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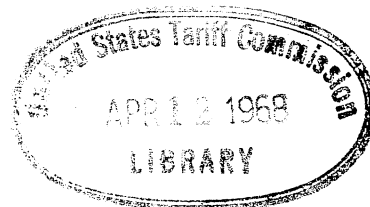
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UNITED STATES TARIFF COMMISSION

DAIRY PRODUCTS



Report on Investigation No. 332-53 Under Section 332
of the Tariff Act of 1930 Pursuant to a Resolution
of the Committee on Ways and Means of the House of
Representatives Adopted May 10, 1967



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INTRODUCTION

This report has been prepared in response to the following resolution, which was adopted on May 10, 1967, by the Committee on Ways and Means of the House of Representatives:

RESOLVED, That the United States Tariff Commission is hereby directed, pursuant to section 332(g) of the Tariff Act of 1930, to make an investigation of the conditions of competition in the United States between dairy products (with particular attention to nonquota products) produced in the United States and in foreign countries, and report the results of such investigation to the Committee on Ways and Means at the earliest practicable date.

The report of the Commission shall include factual information on domestic production, foreign production, imports, consumption, channels and methods of distribution, prices (including pricing practices), United States exports, United States customs treatment since 1930, and on other factors of competition. The report shall also include information indicating whether dairy products are being imported into the United States under circumstances and in quantities interfering with, or threatening to interfere with, price support programs of the Department of Agriculture for milk and butterfat. 1/

On April 7, 1967, at the direction of the President, the Tariff Commission had undertaken an investigation under section 22 of the Agricultural Adjustment Act, as amended, to determine whether certain dairy products were being, or were practically certain to be, imported into the United States under such conditions and in such quantities as

1/ The Commission issued a public notice of the institution of the investigation (No. 332-53) on May 11, 1967. The notice was posted at the office of the Commission in Washington, D.C. and at its office in New York City; it was published in the Federal Register (32 F.R. 7357) and in the May 31, 1967, issue of Customs Bulletin. The Commission announced that it did not contemplate holding public hearings, but it urged interested parties to submit promptly any written statements they wished considered. The Commission indicated that it would include relevant data obtained in the course of the then pending section 22 investigation with respect to certain dairy products.

to render or tend to render ineffective, or materially interfere with, the price-support programs of the U.S. Department of Agriculture for milk and butterfat, and to determine related questions. 1/ On June 15, 1967, the Commission reported the results of this investigation to the President (TC Publication 211). By Proclamation No. 3790 of June 30, 1967, the President, among other things, imposed quotas on U.S. imports of certain butterfat-sugar mixtures, designated American-type cheeses (including Colby), and certain frozen cream; the quotas generally limited annual imports of such products to approximately the average annual volume that entered in 1961-65. 2/

Beginning in 1965, the dairy situation in the United States altered materially. The annual domestic production of milk declined, whereas it had increased slowly in the preceding two decades. The domestic output of milk was materially lower in 1966 than in most years of the preceding decade, and was slightly lower in 1967 than in 1966. In 1966, for the first time in many years, the U.S. supply of dairy products was about in balance with domestic commercial demand, and the Government acquired only small quantities of dairy products

1/ In the past decade and a half, the Commission has conducted eight investigations on various dairy products under section 22 of the Agricultural Adjustment Act, as amended, to determine if imports were materially interfering, or were likely to interfere, with the price-support programs of the Department of Agriculture for milk and butterfat. Most of the investigations resulted in the imposition of quotas on imports of specified dairy products or the modification of quotas previously imposed (see appendix B).

2/ The results of the investigation and subsequent action by the President are described in greater detail in the later section of this report on U.S. nontariff import restrictions on dairy products.

under its price-support programs. In the early summer of 1966, the Department of Agriculture raised the price-support levels for dairy products by about a fifth. This increase in support was the sharpest in history; within a period of 3 months, support objectives were raised from the minimum legally permissible level (75 percent of parity) to almost the maximum (90 percent). The Department also took action under the Federal Milk Marketing Orders--in both 1966 and 1967--to increase the prices received by farmers for milk marketed for fluid consumption (Class I milk). Prices received by farmers for milk rose appreciably; average prices in 1966 and 1967 were substantially higher than in earlier years.

During 1966 and the early months of 1967, imports of some dairy products not subject to quantitative limitations rose sharply; imports of Colby cheese, butterfat-sugar mixtures, and frozen cream accounted for about 95 percent of the increase in imports. Aggregate imports of dairy products in 1966 were triple those in 1965; nevertheless they were equivalent in 1966 to only about 2 percent of the domestic production of milk. Imports in the first 6 months of 1967 were 60 percent larger than those of the corresponding period of 1966. At mid-year, as previously noted, the President imposed import quotas on the aforementioned products.

Meanwhile, the prices received by farmers for milk, although remaining higher than they had been before, declined to close to support levels in the early months of 1967. U.S. consumption of dairy products, exclusive of that by recipients of Government donations,

declined appreciably in 1967; Government acquisitions of dairy products under its price-support program were substantial, although not appreciably larger relative to domestic output than in the late 1950's and early 1960's.

The governments of most major milk-producing countries support the prices of dairy products in their domestic markets. Many subsidize their exports and restrict their imports of these products. The conditions of competition in the United States between foreign and domestic dairy products are greatly affected by such governmental programs. These manifold and complex measures to support prices, expand exports, and restrict imports create trade patterns quite unlike those that would prevail in a freely competitive market. In response to the Committee's resolution, therefore, this report deals with U.S. and foreign governmental programs respecting dairy products, as well as domestic and foreign trade in those products.

The investigation at hand is concerned with virtually all dairy products. Hence, this report deals with milk and cream for consumption in fluid form, as well as in the form of a wide variety of manufactured dairy products. The first section of the report analyzes the domestic dairy situation in overall terms; subsequent sections provide salient data respecting the conditions of competition between imported and domestic dairy products. Accordingly, information is presented on the dairy products specified in part 4 of schedule 1 of the Tariff Schedules of the United States (TSUS), as well as on butter oil and certain butterfat-sugar mixtures. Certain products made from

milk (e.g., casein, lactose, and lactalbumin) and certain other products containing butterfat (e.g., chocolate crumb) are not discussed herein.

THE DOMESTIC DAIRY SITUATION

Milk and other dairy products combined play a major role in the farm economy of the United States. In 1966 dairy products sold by U.S. farmers had a value of about \$5.5 billion; they accounted for a seventh of farmers' total cash receipts from the sale of farm products. The sales of dairy products ranked second only to sales of livestock. The annual value of dairy products sold by farmers in recent years has been less than half the value of meat animals sold, but substantially larger than that of either feed crops or poultry products; it has been double to triple the value of farmers' sales of cotton, food grains, or tobacco.

U.S. consumption

In terms of milk equivalent, the aggregate annual consumption of milk and other dairy products in the United States increased gradually between the mid-1940's and the mid-1960's, and then declined. The consumption in 1964--123 billion pounds--was about 12 percent larger than average annual consumption in 1947-49 (table 4). After 1964 it declined to 122 billion pounds in 1965, 119 billion pounds in 1966, and 116 billion pounds in 1967. Per capita civilian consumption of milk and other dairy products combined has declined almost steadily since World War II. In 1966 it was about a fifth lower than it had been immediately following World War II. Per capita consumption amounted to about 600 pounds in 1966, compared with about 760 pounds

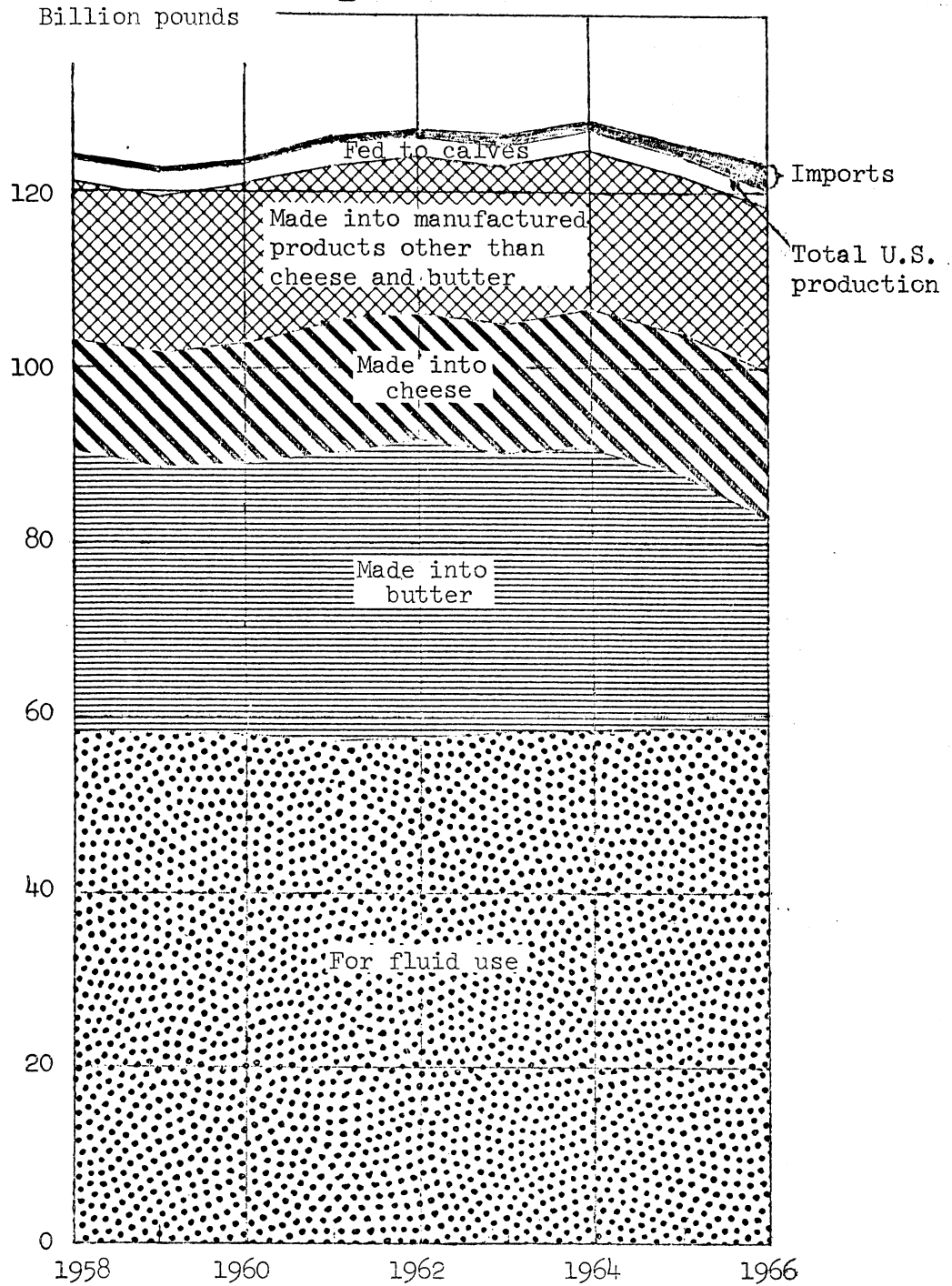
in 1945-49 (table 5). Although per capita consumption has declined substantially, the growth in U.S. population has resulted in a slow increase in aggregate consumption in most years since World War II.

Like total U.S. consumption of dairy products, the consumption of such products exclusive of Government donations has generally grown slowly since World War II. Such consumption in 1967, however, was about 5 percent smaller than in 1966--a drop in consumption of 5 billion pounds. About half of the decline was accounted for by decreased consumption of milk in fluid form, and half by decreased consumption of manufactured dairy products.

Trends, by major products

In the two decades since World War II, the civilian consumption of milk in the United States has consisted about equally of that consumed in fluid form (hereinafter referred to as fluid milk) and that consumed in the form of manufactured dairy products (fig. 1). In this period, the annual domestic consumption of both fluid milk and manufactured dairy products rose by about 12 percent. Nevertheless, the per capita consumption of both fluid milk and manufactured dairy products declined materially in that period--by nearly 20 percent in each instance. The long-run trend of per capita consumption of some dairy products, however, differs materially from that of others (table 6). The per capita consumption of butter and evaporated milk, on the one hand, has declined for a number of years; that of cheeses and frozen dairy products, on the other hand, has increased. Developments in the

Figure 1.--U.S. production of milk and milk equivalent of U.S. imports of dairy products, 1958-66



consumption of individual dairy products are discussed in subsequent sections of this report.

Distribution channels

The great bulk of aggregate U.S. consumption of milk and other dairy products--more than nine-tenths--has been accounted for by products that have moved into consumption through commercial channels. Milk consumed on farms where it was produced and dairy products donated or subsidized by Federal programs have accounted for the remainder. The annual quantity of milk consumed on farms has declined sharply since World War II; such consumption dropped from an average of more than 15 billion pounds in 1947-49 (14 percent of aggregate consumption) to 3 billion pounds in 1966 (3 percent).

In the last decade from 4 billion to 8 billion pounds of milk and other dairy products (milk equivalent) have reached the consumer annually through two groups of Federal programs: (1) donations to welfare programs and (2) school lunch and special milk programs. The average annual quantity so distributed has been equivalent to about 5 percent of average annual consumption of milk in the United States. The school lunch and special milk programs have grown. In 1966, 3.4 billion pounds of milk and other dairy products were distributed through those programs, compared with an annual average of less than a half billion pounds in 1947-49 (when only the school lunch program was in effect). Federal donations to welfare programs have varied widely from year to year, depending largely on the quantities of dairy

products held by the Federal Government as a result of acquisitions under the price-support program. In recent years, Federal donations to welfare programs have declined sharply; whereas they were close to 5 billion pounds (milk equivalent) in each of the years 1962-64, they totaled only 3.6 billion pounds in 1965 and 1.1 billion pounds in 1966. The quantities of dairy products owned by the Federal Government at the close of 1966 were extremely small. In 1967, however, the Government purchased substantial quantities of dairy products; about 3.0 billion pounds of dairy products were donated to welfare programs during the year.

Factors affecting consumption

The long-run decline in aggregate per capita consumption of dairy products occurred despite a marked rise in disposable real personal income in the United States. ^{1/} Changing food consumption patterns arising from a variety of economic, cultural, and technological developments have, on balance, adversely affected the per capita consumption of both fluid milk and manufactured dairy products. In recent years, many consumers have adhered to low-fat diets because of concern with their weight and intake of cholesterol. Shifts in food habits resulting from such diets have contributed to the decline in per capita consumption of butter, cream, and other high-fat dairy products; on

^{1/} Aggregate disposable personal incomes in the United States, in terms of constant dollars, increased by 71 percent from 1950 to 1965; such incomes on a per capita basis rose by 33 percent in the same period.

the other hand, such shifts have stimulated the consumption of skimmed milk and nonfat dry milk, as well as low-fat nondairy products. Increasingly in recent years, substitute products that are lower in cost and/or more convenient to use than the competitive dairy products have become available to the consumer. Among such articles currently on the market are oleomargarine, nondairy creamers, whipped toppings, and imitation dairy products (including milk) made from vegetable fat. Oleomargarine, which has long competed with butter, has had the greatest impact on the decline in the domestic consumption of dairy products. In March 1966, the military services, with the exception of the Navy, began to use oleomargarine rather than butter. The increasing popularity of beverages other than milk, particularly soft drinks, iced tea, and iced coffee, has also contributed to the decreasing per capita consumption of fluid milk.

The U.S. consumption of milk in fluid form, as well as the consumption of manufactured dairy products, are moderately responsive to changes in consumer prices or incomes. Thus, substantial changes in the consumer prices of dairy products (or in the real incomes of consumers) generally result in significant changes in the consumption of the respective dairy products. The Department of Agriculture reports, for example, that a 10-percent increase in the retail price of fluid milk will result in a decline of about 3 percent in the consumption of that product; ^{1/} other studies suggest that comparable increases in

^{1/} Dairy Situation, DS-316, July 7, 1967, p. 12.

the prices of manufactured dairy products will generally result in considerably greater declines in the consumption of those products (especially butter). 1/ The sharp decline in the consumption of dairy products in 1967 appears to have resulted largely from the marked increase in retail prices of dairy products that occurred in 1966 and then held into 1967. The retail price index of dairy products (1957-59=100) averaged 117 in 1967, compared with 112 in 1966 and 105 in 1965. As noted earlier, the domestic consumption of dairy products in 1967 was about 5 percent lower than in 1966.

1/ See, for example, Robert R. Wilson and Russell G. Thompson, Demand, Supply, and Price Relationships for the Dairy Sector, Post-World War II Period, Journal of Farm Economics, May 1967. The most recent comprehensive study of price and income elasticities of dairy products made by an agency of the Federal Government was The Demand and Price Structure for Dairy Products, Agricultural Marketing Service, U.S. Department of Agriculture, May 1957.

U.S. Production

In the two decades following World War II, the annual production of milk in the United States increased slowly, but declined after 1964. The annual output in 1960-64 averaged 125 billion pounds, compared with 118 billion pounds in 1945-49. Production varied little from year to year during that period; fluctuations in annual output rarely exceeded 2 percent. In 1965 and 1966, however, the U.S. production of milk declined significantly. The output of milk in the latter year--120 billion pounds--was more than 5 percent lower than in 1964 and materially lower than in most years of the preceding decade. In 1967 the U.S. output of milk was slightly lower than in 1966. The recent decline in milk production has been associated with high prices for livestock, which has encouraged dairy farmers either to cull their herds more than usual or to discontinue dairy farming; the number of milk cows on farms, as noted in an earlier section, declined at a higher rate than usual during 1965 and 1966. More favorable returns in alternative farm enterprises and increasing opportunities of attractive off-farm employment also contributed to the decreased output of milk.

Trends, by major products and geographic areas

In recent years Grade A milk has accounted for an increasing share of the U.S. output of milk, and manufacturing grade milk, for

a decreasing share. 1/ In 1966, 70 percent of the milk sold by farmers to plants and dealers was Grade A, compared with about 60 percent in 1950 (table 7). Dairy economists predict that eventually virtually all U.S. production of milk will be Grade A. 2/ It appears that the bulk of the farms that have ceased production of milk in recent years have been those that produced manufacturing grade milk. Farms now producing Grade A milk are, on the average, materially larger than those producing manufacturing grade milk. Although the costs of producing Grade A milk generally exceed slightly those of the manufacturing grade, the net incomes on farms producing Grade A milk in recent years have probably exceeded those on farms producing manufacturing grade milk. 3/

The production of Grade A milk in the United States for a number of years has exceeded materially the quantity sold for fluid consumption at the prevailing prices. Since fluid milk is highly perishable, the output of Grade A milk not sold for fluid consumption is channeled into the production of manufactured dairy products. In 1966 nearly a third of the Grade A milk sold by U.S. farmers was used to produce manufactured dairy products; that milk accounted for about two-fifths of the total amount of milk used to produce such products. Although

1/ Grade A milk, which is produced under specified sanitary conditions, may be either sold for fluid consumption or used in the production of manufactured dairy products. Manufacturing grade milk may not be sold for fluid consumption but may be sold to produce manufactured dairy products.

2/ See, for example, National Commission on Food Marketing, Organization and Competition in the Dairy Industry, Tech. Study No. 3, June 1966, pp. 29-30.

3/ See the later section of this report on incomes received by U.S. dairy farmers.

Grade A milk thus currently accounts for a substantial share of the milk used in manufacturing, the quantities of Grade A milk made available for manufacturing use vary widely from time to time during the year in accordance with both the seasonality of output and variations in daily retail sales of Grade A milk.

About a fourth of the U.S. output of milk is produced in the New England and Middle Atlantic States combined, and about a half in the North Central States; production of the remaining fourth occurs widely through the South, the Southwest, and the West. The U.S. output of milk for sale in the fluid state is produced chiefly near the large population centers. Virtually all of the milk produced in the New England and Middle Atlantic States, for example, is Grade A milk (table 7). The bulk of the manufacturing grade milk in the United States is produced in the North Central States. In recent years, those States, which include the two leading milk-producing States (Wisconsin and Minnesota), have accounted for nearly 70 percent of the milk used in manufactured dairy products. Substantial quantities of Grade A milk are also produced in those States.

The aggregate annual U.S. production of manufactured dairy products, which increased slowly for two decades following World War II, declined in 1965 and 1966. The annual output--in terms of milk equivalent--decreased from 66 billion pounds in 1964 to less than 60 billion pounds in 1966 (table 8). The consumption of milk in fluid form had remained stable in those years; hence, when the U.S. production of milk dropped in 1965 and 1966, the quantity of domestic milk

available to produce manufactured dairy products declined. In 1967 the aggregate U.S. output of manufactured dairy products increased. The supplies of domestic milk available for manufacturing use were larger in 1967 than in 1966; although U.S. farm marketings of milk were slightly smaller in 1967 than in 1966, sales of whole milk in fluid form were somewhat less, thus resulting in increased supplies of domestic milk for manufacturing use. The supplies of imported ingredients for manufacturing dairy products were about the same in 1967 as in 1966.

The U.S. output of major dairy products in recent years is shown in the following tabulation (in terms of product weight or volume):

Year	Butter	Cheese	Frozen dairy products ^{1/}
	Million pounds	Million pounds	Million gallons
1962-----	1,537	1,592	989
1963-----	1,420	1,632	1,019
1964-----	1,442	1,724	1,058
1965-----	1,323	1,756	1,093
1966-----	1,119	1,873	1,098

^{1/} Excludes water ices, but includes frozen desserts containing nonfat milk solids.

