,302 | 89.2 |
| 1978 | 5,602 | 4,683 | 52 | 6,240 4.735 | 3,498 | 15,827 | 35 | 188 | 14 | 4,491 | 0 | 10,893 | 93.4 |
| 1979 | 5,793 | 5,027 | 47 | 5,0\%4 | 3,954 | 14.828 | 48 | 29 | 108 | 3,754 | 0 | 11,099 10,889 | 94.2 |
|  |  |  |  |  | 3.75 | 14,621 | 73 | -12 | 103 | 3.701 | 0 | 10,889 10.756 | 91.4 89.3 |
| 1980 | 5,736 | 4,495 | 178 | 4,673 | 3.701 |  |  |  |  |  |  |  |  |
| 1961 | 6,224 | 5,025 | 49 | 5,074 | 3,082 | 14,110 14.380 | 689 | 72 | 78 | 3.082 | 0 | 10.189 |  |
| 1982 | 5,934 | 2,964 | 80 | 3.044 | 3.461 | 14.380 12.439 | 1.191 | -94 | 53 | 3.451 | 0 | 9,769 | 79.4 |
| 1983 | 5.680 | 3.080 | 67 | 3,147 | 3,068 | 12,439 11,895 | 137 | 28 | 53 | 3.068 | 0 | 9.153 | 73.7 |
| 1984 | 5,890 | 3.444 | 24 | 3,468 | 2,570 | 11,928 | 300 447 | 141 -18 | 72 | 2,570 | 0 | 8,812 | 70.3 |
| 1985 | 5,967 | 2,797 |  |  |  |  |  | -18 | 58 | 3,005 | 日 | 3,429 | 66.6 |
| 1986 | 6,267 | 2.223 | 36 | 2,833 | 3,005 | 11.805 | 481 | -69 | 122 | 3,126 |  |  |  |
| 1987 | 7.309 | 1.546 | 12 | 2.254 | 3,126 | 11,647 | 582 | 51 | 28 | 3.126 3.225 | 142 30 | 8,003 | 62.7 |
| 1989 | 7,087 | 1,388 | 19 | 1.558 1.407 | 3.225 <br> 3.195 | 12.092 | 604 | 145 | 18 | 3.2195 3.195 | 30 27 | 7.731 8,103 | 60.0 |
|  | 6,840 | 1.913 | 12 | 1.925 | 3.1953.132 | $\begin{aligned} & 11,689 \\ & 11,897 \end{aligned}$ | 458614 | $\begin{aligned} & -58 \\ & -11 \end{aligned}$ | ${ }_{38}^{12}$ | $\begin{aligned} & 3.132 \\ & 2,946 \end{aligned}$ | 9 | $\begin{aligned} & 8,136 \\ & 8,304 \end{aligned}$ | 62.1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1990 : | 6,327 | 2.765 | -- | 2,765 |  |  |  |  |  |  |  |  | 62.8 |
| 1991 P: | 7.345 | 2,813 | -- | 2,813 | 2.729 | 12,038 | 650 | -15 | 43 | 2,729 | 10 | 8,621 | 64.5 |
|  |  |  |  |  |  | 12,887 | 646 | 0 | 45 | 3,417 | , | 8,771 | 64.5 |

1/ Excludes the = Not applicable.
ixes, and flavored syrups in consumer-size containers). Deliveried bygar blends and mixtures (sucrose-dextrose blends, sugar-sweetened tea by adding the net change in invisible stocks to quentities used for food primary distributors for consumption in the united states can be derived importers). 3/ Includes deliveries transferred to sugar-containing food. 2/ Stocks in hands of primary distributors fprocessors and retailers, and industrial users. Negative number indicates a stock drawdown for export under re-export program. $4 /$ Holdings of wholesalers. In 1985, also includes use of 127,000 short tons in fuel ethanol. 6/ Uses U.S. total population residual. 5/ Includes use in polyhydric alcohol sugar, divide by 1.07.

Table 96--Coffee: Supply and utilization, 1970-90 $1 /$



Table 98--Cocoa: Supply and utilization, 1970-90 1/



Table 99--Spices and herbs: Supply and utilization, 1970-90--continued


1/ Production In preceding year minus estimated guantity used for seed. 2/ California only. 3/ Includes ground and unground condiments, as reported by the Department of Commerce. $4 /$ Cassia, cassia buds, cass vera, and beginning 1989, cimamon. 5/ Includes btems. 6/ Cinnamon import series discontinted: combined with cassia beginning 1989. 2/ Excludes sesame seed crushed for oil. 8/ Includes basil, cardamom seeds, capers, curry and curry powder products, dill, fenugreek seeds, laurel (hay) leaves, marjoram, mint leaves, origanum, parsiey, rosemary, savory, thyme, mixed spices, and other spices and spice seeds (ground and unground not individually reported. Includes shipments from puerto Rica. 9/ Uses U.S. total population July 1.