In 1966, the output of butter was lower than in any year after 1920; indeed, it was more than 25 percent lower than in 1962. The lengthy and severe decline in U.S. output of butter had resulted largely from the competition of oleomargarine. The U.S. production of both cheese and frozen dairy products, on the other hand, were at record levels in 1966, considerably higher than in 1962. During the

period 1962-66, the demand for cheese rose, partly because of higher meat prices. The output of frozen dairy products has increased in recent years, continuing a long trend, which apparently was stimulated largely by the increased per capita disposable income and the increased population.

U.S. dairy farms

Like much of U.S. agriculture, the dairy sector has experienced major long-run economic changes. Since World War II, the number of U.S. farms selling milk and cream has declined sharply and at an increasing rate. The average size of dairy herds in the United States has risen materially. Farms with small dairy herds have declined greatly in number; farms with large dairy herds--although accounting for a small percentage of the total--have increased markedly in number. The number of milk cows in the United States has declined almost steadily in the last two decades; the average production of milk per cow, however, has generally increased sufficiently to offset the decline in numbers. With increased output per cow, increased mechanization, and a decline in the number of low-efficiency farms, the output of milk per man-hour on U.S. farms nearly tripled between 1945 and 1965. Moreover, many dairy farmers have joined in marketing cooperatives, which have materially enhanced the competitive position of their members.

Number and size of dairy farms.--In the two decades following World War II, the number of farms selling milk or cream in the United

States declined by about 75 percent--from about 2,500,000 in 1945 to 648,000 in 1964 (the latest year for which data are available). Only 367,000 of the 648,000 farms selling milk and cream in 1964 consisted of commercial dairy farms (table 1). ^{1/} In the early 1960's the number of farms selling milk or cream declined by about 9 percent annually, while the number had decreased by 4 percent annually in the late 1940's. A number of factors contributed to the decline during recent years. Alternative farming ventures that have been more rewarding than dairying, as well as attractive off-farm employment opportunities, have induced many farmers to discontinue dairying. Other factors have been the large amount of capital required for entry into dairying (or for the substantial expansion of existing dairy operations) and the increasing cost of farm labor. Appropriate use of capital equipment, such as automated milking equipment and bulk tanks, greatly reduce the number of man-hours needed to produce a given quantity of milk, but the substantial capital required generally makes such investment profitable only to dairy farmers with large herds.

^{1/} For the agricultural census, a commercial dairy farm is defined as a farm having aggregate sales of farm products of \$2,500 or more, of which more than half was accounted for by dairy products. Farms having only a few milk cows may qualify as commercial dairy farms under the definition used. At present prices, for example, a farm with 6 milk cows would probably qualify as a commercial dairy farm, even if milk were the only farm product sold. If both milk and other farm products were sold (sales of milk predominating in value), a farm with as few as 3 milk cows might qualify. Under certain circumstances, moreover, farms with sales of farm products aggregating less than \$2,500 may qualify as a commercial dairy farm; see the footnotes to table 1.

Most of the dairy farms that discontinued the production of milk in the two decades following World War II were farms having either a few milk cows or a small herd, while large dairy farms increased in number. The number of U.S. farms having 50 or more milk cows increased from 24,000 in 1954 to 47,000 in 1964; they accounted for 34 percent of farmers' sales of whole milk in 1964, compared with 17 percent in 1954. Farms having from 30 to 49 milk cows accounted for 30 percent of farmers' sales of whole milk in 1964, compared with 19 percent a decade earlier. Those having less than 30 milk cows accounted for 36 percent of sales of whole milk in 1964, whereas they had accounted for 64 percent a decade earlier (table 2). By 1967 dairy farmers having less than 30 cows probably accounted for substantially less than 36 percent of farmers' sales of whole milk.

Number of milk cows.--The number of milk cows in the United States has declined markedly since World War II. In 1967 the number of milk cows estimated to be on U.S. farms was 13.6 million, compared with an annual average of 22.6 million in 1947-49 (table 3). During the same period the average output of milk per cow in the United States increased greatly, rising from an annual average of 5,100 pounds in 1947-49 to 8,800 in 1967. The increase in average output per cow resulted from improved breeding, feeding, and management.

In the 10-year period 1955-64, the number of milk cows in the United States decreased by about 3 percent annually, which was nearly double the average annual decline in the preceding 10 years. In the 3 years 1965-67, the annual decline in the number of milk cows on

farms was more pronounced; the number on farms in 1965 was 5 percent smaller than in the previous year; the number in 1966 was 6 percent smaller, and the number in 1967 was estimated to be 4 percent smaller than in the previous year.

Role of cooperatives

For many years farmers have joined together in cooperatives to market and process agricultural products. Section 6 of the Clayton Act exempted agricultural cooperatives from application of the anti-trust laws; the Capper-Volstead Act of 1922 provided that cooperatives could legitimately engage in the sorting, grading, and packing of agricultural products (such as butter, cheese, and canned goods) and the marketing (including pricing) of agricultural products. 1/

1/ Section 6 of the Clayton Act: Nothing contained in the anti-trust laws shall be construed to forbid the existence and operation of labor, agricultural or horticultural organizations, instituted for the purpose of mutual help, and not having capital stock or conducted for profit, or to forbid or restrain individual members of such organizations from lawfully carrying out the legitimate objects thereof; nor shall such organizations, or the members thereof, be held or construed to be illegal combinations or conspiracies in restraint of trade, under the antitrust laws.

Capper-Volstead: That persons engaged in the production of agricultural products as farmers, planters, ranchers, dairymen, nut and fruit growers may act together in associations, corporate or otherwise, with or without capital stock, in collectively processing, preparing for market, handling and marketing in interstate and foreign commerce, such products of persons so engaged. Such associations may have marketing agencies in common; and such associations and their members may make the necessary contracts and agreements to effect such purposes; provided, however, that such associations are operated for the mutual benefit of the members thereof

In recent years cooperatives have played an increasing role in the marketing and processing of milk and dairy products. Many local cooperatives, moreover, have formed large federations. In 1964 (the latest year for which data are available) 66 percent of all milk sold by farmers to plants and dealers was marketed through cooperatives as compared with 59 percent in 1957. In the fall of 1967, two federations of cooperatives were marketing nearly 40 percent of all milk sold under Federal Milk Marketing Orders, an amount equivalent to nearly 20 percent of the U.S. output of milk.

U.S. Foreign Trade in Dairy Products

Although the United States has generally been a net exporter of dairy products since World War II, imports materially exceeded exports in 1966 and 1967 (table 9). In mid-1967, section 22 quotas were imposed on imports of American-type cheese, butterfat-sugar mixtures, and cream. ^{1/} Hence, U.S. imports of dairy products were markedly lower in the second half of 1967 than they had been in the first half. Because of the perishability and the high cost of transporting whole milk, U.S. foreign trade in manufactured dairy products has been much larger than that in fluid milk and cream.

As noted in the introduction to this report, the United States and many foreign governments support the prices of dairy products in their domestic markets, and subsidize their exports and restrict their imports of such products. It is not possible to judge the aggregate effect of these domestic and foreign governmental measures on U.S. foreign trade in dairy products. Generally, it is also not feasible to isolate the foreign-trade effect of individual U.S. support measures, since similar measures in foreign countries also materially influence U.S. imports and exports of dairy products. The composition and volume of U.S. foreign trade in dairy products in recent years, however, would likely have been different if these governmental measures had not been in force.

^{1/} See the section of this report on U.S. nontariff restrictions on dairy products.

U.S. exports

U.S. exports of dairy products have generally been small compared with domestic production. In recent years, moreover, most of the exports have been subsidized under Government programs. Meanwhile, U.S. commercial exports of dairy products have been negligible, primarily because prices of dairy products in most countries have been lower than those in the United States.

During the period 1955-65, the milk equivalent of the annual U.S. exports of dairy products ranged from 655 million to 6,872 million pounds, or from 0.5 percent to 5.4 percent of domestic production (table 9). The annual fluctuations in the volume of exports reflected primarily changes in the amount of dairy products exported under Government programs. Compared with exports in other recent years, those in 1963 and 1964 were large relative to domestic production--equivalent to 4.0 percent and 5.4 percent, respectively. Milk production in Western Europe was low in those years and U.S. shipments abroad under Government programs were large. In 1966, however, U.S. exports of dairy products were equal to only 0.6 percent of production; Government supplies available for export were smaller than in 1963 and 1964, and world milk production had increased materially above the 1963-64 level. U.S. exports of dairy products in 1967 were even smaller than in 1966.

U.S. imports

For many years, U.S. imports of dairy products (in terms of milk equivalent) have been small compared with domestic production (table 9). During the middle 1930's (before the inauguration of U.S. price-support programs for dairy products) and in the years immediately preceding and following World War II, imports were never equivalent to as much as 1 percent of domestic production. Since 1953 many dairy products have been subject to quantitative limitations imposed under section 22 of the Agricultural Adjustment Act, as amended. 1/

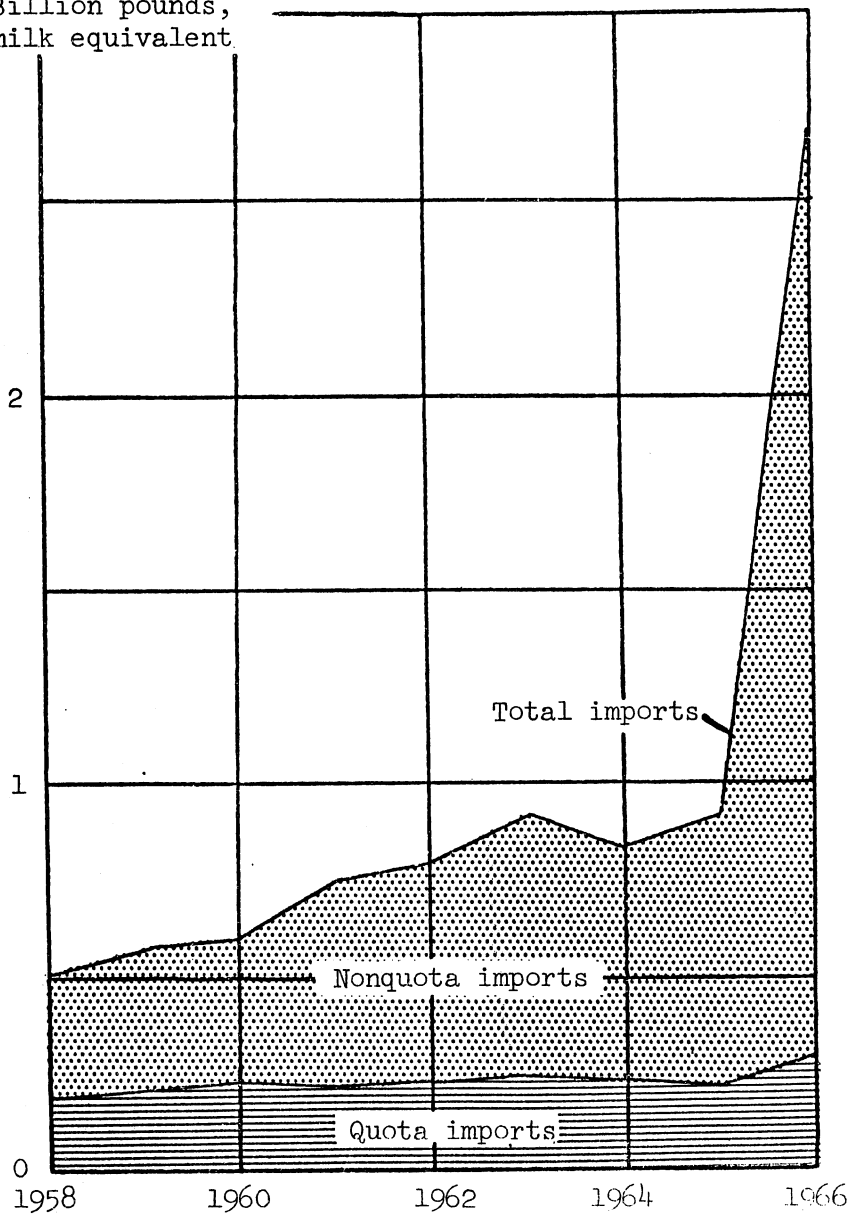
During 1958-65, annual U.S. imports of all dairy products increased gradually from 507 million pounds to 918 million pounds (milk equivalent); they were equivalent to considerably less than 1 percent of domestic production of dairy products in each of those years. In 1966 and the first half of 1967, imports of dairy products increased sharply (fig. 2); they dropped sharply in the second half of 1967, however, following imposition by the United States at mid-year of new section 22 quotas on certain dairy products. 2/ U.S. imports of dairy products amounted to about 2.8 billion pounds in 1966; they were at about the same level for the full year of 1967. In terms of milk equivalent, the aggregate imports of dairy

1/ See the later section of this report on U.S. nontariff import restrictions.

2/ See the later section of this report on section 22 quotas on imports of dairy products.

Figure 2.--U.S. imports of dairy products, by quota status, 1958-66

Billion pounds,
milk equivalent



products were equal to 2.3 percent of the domestic production of milk in 1966 and 1967.

In 1958-65, when imports of dairy products increased gradually, U.S. market prices of dairy products, supported by Government programs, increased gradually (table 10). Beginning in the fall of 1965, however, market prices rose substantially; the Department of Agriculture in 1966 increased the milk price-support objective about a fifth. In 1966 and 1967, therefore, the price of butterfat in the United States was very high relative to world prices. In January 1967, for example, the wholesale price of butter (about 80 percent butterfat) in London (a principal market) was 37.5 cents per pound, while it was 66.5 cents per pound in Chicago. Moreover, the world output of milk was 2 percent larger in 1966 than in 1965, and was expected to increase further in 1967. Under these conditions, attracted by high prices, U.S. imports of dairy products rose sharply in 1966 and early 1967.

The marked increase in U.S. imports of dairy products in 1966 and 1967 reflected largely a rapidly expanding trade in Colby cheese and butterfat-sugar mixtures--products not then subject to quantitative limitations under section 22. These two products combined accounted for 92 percent of the increase in annual imports between 1965 and 1966; together they accounted for about 70 percent of U.S. imports of all dairy products in 1966. The milk equivalent of

recent imports of butterfat-sugar mixtures and Colby cheese are shown in the following tabulation (in millions of pounds):

<u>Period</u>	<u>Butterfat-sugar mixtures</u>	<u>Colby cheese</u>
1965-----	8	175
1966-----	1,276	552
January-June:		
1966-----	714	181
1967-----	1,099	547

As noted above, the United States in mid-1967 imposed absolute quotas on imports of butterfat-sugar mixtures, American-type cheese (which includes Colby), and frozen cream. The quotas generally limited annual U.S. imports of such products to approximately the average annual volume that entered in 1961-65. As a result of the imposition of the quotas, the imports of dairy products in subsequent years are expected to enter at an annual rate far lower than that of 1966 and the first half of 1967.

Federal Programs for Dairy Products

Milk is marketed in the United States under a complex of Federal, State, and local laws and regulations. The major Federal programs, two in number, are designed to support the prices of milk and the income of dairy farmers; their stated purpose is to assure the production of an adequate supply of milk. One Federal program, the Federal Milk Marketing Orders, establishes minimum prices received by farmers for sales of Grade A milk (milk eligible for fluid consumption). The other, a price-support program, puts a floor under the price of milk for manufacturing. Other Federal programs, such as the school lunch and the special school milk programs, indirectly benefit the U.S. dairy farmer.

A variety of State and local programs affect the production and marketing of milk within their respective jurisdictions. Twenty States operate programs on behalf of the dairy farmer. All such States maintain programs governing the farm price of milk. Sixteen of them also establish minimum wholesale prices for milk; fourteen establish minimum retail price laws as well. Local laws affecting the production and marketing of milk generally impose health and quality standards; necessarily they influence the financial returns of the dairy farmers supplying milk to the local market.

In recent years the Federal and State marketing orders have established minimum farm prices on about nine-tenths of the Grade A milk sold by farmers; Federal orders have applied to about three-fourths of the milk subject to such controls, and State orders, to

one-fourth. Although Federal marketing orders apply only to Grade A milk, they apply to such milk used both for fluid consumption and for manufacturing, and thus influence the prices paid for milk for manufacturing. The Federal price-support program influences the prices of manufacturing grade milk sold by farms, and affects the minimum prices established for Grade A milk (whether for fluid consumption or manufacturing use) under most Federal marketing orders. In combination, the Governmental programs strongly influence the farm price of all milk produced in the United States.

Federal Milk Marketing Orders

Federal Milk Marketing Orders, which are provided for by the Agricultural Marketing Act of 1937, are employed widely to regulate the marketing of milk. Indeed, milk is by far the most important product marketed under Federal orders. Currently 74 Federal orders for milk are in effect. Such orders apply to about two-thirds of the Grade A milk sold in the United States and to about half of all milk sold. The geographic areas where such orders are effective are shown on the accompanying map (fig. 3).

Marketing orders represent an attempt to strengthen the competitive position of farmers in relation to the processors of their products. The processors are generally deemed to hold a competitive advantage because a large number of farmers generally sell to a few buyers; production, moreover, is seasonal and milk is perishable. In 1964 about 168,000 dairy farmers sold milk under Federal orders to about 2,000 distributors or "handlers."

Farmers or their representatives (usually a cooperative) must take the initiative if a Federal Milk Marketing Order is to be

established. On petition, accompanied by a proposed order, the Secretary of Agriculture investigates the proposal; counterproposals are invited and hearings held. On the basis of the evidence presented during the hearings, and other information at its disposal, the Department, if it deems it appropriate, issues a recommended milk marketing order. If the order is accepted by two-thirds of the participating farmers, the minimum prices established thereunder become binding on the purchasers of the farmers' milk, i.e., on the "handlers."

The Federal Milk Marketing Orders currently operative establish minimum prices for Grade A milk only--i.e., for milk eligible for consumption in fluid form. 1/ No single price is established for Grade A milk; prices vary depending upon the use to which the milk is to be put. Thus, Grade A milk going into fluid consumption commands one price, while that going into butter, cheese, dried skimmed milk, and other products commands other prices. 2/ The marketing orders establish different minimum prices for Grade A milk marketed for fluid consumption (known as Class I) and Grade A milk marketed for manufacturing use (known as surplus milk). Farmers selling Grade A milk to handlers that operate under marketing orders are paid a "blend" price--an average of the minimum prices to be paid by the handler for each class of milk, weighted by the quantities of milk in each class sold by the handler during a given

1/ Federal Milk Marketing Orders for manufacturing-grade milk are permitted by the law, but none have been established to date.

2/ Likewise, manufactured dairy products, particularly butter and cheese, constantly compete for the supply of manufacturing grade milk.

period. ^{1/} Under some marketing orders, a blend price is calculated for each handler; under others, a common blend price is calculated for all handlers in the marketing-order area. Blend prices are generally calculated monthly on the basis of reports by handlers of the amounts of milk received from producers and the classes in which it is sold.

Under the Federal Milk Marketing Orders, the minimum price to be established for different classes of milk is determined in accordance with complex pricing formulas. Most orders, however, derive Class I prices from the Minnesota-Wisconsin price series, which reports market prices of milk for manufacturing in that two-State area. Class I prices are generally fixed at specified premiums above such prices; the formula may adjust the price for seasonal price differences and for the effect of the current supply and demand of Grade A milk in the regulated area. One of several formulas may be used to determine minimum prices for surplus Grade A milk; minimum prices generally are based, however, on the current market prices of manufactured dairy products or on the prices paid for manufacturing milk either in the Minnesota-Wisconsin area or in the regulated area. The prices on which the Minnesota-Wisconsin price series is based are influenced in part by competitive conditions in that two-State area; about half of the U.S. output of milk for manufacturing is produced there and

^{1/} Frequently handlers pay farmers premiums over the minimum prices established for a class of milk. In such instances the premium is distributed to farmers by a separate apportionment, which is determined by agreement between the farmers and the handlers.

more than half of such milk is sold free from milk marketing orders. Nevertheless, the prices of milk for manufacturing sold in Minnesota and Wisconsin (and elsewhere) are influenced materially by the Department of Agriculture's price-support program for dairy products, as are the U.S. prices of manufactured dairy products. Thus, inasmuch as most of the Federal Milk Marketing Orders derive minimum prices for both Class I and surplus milk from either the prices of manufacturing milk or the market prices of manufactured dairy products, changes in price-support levels will be reflected in the prices established by the orders.

In both 1966 and 1967 marked increases were made in the minimum prices established under the Federal Milk Marketing Orders. Inasmuch as the sharp increase in price supports made in 1966 (see the following section) affected market prices of manufacturing milk and manufactured dairy products, increases in the minimum prices occurred automatically under the pricing formulas of most marketing orders. In both 1966 and 1967, moreover, following extensive hearings, the Department of Agriculture, with the concurrence of the farmers involved, adjusted the pricing formulas to increase minimum prices. In 1967, for example, seasonal price differentials were eliminated from the formulas, thus resulting in higher minimum prices than would otherwise have occurred during the flush production months. Further, a fixed base price that was higher than the Minnesota-Wisconsin price was established from which to derive the minimum prices; the Class I premium to be added to the base price, moreover, was made larger than

previously provided in the pricing formulas. As a result of the actions, the prices paid to farmers for Class I milk by handlers operating under marketing orders did not decline during April to June 1967, as they customarily would have; in July and August, prices remained about at the June level.

As indicated above, Federal Milk Marketing Orders establish only minimum prices to be paid to dairy farmers. During 1966 and 1967, when prices have been strong, buyers in an increasing number of the markets governed by orders have been paying premium prices (prices above the minimum order prices). The premiums to be paid by handlers in a given market are customarily negotiated by farmers cooperatives. In the late fall of 1967 handlers in nearly three-fourths of the markets were paying premium prices; in 1965 handlers in about a third of the markets paid such prices. Although the premiums paid for Class I milk ranged from 5 cents to \$1.50 per hundred pounds in the fall of 1967, they probably averaged about 50 cents per hundred pounds; at that time the average minimum order price for Class I milk in all Federal Milk Marketing Order areas was about \$5.90 per hundred pounds.

The price-support program

The Agricultural Act of 1949, as amended, requires the Secretary of Agriculture to support the prices of whole milk, butterfat, and products made therefrom, at such level between 75 percent and 90 percent of parity as will assure an adequate supply of milk. To achieve

this objective, the Department of Agriculture maintains a purchase program for three manufactured dairy products--butter, Cheddar cheese, and nonfat dry milk. These products, all of which are storable, constitute the chief manufactured dairy products produced in the United States; they account for about three-fifths of the milk used in manufacturing dairy products. The decision to maintain a purchase program for these three products was based on the assumptions that Government purchases thereof would support the farm price of milk, which in turn would strengthen the income of dairy farmers and assure that milk would be produced in adequate supply.

In advance of each marketing year (which begins April 1), the Secretary of Agriculture announces the price-support objective for milk to be used in manufacturing, and the prices at which the Department of Agriculture will purchase butter, Cheddar cheese, and nonfat dry milk. 1/ During the course of the marketing year, the support objective of milk for manufacturing and the purchase prices of the three dairy products may be increased within the limits imposed by the legal parity objectives, but not reduced.

Whereas various other price-support programs control the output of the commodities concerned, the price-support program for dairy products does not limit the quantity of milk or dairy products that may be produced or marketed--except indirectly, of course, through

1/ The purchase prices of butter, Cheddar cheese, and nonfat dry milk are based on historical gross processing margins (the average spread between the price of the milk used and the market price of the product) and the support objective for milk for manufacturing.

its effect on prices. The Department stands ready to purchase all butter, Cheddar cheese, and nonfat dry milk offered to it, provided the products meet certain standard physical specifications and are offered in carload lots. Since November 1965 the Secretary of Agriculture has also been authorized to purchase the three products at market prices above the purchase (support) prices, if the quantities purchased at support prices are deemed insufficient to meet commitments under various Government programs (e.g., the school lunch program). ^{1/}

Through its purchase program, the Department of Agriculture removes part of the supply from the market when prices fall to the support level, and thereby keeps the market price higher than it otherwise would be. If, however, products purchased by the Department are resold to the market, or if products acquired by the Department are distributed so as to substitute for commercial sales, such actions serve to moderate the price increases stimulated by the purchase programs.

The Department of Agriculture generally stands ready to resell dairy products to domestic commercial users for unrestricted use at announced prices, which are always above the Government's current purchase prices (generally 5 to 10 percent higher). Thus, the announced resale prices ordinarily set a ceiling on the wholesale market prices of the supported products. It is likely that market

^{1/} Sec. 709, Public Law 89-321. See the following section on Government purchases.

prices would exceed CCC resale prices only when Government stocks are low.

As noted, the Department of Agriculture is required to support the prices of milk and butterfat at a level between 75 percent and 90 percent of parity. The "parity price" of individual commodities is determined by the Secretary of Agriculture according to a statutory formula; in effect, the parity price is the price that a given quantity of the designated commodity would have to command in order to provide the purchasing power equivalent to that of its price during a statutory base period (1910-14). ^{1/}

Support levels.--Since price-support programs for dairy products have been in effect (beginning in the late 1930's), the support objective for such projects has varied from 75 percent to 90 percent of parity. During the marketing years 1962-65, the Department's support objective for manufacturing milk was equivalent to 75 percent of parity; the actual price objective was increased gradually from \$3.11 to \$3.24 per hundred pounds. In the spring and early summer of 1966, the support levels for dairy products were increased sharply; on April 1, 1966, the Department increased the price objective to

^{1/} As established by U.S. law, parity pertains to a price relationship between farm and nonfarm products, not to an income relationship between farm and nonfarm persons. It is constructed by adjusting prices of agricultural products for changes in prices paid and prices received by farmers since 1910-14. Accordingly, it generally does not take account of supply-demand changes in the economy arising out of new technology, new sources of supply, and shifts in consumer preferences. Indeed, a new parity formula was adopted by the Congress in 1948 to reflect the changes in consumer preferences between agricultural products that had occurred up to that time.

\$3.50 per hundred pounds (78 percent of parity), and on June 29 to \$4.00 per hundred pounds (89.5 percent of parity). The latter price objective for manufacturing milk was 23 percent higher than the Department's price objective at the close of the previous marketing year; the increase thus effected was the sharpest in history. On October 14, 1966, the Secretary of Agriculture announced that the support objective of \$4.00 per hundred pounds would be continued through March 31, 1968. On March 30, 1967, the Secretary further announced (a) that the purchase (support) prices for butter, Cheddar cheese, and nonfat dry milk would remain unchanged in the year ending March 30, 1968, and (b) that stocks of dairy products owned by the CCC would not be resold to the domestic market at less than 110 percent of the current purchase price. The Department's resale price of dairy products for unrestricted use had been 105 percent of the current purchase price for butter and 110 percent for Cheddar cheese and nonfat dry milk.

Government purchases and resales.--In most years during the past decade the Department of Agriculture has purchased substantial quantities of butter, Cheddar cheese, and nonfat dry milk under its purchase programs; much smaller quantities were removed from the commercial market under the Payment-in-Kind (PIK) export program (described later in this report). In the period 1953-65 the annual amount of dairy products removed from the commercial market ranged from 3.1 billion to 10.7 billion pounds

(milk equivalent); these quantities accounted for 2.5 percent to 8.6 percent of annual U.S. milk production. In 1966 output decreased and the quantity purchased (or exported) under Government programs was far smaller than in any other recent year--about 650 million pounds, equivalent to one-half of 1 percent of domestic production. Although the domestic output was slightly smaller in 1967 than in 1966, Government purchases in 1967 were large (equivalent to about 6.2 percent of the domestic output of milk); this development undoubtedly resulted from a marked decrease in domestic consumption of milk and manufactured dairy products. The high levels of price support maintained by the Department of Agriculture have also probably held retail prices of such products at higher levels than they otherwise would have been.

The share of the annual U.S. production of milk (milk-equivalent basis) removed by programs of the U.S. Department of Agriculture from the commercial market during 1953-67 is shown in the following tabulation (in millions of pounds):

Calendar year	U.S. milk production	CCC purchases and PIK exports	
		Milk equivalent	Percent of production
1953-----	120,221	10,328	8.6
1954-----	122,094	9,216	7.5
1955-----	122,945	4,780	3.9
1956-----	124,860	5,224	4.2
1957-----	124,628	5,899	4.7
1958-----	123,220	4,713	3.8
1959-----	121,989	3,214	2.6
1960-----	122,951	3,112	2.5
1961-----	125,442	8,024	6.4
1962-----	126,021	10,748	8.5
1963-----	125,009	7,777	6.2
1964-----	127,000	8,464	6.7
1965-----	125,061	6,449	5.2
1966-----	120,230	648	.5
1967-----	119,583	7,400	6.2

During 1966, when Government purchases were small, the Department of Agriculture did not purchase any cheese from the beginning of the year through October nor did it purchase any butter during the period April-September. When the Department began to purchase butter and cheese in October and November 1966, respectively, such purchases were, for the first time, made at market prices, not at purchase (support) prices. As noted earlier, the Secretary of Agriculture is authorized, under section 709 of Public Law 89-321, to use CCC funds to purchase dairy products at market prices (rather than at support prices) if stocks of dairy products owned by the CCC are deemed insufficient to meet commitments under various Government programs such as the school

lunch program. Nine million of the 23 million pounds of butter purchased by the Department of Agriculture in 1966, or about 40 percent of the total, were purchased under the authority of section 709; all of the cheese was so purchased. Nonfat dry milk has not been purchased under section 709. By December 1966, when the market prices for butter had declined to support levels, and the market prices for Cheddar cheese were closer to support levels than earlier, Government purchases under section 709 were discontinued. Since then purchases by the Department have been made at support prices.

During most years of the past decade the resale of Government-purchased dairy products to domestic buyers for unrestricted use has been negligible or nil. Resales were sizable only in the two 12-month periods ending March 31, 1965 and 1966, when they amounted to about 0.8 billion pounds (milk equivalent). In those periods market prices for dairy products were substantially above the support levels; they had been close to support levels in other recent years. As mentioned above, resales are not made except at prices above the current purchase (support) price of the commodity concerned.

Prices.--The price-support program has generally played a central role in determining market prices of milk and dairy products in the United States in recent years. Market prices of butter, Cheddar cheese, and nonfat dry milk--the products directly supported--have usually

approximated the Government's purchase prices (table 10). Prior to 1966, supplies of dairy products appear to have been consistently in excess of commercial demand at support prices, and, as noted above, substantial quantities have been offered to the Government for purchase (table 11). In 1966, however, market prices increased sharply, apparently because supply was no longer in excess of commercial demand. Throughout much of the year, market prices of the supported dairy products were materially higher than the Government's purchase prices. The market in 1966 absorbed almost all of the supply of dairy products at such prices; the Government purchased only half a billion pounds, much of it at market prices. In the spring of 1967, the market prices of manufactured dairy products declined, and the prices of the supported commodities approximated the Government's purchase prices by April. Despite the decline in prices, commercial consumption of dairy products in 1967 was at a rate materially lower than in 1966. This development may reflect the lagged effect of high prices because consumers may take some months to rearrange purchasing patterns.

Disposition of Government stocks.--The dairy products acquired by the Government under the price support programs are disposed of predominantly through two channels--domestic welfare outlets and sales or donations abroad. Domestic disposal has been to welfare recipients, the school lunch program, military and veterans' hospitals, and penal and correctional institutions. Disposal abroad has been through sales for local currency, barter, and donations to famine relief.

In 1964-66 uncommitted yearend supplies of dairy products held by the Government were small (table 12). At the end of 1966, the uncommitted supplies of butter and Cheddar cheese owned by the Government totaled 6 million and 8 million pounds, respectively; nonfat dry milk amounted to 64 million pounds. The uncommitted supplies at the end of 1967 were materially larger than at the end of 1966 and generally were larger than they have been in recent years.

The purchases of butter and Cheddar cheese in recent years have generally been disposed of through school lunch and welfare programs within the United States, whereas most of the nonfat dry milk has been donated abroad. In 1962-65, however, substantial quantities of nonfat dry milk and small amounts of butter were exported under the U.S. Government PIK program. In 1963-65 export sales of butter and nonfat dry milk were also made through the CCC's export sales program, and considerable quantities of butter were donated abroad.

Under the PIK program, commercial stocks of butter and nonfat dry milk may be purchased by U.S. exporters at domestic market prices and exported at the prices prevailing in the foreign markets. The U.S. Government affords the exporter an announced subsidy (in the form of CCC-owned commodities--principally grain) equal approximately to the difference between the U.S. and foreign market prices. On March 2, 1966, the U.S. Department of Agriculture announced that the PIK export program for dairy products had been temporarily suspended until the domestic dairy supply situation again justified its use; by January 1968, the program had not been reinstated.

Costs of the dairy price-support programs.--The net 1/ Government expenditures on the dairy price-support and related programs, 2/ as reported by the Department of Agriculture, reached record levels in 1962-63, as the Government purchased increased quantities of butter, Cheddar cheese, and nonfat dry milk (table 13). The expenditures declined sharply, however, in the year ending June 30, 1966. In the year, which ended June 30, 1967, expenditures were substantially higher than in 1966. Over the years, the aggregate cost of the dairy price-support program has been large--amounting to \$4.7 billion in 1953-67. The aggregate cost of the special school milk program amounted to about \$1.0 billion in 1955-67.

1/ CCC purchase and other costs (processing, repackaging, transportation, storage, and handling), less proceeds from sales.

2/ Data on Government expenditures do not include those under Titles I, II, and IV of P.L. 480; such costs on dairy products are estimated by officials of the U.S. Department of Agriculture to have been less than \$50 million annually in the last decade, except in the 12 months ending June 30, 1967 (when they amounted to about \$70 million).

U.S. Nontariff Import Restrictions on Dairy Products 1/

For a number of years, U.S. imports of designated dairy products have been subject to a variety of nontariff import controls. Of principal interest are the absolute quotas imposed on some products under section 22 of the Agricultural Adjustment Act, as amended. For sanitary and other purposes, importers of some dairy products have been required to have entry permits under the Federal Import Milk Act of 1927. In 1966, moreover, the Department of Agriculture imposed quotas on imports of certain mixtures containing principally sugar and butterfat under section 206 of the Sugar Act of 1948. Certain foreign countries have committed themselves in recent years to limit their exports of designated dairy products to the United States.

The Contracting Parties to the General Agreement on Tariffs and Trade (GATT) have frequently criticized the United States for its continued maintenance of the absolute quotas under section 22 of the Agricultural Adjustment Act. They have, however, granted the United States a waiver of its obligations "to the extent necessary to prevent a conflict with such provisions of the general agreement in the case of action required to be taken by the Government of the United States under section 22."

Section 22 quotas on imports of dairy products

Since 1953 the United States has imposed absolute quotas

1/ The tariff restrictions on dairy products--including the "tariff quota" on cream--are discussed in the sections on the respective products.

on imports of a variety of dairy products under the provisions of section 22 of the Agricultural Adjustment Act, as amended. ^{1/} By Proclamation No. 3790 of June 30, 1967, the President, after an investigation by the Tariff Commission under section 22, imposed quotas on imports of certain butterfat-sugar mixtures, designated American-type cheeses (including Colby), and frozen cream; the existing quota on Cheddar cheese was modified. All of the previous quotas on dairy products that had been imposed for 12-month periods ending June 30 were changed to a calendar-year basis.

Current quotas.--The quotas currently in effect for dairy products for 1967 and subsequent years are shown in the following tabulation:

<u>Commodity</u>	<u>Quantity</u>
Milk and cream, fluid or frozen, fresh or sour, containing over 5.5 percent but not over 45 percent by weight of butterfat:	
For the 12-month period ending December 31, 1967:	
New Zealand-----	The quantity entered on or before June 30, 1967, plus 750,000 gallons
Other-----	None
For each subsequent year	
New Zealand-----	1,500,000 gallons
Other-----	None
Dried buttermilk and dried whey (TSUS items 115.45 and 118.05)--	496,000 pounds

^{1/} Quotas on dairy products under section 22 were first imposed in mid-1953. Imports of some dairy products had been subject to quota before then under the provisions of the Second War Powers Act of 1942 and the Defense Production Act of 1950. The historical development of U.S. quotas on imports of dairy products is described briefly in appendix B.

<u>Commodity</u>	<u>Quantity</u>
Dried skimmed milk (TSUS item 115.50)-----	1,807,000 pounds
Dried whole milk (TSUS item 115.55)-----	7,000 pounds
Dried cream (TSUS item 115.60)----	500 pounds
Butter, and fresh or sour cream containing over 45 percent of butterfat-----	707,000 pounds
Butter substitutes containing over 45 percent of butterfat and butter oil-----	1,200,000 pounds
Blue-mold (except Stilton) and cheese and substitutes for cheese containing, or processed from, blue-mold cheese-----	5,016,999 pounds
Cheddar cheese, and cheese substitutes for cheese containing, or processed from, Cheddar cheese:	
For the 12-month period ending December 31, 1967-----	The quantity entered on or before June 30, 1967, plus 5,018,750 pounds <u>1/</u>
For each subsequent 12-month period-----	10,037,500 pounds <u>2/</u>
American-type cheese, including Colby, washed curd, and granular cheese (but not including Cheddar) and cheese and substitutes for cheese containing, or processed from, such American-type cheese:	
For the 12-month period ending December 31, 1967-----	The quantity entered on or before June 30, 1967, plus 3,048,300 pounds
For each subsequent 12-month period-----	6,096,600 pounds
Edam and Gouda cheeses-----	9,200,400 pounds
Italian-type cheeses, made from cows' milk, in original loaves (Romano made from cows' milk, Reggiano, Parmesano, Provoloni, Provolette, and Sbrinz)-----	11,500,100 pounds

See footnotes at end of tabulation.

The maximum quantity of dairy products that can be imported under the quotas established for 1968 (and later years) is 593 million pounds (milk equivalent)--an amount equal to 0.5 percent of U.S. milk consumption in 1966. While the quantity of some individual dairy products permitted under the quotas is very small compared with U.S. output of the respective products, the quantities permitted for others are large. The quantities specified in the existing quotas for butter and dried milk products, for example, are infinitesimal compared with the domestic output of these products. The butterfat equivalent of the annual quota on butter substitutes containing over 45 percent of butterfat, butter oil, and the recently established quotas on certain butterfat-sugar mixtures and frozen cream, have been small compared with the domestic production of butterfat. The recently established quotas for "American-type" cheese and the modified quota for Cheddar cheese are also small compared with the domestic output of those cheeses. The quotas on blue-mold cheese and on Italian-type cheeses, however, were equivalent to about 22 percent and 14 percent, respectively, of the domestic output of those cheeses in 1966, while that on Edam and Gouda cheeses has been larger than the domestic output in recent years.

Although U.S. imports of natural Edam and Gouda cheeses and Italian-type cheeses in original loaves have been materially smaller in recent years than the quantities authorized under the quotas, the quotas on most other dairy products have been substantially filled.

<u>Commodity</u>	<u>Quantity</u>
Malted milk, and articles of milk or cream, provided for in item 118.30-----	6,000 pounds
Articles containing over 5.5 percent by weight of butterfat, the butterfat content of which is commercially extractable, or which are capable of being used for any edible purpose (except articles provided for in subparts A, B, C, or item 118.30, of part 4, schedule 1 of the TSUS, and except articles imported packaged for distribution in the retail trade and ready for use by the purchaser at retail for an edible purpose or in the preparation of an edible article):	
Over 45 percent by weight of butterfat-----	None
Over 5.5 percent but not over 45 percent by weight of butterfat and classifiable for tariff purposes under item 182.92:	
For the 12-month period ending December 31, 1967:	
Australia-----	The quantity entered on or before June 30, 1967 plus 1,120,000 pounds
Belgium and Denmark (aggregate)-----	The quantity entered on or before June 30, 1967, plus 170,000 pounds
Other-----	None
For each subsequent 12-month period:	
Australia-----	2,240,000 pounds
Belgium and Denmark (aggregate)-----	340,000 pounds
Other-----	None

1/ Not more than 4,406,250 pounds shall be products other than natural Cheddar cheese made from unpasteurized milk and aged not less than 9 months.

2/ Not more than 8,812,500 pounds shall be products other than natural Cheddar cheese made from unpasteurized milk and aged not less than 9 months.

The circumstances relating to individual dairy products are described in the later sections of this report.

Administration of section 22 quotas.--Most of the section 22 quotas on dairy products are administered by the Department of Agriculture through a system of import licenses. Imports of all dairy products under quota--except frozen cream, articles containing over 5.5 percent but not over 45 percent of butterfat, butter substitutes (including butter oil), and "aged" Cheddar cheese.^{1/}--are subject to the licensing procedure. The quotas for the products not subject to licensing procedures are administered by the Bureau of Customs on a first-come, first-served basis. Imports of dairy products subject to quotas and licensed by the Department of Agriculture, may be entered only by, or for the account of, a licensed person or firm, and only in accordance with the terms of the license. Licenses usually authorize a particular firm to enter designated quantities of a specified dairy product from a designated country through a specified port of entry. ^{2/} Licenses for entries of the various cheeses

^{1/} Imports of natural "aged" Cheddar cheese in an amount of up to 1,225,000 pounds per quota year (612,500 pounds for the period July 1, 1967 through December 31, 1967, or during the first 6 months of a quota year), made from unpasteurized milk and aged not less than 9 months which prior to exportation have been certified to meet such requirements by an official of a government agency of the country where the cheese was produced are not subject to licensing.

^{2/} The administrative regulations established by the Department of Agriculture are published in 7 CFR 6.

(but not the other dairy products under quota) require that not more than one-half of the designated quantities can be imported in the first 6 months of a quota year. 1/

When issuing licenses the Department of Agriculture must, to the fullest extent practicable, (1) distribute the respective quotas equitably among importers or users, and (2) allocate the respective quotas among supplying countries in accordance with the share of imports supplied by such countries during previous representative periods, taking due account of any special factors that may have affected or may be affecting the trade in the articles concerned. In accord with these directives, the Department generally deems that an importer who entered a dairy product during a base period is eligible for a license; such importer is usually granted a share of the respective annual quota proportionate to his share of total imports of the product in question in the base period. Importers seeking to enter the trade may be licensed to enter nominal quantities of a single product. 2/ Licenses may not be transferred or assigned to others, except as authorized by the Department of Agriculture.

1/ Prior to Presidential Proclamation No. 3790 of June 30, 1967, the licenses for cheese were allocated thrice-yearly rather than semiannually.

2/ At present the so-called new business quota for Italian-type cheeses is 5,000 pounds; Edam and Gouda cheeses, 10,000 pounds; blue-mold cheese, 2,500 pounds; and Cheddar cheese, 1,000 pounds.