Table 100--Import share of food disappearance for selected foads, selected years 1 -

$1989: 1090$

Red mea
Beef
Pork
Lamb
Fish and shelleish $2 /$
Fresh and frozen $3 /$
Canned $4 /$
: percent

Eggs
Daify products 5/
Cheese $6 /$
Americ
Other
Condensed and
evaporated whole milk
Nonfat dry mink

| : | 6.2 | 5.7 | 6.5 | 5.7 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ; | 7.7 | 6.8 | 8.8 | 5.7 7.3 | 6.6 | 6.6 | 6.8 | 7.7 | 7.9 | 8.6 |  |  |  |
| 1 | 3.9 | 2.7 | 5.1 | 4.3 | 8.0 | 7.9 | 7.3 | 8.1 | 8.2 | 8.6 9.0 | 8.5 | 7.6 | 8.2 |
| : | 3.3 | 3.6 | 3.3 | 4.0 | 4.0 | 4.0 | 4.7 | 3.7 | 4.9 | 5.0 | 9.4 | 9.0 | 9.8 |
| ' | 18.4 | 6.3 | 9.5 | 8.6 | 4.2 | 4.6 | 6.2 | 7.2 | 7.5 | 7.8 | 6.6 | NA | NA |
| * |  |  |  | 8.6 | 5.5 | 4.7 | 5.0 | 9.4 | 10.9 | 7.8 12.2 | 6.9 13.3 | 5.5 | 5.6 |
| ; | 49.2 | 45.6 | 45.3 | 47.5 |  |  |  |  |  | 12.2 | 13.3 | 15.6 | 14.1 |
| ; | 63.3 | 60.7 | 56.8 | 61 | 5 | 52.3 | 50.5 | 53.8 | 55.1 | 57.1 | 5.3 |  |  |
| 1 | 26.1 | 17.8 | 21.8 | 19.5 | 63.7 | 66.8 | 61.5 | 62.8 | 65.9 | 67.4 | 55.3 | 56.3 | 56.3 |
| : |  |  |  |  | 22.6 | 23.6 | 27.5 | 34.9 | 34.0 | 34.1 | 63.9 | 62.3 | 65.8 |
| \% | 0.5 | 0.1 | 0.1 | 1 |  |  |  |  |  |  | 35.9 | 42.4 | 36.0 |
|  |  |  |  |  |  | 0.5 | 0.6 | 0.3 | 0.3 | 0.1 | 0.1 |  |  |
|  | 1.6 | 1.4 | 1.7 | 1.9 | 1.9 |  |  |  |  |  | 0.1 | 0.5 | 0.2 |
|  |  |  |  |  | 1.9 | 1.9 | 2.0 | 2.0 | 1.9 | 2.7 | 1.7 |  |  |
|  | 6.9 | 5.8 | 5,8 | 5.9 |  |  |  |  |  |  | 1.7 | 1.8 | 1,9 |
|  | 1.1 | 0.9 | 0.8 | 0.9 |  | 6.0 | 6.0 | 5.6 | 5.3 | 4.5 |  |  |  |
|  | 16.3 | 12.4 | 11.9 | 12.4 | 10.7 | 0.8 | 0.9 | 0.7 | 0.8 | 0.5 | 4.3 | 4.7 | 4.8 |
|  |  |  |  | 12.4 | 12.6 | 12.6 | 12.4 | 11.5 | 10.3 |  | 0.6 | 0.7 | 0.9 |
|  |  |  |  |  |  |  |  |  | 10.3 | 8.8 | 7.8 | 8.1 | 0.2 |
|  | 0.2 | 0.1 | $\sim$ | 0.5 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | 0.8 | 1.2 | 1.1 | 1.1 | 1.1 |  |  |  |  |
|  | 0.2 | 0.3 | 0. |  |  |  |  |  |  | 0.9 | 2.1 | 0.9 | 0.9 |

Fats and oils:
Butter
Salad and cooking oil 2/:
Fresh fruits
Citrus 8/
Apples
Bananas
Other $9 /$
Processed fruits:
Dried $10 /$
Frozen noncitrus
Frozen citrus juice $11 /$
Fresh vegetables
Artichokes
Asparagus
Broccoli
Cabbage
Carrots
Cauliflower
Celery
Sweet corn
Cucumbers
Eggplant
Garlic
Green beans
Green peppers
Lettuce
Onions
Tomatoes

Vegetables for processing::
Asparagus for canning :
Asparagus for canning
Asparagus for freezing
Broccolf
Carrats
Cauliflower
Cucumbers for pickling
Green peas for canning
Green peas for freezing
Snop beans for canning
Sweet corn for canning
Tomatoes
See footnotes at end of table.