Quotas under the Sugar Act of 1948, as amended

In 1966, imports of butterfat-sugar mixtures increased sharply above the levels of annual imports in the immediately preceding years. The Department of Agriculture determined that the sugar in such products was of sufficient quantities as to substantially interfere with the attainment of objectives of the Sugar Act of 1948, as amended. Accordingly, on July 13, 1966, under the provisions of that act, the Department established absolute quotas on imports of mixtures of sugar and butterfat or flour or both that contained more than 25 percent of sugar.

For the calendar year 1966, the following quotas were established (31 F.R. 9495-96):

<u>Country</u>	<u>Quantity of mixtures permitted entry</u>
Australia-----	2,240,000 lbs.
Denmark-----	350,000 lbs.
Other-----	The quantity containing 200,000 lbs., raw value, of sugar or liquid sugar, (187,000 lbs. of refined sugar).

Under the quota provisions, however, the restriction for imports from any country, including Australia and Denmark, was to be increased to permit the entry of shipments imported in 1966 prior to the effective date of the quotas (July 13), plus shipments entered within 30 days after the effective date of the quotas, provided that the shipment concerned had departed the port of lading prior to that date or that an irrevocable contract had been entered into prior to June 15, 1966. Because of the rapidly expanding trade in the

mixtures concerned during the first half of 1966, and the large imports of such products from several countries, the quotas applicable to entries were increased to an amount substantially in excess of the originally established quotas. Indeed, imports of these products that were subject to the quota provisions (more than 25 percent of sugar) amounted to nearly 100 million pounds in 1966. The sugar contained in such imports was equivalent to about one-half of 1 percent of the domestic sugar production in that year; the butterfat contained therein was equivalent to about 1 percent of the domestic output of butterfat.

For the calendar year 1967, the Department of Agriculture modified the quotas to establish the following limitations (31 F.R.

16518-20): 1/

<u>Country</u>	<u>Quantity of mixtures permitted entry</u>
Australia-----	14,090,000 lbs.
Austria-----	827,000 lbs.
Belgium-----	14,090,000 lbs.
Canada-----	11,650,000 lbs.
Denmark-----	1,926,000 lbs.
Sweden-----	397,000 lbs.
United Kingdom-----	2,159,000 lbs.
Other-----	The quantity containing 200,000 lbs., raw value, of sugar or liquid sugar, (187,000 lbs. of refined sugar).

1/ The quota amounts for each country except Australia were established on the basis of the average annual U.S. imports during 1964-66. Beginning in 1963 Australia had agreed to limit its exports of butterfat-sugar mixtures to the United States. Consequently, exports from that country to the United States did not expand in 1966 as did those from other countries. Inasmuch as Australia had been limiting its exports of Junex and similar products to the United States in the base period, the Department of Agriculture established an import quota for Australia equal to that for the country having the largest average annual imports in the base period (Belgium).

The foregoing quotas were established only for the calendar year 1967. In December 1967, the Department of Agriculture issued a proposed rule (32 F.R. 17669-17671) to establish quotas for 1968 and subsequent years on products which, among other things, contain more than 25 percent by weight of sugar, contain flour and/or butterfat as the other principal solid ingredients, and contain not more than 5.5 percent by weight of butterfat. 1/ As of January 31, 1968, the proposed rule had not been made effective.

The Federal Import Milk Act

Under the Federal Import Milk Act of 1927, as amended (21 U.S.C. 141 et seq.), the importation into the United States of milk and cream is prohibited unless the person shipping or transporting such products into the United States holds a valid permit from the Secretary of the Department of Health, Education, and Welfare. Although the primary purpose of the act is to ensure that imported milk and cream meet certain health standards, the statute also states that the promotion of the dairy industry of the United States is an objective of the act. Applicants for permits--and, at regular intervals, holders of permits--must establish that (1) the cows in herds producing milk for export to the United States are free from tuberculosis and are otherwise healthy and (2) the dairy farms and processing plants

1/ In mid-1967, an annual absolute quota was imposed under sec. 22 on imports of butterfat-sugar mixtures that contain over 5.5 percent by weight of butterfat (see the section of this report on section 22 quotas on imports of dairy products).

producing milk or cream for export to the United States meet specified sanitary standards. The holder of a permit is authorized to ship specified products into the United States. Under the law, however, a shipment of milk or cream which the holder of a permit desires to import may be refused entry at the port if either the bacteria count or the temperature of the product is greater than specified limits. The provisions of the act are administered by the Food and Drug Administration (FDA) of the U.S. Department of Health, Education, and Welfare.

Fluid and frozen milk and cream, yoghurt and other fermented milk, and condensed and evaporated milk are subject to the provisions of the Federal Import Milk Act. Currently, only four permits are in effect--the New Zealand Dairy Products Marketing Board holds a permit to ship frozen cream into the United States; two Canadian firms hold permits to ship sweetened condensed milk; and one Canadian firm holds a permit to ship concentrated milk into the United States. From time to time the FDA has issued temporary permits to import specified products that are subject to the act. Until recently the FDA had allowed imports of condensed and evaporated milk from foreign firms not holding permits, if such milk was packed in 6-ounce or 14-ounce hermetically sealed tins. In September 1966, however, the FDA modified its policy; it announced that, henceforth, U.S. imports of milk and cream were to be restricted to shippers holding valid permits.

Commitments by exporting countries

From time to time in recent years, New Zealand, Australia, and Ireland, after representations by the United States, have undertaken to restrict their exports of certain dairy products to the United States. At the time the commitments were in effect, the dairy products involved were not subject to U.S. import restrictions under section 22 of the Agricultural Adjustment Act. The export restrictions agreed upon are shown in the following tabulation:

Commodity	1962	1963	1964	1965
Colby cheese: <u>1/</u>				
New Zealand-----million pounds--:	11.60	6.72	6.72	6.72
Australia-----do-----:	-	-	3.36	3.36
Ireland-----do-----:	-	-	1.12	1.12
Butterfat-sugar mixtures (Junex): <u>2/</u>				
Australia-----do-----:	-	2.24	2.24	2.24
Frozen cream: <u>2/</u>				
New Zealand-----million gallons--:	-	1.50	1.50	1.50

1/ For years ending June 30.

2/ For calendar years.

Generally the export limitations listed above were closely observed by exporters in the foreign countries concerned during the periods they were in effect. The restrictions on exports of Colby cheese were allowed to expire on June 30, 1965, and those on exports of Junex and frozen cream, on December 31, 1965. During 1965, imports of such products from countries other than those that had agreed to limit their exports of Colby cheese and Junex to the United States

in the specified area. As measured by the median size farm in its respective area, each of the models would appear to be "typical" of dairy farms in the area in which it is located. The number of cows and heifers (2 years old and older) and milk production per cow for each of the models used in calculating data on net farm income for 1966 ^{1/} were as follows:

Model	Cows and heifers (2 years old and older)	Annual milk production per cow
	Number	Pounds
Central Northeast, dairy-----	34	9,750
Eastern Wisconsin, dairy, Grade A-----	35	10,800
Eastern Wisconsin, dairy, Grade B-----	23	9,200
Western Wisconsin, dairy, Grade B-----	26	8,880
Southeastern Minnesota, dairy-hog-----	23	9,140

As indicated by data from the Census of Agriculture, the median size dairy farm--in terms of the number of cows and heifers on farms--in New York State (Central Northeast) in 1964 had about 33 cows and heifers, that in Wisconsin had 30, and that in Minnesota had 24. In terms of aggregate milk production, the median size farm in each State was slightly larger. As described earlier ^{2/}, farms having less than 30 milk cows accounted for about a third of U.S. milk production in 1964; farms having 30 to 49 milk cows accounted for about a third, and farms having 50 or more milk cows, for a third. Three of the models would

^{1/} The characteristics of the models are changed regularly by the Department of Agriculture to try to reflect the changing character of the "typical" dairy farms in each of the selected areas. For example, the model for the dairy farm in the Central Northeast was assumed--among other characteristics--to have 26 cows and heifers and annual milk production of 7,380 pounds per cow in 1956, compared with 34 cows and heifers and milk production of 9,750 pounds per cow in 1966.

^{2/} See the earlier section on number and size of dairy farms.

be classified in the first category described, and two, in the second. None of the models, however, are representative of the large dairy farms in the United States, i.e., those having 50 milk cows or more. The figures on milk production per cow used for each of the models are higher than the national average--8,500 pounds per cow in 1966.

The net farm income--the difference between gross farm income and operating expenses--calculated for each of the models constitutes the aggregate return from the model farm for interest on capital, rent of land, entrepreneurial rewards, and labor of the farm family. The gross farm income includes an estimate of receipts from the sale of farm products and an estimate of the value of perquisites (products consumed on the farm where produced and rental on the farm dwelling). Except for the model of a southeastern Minnesota dairy-hog farm, the bulk of the receipts from the sale of farm products in each model comes from the sale of dairy products. For the Minnesota model, about half of such receipts comes from the sale of dairy products and half from other farm products (chiefly hogs and crops). Farm operating expenses include estimated expenditures for farm supplies, hired labor, and taxes. 1/

The annual net farm income of each of the "typical" dairy farms, though varying somewhat from year to year, was about stable in the 1950's and then increased in the 1960's (table 15). The average annual net farm income of the 5 models combined was nearly 25

1/ Adjustments in gross income and operating expenses are made to reflect changes in inventories of supplies, livestock, stored crops, machinery, and buildings.

percent larger in 1960-64 than in 1950-54. In 1966 the annual net income of each of the "typical" farms increased sharply from that in 1965, generally being half again as large in 1966 as in 1965. This sharp increase resulted chiefly from increased unit prices received by the farms for sales of milk; although operating expenses had increased in earlier years, they were not appreciably larger in 1966 than in 1965. The average annual combined net farm income of the 5 models since 1950, in actual dollars and in dollars of constant purchasing power (adjusted for changes in prices paid by farmers for family living items, 1957-59=100), was as follows:

Period	Net farm income	
	Actual	In constant purchasing power
1950-54-----	\$3,601	\$3,889
1955-59-----	3,670	3,737
1960-64-----	4,455	4,317
1965-----	4,632	4,329
1966-----	7,164	6,513

After deduction for a return on capital (including land and buildings) ^{1/}, the net farm income per hour of labor devoted by the farm family was substantially below \$1.00 per hour for each of the five models in 1965. Net income per hour increased sharply in 1966; it ranged from \$1.21 to \$1.58 per hour, except for one of the models (Eastern Wisconsin, Grade B--75 cents per hour).

^{1/} Calculated on the basis of the current value of land, farm buildings, dwelling, improvements, machinery, equipment, livestock, and crops.

A number of studies suggest that there are substantial economies of scale among dairy farms. ^{1/} Investment for working capital per cow and labor requirements per cow are materially smaller for large herds than for small herds. Moreover, milk output per cow generally varies directly with the size of the operation; the larger farms usually employ better technology and herd management than the smaller farms. Net income per cow, therefore, is generally higher for large herds than for small herds, and aggregate income per farm ordinarily is strikingly higher for dairy farms with large herds than those with small herds. An exact line cannot be drawn, however, to indicate the size dairy herd needed at current milk prices for profitable operations, i.e., the point at which economies of scale would assure a viable operation. The profitability of a given dairy farm depends on a host of factors, of which the number of milk cows is but one. Nevertheless, recent experience, supported by the data in the studies cited, suggest that the great bulk of marginal and submarginal dairy farms in recent years have been small farms. Between 1959 and 1964, for example, the number of farms having less than 30 milk cows declined about 40 percent, while the number having more than 30 milk cows increased about 29 percent (table 2).

^{1/} University of Wisconsin, Costs and Returns for Large Wisconsin Herds, Bulletin 578, Apr. 1966; Michigan State University, Profitable Dairy Farming Tomorrow, Agricultural Economics Report No. 30, Oct. 1965; Cornell University, Changes on Farms Supplying Milk to the New York-New Jersey Market 1960-64, A.E. Res. 195, Mar. 1966; University of Maryland, The Effect of Size of Herd on the Organization and Operation of Frederick County Dairy Farms, Misc. Pub. No. 478, Jan. 1963.

WORLD PRODUCTION AND TRADE

In terms of commercial milk production, Europe and North America are the predominant milk-producing areas of the world. The countries in these two areas together account for about three-fourths of total world production of milk. Latin America, Africa, and the Near and Far East, which have about 70 percent of the world's population, produce about 20 percent of the world's output of milk. Oceania-- chiefly Australia and New Zealand--accounts for about 5 percent of the world's output.

The major milk-producing countries in Western Europe are France and West Germany; other countries that produce substantial quantities are the United Kingdom, Italy, the Netherlands, and Denmark. The major producing countries in Eastern Europe are the Union of Soviet Socialist Republics (U.S.S.R.), Poland, and East Germany. Among individual countries, the U.S.S.R. and the United States, in that order, are by far the world's largest producers of milk; France, West Germany, Poland, and the United Kingdom rank next in output.

World production of milk has increased in recent years. The average annual output of milk in 37 countries for which data are available--probably accounting for 85 percent of world output--was 15 percent greater in 1964-66 than in 1956-60 (table 16). Milk production in these countries amounted to about 660 billion pounds in 1966, compared with an average of about 570 billion pounds in 1956-60. Except in North America, the output in all of the major producing areas has been increasing. Average annual output in

Western Europe was 17 percent greater in 1964-66 than in 1956-60, and that in Eastern Europe was 15 percent greater. Output in Latin America, Oceania, and Japan also rose markedly during the past decade. In North America the average annual production of milk in 1964-66 was virtually the same as it had been in 1956-60.

In 1966 the annual production of milk in Western Europe was 3 percent larger than in 1964; that in Eastern Europe was 10 percent larger; Latin America, 4 percent; Oceania, 5 percent; and Japan, 11 percent. Output of milk in North America (Canada and the United States combined), however, was 5 percent smaller in 1966 than in 1964, largely because of a decline in U.S. output.

The recent increases in the production of milk, especially in Western Europe, have resulted in a surplus of milkfat, which has been stored largely in the form of butter. Stocks of butter in 14 West European countries in April 1967 totaled 446 million pounds, compared with holdings of 414 million pounds a year earlier and average stocks of 244 million pounds during 1962-64. More than half of the stocks in 1967 were in West Germany and France. Data are not available on stocks of dairy products in Eastern Europe; holdings in Oceania have not increased in recent years, and those in North America have generally declined.

The per capita consumption of dairy products varies widely among the individual countries of the world. In 1965 per capita consumption (in terms of milk equivalent) in Finland was about 1,500 pounds, Ireland, 1,400 pounds, New Zealand, 1,300 pounds, Denmark, 1,000 pounds,

Australia, 900 pounds, and Canada, 870 pounds. The United States ranks sixteenth in per capita consumption--only 616 pounds in 1965. In most major milk producing countries, the per capita consumption of dairy products has been declining largely because of the competition between butter and oleomargarine.

Fluid milk generally does not enter international commerce because of its perishability and high transportation costs. International trade in manufactured dairy products, however, is substantial; the principal dairy products entering such trade are butter, cheese, nonfat dry milk, dry whole milk, and evaporated and condensed milk.

The chief exporters of dairy products are New Zealand, Australia, Denmark, the Netherlands, France, and the United States (table 17). The United Kingdom is the world's largest importer of dairy products.

The world's major exporters of butter, New Zealand, Australia, and Denmark, together have accounted for about two-thirds of world exports of butter in recent years. The three countries each export from about 40 percent to 75 percent of their production of butter. The Netherlands, New Zealand, Denmark, and France, the world's major exporters of cheese, have accounted for about two-thirds of the world's exports of cheese in recent years. With the exception of France, these countries export from about half to nine-tenths of their production of cheese; France generally exports only about 10 percent of its output of cheese. The Netherlands supplies about half of the world's exports of condensed milk and 70 percent of the exports of evaporated milk.

The United States has supplied a large, but fluctuating, share of the world's exports of nonfat dry milk in recent years.

The United Kingdom imported about three-fourths of the world's exports of butter in 1965; it also imported large quantities of cheese and other dairy products.

As has been indicated earlier, the governments of virtually all of the major milk-producing countries of the world intervene either in the operations of the dairy farmers or in the marketing of dairy products or both. Governments generally assist their domestic dairy industries by some form of price support or income aid, usually coupled with import restrictions in the form of import levies or quotas. Some countries provide consumer subsidies, and most countries directly or indirectly subsidize exports of dairy products. The particular governmental measures adopted to carry out the policies of assistance to dairy farmers usually vary widely in detail from country to country. ^{1/}

The European Economic Community (EEC)

In 1966 the production of milk in the European Economic Community amounted to 151 billion pounds--about 25 percent larger than output in the United States and 15 percent larger than output in the U.S.S.R. The EEC's output of milk in that year accounted for about a fifth of world production of milk. France and West Germany supplied two-thirds of the community's production of milk in that year.

^{1/} The governmental measures currently in effect in foreign countries are discussed in Dairy Situation, DS-316, July 7, 1967, and Organization for Economic Cooperation and Development, Agricultural Policies in 1966.

The pattern of milk utilization in the European Economic Community (EEC) differs considerably from that in the United States (table 18). In recent years a fourth of the milk produced in the EEC has been consumed in fluid form, while half of the U.S. output has been so used. About two-fifths of the EEC's output of milk has been used to produce butter and a fifth to produce cheese. About a seventh of the milk produced in the EEC is fed to calves and other livestock; this share is materially larger than that so used in the United States (about 2 percent) or in the other countries of Western Europe (about 6 percent).

The Netherlands and France are the major butter exporting countries of the EEC, but they probably supply less than 10 percent of the world exports. They are also among the world's major exporters of cheese. The Netherlands generally imports substantial quantities of nonfat dry milk; West Germany and Italy are important importers of butter and cheese.

The Common Agricultural Policy (CAP) of the EEC provides a price-support program for dairy products. Prior to the effective date of the CAP, November 1964, the individual EEC members maintained support programs for dairy products. Under the current policy for dairy products, the prices of milk within the EEC are supported at agreed-upon levels, imports of dairy products are controlled by variable import levies, and exports of dairy products are subsidized.

To support prices of milk within the EEC, basic support prices for milk--target prices--are established for each marketing year

(beginning April 1). The Government of each member country supports domestic prices of milk at its target level, when deemed necessary, by purchases of dairy products, chiefly butter. Currently the CAP is in the process of transition to effect a common target (support) price for the EEC countries. Support levels, which now vary from country to country, are gradually being harmonized; a common support price is scheduled to go into effect on April 1, 1968. The common target price scheduled to become effective on that date is the equivalent of U.S. \$4.67 per hundred-weight. In 1963, the year before the Policy for Dairy was adopted, support prices for milk in the EEC countries ranged from the equivalent of \$3.54 to \$4.76 per hundred-weight. For most of the EEC countries, the prospective common target price constitutes a substantial increase in support from the levels of 1963. In France and West Germany, the common target price will be about 25 percent and 15 percent higher, respectively, than their individual support prices for milk in 1963.

The policy for dairy products is designed to protect the EEC market from imports of dairy products by a system of variable levies. Threshold prices (minimum import prices) are established for imported dairy products; the threshold price of a given dairy product is that price at the port of entry which equates the prospective wholesale price of the imported product in the EEC (member) country with the price of the domestic product, plus specified additional amounts. The import levy applicable to a dairy product imported from a non-member country is the difference between the threshold price and

the lowest world price; the levies are calculated daily. During the period of transition to a common target price for dairy products, the EEC members also impose variable levies on intra-Community shipments of dairy products; trade in dairy products between the EEC members is to become free of restrictions when the common target price is adopted (now scheduled for April 1968).

Member countries of the community generally pay subsidies on exports to non-member countries. At times such subsidies on some dairy products have ranged as high as two-thirds to three-fourths of the wholesale price in the country of origin. Information on the subsidies paid on shipments of some dairy products to the United States is given in some subsequent sections of this report.

The United Kingdom

In recent years the United Kingdom has ranked as the world's sixth largest producer of milk. In 1966 the output of milk in the United Kingdom amounted to about 25 billion pounds--about a fifth of the amount produced in the United States. Average annual production of milk in the United Kingdom was about a tenth larger in 1964-66 than in the late 1950's. Despite its substantial output of milk, the United Kingdom is the world's largest importer of dairy products. Two-thirds of the milk produced in the United Kingdom is consumed in fluid form--a substantially larger share than in other major milk producing countries (table 18). Hence, the production of manufactured dairy products is insufficient to supply domestic requirements, and large quantities of such products are imported. In recent years, the United Kingdom has

generally accounted for about three-fourths of world imports of butter and one-fourth of world imports of cheese; it also is generally a major market for dry whole milk and nonfat dry milk.

The Government's price-support program for dairy products in the United Kingdom is implemented by five regional Milk Marketing Boards. The program provides dairy farmers a guaranteed price for a so-called standard quantity of milk--generally milk marketed for consumption in fluid form. On sales in excess of the standard quantity, the farmer receives the average price realized for milk marketed for manufacturing. The guaranteed prices are established annually. In the United Kingdom the returns from the sale of fluid milk, over a period of time, are obliged to cover the full cost of the guaranteed price.

Imports of butter into the United Kingdom are subject to quotas which are established annually and allocated among foreign countries. Australia, New Zealand, and the Irish Republic are guaranteed given shares of the authorized imports; together they supply about three-fifths of the imports of butter into the United Kingdom. The United Kingdom generally does not subject other dairy products from any country to quota restrictions. Commonwealth tariff preferences are extended to imports from a number of the Commonwealth countries. In addition, certain dairy products imported from member countries of the European Free Trade Association enter the United Kingdom free of duty.

Scandinavia

The production of milk in Scandinavia has not altered significantly in recent years. The aggregate annual output in the 4 Scandinavian

countries--Denmark, Finland, Norway, and Sweden--amounted to 31.4 billion pounds in 1966 compared with 31.0 billion pounds in 1956-60. The current Scandinavian production of milk is equivalent to about a fifth of that in the European Economic Community and about a fourth of that in the United States, but slightly larger than that in Australia and New Zealand combined. In the last decade, the output of milk in Denmark and Norway has been virtually unchanged, while that in Finland has been increasing and that in Sweden has been decreasing. In the Scandanavian countries, nearly a third of the output of milk is consumed in fluid form; about half is used in the production of butter, and a tenth in the production of cheese (table 18).

Denmark has ranked about sixth among the major world exporters of dairy products in recent years. Exports of dairy products by the other Scandinavian countries are materially smaller than those from Denmark.

Each of the Governments of the Scandinavian countries supports its domestic prices of milk and dairy products; some subsidize directly the production and/or consumption of various dairy products. Generally they control imports of dairy products rather rigidly and subsidize exports.

Since 1961, domestic market prices for milk and dairy products in Denmark have been established by an organization of producers, under the supervision of the Danish Government. As part of a broad program to subsidize Danish agriculture in order to reduce disparities between farm and other income, the Danish Government makes annual grants to dairy farmers; the amount of the grants vary directly with the size of

the farm and the number of milk cows thereon. Imports of dairy products into Denmark are generally prohibited. Exports of butter and cheese are regulated by industry boards. The boards operate stabilization funds through which returns to dairies (plants) from exports of butter and cheese are equalized irrespective of the export destination.

The Governmental dairy programs in Finland and Norway aim to keep the production of milk equal to domestic requirements. The Finnish Government establishes a target price annually at which it expects to support prices paid to dairy farmers. To enable dairies (plants) to pay the farmers at the target level, domestic retail prices of fluid milk, butter, and certain cheeses are controlled; the Government pays a direct subsidy to producers of butter to keep the retail price at levels which it expects will encourage domestic consumption. In Norway, the Government fixes maximum retail prices and producers' markups for milk and dairy products, apparently to encourage consumption; it also subsidizes the purchases of fertilizer, equipment, and other materials needed by farmers for dairying. Both countries subsidize exports of dairy products; they control imports by the imposition of import levies and quantitative restrictions.

The marketing of milk and dairy products in Sweden is controlled by the Swedish Dairy Association which operates under the supervision of the Swedish Government. Support prices are established for dairy products; domestic prices are permitted to fluctuate within limits which are generally set 10 to 15 percent above and below the support level. By means of an equalization fund (derived in part from certain

import levies and domestic taxes), farmers are paid the same price for all milk delivered regardless of the use to which it is put (i.e., fluid consumption or manufacturing). From general funds, the Government pays farmers a fixed subsidy based on the butterfat content of milk they deliver to dairies. Exports are subsidized by the difference between the domestic price and the export price. Variable levies--the difference between the support price of a product and the world price--are imposed on imports of dairy products.

Australia and New Zealand

In recent years Australia and New Zealand together have produced about 5 percent of the world's output of milk. Milk production has grown moderately in both countries; output in each country in 1966 was about 12 percent larger than annual average production in 1956-60. The production of milk per capita in both countries is among the world's highest, New Zealand ranking first and Australia, fifth. Compared with many important milk-producing countries in Western Europe and North America, however, output per cow is low. Production of milk per cow in 1966 was about 8,500 pounds in the United States, 5,200 pounds in Australia, and 6,500 pounds in New Zealand. The predominant breed of cow in Oceania, the Jersey, produces less milk per cow than other breeds. The milk of the Jersey, however, has a higher butterfat content than that of other breeds. Because of the higher butterfat content, the output of milk in Oceania is conducive to the manufacture of dairy products, particularly butter and cheese. Australia and New Zealand rank fourth and fifth, respectively, in the world in the production of

butter. A high proportion of milk output in Australia and New Zealand--63 percent and 72 percent, respectively, in 1966--has been channeled into butter manufacturing (table 18).

Australia and New Zealand are among the six major world exporters of dairy products. By far the greatest part of their exports of dairy products goes to the United Kingdom. Australia, New Zealand, and Denmark supply about two-thirds of the international trade in butter. New Zealand is the world's second largest cheese exporter, supplying about a sixth of world exports; that country also accounts for a large share of world exports of nonfat dry milk.

The Australian Dairy Industry Council, which is composed of representatives of the dairy industry, is empowered by the Australian Government to fix domestic wholesale prices of butter and cheese. Through other industry organizations, the Government underwrites financially a so-called equalization program designed to provide uniform returns to factory producers on their sales of dairy products and also subsidizes by a given amount annually (currently about \$50 million) the production of butter, cheese, and other products containing 40 percent of butterfat or more. State milk boards and organizations of producers of dairy products negotiate the price to be paid to farmers for milk for fluid consumption; the State boards establish retail prices for fluid milk and cream. Imports of dairy products into Australia are subject to tariffs. Exports of most dairy products are made by, or are under the control of, the Australian Dairy Produce Board.

In New Zealand, a Dairy Production and Marketing Board, composed of industry and government representatives, is directed to acquire and

market all butter and cheese intended for export. The Board is also authorized to acquire and market, as it may decide, other dairy products intended for export. Prices that must be paid by the Board are fixed by a Dairy Product Prices Authority in consultation with the Minister of Agriculture. The prices of dairy products sold for domestic consumption are supported by the Board, if they are lower than the prices paid by the Board for dairy products to be exported; public funds are made available to pay to producers the difference between such prices. Retail prices for liquid milk and butter are fixed by the Government. Virtually all imports of dairy products are subject to licensing and import duties.

Canada

Canada ranks eighth in the world production of milk; Canada's production is equivalent to less than a sixth of the milk produced in the United States. Production of milk in Canada has increased slowly in the past few years; output in 1966 amounted to 18.4 billion pounds, compared with an annual average output of 17.4 billion pounds in 1956-60. As in the United States, cow numbers in Canada have declined steadily, but production per cow has risen. The production of butter decreased between 1964 and 1966; the production of cheese increased, while the production of canned milk was virtually unchanged.

In recent years, Canada has been among the world's chief exporters of dry whole milk and nonfat dry milk; it has accounted, however, for less than 10 percent of world exports of each product.

Since 1958, the Canadian Government has supported the domestic prices of butter, Cheddar cheese, and manufacturing milk at not less than 80 percent of the average prices in the preceding ten years. Generally support levels have been above the minimum level. The price support is carried out by offers to purchase dairy products or by direct payments to farmers. In 1967 a Canadian Dairy Commission was established; it was granted broad responsibility to develop the Canadian dairy industry. Provincial marketing boards, which are directed to work with the newly appointed Commission, control the prices of dairy products produced in their Provinces. The boards in most Provinces prescribe minimum prices at both producer and consumer levels for milk sold for fluid consumption. Minimum prices of milk sold for manufacture, in Ontario at least, are negotiated by producers and manufacturers and are applicable to all milk bought there for manufacturing purposes. Payments are made on exports of some dairy products (e.g., Cheddar cheese and nonfat dry milk) to some markets, but not on the products destined to the United States. Imports of milk products are subject to tariffs, and imports of some products (creamery butter, Cheddar and Colby cheeses, and skimmed milk powder) require a permit from the Government.

MAJOR PRODUCTS OF MILK AND CREAM

Although the value of dairy products sold by U.S. farmers amounted to about \$5.5 billion in 1966, expenditures by consumers at the retail level for dairy products amounted to \$14.2 billion in 1966. In 1964, 16 percent of consumers' total expenditures on food was for dairy products.

The conditions of competition in the United States between imported and domestic dairy products differ widely from product to product. On the one hand, for example, little imported milk or cream in fluid form is sold at retail in the United States; on the other, imports of some varieties of cheese supply a large share of domestic consumption. The following sections of this report provide data on the competitive circumstances respecting various categories of dairy products.

Milk and Cream in Fluid Form

Description

Whole milk is a bulky, perishable product that is generally used near the area of production. In recent decades, however, homogenization, pasteurization, sterilization, and refrigeration have made it possible to ship milk greater distances than formerly. Although substantial quantities of sheep's and goat's milk are produced in some areas of the world, cow's milk accounts for the great bulk of the world's output of milk.

About half of the U.S. production of milk for human consumption is consumed in the fluid form; the remainder is used to produce manufactured dairy products (table 8). Data are given in this section of the report primarily on the portion of the U.S. output of milk consumed in the fluid form, i.e., fluid whole milk and cream, fluid skimmed milk, fluid buttermilk, fluid whey, and chocolate milk drink.

Cream is the fatty liquid separated from whole milk. Cream containing over 45 percent of butterfat is dutiable as butter and discussed in the following section of this report. The most important purpose for separating cream from whole milk is to obtain a product from which butter may be churned economically; cream is also consumed as such and used in making other dairy products. In recent years, frozen cream from New Zealand has been virtually the only fluid milk or cream product to be imported. The imported cream is closely comparable to the domestic cream.

Skimmed milk is whole milk from which butterfat has been removed. There are two types of buttermilk: (a) that resulting from the churning of milk or cream to make butter, and (b) that produced by the addition of certain bacteria to milk. The former product has at times created disposal problems for butter plants; it is generally either used for animal feed or condensed or dried for human consumption. The latter product, often called cultured buttermilk, is invariably sold in the fluid form at the retail level for human consumption.

In the past decade, both buttermilk and skimmed milk, which are valuable sources of calcium, riboflavin, and protein, have become important articles of commerce. In addition to being consumed in fluid form, they are used extensively in producing dried buttermilk and dried skimmed milk (products discussed later in this report), which in turn are used as ingredients in ice cream mixes and bakery and confectionery products. Skimmed milk is also used extensively to make cottage cheese and condensed or evaporated milk. In earlier years, however, skimmed milk and buttermilk were used mainly as animal feeds. Skimmed milk was also used to manufacture casein. In recent years, however, the price-support program of the U.S. Department of Agriculture has increased the price of nonfat dry milk substantially. Accordingly, large quantities of domestic skimmed milk have been diverted from the production of casein to the output of nonfat dry milk. Virtually all the domestic requirements for casein are currently supplied by imports. Casein, dutiable in schedule 4 (chemicals and related products) of the TSUS, is not discussed further in this report.

Fluid whey is the liquid portion that remains after cheese has been made from milk. Although fluid whey at times has created disposal problems for cheese plants, it has important commercial uses. It is the principal source of lactose(milk sugar), is frequently used for animal feed, and is sometimes used to make cheeses such as Ricotta, Mysost, and Primost. In recent years, increasing quantities of fluid whey have been dried for use in the confectionery, bakery, and chemical industries; dried whey is discussed later in this report.

Chocolate milk drink embraces generally two types of products--one which is made from skimmed milk with the addition of flavoring and other ingredients, and the other being whole milk to which chocolate flavoring, usually cocoa, has been added.

U.S. tariff treatment and other import restrictions

Since August 1963, U.S. imports of fluid milk and cream have been dutiable as follows: 1/

<u>TSUS</u> <u>item</u>	<u>Commodity</u>	<u>Rate of duty</u>
115.00	Buttermilk-----	1.5¢ per gal.
	Other:	
115.05	Skimmed milk-----	1.5¢ per gal.
	Other milk:	
115.10	Within quota of 3,000,000 gallons---	2¢ per gal.
115.15	Over quota-----	6.5¢ per gal.
	Cream:	
115.20	Within quota of 1,500,000 gallons---	15¢ per gal.
115.25	Over quota-----	56.6¢ per gal.
118.00	Whey-----	1.5¢ per gal.
118.15	Chocolate milk drink-----	20% ad val.

1/ For the statutory descriptions, see table 19 in the appendix to this report.

These rates are currently applicable to imports from all countries (except the Republic of the Philippines) other than those designated as being under Communist control. ^{1/} The rates of duty on skimmed, sour, and whole milk and whey have been in effect since January 1, 1948. The rates of duty on cream have been in effect since June 6, 1951. The rate on chocolate milk drink is that originally provided for in the Tariff Act of 1930. The ad valorem equivalent of the current specific rate on item 115.20, based on U.S. imports entering during 1966, is 8.4 percent; there were no imports of the other products in recent years.

Under the Tariff Act of 1930, U.S. imports of fluid milk and cream were dutiable at the rates of $6\frac{1}{2}$ cents per gallon (whole milk), $56\frac{6}{10}$ cents per gallon (cream), and $2\frac{1}{2}$ cents per gallon (skimmed, sour, buttermilk, and whey) (par. 707). Imports of whey were dutiable under paragraph 1559 at the rate of $2\frac{1}{2}$ cents per gallon by virtue of similitude to buttermilk. Pursuant to concessions granted by the United States under bilateral trade agreements and the General Agreement on Tariffs and Trade (GATT), these rates were reduced to those now in effect under the TSUS (table 20). The rates of duty on imports in excess of the quotas were bound at the original Tariff Act of 1930 levels. U.S. imports of chocolate milk drink were dutiable at the rate of 20 percent ad valorem under paragraph 1558 of the 1930 act; the rate was not reduced under trade agreements.

^{1/} Imports from these Communist-controlled areas are dutiable at the rates of 2.05 cents per gallon (items 115.00, 115.05, and 118.00), 6.5 cents per gallon (items 115.10 and 115.15), 56.6 cents per gallon (items 115.20 and 115.25), and 20 percent ad val. (item 118.15)

The existing rates of duty are not ones on which the United States gave concessions in the sixth (Kennedy) round of trade negotiations under the GATT.

Pursuant to Presidential Proclamation No. 3790 of June 30, 1967, U.S. imports of cream 1/ were made subject to quantitative restrictions under section 22 of the Agricultural Adjustment Act, as amended (see item 950.00 of the appendix to the TSUS). The annual quota of 1,500,000 gallons was allocated (on a calendar-year basis) entirely to New Zealand, 2/ the only significant supplier in recent years. 3/ Other forms of fluid milk and cream are not subject to quota. U.S. imports of fluid milk and cream and chocolate milk drink are subject to the provisions of the Federal Import Milk Act of 1927; that act has been discussed earlier in this report.

U.S. consumption.

The U.S. annual apparent consumption of fluid milk and cream, which is virtually all supplied by the domestic production, ranged from about 58 billion to 60 billion pounds during 1962-66 as shown in the following tabulation (in millions of pounds of milk equivalent):

1/ "Milk and cream, fluid or frozen, fresh or sour, containing over 5.5 percent but not over 45 percent by weight of butterfat."

2/ For 1967, the quota (allocated exclusively to New Zealand) was the quantity entered on or before June 30, 1967, plus 750,000 gallons.

3/ During 1963-65 New Zealand limited its annual exports of frozen cream to the United States to 1.5 million gallons (see the section of this report on commitments by exporting countries).

Year	Con- sumed on farms	Federal school lunch and special milk programs	Commercial channels <u>1/</u>	Apparent consumption	
				All categories	Excluding Fed- eral programs
1962--	4,410	2,755	50,835	58,000	55,245
1963--	4,023	2,902	51,875	58,800	55,898
1964--	3,693	3,031	52,476	59,200	56,169
1965--	3,355	3,215	52,830	59,400	56,185
1966--	3,000	3,380	53,220	59,600	56,220

1/ Includes military consumption which averaged 1,400 million pounds in each year during 1962-66.

Fluid milk and cream consumed on farms where it was produced declined from about 8 percent of total consumption in 1962 to 5 percent in 1966. Meanwhile, the amount of fluid milk consumed under Federal programs averaged about 5 percent annually. Although the quantity of milk and cream consumed in the fluid form has not altered significantly in recent years, the share of the total output of milk consumed in the fluid form has been increasing gradually.

Although the aggregate consumption of fluid milk has remained fairly constant in recent years, the per capita consumption has declined somewhat. The consumption of cream has decreased, whereas that of low-fat items such as skimmed milk, buttermilk, and flavored milk drinks has increased. During the period 1962-66, the annual per capita consumption of fluid milk decreased from 266 pounds to 260 pounds and that of fluid cream decreased from 8.6 pounds to 7.4 pounds. The annual per capita consumption of low-fat items, however, increased

from 27 pounds to 38 pounds during the period. As a result of changes in nutritional practices consumers in recent years have been substituting foods high in vegetable fat and foods low in butterfat for high-butterfat foods. Butterfat, moreover has been higher priced than vegetable fats.

U.S. production

The domestic production of milk and cream for fluid consumption is equivalent to consumption (shown in the above tabulation); imports and exports of such milk and cream have been negligible for many years. Virtually all milk consumed in the fluid form in the United States is Grade A milk, but not all Grade A milk produced in the United States is used for fluid consumption. The U.S. production and utilization of Grade A milk is discussed in the section of this report on the domestic dairy situation.

U.S. exports

Although annual U.S. exports of fluid milk and cream have generally been larger than imports, they have been insignificant compared with domestic production. Exports ranged from 0.8 million to 1.2 million gallons during 1962-66. Inasmuch as these products are bulky and perishable, they are difficult to ship for long distances. Moreover, foreign prices are generally lower than domestic prices. In recent years, the bulk of the exports have gone to the Bahamas, the Philippine Republic, Canada, and Mexico.

U.S. imports

U.S. imports of milk and cream for fluid consumption have been negligible or nil for many years. As mentioned earlier, frozen cream from New Zealand--used in manufactured dairy products--has been the only fluid milk and cream product to be imported in recent years.

Until recently, fluid cream has not been an important article in international trade. U.S. imports were negligible before 1962, but they have increased sharply since then. In recent years, techniques of preparing (freezing) and transporting cream have improved; in 1961, moreover, the Food and Drug Administration issued a permit to the New Zealand Dairy Products Marketing Board enabling it to export frozen cream to the United States. This permit is the only one issued authorizing imports of frozen cream. 1/ Annual U.S. imports in the period 1962-66 were as follows: 2/

<u>Year</u>	<u>1,000 gallons</u>
1962-----	149
1963-----	850
1964-----	1,076
1965-----	1,181
1966-----	1,555

In 1966 U.S. imports of cream were equivalent to less than 0.2 percent of the combined domestic output of cream, i.e., the cream that is actually separated from milk plus the cream in whole milk used

1/ See the section on the Federal Import Milk Act.

2/ Data reported by the Bureau of Customs.

directly in manufacturing dairy products. Imports in 1966 exceeded the tariff quota of 1.5 million gallons for the first time--by some 55,000 gallons. In January-June 1967, imports amounted to 1,132 gallons. Effective July 1, 1967, imports of fluid or frozen cream were made subject to a section 22 quota. ^{1/} Because of the quota, imports of cream should not exceed 1,882,000 gallons in 1967; thereafter they will be limited to no more than 1.5 million gallons annually.

Unlike imports of some dairy products, frozen cream has been entered at ports throughout the United States. In 1966, the bulk of the imports entered at San Francisco, Charleston (South Carolina), Philadelphia, and Galveston. The imported cream is generally packed in 50 to 60 pound plastic containers.

Before 1966 the imported cream was purchased primarily by producers of ice cream. In 1966 such producers found it advantageous to use imported butterfat-sugar mixtures (Junex, etc.) rather than imported frozen cream. Nevertheless, as noted earlier, imports of cream in that year reached a record high; the bulk of the imported cream was purchased by producers of soups and dairy products other than ice cream.

Channels and methods of distribution

Most milk and cream for fluid consumption is transported from the farm to processing plants in (bulk) tank trucks. Such plants process, standardize, pasteurize, homogenize, and package the milk for distribution to the consumer. Fluid milk and cream generally reach the

^{1/} See the earlier section on U.S. tariff treatment and other import restrictions.

ultimate consumer through stores and home delivery. In recent years the amount of milk marketed through stores has been increasing, and that marketed through home delivery has declined. Inasmuch as fluid milk and cream are both bulky and perishable items, they are generally marketed near the areas of production and processing. Improved transportation facilities, however, have expanded the geographic areas in which fluid milk and cream can feasibly be distributed.

Prices

The bulk of the milk and cream for fluid consumption is marketed under Federal Milk Marketing Orders. The role of Federal Milk Marketing Orders in pricing milk has been discussed earlier in this report.

In recent years, the prices of imported frozen cream have followed closely those of domestic cream. The annual average wholesale price of domestic cream has been increasing in recent years as milk production has declined and as the minimum Federal order prices and the price support objective for milk have been increased. The following tabulation shows the annual average wholesale price of cream, 40 percent butterfat, at Philadelphia in 1964-66:

<u>Year</u>	<u>Per gallon</u>
1964-----	\$2.58
1965-----	2.60
1966-----	2.85

Since it appears that the U.S. output of milk in 1967 will be slightly less than that of 1966, the price of cream in 1967 is likely to average close to that of 1966. Nonetheless, the U.S. price will probably be high relative to the world price.

Butter

Description

Butter is the solidified fat of milk, churned from cream. The U.S. statutory definition for butter (21 U.S.C. 321a) calls for butter to contain not less than 80 percent by weight of butterfat. Butter is made exclusively from milk or cream or both; salt and coloring matter are generally added. The principal butter substitute, oleomargarine, is usually made from vegetable oils and fats, although it sometimes contains animal fats.

The U.S. Department of Agriculture inspects and grades butter when a producer or assembler requests this service. The Federal grade designations "U.S. Grade AA, A, or B" are seen on butter packages in most retail stores; grade "C" butter is not eligible for packaging under official grade labels. The grade terms reflect quality characteristics of butter such as flavor, texture or consistency, color, and salt content.

In the United States, butter is used principally for consumption without further processing; however, significant quantities are used by food processors in bakery products, candy, and ice cream. Imported and domestic butter are generally similar in quality and uses. Butter imported from New Zealand and the Netherlands has generally been consumed both for table use and in processed foods, while that imported from Denmark has been used almost entirely as table butter.

Butter is usually the dairy product which provides the least return for the milk used; milk is not used for its manufacture,

therefore, until other demands have been met. The output of butter fluctuates throughout the year depending on the amounts of milk available. The share of the U.S. output of milk used in the manufacture of butter in the United States declined from about 27 percent in 1962 to 20 percent in 1966 (table 8).

U.S. tariff treatment and other import restrictions

Since August 1963, U.S. imports of butter, oleomargarine, and other butter substitutes have been dutiable as follows: 1/

<u>TSUS</u> <u>item</u>	<u>Commodity</u>	<u>Rate of duty</u>
	Butter and fresh or sour cream containing over 45 percent butter-fat:	
	Entered November 1 to the following March 31:	
116.00	Within quota of 50,000,000 pounds.	7¢ per lb.
116.05	Over quota-----	14¢ per lb.
116.06	If product of Cuba-----	11.2¢ per lb.
	Entered April 1 to July 15:	
116.10	Within quota of 5,000,000 pounds--	7¢ per lb.
116.15	Over quota-----	14¢ per lb.
116.16	If product of Cuba-----	11.2¢ per lb.
	Entered July 16 to October 31:	
116.20	Within quota of 5,000,000 pounds--	7¢ per lb.
116.25	Over quota-----	14¢ per lb.
116.26	If product of Cuba-----	11.2¢ per lb.
116.30	Oleomargarine and butter substitutes--	7¢ per lb.

These rates are currently applicable to imports from all countries (except the Philippine Republic) other than those designated as being under Communist control 2/. In addition to the duty, imports

1/ The rates for imports from Cuba are currently suspended. For the statutory description of the commodities, see table 19 in the appendix to this report.

2/ Imports from these Communist-controlled areas are dutiable at the rate of 14¢ per lb.

of oleomargarine are subject to a tax of 15 cents per pound under section 4591 of the Internal Revenue Code. The ad valorem equivalents of the specific rates, based on imports entering during 1966 are given below:

<u>TSUS item</u>	<u>Percent</u>
116.00-----	12.5
116.10-----	14.6
116.20-----	11.3
116.30-----	30.4

There were no imports in the other TSUS items relating to butter.

Under the Tariff Act of 1930, U.S. imports of butter, oleomargarine, and other butter substitutes were dutiable at the rate of 14 cents per pound (par. 709). Pursuant to concessions granted by the United States under the General Agreement on Tariffs and Trade (GATT), this rate was reduced to the rates now in effect (table 20).

The existing rates of duty are not ones on which the United States gave a concession in the sixth (Kennedy) round of trade negotiations under the GATT.

Since July 1, 1953, U.S. imports of butter have been subject to an annual quota of 707,000 pounds under section 22 of the Agricultural Adjustment Act, as amended (see item 950.05 of the appendix to the TSUS). In the quota year ending June 30, 1967, 47 percent of the quota was allocated to New Zealand, 30 percent to Denmark, and the remaining 23 percent to the following countries: Argentina, Australia, Canada, the Netherlands, Norway, Sweden, and Switzerland. 1/

1/ Pursuant to Presidential Proclamation No. 3790 of June 30, 1967, the quota year (ending June 30) was changed to a calendar-year basis.

U.S. consumption

Annual apparent consumption of butter in the United States ranged from 1.4 billion to 1.1 billion pounds in 1962-66 (table 21). During that period the annual per capita consumption of butter decreased from 7.3 pounds to 5.7 pounds while that of margarine increased from 9.3 to 10.5 pounds. The declining per capita consumption of butter and increasing per capita consumption of margarine is part of a continuing trend which began during World War II; in 1942 per capita consumption of butter was 15.9 pounds and that of margarine, 2.8 pounds. The declining consumption of butter has been principally the result of the efforts of many consumers to reduce their consumption of high-fat products (particularly those high in animal fats) and the effect of the competition from margarine. In 1964 the U.S. Department of Agriculture reported that the average retail price of butter was nearly 3 times that of margarine. U.S. consumption of margarine has been supplied almost entirely by domestic production.

U.S. production and stocks

U.S. production of butter amounted to about 1.5 billion pounds in 1962; it had declined to 1.1 billion pounds in 1966. The U.S. production of butter has been declining for several decades; the decline began after 1933, the year in which output reached a record high of 2.4 billion pounds.

The number of plants producing butter in the United States decreased from 1,411 in 1962 to 1,048 in 1966. Although some large dairy firms produce butter and other dairy products, many smaller

firms specialize in the output of butter. The sale of butter generally provides the primary source of income for the bulk of these plants. Minnesota, the leading producing State, accounted for 28 percent of the domestic production in 1966, followed by Wisconsin, which accounted for 20 percent, Iowa, Nebraska, New York, and North and South Dakota. These 7 States accounted for nearly three-fourths of the total output in 1966.

Yearend stocks of butter (commercial and Government-owned) amounted to 359 million pounds in 1962; they then declined to 271 million pounds in 1963, 71 million pounds in 1964, 52 million pounds in 1965, and 32 million pounds in 1966. In both 1962 and 1963, when stocks were high, about 90 percent of the total stocks were owned by the Government. In 1966, however, only 6 percent of the stocks were Government-owned. The Government generally acquires stocks of butter when production is greater than commercial demand at the supported level of prices.

U.S. exports

Although U.S. exports of butter have been larger than imports, they have generally been small compared with domestic production. Inasmuch as butter prices are generally lower in foreign countries, U.S. exports of butter without Government assistance have been insignificant. Annual U.S. exports of butter increased from 35 million pounds in 1962 to 190 million pounds in 1963 and 297 million pounds in 1964; they then declined to 66 million pounds in 1965 and to 13 million pounds in 1966.

About half of the U.S. exports of butter in the period 1963-65 were to Western Europe. Inasmuch as European butter production declined in 1963 and 1964, the United Kingdom and other Western European markets liberalized their U.S. quota allocations in those years in order to meet their domestic market requirements. Thus, U.S. butter exports played a part in maintaining butter supplies in Western Europe at that time. Because of a rise in the output of milk in Western Europe beginning in 1965, the production of butter increased; stocks of butter in Western Europe by January 1966, were large. Other foreign markets for U.S. butter in recent years include Poland, Chile, Algeria, Peru, Israel, Iran, Morocco, and Tunisia.

Annual U.S. exports of margarine, which have been small compared with domestic production, averaged about 8 million pounds annually in recent years. Other countries generally prefer to import from the United States the oil or oil-bearing material used for manufacturing margarine rather than import the finished product.

U.S. imports

For a number of years U.S. imports of butter have been subject to an absolute quota of 707,000 pounds during each 12-month period ending June 30, pursuant to section 22 of the Agricultural Adjustment Act (see separate section of this report on section 22 quotas). In the period 1962-66 calendar-year imports of butter into the United States ranged from 665,000 to 748,000 pounds. In each of the quota years since 1961, importers have used 86 percent or more of the quota allocated to them (table 22). In the calendar year 1966, 55 percent of the U.S.

imports came from New Zealand, 24 percent from Denmark, 17 percent from the Netherlands, and the remaining 4 percent from other countries. The butter imported from New Zealand and the Netherlands has been consumed in continental United States; about half of the imports from Denmark, which have consisted of low-moisture butter packaged in cans, have been imported into Puerto Rico. Such butter does not spoil easily in warm climates.

Channels and methods of distribution

The marketing of butter, in general, involves three major levels: (1) the manufacturer, (2) primary receiver, and (3) the retailer. Butter is usually initially packed in 60, 64, or 68 pound boxes at the country plants. Primary receivers assemble butter at central locations, print 1/, and package butter for distribution. They also sell bulk butter to other wholesalers and to food chain warehouses which print and distribute butter to their retail stores. Some retail organizations contract with a creamery for butter printing and packaging.

The largest volume of butter is sold through retail grocery stores; they have accounted for about 47 percent of all butter sold to consumers in recent years. Some butter is sold directly by manufacturing plants to consumers and to other manufacturers such as bakeries; some is distributed on home delivery milk routes. The institutional market (restaurants, schools, hospitals, etc.) is also

1/ Printing is the process in which bulk butter is wrapped and packaged into 1 pound and one-quarter pound consumer packages.

an important outlet for butter; an estimated 20 to 25 percent of all commercial butter sales are through this channel.

Prices (including pricing practices)

Wholesale prices of butter have closely followed the quotations reported by the Chicago Mercantile Exchange and the New York Mercantile Exchange. Bulk butter prices at the manufacturing plants are almost exclusively based on the exchange prices.

The U.S. Department of Agriculture stands ready to purchase unlimited quantities of butter at preannounced support prices. Since November 1965 the Secretary of Agriculture has also been authorized to purchase butter (as well as Cheddar cheese and nonfat dry milk) at market prices above the support prices, if the quantities purchased at support prices are deemed insufficient to meet commitments under various Government programs (e.g., the school lunch program). ^{1/} About 30 percent of the butter acquired by the Department in 1966 (9 million pounds) was purchased at market prices. During most of 1966 the market prices of butter were above support prices; in December, however, market prices were closer to support levels than in earlier months and the Government purchases at market prices were discontinued. Since then purchases by the Department have been at support prices. The Department of Agriculture generally stands ready to resell dairy products to domestic commercial users for unrestricted use at announced prices, which are always above the Government purchase prices. Although the quantities of butter resold to the commercial market have

^{1/} Section 709 of Public Law 89-321.

been small, the resale prices ordinarily set a ceiling on the wholesale market prices for butter inasmuch as market prices probably would exceed the CCC resale prices only when Government stocks are low.

The dairy price-support program has generally played a central role in determining market prices of butter in the United States in recent years. Market prices have usually remained close to the Government purchase prices and the Government has frequently purchased a substantial share of the domestic output of butter. The share of U.S. production of butter purchased by the Government, the purchase prices, and the average wholesale selling price in Chicago are shown in the following tabulation for the years 1962-66: ^{1/}

Year	U.S. production	CCC purchases		Butter (Grade A)	
		Total	Share of U.S. production	Market price at Chicago	CCC purchase price
		Million pounds	Million pounds	Percent	Cents per pound
1962--	1,537	403	26	58.6	58.0
1963--	1,420	308	22	58.2	58.0
1964--	1,442	266	18	59.1	58.0
1965--	1,323	216	16	61.1	59.0
1966--	1,112	29	2	^{1/} 62.8	^{1/} 61.0
				^{2/} 71.2	^{2/} 66.5

^{1/} Apr. 1-June 29.

^{2/} June 30-Mar. 31, (1967).

Purchases of butter were small in 1966 when the market prices were above the support levels. Thus far in 1967, however, the market prices have been at support levels and purchases of butter by the CCC have been substantially higher than in 1966.

^{1/} Prices are reported on a marketing-year basis (beginning Apr. 1).

Foreign production and trade

Total world butter production in 1966 amounted to about 12 billion pounds (table 23). The Soviet Union, the leading butter-producing country for many years, accounted for about 2.6 billion pounds of the total production in 1966; the United States accounted for 1.1 billion pounds, West Germany for 1.1 billion pounds, and France for 1.0 billion pounds.

World trade in butter averaged 1.2 billion pounds annually during 1960-64 (table 24). New Zealand, Denmark, and Australia together accounted for about two-thirds of the total world exports in that period. Butter has been in demand in many countries, despite the price advantage of margarine. The United Kingdom has been the world's major importer of butter; in the period 1960-64, the United Kingdom annually imported about three-fourths of all the butter entering international trade. Butter imported into the United Kingdom from New Zealand, Australia, and Denmark, the principal suppliers, has been used mainly as table butter, while that from continental Europe has been used principally for processed foods and for cooking.

The reported wholesale prices of New Zealand's finest butter on the London Provision Exchange increased from 35.6 cents per pound in January 1962 to 43.7 cents per pound in January 1965; the price then declined to 37.5 cents per pound in July 1966. The price of butter in the United Kingdom was substantially below that in the United States throughout the period 1962-66.

Cheese

Cheese generally is made from the curd formed by the coagulation of milk; several cheeses, however, are made from whey (the liquid portion that remains after milk is coagulated). Although the methods of manufacturing various cheeses differ from one another, the production steps common to the manufacture of most cheeses include coagulation of the milk, stirring and heating of the curd, draining off of the whey, and collecting, salting, and pressing of the curd. Some cheeses are ripened (i.e., aged or cured) by storing them for various periods of time under conditions of controlled temperature and humidity to permit certain desired activity by bacteria or molds.

Cheeses are often classified as to whether they are natural cheeses or processed cheeses. Natural cheese is that produced directly from milk; processed cheese is natural cheese which has been further processed by heating, emulsifying, and stirring into a plastic mass. ^{1/} Processed cheese may be produced from a single variety of natural cheese or from a blend or combination of natural cheeses. The greater part of the cheese consumed in the United States is in the form of natural cheeses.

The varieties of cheeses are often distinguished on the basis of inherent differences such as the types of milk used to produce them,

^{1/} The definition of processed cheese established by the U.S. Food and Drug Administration is given in 21 CFR 19.750.

the bacteria or molds used to ripen them, the butterfat (milkfat) content, the moisture content, coloring, the types of ingredients added (such as spices, seeds, or meats), and the degree to which they are aged or cured. Cheeses are sometimes described in terms of their relative hardness or softness--factors which are closely related to their moisture content. Distinctions between cheeses may also be made on the basis of the locality and the methods of manufacture, the size of the loaf, and the packaging. The foregoing differences generally form the basis for distinguishing the cheeses in world commerce which are said to number in excess of 400 varieties and subvarieties. In a number of instances, however, objective differences between cheeses either do not exist or at best are elusive and difficult to establish.

The U.S. Food and Drug Administration has established Standards of Identity for cheeses (21 CFR 19) which provide the official specifications for imported and domestic cheese for the purpose of enforcing the Federal Food, Drug, and Cosmetic Act. Generally, these standards prescribe a minimum fat content, a maximum moisture content, and a method of manufacturing the cheese. The Bureau of Customs sometimes uses the standards as aids in classifying cheeses for tariff purposes.

Inasmuch as cheese is a relatively inexpensive source of protein, it is frequently substituted for meat. Although the United States consumes a larger aggregate quantity of cheese than any other country, its per capita consumption is lower than that of most European

countries. Currently, the annual per capita consumption of cheese in the United States is about 10 pounds, while annual per capita consumption in Denmark, France, Switzerland, Norway, and Italy averages about 20 pounds. Nonetheless, per capita consumption of cheese is higher in the United States than in countries such as Canada, New Zealand, and Australia where, as in the United States, the consumption of meat is very high.

The per capita consumption of cheese in the United States, unlike that of many dairy products, has been increasing over the past decade, notwithstanding rising retail prices. Annual consumption increased from 7.7 pounds per capita in 1957 to 9.9 pounds in 1966. The strong U.S. market prices for cheese reflect the impact of many factors, each of which alone cannot be appraised precisely. The slow but steady rise that has occurred in the aggregate demand for cheese stems from both population growth and rising incomes. The variety of cheeses available to the consumer has become greater in recent years and cheese has been used increasingly in a wide variety of manufactured foods. After 1965, moreover, prices of important protein foods (such as meat and fish) increased sharply, contributing to increased consumption (and increased prices) for cheese, an alternative source of protein. The consumer price index of processed meat, poultry, and fish (1957-59 = 100) increased from 99 in 1964 to 114 in 1966; the monthly index averaged 111 in 1967.

The total cheese production in the countries reporting output in 1965 amounted to 7.9 billion pounds; the international trade in cheese amounted to some 1.2 billion pounds. The following tabulation shows the share of the world production, exports, and imports of cheese accounted for by selected countries in 1965:

<u>Country</u>	<u>Production</u> <u>(percent)</u>	<u>Exports</u> <u>(percent)</u>	<u>Imports</u> <u>(percent)</u>
United States-----	22	1	6
France-----	15	12	5
Italy-----	12	4	11
Netherlands-----	6	22	<u>1/</u>
New Zealand-----	3	17	<u>1/</u>
Denmark-----	3	14	<u>1/</u>
United Kingdom-----	3	<u>2/</u>	27
West Germany-----	4	<u>2/</u>	24
Switzerland-----	2	7	2

1/ Less than 1 percent.

2/ Not available.

Although the United States has been the world's largest cheese-producing country in recent years, the Netherlands and New Zealand have been the largest exporters of cheese. The United States has been a small exporter of cheese because the prices of cheese in most other countries have been lower than domestic prices. The United Kingdom has been the world's largest importer of cheese for many years, although West Germany has recently been a close second.

U.S. imports of cheese have been small because they are controlled by quotas and because the domestic output has been large. U.S. annual imports of cheese ranged from 76 million to 79 million pounds in 1961-65 and then increased to 135 million pounds in 1966; most of the increase in annual imports that occurred from 1965 to

1966 was accounted for by increased entries of Colby, a cheese that was not subject to U.S. quota restrictions until July 1, 1967. The annual U.S. output of cheese increased from 1.6 billion to nearly 1.9 billion pounds during the 1961-66 period; Cheddar cheese accounted for about 1.0 billion pounds of the U.S. output in each of those years. In most recent years, about a fifth of U.S. imports of cheese has come from Italy, about 10 percent each from Switzerland, Denmark, and New Zealand; and about 6 percent each from the Netherlands and Australia. The remaining two-fifths came from 35 other countries. With the exception of 1966--when the imports of Colby cheese were large--about three-fourths of the U.S. imports of cheese in recent years have consisted of "specialty-type" cheeses such as sheep's milk, Swiss, and Gruyere-process cheeses; these cheeses are not closely competitive with, but generally complementary to, domestic cheeses. The remaining one-fourth of cheese imports were controlled by quotas imposed under section 22 of the Agricultural Adjustment Act. ^{1/} The section 22 quotas for cheese in effect before July 1, 1967, which have been substantially filled in recent years, permitted entries of cheese equivalent to about 266 million pounds of milk; this quantity of milk equals about 2 percent of the amount of milk used annually in the United States to produce cheese, but only 0.2 percent of the total U.S. production of milk. On July 1, 1967, pursuant to

^{1/} TSUS items 950.07-950.10.

Presidential Proclamation No. 3790, the quota year (ending June 30) was changed to a calendar-year basis; the quota for Cheddar cheese was modified and imports of Colby cheese were made subject to quotas. For the 1968 calendar year, the milk equivalent of the quotas on cheese will amount to about 379 million pounds, equal to slightly more than 2 percent of the quantity of milk currently used to produce cheese and about 0.3 percent of the current U.S. annual output of milk.

Cheddar, Colby, Washed Curd, and Granular Cheeses

Description

Cheddar, Colby, washed curd, and granular cheeses are all made from cow's milk. They generally range from semi-soft to semi-hard in texture and from white to yellowish-orange in color. It is difficult to distinguish Colby cheese from Cheddar. The texture of Colby, however, is generally not as compact as that of Cheddar; this difference occurs because in the making of Colby the curd is not subjected to "matting" and "milling" as is the curd in the making of Cheddar. The Standards of Identity allow Colby to contain not more than 40 percent of moisture, while Cheddar may contain not more than 39 percent. ^{1/} There is often little difference, however, in the moisture content of the two cheeses.

Granular cheese is granular in texture and checkered in appearance. In making granular cheese, no water is added to the curd while it is being stirred and cooled; the small curd particles, therefore, do not bond well, thus giving the cheese its distinctive appearance. In making washed curd cheese, the curd is "matted" and "milled" (as in making Cheddar), but then the curd is washed with water before it is salted. Washing the curd increases the moisture content of the cheese, reduces the acidity and lactose (milk sugar) content, and results in an open texture.

^{1/} The standards for Colby are specified in 21 CFR 19.510; those for Cheddar in 21 CFR 19.500.

Cheddar, Colby, washed curd, and granular cheeses are competitive with each other in the manufacture of pasteurized process American cheese. Under the Standards of Identity, these cheeses are all eligible to be used in the production of pasteurized process American cheese, and only they are eligible to be so used. ^{1/} In 1965 about 70 percent of the pasteurized process American cheese produced in the United States was made from Cheddar and 30 percent from the other varieties of cheese referred to above.

Pasteurized process American cheese manufactured in the United States may consist in whole or in part of imported or domestic cheese. About half the domestic output of Cheddar, four-fifths of imported Cheddar, most of the domestic and all of the imported Colby, and most of the domestic granular and washed curd cheeses are generally used to make pasteurized process American cheese. About a fifth of total U.S.

^{1/} The Standards of Identity for pasteurized process cheese (21 CFR 19.750) state that "in case . . . [pasteurized process cheese] is made of Cheddar cheese, washed curd cheese, Colby cheese, or granular cheese or any mixture of two or more of these, it may be designated 'pasteurized process American cheese'; or when Cheddar cheese, washed curd cheese, Colby cheese, or granular cheese or any mixture of two or more of these is combined with other varieties of cheese in the cheese ingredient any of such cheeses (i.e., Cheddar, washed curd, Colby, or granular) or such mixture may be designated as 'American cheese'."

If another variety of cheese (Swiss cheese) is processed with one or more of the aforementioned cheeses, the finished product may be designated as pasteurized process Swiss and American cheese. In such use, however, the aforementioned standards must be met if the term "American" is used in the marketing of such process cheese.

In reporting data on the U.S. output of cheese, the Department of Agriculture designates Cheddar, Colby, granular, washed curd, high and low moisture Jack, and Monterey cheeses as American cheese. The Standards of Identity established by the Food and Drug Administration, however, do not allow high and low moisture Jack or Monterey cheeses to be designated as "American cheese," when marketed as process cheese.

imports of Cheddar (i.e., all imports of Cheddar from Canada) and about 35 percent of the domestic production of Cheddar is consumed as natural cheese for table use; 15 percent of the domestic output of Cheddar is used as an ingredient in foods such as soups and crackers.

Cheddar, Colby, washed curd, and granular cheeses destined for making process cheese are generally not aged more than 60 days; such cheeses are ordinarily made from pasteurized or heat-treated milk.

Cheddar not to be used for processing is ordinarily aged for periods that range from 4 to 16 months, although the duration of aging may be somewhat shorter or longer than the aforementioned time periods. Cheddar generally reaches its peak of flavor development after 9 to 16 months of aging. Cheddar destined to be consumed as natural cheese is usually made from heat-treated milk but sometimes from unpasteurized (raw) milk. Cheddar made from heat-treated and raw milk develops a much sharper flavor when aged than that made from pasteurized milk. Further, Cheddar made from raw milk (less than 5 percent of the domestic Cheddar production) tends to develop a sharper flavor than cheese made from heat-treated milk inasmuch as heat-treating tends to inhibit some of the flavor-developing enzymes in the raw milk.

U.S. tariff treatment and other import restrictions

The rates of duty applicable to imports of Cheddar, Colby, washed curd, and granular cheeses from countries (except the

Philippine Republic) other than those designated as being under Communist control are as follows: 1/ 2/

<u>TSUS</u> <u>item</u>	<u>Commodity</u>	<u>Rate of duty</u>
117.15	Cheddar cheese: Not processed otherwise than by division into pieces.	15% ad val.
117.20	Other----- Cheese not elsewhere enumerated (including Colby, washed curd, and granular):	20% ad val.
117.75 (pt.)	Valued not over 25¢ per pound-- Valued over 25¢ per pound:	5¢ per lb.
117.81	Colby-----	20% ad val.
117.85 (pt.)	Other-----	18% ad val.

In recent years virtually all of the U.S. imports of Cheddar cheese have entered at the 15 percent rate of duty. The ad valorem equivalent of the specific rate applicable to Colby cheese (based on imports entering in 1966) is 21 percent.

Under the Tariff Act of 1930, imports of Cheddar, Colby, washed curd, and granular cheeses were originally dutiable at the rate of 7 cents per pound, but not less than 35 percent ad valorem (par. 710). Pursuant to concessions granted by the United States under bilateral trade agreements and the General Agreement on Tariffs and Trade (GATT), this rate was reduced to 3 cents per pound, but not less than 15 percent ad valorem for Cheddar cheese not otherwise processed than by division into pieces and 5 cents per pound but not less than 20 percent ad valorem for all other cheeses considered here (table 20).

1/ Imports from these Communist-controlled areas are dutiable at the rate of 35 percent for Cheddar cheese and for the other cheeses if valued over 25 cents per pound; if valued not over 25 cents per pound a rate of duty of 8.75 cents per pound applies.

2/ For the statutory description see table 19 in the appendix to this report.

When the TSUS was adopted in 1963, the specific rates of duty on Cheddar were eliminated and the ad valorem rates retained.

The existing rate of duty on washed curd and granular cheeses valued over 25 cents per pound (item 117.85 (pt.)) is one on which the United States gave a concession in the sixth (Kennedy) round of trade negotiations under the GATT. The rate will be reduced in 5 annual stages, from 20 percent ad valorem (the rate existing on December 31, 1967) to 10 percent ad valorem. The first stage rate (18 percent ad valorem) became effective January 1, 1968. The existing U.S. rates on Cheddar and Colby cheeses were not affected by the sixth (Kennedy) round of trade negotiations.

During the quota years (ending June 30) extending from 1954 to 1965, annual imports of Cheddar cheese 1/ were subject to a quota of 2,780,100 pounds under section 22 of the Agricultural Adjustment Act, as amended. On March 31, 1966, the quota was increased to 3,706,800 pounds for the one quota year ending June 30, 1966. On July 1, 1966, the quota reverted to the original quantity of 2,780,100 pounds for the year ending June 30, 1967.

Pursuant to Presidential Proclamation No. 3790 of June 30, 1967, a quota on imports of Cheddar cheese was established for the calendar year 1967, amounting to the quantity entered on or before June 30, 1967, plus 5,018,750 pounds of which not more than 4,406,250 pounds

1/ The quota restriction applied to "Cheddar cheese, and cheese and substitutes for cheese containing or processed from Cheddar cheese."

could be products other than natural Cheddar cheese made from un-pasteurized milk and aged not less than 9 months (see item 950.08A of the appendix to the ESUS). For each subsequent calendar year the quota was to be 10,037,500 pounds, of which not more than 8,812,500 pounds could be products other than the aforementioned natural Cheddar cheese. ^{1/} Of the annual 8,812,500 pound limit, an amount of 2,780,100 pounds, a quantity equal to the previous Cheddar quota, was allocated to the same countries in the same proportions as the previous Cheddar quota, i.e., 77 percent to New Zealand, 22 percent to Canada, and the remaining 1 percent to Australia, Sweden, Ireland, and Denmark combined. The quantity by which the previous Cheddar quota was increased (6,032,400 pounds) was allocated by the Department of Agriculture to the countries that supplied American-type cheese (principally Colby) during the 1961-65 period; thus, New Zealand received an allocation of 56 percent, Australia 28 percent, Ireland 9 percent, Sweden 2 percent, and all other countries less than 5 percent.

The proclamation referred to above also established a quota for "American-type cheese, including Colby, washed curd, and granular cheese (but not including Cheddar) and cheese and substitutes for cheese containing, or processed from, such American-type cheese."

^{1/} Unlike the other cheeses subject to section 22 quotas, no license is required from the Secretary of Agriculture to import up to 1,225,000 pounds per quota year (612,500 pounds during the period July 1-Dec. 31, 1967) of natural Cheddar cheese made from unpasteurized milk and aged not less than 9 months which prior to exportation has been certified to meet such requirements by an official of a Government agency of the country where the cheese was produced.

For the calendar year 1967, the quota established was the quantity entered on or before June 30, 1967, plus 3,048,300 pounds; for each subsequent calendar year, the quota was to be 6,096,600 pounds (see item 950.08B of the appendix to the TSUS). The Department of Agriculture allocated 55 percent of the quota to New Zealand, 28 percent to Australia, 9 percent to Ireland, 2 percent to Sweden, and 6 percent to several other countries combined.

U.S. consumption

The annual U.S. consumption of Cheddar cheese increased from 980 million pounds in 1962 to 1,032 million pounds in 1964 and then declined to 993 million pounds in 1966 (table 25). The annual consumption of Colby in the United States, however, increased from 149 million to 223 million pounds during the 1962-66 period (table 26). In the aggregate, the consumption of the two cheeses increased by about 87 million pounds from 1962 to 1966; imports of Colby cheese amounted to 46 million pounds in 1966. The bulk of the increase in the consumption of Cheddar and virtually all of the increase in that of Colby was in cheese used to make process cheese, the U.S. output of which has been increasing. In recent years Colby has been supplying a larger share of the natural cheese used to make pasteurized process American cheese. Process cheese has gained increased popularity for use as cheeseburgers and in cheese snacks. The amount of natural Cheddar consumed as an ingredient in foods such as crackers and soups, however, has also increased significantly in recent years.

The annual U.S. consumption (and production) of granular and washed curd cheeses is trivial compared with Cheddar and Colby. Granular and washed curd cheeses will not be discussed further.

Cheddar has supplied the great bulk of the U.S. consumption of cheese for many years. Consumption of Colby has increased somewhat in recent years, however, notwithstanding the increase in the consumption of Cheddar. In 1966, the year in which the per capita U.S. consumption of all cheese reached a record level of 9.9 pounds, the consumption of Cheddar and Colby amounted to 6.3 pounds.

U.S. production and stocks

The East North Central region of the United States has long been the major Cheddar and Colby cheese producing area. Wisconsin, the leading producing State for both cheeses, accounted for 48 percent of the U.S. output of Cheddar and 31 percent of the output of Colby in 1966. Other important States producing Cheddar were Minnesota, Missouri, Iowa, Kentucky, and New York which together accounted for 29 percent of the U.S. output; next in order of importance in the output of Colby were Michigan, Indiana, Idaho, Iowa, and Missouri which together accounted for 39 percent of the U.S. output.

The annual U.S. production of both Cheddar and Colby cheeses has generally been increasing for many years. In 1966 the output of both cheeses reached record levels. In that year the production of Cheddar amounted to 1,043 million pounds (valued at some \$460 million), while that of Colby amounted to 177 million pounds (valued at some \$78 million). In recent years, Cheddar has accounted for nearly 60 percent and Colby has accounted for about 9 percent of the U.S. output of cheese. The steady increase in the output of these cheeses in recent years is attributable largely to the increased civilian demand

for the cheeses. Accordingly, a larger portion of the U.S. output of milk for manufacturing has been used to produce Cheddar and Colby. About 17 percent of the output of manufacturing milk was so used in 1962, and about 21 percent in 1966.

The number of U.S. plants producing Cheddar cheese has been declining for many years. Small plants are decreasing in number, but the number of large plants has been increasing. The number of plants producing Cheddar declined from about 900 in 1962 to 765 in 1966. In 1957, about 155 plants produced more than 1.5 million pounds of cheese each; in 1963 there were about 200 such plants. In recent years, plants of that size have accounted for the bulk of the domestic production. Some of the plants that produce Cheddar probably produce Colby. About 200 plants have reported the production of Colby in recent years. Producers of Cheddar and Colby can readily utilize their supply of milk to make either variety of cheese.

During the past decade, U.S. producers have changed substantially the forms and styles of their output of Cheddar cheese. In the early 1950's, more than half of the output of Cheddar cheese consisted of cylindrical-shaped cheeses weighing 70 to 80 pounds. By 1966, however, such "Cheddar styles" accounted for only about 2 percent of the total. The decline in the marketings of "Cheddar styles" is attributable largely to the expanded use of the 40- and 60-pound rindless blocks of Cheddar cheese and the introduction of Cheddar cheese in barrels. (Colby is generally in the form of the aforementioned blocks.) Barrel Cheddar is a 500-pound cheese made in a plastic-lined, barrel-shaped,

steel container. It is especially adapted for processing, inasmuch as labor costs are lower and cheese wastes are smaller when such large-size cheeses are processed. Because of their cutting and packaging advantages, the 40- and 60-pound rindless blocks are more suitable for conventional chainstore marketing than the "Cheddar styles". In 1966 37 percent of the output of Cheddar cheese consisted of the aforementioned blocks; 48 percent was barrel Cheddar. The remainder consisted largely of small shapes of Cheddar known as longhorns, daisies, and twins.

Yearend stocks of Cheddar cheese (commercial and Government-owned) in cold storage warehouses declined from 386 million pounds in 1962 to 271 million pounds in 1965; in 1966 they amounted to 332 million pounds. During 1962-66 yearend stocks were equivalent to from 40 percent (1962) to 27 percent (1965) of the U.S. output. The bulk of the commercial stocks consist of cheese being aged or held by assemblers in order to assure an adequate supply of cheese for processing. Government-owned stocks of Cheddar generally reflect surplus production. In the mid-1950's Government stocks of Cheddar were large; in recent years, however, they have been negligible. During 1953-57 the Government-owned stocks of Cheddar at yearend accounted for 45 to 69 percent of the total stocks. At the end of 1966 all of the stocks of Cheddar cheese were commercially owned. Stocks of Colby cheese have generally been negligible inasmuch as Colby is not aged.

U.S. exports

Although exports of Cheddar cheese have generally been larger than imports, they have been small compared with domestic production. Exports of Colby cheese have been negligible for a number of years. Annual exports of Cheddar increased from 12 million pounds in 1962 to 30 million pounds in 1963. Thereafter, they declined; in 1966 exports of Cheddar amounted to about 3 million pounds. Before 1964 the bulk of the Cheddar exports consisted of cheese donated to the recipient countries under the Agricultural Trade Development and Assistance Act of 1954 (Public Law 480, 83rd Cong.) Exports under Public Law 480 were curtailed in 1963 because domestic school lunch and welfare donations and both domestic and export sales had reduced CCC supplies substantially. In 1963 the bulk of the Public Law 480 exports of Cheddar cheese went to Brazil, Egypt, Portugal, Poland, Bolivia, the Dominican Republic, Greece, and El Salvador. U.S. commercial exports of Cheddar have been small because U.S. prices have not generally been competitive in world markets with those for Cheddar from other countries.

U.S. imports

Although annual U.S. imports of Cheddar cheese have been small because they have been controlled by absolute quotas, they will undoubtedly be larger in the immediate years ahead because the annual quota was enlarged in mid-1967. ^{1/} Annual imports of Colby, which

^{1/} See the earlier section on U.S. tariff treatment and other import restrictions.

were not controlled by quotas before July 1, 1967, have been substantially larger than imports of Cheddar in recent years.

Annual imports of Cheddar, which ranged from 1.9 million to 4.2 million pounds during 1962-66, were equivalent to less than 0.5 percent of production in each of those years. The quantity of Cheddar cheese that will be permitted entry under the new import quota--slightly more than 10 million pounds annually--is equivalent to about 1 percent of recent annual U.S. production of Cheddar. In recent years, about 80 percent of the U.S. imports of Cheddar have come from New Zealand, nearly 20 percent from Canada, and negligible quantities from Sweden and Ireland.

During the quota years 1962-66, U.S. importers of New Zealand cheese filled 82 percent or more of the annual quota for Cheddar cheese allotted to that country (table 27). Importers of Canadian Cheddar utilized 86 percent or more of their allotted share of the annual quota. This less-than-full utilization of the quotas probably is attributable to two factors: (a) It has not been economically feasible for some licensees to market Cheddar as actively as they had during the period on which the license allocations were based, and (b) the quotas were allocated on a July 1-June 30 year, rather than on a calendar-year basis, with the result that cheese allocated to be imported in the last third of the quota year (March-June) could not be entered before the yearend holiday seasons. The demand for cheese, particularly for gift packages, is the greatest prior to Christmas. The new quota imposed in mid-1967, however, will be applied on a calendar-year basis.

U.S. imports of Cheddar from New Zealand are channeled through two sales agents representing the New Zealand Dairy Production and Marketing Board, the sole exporter in that country. The Board supplies about 20 U.S. importers. Some of the importers are also large domestic producers and assemblers. New Zealand Cheddar, is a natural cheese made from pasteurized milk, and generally aged for less than 60 days. In the United States, the Cheddar from New Zealand is used almost exclusively in making process cheese.

About 35 U.S. importers enter Cheddar cheese from Canada; some are large domestic producers and assemblers. The Cheddar imported from Canada is a natural cheese made from unpasteurized (raw) milk, usually aged 9 months or more; it has a "sharp" flavor. U.S. imports of Canadian Cheddar are consumed almost exclusively as natural cheese for table use.

U.S. imports of Colby cheese were negligible or nil until 1958. Early in that year, the Bureau of Customs ruled that Colby was not classifiable in the tariff provision for Cheddar, and was not subject to the quantitative restrictions imposed on Cheddar cheese under section 22 of the Agricultural Adjustment Act, as amended. Thereafter, imports increased sharply from 500,000 pounds in 1958 to 15 million pounds in 1961. During the period 1962-65, annual imports ranged from 10 million pounds to 14 million pounds (table 26). In late 1965 and in 1966 U.S. prices of Cheddar cheese advanced rapidly. The output of milk in foreign countries expanded in 1965; such expansion continued into 1967. As a result of these factors, U.S. imports of Colby cheese,

in 1966, totaled nearly 46 million pounds. In January-June 1967 they amounted to nearly 46 million pounds. Effective July 1, 1967, imports of Colby, washed curd, and granular cheeses were made subject to import quotas. ^{1/} Because of the quota, imports of Colby should not exceed 49 million pounds in 1967 ^{2/}; thereafter, they will be limited to about 6 million pounds annually.

Before 1962, virtually all U.S. imports of Colby cheese came from New Zealand. In that year, however, imports began to enter from other countries. In 1966 New Zealand, France, Denmark, and Australia were the principal suppliers of imports; small quantities of Colby were imported from a number of other countries (tables 28 and 29). Imports from France and Denmark had been negligible prior to 1966. During some recent years, New Zealand, Australia, and Ireland agreed to limit their exports of Colby cheese to the United States (see the section of this report on commitments by exporting countries).

The marked increase in the importation of Colby cheese from France was attributable in part to payments made to cheese producers by the French Government for cheese that was exported. These inducements were offered within the framework of the Common Agricultural Policy of the European Economic Community (EEC). Such export inducements, which began about June 1966 and which were employed to

^{1/} See the earlier section on U.S. tariff treatment and other import restrictions.

^{2/} According to the official U.S. import statistics, U.S. imports of Colby cheese during January-July 1967 amounted to about 53 million pounds; Colby cheese in transit to the United States or in bonded warehouse on June 30 apparently was permitted entry after that date without charge against the July-December quota.

complement the country's price-support program for dairy products, were set originally at about 27 cents per pound; shortly thereafter they were reduced to 24 cents per pound and later to about 23 cents per pound. Government payments for the 9 million pounds of Colby cheese exported from France to the United States in 1966 are estimated to have amounted to about \$2 million or the equivalent of about 23 cents per pound. ^{1/} At this level, the payment on French Colby cheese probably was equivalent to 50 percent or more of the U.S. market price for Colby. In 1966, the average unit dutiable value of U.S. imports from France reported in official U.S. import statistics was 27 cents per pound. The average unit value of imports from the other major suppliers ranged from 26 cents per pound for those from New Zealand, Australia, Belgium, and Austria to 33 cents per pound for those from Denmark and Ireland.

In recent months the Treasury Department had considered applying countervailing duties to the imports of Colby cheese from France. As France was not a supplier of Colby cheese to the United States during 1961-65, the period on which the import quota established for Colby cheese was based, France has not been allocated any share of the quota. Thus, the issue of applying countervailing duties to imports of Colby from France has become moot.

^{1/} Data on export payments are from a Foreign Agricultural Service report on French dairy products, dated March 20, 1967 (unclassified); data on the volume of trade are from U.S. official import statistics.

Channels and methods of distribution

The factories that make Cheddar and Colby cheese in the United States typically are small plants that send their output to other concerns (assemblers) which age or process and market the product. Many of the assemblers make process cheese; some produce and handle other dairy products and a variety of other foods. Over the years, the large assemblers have become a dominant force in the marketing of cheese in the United States. ^{1/} Approximately 25 of the assemblers handle about 70 percent of the Cheddar, and virtually all of the Colby cheese, produced in the United States. Although the assemblers do not generally own the plants that make the natural cheeses, they often supervise their operations and require that the cheese meets designated specifications. The aging of most Cheddar (about 35 percent of the U.S. output) is carried on under contracts, often negotiated about a year in advance by assemblers and chain stores. Cheddar deemed likely to develop imperfections while aging is processed rather than aged.

In recent years the sales of prepackaged cheese have been increasing as methods of packaging and distribution have improved. In earlier years, however, considerable quantities of cheese were

^{1/} The National Commission on Food Marketing recently reported that four large firms accounted for 44 percent of the value of U.S. shipments of natural cheese in 1963 as compared with 27 percent in 1947.

purchased in bulk form by grocery stores and cut and wrapped in the store. There has also been a large increase in the sales of random-cut cheese (cuts of cheese that vary in weight, size, and shape). There is less waste when the loaf of cheese is cut in random sizes. Moreover, the housewife has a greater selection inasmuch as the various cuts are of different weights.

Prices (including pricing practices)

Wholesale price movements for domestic Cheddar cheese follow closely the auction prices reported by the Wisconsin Cheese Exchange, located in Green Bay, Wisconsin. Although the Exchange has some 40 members, about six firms account for the bulk of the transactions. The Exchange prices, which are exclusive of assembling charges, are commonly referred to in the trade as "base" prices for cheese; wholesale prices of cheese throughout the United States have generally followed movements in these base prices. The following tabulation compares the average annual wholesale price of Cheddar cheese at Wisconsin assembly points with the prices reported by the Cheese Exchange during the period 1962-66 (in cents per pound):

<u>Year</u>	<u>Prices reported by Wisconsin Cheese Exchange</u>	<u>Wisconsin assembly points ^{1/}</u>
1962-----	33.9	36.0
1963-----	34.3	36.1
1964-----	35.0	36.8
1965-----	35.8	39.8
1966-----	43.6	46.3

^{1/} Year beginning April 1.

The U.S. Department of Agriculture stands ready to purchase unlimited quantities of Cheddar cheese at preannounced support prices. Since November 1965, the Secretary of Agriculture has also been authorized to purchase Cheddar cheese (as well as butter and nonfat dry milk) at market prices above the support prices, if the quantities purchased at support prices are deemed insufficient to meet commitments under various Government programs (e.g., the school lunch program). ^{1/} The Cheddar cheese acquired by the Department of Agriculture in 1966 (about 11 million pounds) was purchased at market prices. As will be discussed later in this section, the market prices of Cheddar were substantially above support prices during most of 1966; however, market prices were closer to support levels in December than in earlier months, and the Government discontinued purchases at market prices. Since then purchases by the Department have been made at support prices. The Department of Agriculture generally stands ready to resell dairy products to the domestic commercial users for unrestricted use at announced prices, which are always above the Government purchase prices. Although the quantities of Cheddar resold to the commercial market have been small, the resale prices ordinarily set a ceiling on the wholesale market prices for Cheddar inasmuch as market prices probably would exceed the CCC resale prices only when Government stocks are low.

The dairy price-support program has generally played a central role in determining market prices of Cheddar cheese in the United

^{1/} Section 709 of Public Law 89-321.

States in recent years. Market prices have usually remained close to the Government purchase prices (table 10), and the Government frequently has purchased a substantial share of the domestic output of Cheddar. During 1953-57 the U.S. Department of Agriculture purchased about 24 percent of the average annual U.S. output of Cheddar cheese. Since 1958 the share of the annual U.S. output purchased by the Department, though varying widely from year to year, has generally been much less than in 1953-57; purchases by the Department were negligible in 1966. The share of U.S. production of Cheddar cheese purchased by the Government in 1953-66 is shown in the following tabulation:

Period	U.S. production	CCC purchases	
		Total	Share of U.S. production
	Million pounds	Million pounds	Percent
Average:			
1953-57-----	935	233	24
Annual:			
1958-----	883	80	9
1959-----	849	57	7
1960-----	894	3	<u>1/</u>
1961-----	1,020	100	10
1962-----	955	214	22
1963-----	965	113	12
1964-----	1,009	129	13
1965-----	1,005	49	5
1966-----	1,043	11	<u>1/</u>

1/ Less than 0.5 percent.

Although the CCC purchase prices for Cheddar cheese were generally higher than the market prices during the period 1953-57, producers of Cheddar cheese sold their aggregate output of cheese at prices averaging slightly less than the support price inasmuch as some

of the Cheddar did not meet Government specifications. ^{1/} Annual market prices generally averaged slightly higher than CCC purchase prices during the period 1958-64; nevertheless, as noted above, the Government purchased substantial shares of the domestic output in most of those years.

During the last half of 1965 and all of 1966, the market prices of Cheddar were appreciably higher than the CCC purchase prices. In the 9 months from July 1965 to March 1966, the monthly average price for domestic Cheddar cheese at Wisconsin assembly points rose successively from 37.3 cents per pound to 45.7 cents per pound. On April 1, 1966, the Tariff Commission instituted a supplemental investigation under section 22 to ascertain whether increased imports of Cheddar cheese could be permitted without materially interfering with the Department of Agriculture's price-support program for milk and butterfat. On April 7 the price of Cheddar cheese at Wisconsin assembly points was reduced to 42.7 cents per pound--the first price reduction in nearly a year. On April 1, 1966, the Secretary of Agriculture increased the CCC purchase price for Cheddar cheese from 36.1 cents per pound to 39.3 cents per pound; on June 29, 1966, he further increased it to 43.8 cents per pound where it has since remained. Meanwhile, the monthly average assembly point price advanced from 42.9 cents per pound in May 1966 to 49.4 cents in August and September, the highest level at which it had been for many years. Thereafter, the

^{1/} Moreover, trade sources reported that assemblers generally do not sell to the Government until market prices decline about 1 cent below the CCC prices.

price declined; during the period March-July 1967 it averaged 44.9 cents per pound, or about one cent per pound above the support price. During January-July 1967, both the domestic output and stocks of Cheddar cheese were higher, and imports of Colby cheese larger, than in the comparable period a year earlier. On July 1, however, imports of Colby were made subject to the quotas discussed earlier. Purchases of Cheddar cheese by the Government were larger in January-Sept. 1967 than in the comparable period of 1966 (table 12).

In recent years, the Cheddar cheese from New Zealand has sold at lower prices than the domestic Cheddar. In early 1966, the imported Cheddar sold at about 7 cents per pound lower than the domestic cheese; in early 1967, about 3 cents per pound lower. Moreover, the butterfat content of New Zealand Cheddar, which is higher than that of domestic Cheddar by 2 to 5 percent, affords cheese processors additional cost savings. The additional butterfat in the imported Cheddar serves as an extender when the imported and domestic cheeses are mixed in making process cheese. The wholesale prices of Canadian Cheddar in the United States, however, have generally been 8 to 10 cents per pound higher than those of the most directly competitive domestic cheese, New York State sharp cheese. The Canadian Cheddar is probably aged for longer periods than the domestic cheese.

There are no published prices for imported Colby cheese. The average unit values of imported Colby, calculated from data recorded in U.S. import statistics, have increased in recent years. Trade sources indicate that the price of the imported Colby, delivered in

Wisconsin, has generally been at least 1 cent per pound, and sometimes as much as 4 cents per pound, below the price of domestic Cheddar cheese. Direct price comparisons, however, are misleading. Like imported Cheddar, the imported Colby has a higher butterfat content than domestic cheese (about 52 percent compared with 50 percent).

Foreign production and trade

Virtually all the Cheddar cheese exported to the United States in recent years has come from New Zealand and Canada. The annual production of cheese in New Zealand has averaged only some 200 million to 230 million pounds in recent years; about 90 percent of the output consists of Cheddar. New Zealand is the world's largest exporter of Cheddar. For many years the bulk of the New Zealand exports, which amount to about 90 percent of the domestic production, have gone to the United Kingdom. Although exports are not subsidized by the Government, they are controlled by the New Zealand Production and Marketing Board.

The annual production of Cheddar cheese in Canada increased from about 139 million pounds in 1963 to 167 million pounds in 1966. In recent years about 60 percent of the total was made from heat-treated milk; 35 percent was made from unpasteurized (raw) milk, and the remaining 5 percent from pasteurized milk. Cheddar made from unpasteurized milk is generally produced in areas of cool climate because bacteria do not multiply rapidly there. In 1965 and 1966 about one-fifth of Canada's output of Cheddar was exported. Virtually all such exports went to the United Kingdom, Canada's traditional export market for Cheddar

cheese. The Canadian Government subsidizes and controls exports of Cheddar cheese to the United Kingdom. A Canadian export subsidy of 4 cents (Canadian currency) per pound applies to cheese exported to all destinations other than the United States. Exports of Canadian Cheddar to the United States are by private companies.

Australia, the world's second largest exporter of Cheddar cheese, has only a small share of the U.S. import quota. The annual output of cheese in Australia has averaged some 130 million to 150 million pounds in recent years; about 90 percent of the output has consisted of Cheddar. Like New Zealand and Canada, Australia sends the bulk of its exports of cheese to the United Kingdom.

Italian-Type Cheeses

Description

The cheeses considered herein--Romano made from cow's milk, Reggiano, Parmesano, Provoloni, Provolette, and Sbrinz--are collectively termed "Italian-type cheeses." ^{1/} These cheeses, which range from firm to hard in texture, are made from cow's milk. Italian-type cheeses are produced and imported in loaves ranging in size from 5 to 80 pounds each; they are generally sold to the ultimate consumer, however, in slices, pieces, or in the grated form.

Romano is a sharply flavored, hard cheese which is compact and without holes or air spaces. The original loaves, which usually weigh from 20 to 25 pounds, are cylindrical in shape and have a black paraffin coating. Some Romano, often called "Sardo," is made in a ball-shaped loaf that weighs about 5 pounds. The bulk of Romano cheese is cured for more than a year and used for grating; some is cured for a shorter time and consumed as a table cheese.

Reggiano and Parmesano are sharply flavored cheeses which, because of their extremely hard granular texture, are used principally for grating; cheeses of this type are sometimes called "Grana." Both cheeses are made in cylindrical-shaped loaves, which usually weigh from 35 to 80 pounds. Loaves of Reggiano are usually smaller than

^{1/} Although some types of cheeses that originate in Italy are frequently referred to as Italian-type, they are not so considered here and are not discussed in this section. Some of them are made from cow's milk, while others are made from the milk of sheep and goats. Such cheeses range from hard to soft in texture and vary widely in taste and use. Most of these cheeses are not imported into the United States in substantial quantities.

loaves of Parmesano. Some Reggiano, often referred to as "Reggianito," is made in loaves weighing about 15 pounds. When fully cured (about 14 months to 2 years) Reggiano and Parmesano keep almost indefinitely. They require neither special packaging for shipping nor extensive refrigeration. These cheeses are principally consumed in salads and soups and on pizzas, spaghetti, and macaroni.

Provoloni and Provolette are smoked, plastic-curd cheeses that can be cut without crumbling. They are made by working, stretching, and molding the curd while it is in a hot plastic condition. Provoloni and Provolette differ from each other principally in shape and size. Provoloni is molded into a pear-shaped loaf weighing about 14 pounds. Provolette, on the other hand, is molded into a spherical loaf, generally weighing about 5 pounds. After molding, the loaves are smoked. Although these cheeses are mainly for table use, they are suitable for grating if properly cured.

Sbrinz is a porous cheese that is used mainly for grating. It is usually cured for 3 years or longer. It is molded into cylindrical-shaped loaves that weigh about 12 pounds. Unlike the other hard Italian-type cheeses discussed herein, Sbrinz is not produced in the United States; small quantities have been imported from Argentina.

U.S. tariff treatment and other import restrictions

Since August 1963, U.S. imports of Italian-type cheeses have been dutiable as follows: 1/

<u>TSUS</u> <u>item</u>	<u>Commodity</u>	<u>Rate of duty</u>
117.40 (pt.)	Sbrinz cheese-----	25% ad val.
117.55	Romano made from cow's milk, Reg- giano, Parmesano, Provoloni, and Provolette cheeses.	20% ad val.

These rates are currently applicable to imports from all countries (except the Philippine Republic) other than those designated as being under Communist control. 2/

Under the Tariff Act of 1930, U.S. imports of these Italian-type cheeses were dutiable at the rate of 7 cents per pound but not less than 35 percent ad valorem (par. 710). Pursuant to concessions granted by the United States under bilateral trade agreements and the General Agreement on Tariffs and Trade (GATT), this rate was reduced to 5 cents per pound but not less than 25 percent ad valorem for Sbrinz and 5 cents per pound but not less than 20 percent ad valorem for the other cheeses considered here (table 20). When the Tariff Schedules of the United States (TSUS) were adopted in 1963, the specific rates were eliminated and the ad valorem rates retained.

The existing rate of duty on Sbrinz cheese, in original loaves, is one which the United States bound in the sixth (Kennedy) round of

1/ For the statutory description see table 19 in the appendix to this report.

2/ Imports from those Communist-controlled areas are dutiable at the rate of 35 percent ad valorem.

trade negotiations in the GATT. The binding became effective January 1, 1968. Other Italian-type cheeses were not affected by the sixth (Kennedy) round of trade negotiations.

Since July 1, 1953, imports of these Italian-type cheeses in original loaves have been subject to an annual quota under section 22 of the Agricultural Adjustment Act, as amended (see item 950.10 of the appendix to the TSUS). Initially the quota amounted to 9,200,100 pounds; it was increased to 11,500,100 pounds in 1960. Argentina was allocated about 56 percent of the quota and Italy the remainder in the quota year ending June 30, 1967. 1/

U.S. consumption

The annual U.S. consumption of the Italian-type cheeses considered herein (whether or not in original loaves) is estimated to have increased from 68 million pounds in 1961 to 89 million pounds in 1966 (table 30). The consumption of certain soft so-called Italian-type cheeses (which are not included herein) increased considerably more during those years than did the consumption of the hard types, largely because of the increased use of the soft types in such foods as pizzas, lasagna, and cheese sandwiches. In 1964, the latest year for which data are available, about 40 percent of the Italian-type cheese consumed was Provoloni, 40 percent was Parmesano, and most of the remainder was Romano.

1/ Pursuant to Presidential Proclamation No. 3790 of June 30, 1967, the quota year (ending June 30) was changed to a calendar-year basis.

U.S. production

The domestic output of Italian-type cheeses increased from about 60 million pounds in 1961 to 81 million pounds in 1966. Such cheese accounted for 4 percent of the U.S. output of all cheeses in 1966. In that year less than 1 percent of the milk produced in the United States was used in the production of these cheeses.

Some 25 U.S. producers make Romano, Reggiano, Parmesano, Provoloni, and Provolette cheeses; most of them are located in Wisconsin and nearby States. Plants manufacturing Italian-type cheeses rarely produce other types of cheese because of the problems associated with bacterial contamination. Few, if any, U.S. producers have foreign affiliates producing Italian-type cheeses.

U.S. exports and imports

U.S. exports of Romano, Reggiano, Parmesano, Provoloni, Provolette, and Sbrinz, whether or not in original loaves, are believed to have been negligible in recent years.

Annual U.S. imports of Italian-type cheeses ranged from 8 million to 10 million pounds in 1962-66. The imports accounted for 9 to 13 percent of U.S. consumption of such cheeses in each of those years (table 30). Imports of the Italian-type cheeses in original loaves, which are subject to section 22 quotas, accounted for nearly all of the imports. The annual import quota for such cheeses was from 64 percent to 87 percent filled during the 1962-66 quota years (table 31).

In recent years about 60 percent of the imported Italian-type cheese in original loaves has come from Italy. Provoloni and Provolone have accounted for about three-fourths of the imports from Italy; Parmesano has accounted for the bulk of the remainder. During the period 1962-66, Italy used from 73 percent to 96 percent of its annual quota. In recent years, particularly in 1964 and 1965, the production of cheese in Italy has been somewhat lower than in earlier years because of drought conditions and the strong demand for meat animals; prices in the domestic (Italian) market were generally more attractive than export prices.

Argentina has supplied about 40 percent of the U.S. imports of Italian-type cheese in original loaves in recent years. Romano has accounted for nearly three-fourths of the imports from Argentina; the bulk of the remainder has been Reggiano. Imports of Sbrinz, all of which came from Argentina, have been small in recent years.

Imports from Argentina have generally been smaller than the volume authorized to be imported from that country under the section 22 quota. During the period 1962-66 Argentina used from 55 percent to 85 percent of its annual quota. Italian-type cheeses from Argentina are considered by the trade to be lower in quality than those produced in Italy. Argentina has no aging standards, and the Argentine producers often sell their cheese before it is adequately ripened.

In recent years U.S. imports of the Italian-type cheeses not in original loaves have been small. They amounted to 322,000 pounds in

1964, 97,000 pounds in 1965, and 451,000 pounds in 1966 (table 32). ^{1/} Such imports accounted for 5 percent or less of total imports of Italian-type cheeses and supplied less than 1 percent of U.S. consumption of such cheeses in each of those years. In January-June 1967, however, imports of these cheeses not in original loaves amounted to 959,000 pounds, compared with 110,000 pounds in the corresponding months of 1966.

In 1964-66, Argentina and Italy together accounted for virtually all U.S. imports of Italian-type cheeses not in original loaves. That imported from Italy has generally been in pieces or wedges and has been used as table cheese or for grating; it is generally higher in price than both Italian-type cheeses imported from other countries or those produced in the United States. That from Argentina has been imported chiefly in grated forms; it is lower in price than both cheeses from Italy or those produced in the United States.

According to the trade, Italian-type cheeses had generally been imported before the early 1960's in original loaves because the cheeses retained their flavor longer and were less subject to spoilage in that form than after they had been cut or grated. In recent years, however, improvements in packaging have permitted cut or grated Italian-type cheeses to be held for considerable periods of time without appreciable spoilage or loss of flavor.

^{1/} Statistics on annual imports of these cheeses not in original loaves in years before 1964 are not available; it is unlikely, however, that the trade was appreciably larger in those years than in 1964-66.

More than 200 U.S. firms import Italian-type cheeses; only a few of them currently import such cheeses not in original loaves. Those firms that account for the great bulk of the imports do not produce such cheeses. Most of the importers are long-established dealers in several kinds of domestic and imported cheeses. Some of them grate, mix, and package both imported and domestic cheeses.

Channels and methods of distribution

Many U.S. producers of Italian-type cheeses sell the cheese while unaged to assemblers who age, grate, and package it for marketing under well-advertised brand names; some producers perform such operations themselves and market the cheese under their own brand names. Virtually all of the imported Italian-type cheeses in original loaves from Argentina and a large part of such cheeses from Italy are grated either by the importer, wholesaler, or retailer; they are then packaged in retail-size containers. Some of the cheese from Italy is cut into small pieces and individually wrapped for grating by the consumer. Most of the imported Italian-type cheeses not in original loaves have consisted either of pieces wrapped in a transparent plastic film or grated cheese. Importers generally package the grated cheese in retail-size containers.

At the wholesale level, about three-fifths of the Italian-type cheeses sold in the United States, whether imported or domestic, has been either in the grated form or cut into pieces; much of the remainder probably has been cut or grated by the retailer before sale

to the consumer. The original loaves are, for the most part, too large for use by the housewife; furthermore, many consumers do not wish to grate these hard cheeses themselves.

Prices

The wholesale prices of domestic and imported Italian-type cheeses in the United States have been increasing in recent years. The following tabulation shows the average annual wholesale price ranges at Chicago for imported (Italian) and domestic Parmesan and Provoloni cheeses during 1962-66 (in cents per pound): 1/

Year	Parmesan		Provoloni	
	Imported <u>1/</u>	Domestic	Imported <u>1/</u>	Domestic
1962-----	89-103	62-73	85-93	42-54
1963-----	92-105	62-76	88-93	44-54
1964-----	112-124	61-75	98-108	50-55
1965-----	139-151	65-76	112-125	46-57
1966-----	<u>2/</u> 145-163	71-84	<u>3/</u> 131	51-66

1/ Believed to be largely cheese imported from Italy.

2/ Wholesale price at New York.

3/ Only the average wholesale price was reported for most of 1966.

The average wholesale price ranges of the imported cheeses were substantially above those of the domestic cheeses.

In recent years, the wholesale prices for Italian-type cheeses from Italy have been about twice as high as those for the comparable domestic varieties. The cheeses from Argentina generally sell at

1/ Compiled from Wednesday price quotations reported in Dairy Market Statistics, U.S. Department of Agriculture.

wholesale for somewhat less than the comparable domestic varieties. Prices of Argentine cheese fluctuate substantially in contrast to the prices of the cheese from Italy or that produced in the United States which frequently remain unchanged for long periods.

Foreign production

The annual output of cow's milk cheeses in Italy increased from about 665 million pounds in 1964 to 770 million pounds in 1966. The great bulk of the output is believed to have consisted of the Italian-type cheeses here under discussion. The output of all cheeses (including that made from sheep's and goat's milk) amounted to about 990 million pounds in 1966. The annual production of hard cheeses in Argentina has averaged slightly more than 100 million pounds in recent years. The bulk of the output is believed to have consisted of Italian-type cheeses. The output of all cheeses in Argentina amounted to 370 million pounds in 1966.

Swiss or Emmenthaler Cheese with Eye Formation

Description

Swiss cheese with eye formation is a hard, natural cheese made from cow's milk; it is distinguished by the large holes, or eyes, which are developed by the action of certain bacteria. Swiss cheese was first made in the Emmenthal Valley of Switzerland, from which its original name, Emmenthaler, was derived. Swiss cheese without eye formation, i.e., process Swiss cheese, is classifiable with "other" cheeses and is covered later in this report.

In recent years, about 85 percent of the Swiss cheese imported from Switzerland, the principal supplier, has been in the form of the 180-200 pound "wheels" in which it was produced; 10 percent has been in the form of 8 to 10 pound blocks and 5 percent has been in the form of sandwich slices which are vacuum sealed in plastic packages. Of the imports from other countries (Finland, Austria, and Denmark), about 30 percent have been in the form of original wheels, 60 percent blocks, and the remaining 10 percent sandwich slices.

In recent years a large part of the domestic output of Swiss cheese has been made by a special patented process in the form of 80-100 pound rectangular blocks which are sealed in plastic and often called "rindless Swiss." Swiss cheese in the form of blocks is more conducive to conventional chainstore marketing than such cheese in the form of wheels; the wheels are difficult to slice because of their heavy rind, and hard to cut into uniform sizes because of their shape.

Rindless Swiss is not produced in countries other than the United States.

U.S. tariff treatment

Swiss or Emmenthaler cheese is dutiable at the rate of 14 percent ad valorem under item 117.60 of the Tariff Schedules of the United States (TSUS) (table 19). The rate is applicable to imports from countries (except the Philippine Republic) other than those designated as being under Communist control. ^{1/}

Under the Tariff Act of 1930, imports of Swiss or Emmenthaler cheese with eye formation were originally dutiable at the rate of 7 cents per pound, but not less than 35 percent ad valorem (par. 710). This rate was reduced to 4 cents per pound, but not less than 16 percent ad valorem (table 20) pursuant to concessions granted by the United States in bilateral trade agreements and the General Agreement on Tariffs and Trade (GATT). When the TSUS was adopted in 1963, the specific rate was eliminated and the 16 percent ad valorem rate retained. That rate of duty is one on which the United States granted a concession in the sixth (Kennedy) round of trade negotiations under the GATT. The rate of duty will be reduced in 5 annual stages, from 16 percent ad valorem (the rate in effect on December 31, 1967) to the final stage of 8 percent ad valorem. The first-stage rate (14 percent ad valorem) became effective January 1, 1968.

^{1/} Imports from these Communist-controlled areas are dutiable at the rate of 35 percent ad valorem.

There are no quantitative restrictions on U.S. imports of Swiss or Emmenthaler cheeses.

U.S. consumption

Apparent annual U.S. consumption of Swiss cheese increased from 122 million pounds in 1962 to 151 million pounds in 1966 (table 33). The increase in annual consumption is attributable largely to the continued popularity of cheese sandwiches and to the promotional efforts of domestic and foreign producers and importers of Swiss cheese.

A large share of both the domestic and imported