Table 100--Import share of foad disappearance for selected foods, selected years $1 /-\cdots$ continued

$\mathrm{NA}=$ Not av
1/ Calculated from supply and utilization balance sheets constructed by the Commodity Economics Division of the Economic Research Service. Import share is the total quantity imported divided by the quantity available for domest ario cons consumption (disappearance). A portion of the imports of aonte comnodities is exported; therefore, the gimilarly, presed here may overstate the importance of imports in domestic consumption for some commodity groups. fuel production, imports in food cifappearance. For example, the can cause the ratios presented here to overstate the importance of In no year dia barley imports account for more than for barley greatly overstate the importance of barley importe for human food accounted for only 1 percer than 2 percent of the total U.S. barley bupply. However, barley used disappearance sometimes exceeded 100 percent. 2/ Excludes game fish less. Thus, the ratio of imports to food beginning in 1975. 4/ Excludes the nonfieh content of canned products calculated on a milkfat basis. 6/ Natural equivaled tishery products. 5/ Hilk equivalent of all dairy cheese except fuli-skim American and cottage, pot, and baker's cheeses, and cheese producta. Includ $s$ all types of grapefruits, lemons, limes, tangerines, and tangelos. g/ Includes apricots Olive all imports. 8/ Includes oranges, grapes, nectarines, peaches, pears, pineapples, plums, prunes, st apricote, avocados, cherries, cranberxies, figs, 20/ Includes apricots, dates, figs, peaches, pears, prues, and raisins ies, papayas, and miscellaneous fruits. concentrated and single-strength fuices. 1 prop, prunes, and raisins. 11/ Product-weight basis, includes almonds, filberts, pecans, walnuts, Brazil $\frac{12 / C r o p ~ y e a r ~ b e g i n n i n g ~ i n ~ S e p t e m b e r ~ o f ~ y e a r ~ i n d i c a t e d . ~ i 3 / ~ I n c l u d e s ~}{\text { in }}$ 1977, chestnuts, cashews, and macadamias nuts, pignolias, and miscellaneous tree nuts inciuding pistachios until 15/ Includes flour equivalent of mate 14 flour and other wheat products included, grain equivalent. prociucts. Excludes wet pasta, and zanned and frozen pasta Includes dry macaroni, spaghetti, noodies, and other macaroni terms of rye. 18 / Rough equiva?ent. Crop year beginning in aucts made from wet pasta. il/ Includes flour imports in rice converted to rough basis al: annual extraction in August of year preceding that indicated. Includea milled crop-year (beginning September of year indiated) basie be/ Grain-equivalent basis. Calendar-year basis in 1970: June 1 of year indicated, $2 I$ / Kona coffee, grown in conbumption. 22/ Includes paln kerne? ofl grown in Hawaii, accounts for about 0.1-0.2 percent of total $U . s$. coffee for domestic consumption (net of re-exports) divided by coconut oil. 23/ Import share is the quantity of importe syrup, edible refiner's eyrups, and edible molasses. by domestic food consumption (disappearance). 24/ Includes maple

Table 201--Consumer Price Index for all urban consumers. 1970-92


Table 102-Consumer Price Index for food, rmajor groups, 1970-91


[^8]Table 103--Consumer Price Index for food and beverages at home, selected categories, 1970-91



Table 103--Consumer Price Index for food and beverages at home, selected categories, 1970-91--continued


Table 103--Consumer Price Index for food and beverages at hone, selected categories, 1970-91--continued


NA = Not available.
1/ Excludes canned ground beef. 2/ Includes items not show. 3/ Includes tangerines. 4/ Excludes diet colas. 5/ Includes freeze-dried coffee.
Source: Bureau of Labor Statibtics.

Table 104--Consumer Price Index for food, 1979-91, quarterly


Table 104--Consumer Price Index for food, 1979-91, quarterly--continued


Table 105-Average retail food prices, individual items, 1984-91


Table 105--Average retail food prices, individual items, 1984-91--continued

Source: Bureau of Labor Statistics.

Table 106--Producer price Index for food and beverages, by stage of processing, 1970-91



Table 107--Food expenditures by families and individuals as a share of disposable personal income, 1970-91

( ncluded in and food produced and consumed on farms because the value of these foods is included in personal income. Excludes government-donated foods. $2 /$ Purchases of meals and snacks by families and individuals, and food furnished employees since it is included in personal income. Excludes food paid for by government and business. such as donated foods to schools, meals in prisons and other institutions, and expense-account meals. 3/ Total may not add due to rounding.

Table 108 --Household expendtures for food in relation to income, after taxes, by income group, 1990 1/

$1 /$ Data are only for those households who reported at least one major source of income and full accounting of ali income fe income reporters. However, households may not have provided a full accounting of all income from all sources. Underreporting of income would cause an upward households reporting business iosses.

Source: U.S. Departinent of Labor, Bureau of Labor statistics, Office of Prices Expendituxe Survey. Percentages computed by USDA


1/ The da
Independent (UN) System of National Accounts (219-0705). ERS, USDA, mainly from data provided by Yearbook. Two ger. formerly the Soviet Union, are from the cis, which is the commonwealth of set ia based on ERS estigures are shown for the United States budget published in a statistical
second set is based on the $u$ of $0 . S$ food and beverage expenditures firbt, and we belleve most accurate, (PCE) for food and beverages, and is unent of Commerce eatimates of personal con and lndividuals. The partly because it excludes pet food tod by the UN. The ERS eatimate is ? consumption expenditures estimates also deduct more from gro.ice, and prepared feed which are foluwer than the PCE estimate arriving at the estimate for fyod purch store sales for nonfoods, such as drud in the pCE estimates. ERS 3/ Consumer expenditures for goods and and tobacco. 7/ Food includes alcoholiservices. 4/ 1987. 5/ 1988. 6/ Foodudes nonalcoholic beveragea, i0/ 1986. - 8/ 1983. 9/ Inciudes nonalcoholic alcoholic beverages


Table 111--Food for off-premise use: Total expenditures, 1970-91 1/



Table 113--Alcoholic beverages: Total expenditures, 1970-91 1/


Table 114--Food expenditures, by source of funds, 1970-91


[^9]Table 115--Population: Total, resident, and civilian, 1970-92 1/


[^10]Source: Bureau of the Census.

$$
\begin{aligned}
& \text { END } \\
& \text { DATE } \\
& \text { FILMED } \\
& \text { IO-23.92 } \\
& \text { NTIS }
\end{aligned}
$$


[^0]:    ${ }^{\text {I }}$ Where available, preliminary estimates for 1991 are also included in tables and charts.

[^1]:    1/Excludes quantities used in alcoholic beverages, tuel, and com sweeteners.
    2 Corr:, oats, balley and rye.

[^2]:    1/' Quantities of individual foods on a retail-wetght basis axe combined into indexes using 1965-67 average prices through 9975 and 1977-79 average prices for 1976 and beyond. Index is linked at 3975. 2/ includes skim milk, buttermilk, and yogurt. 3/ Excludes full-skim American and cottage, pot, and baker's cheese. 4/ Includes condensed and evaporated milk, frozen desserts, cottage cheese, and dried-milk products. 5/ Excludes corn sweeteners which are with sugars and other sweeteners. 6/ Includes dried fruit. frozen fruit. canned fruit, and citrus juices. Excludes noncitrus fruit juices. $7 /$ Includes canned and dehydrated. $\theta /$ Data are not avadlable to adjust for stock changes.

[^3]:    

[^4]:    1/ Single-strengch equivalent. Uses U.S. total population, July i. $2 /$ Season beginning october prior to year indicated. 3/ Excludet canned concentrate. 4/ Includee blended orange and grapefruit juice. 5/ Computed from unrounded data. 6/ Includes lemon, lime, blends, the juice portion of lemonade base, and frozen tangerine juice.

[^5]:    1/ Per capita numbers do not reflect changes in stocks, therefore the numbers do not reflect year-to-year changes in consumption. However, the numbers do approximate the trend and level of consumption over time. Uses U.S. total population, July 1.

[^6]:    1/ Natural equivalent of cheese and cheese products (see table 14). Includes cheddar, Colby, washed curd, stirred curd, Monterey, and Jack. Excludes full-skim American. $2 /$ Uses U.S. cotal population, July 1.

[^7]:    I/ Shelled basis. 2/ Beginning July 1 of year indicated. 3/Excludes quantities unharvested on account of economic conditions, sent to oil mills, and culls and blows not used. 4/ Uses U.S. total population, January 1 of year following that indicated.

[^8]:    1/ Beef, veal, lamb, mutton, park, and processed meat. $\underline{\text { / / Includes butter. } 3 / \text { Excludes butter. }}$
    Source: Bureau of Labor Statistics.

[^9]:    Note: The figures in this table differ from those in table 107. This table breaks down total total expenditures which are paid out of of funds. Table 107 deals only with the portions of
    1/ Includes philanthre are paid out of personal income.

[^10]:    NA $=$ Not available.
    1/ Estimates for July 1, 1980, and thereafter are based on the April 1, 1990, population as enumerated in the 1990 census.

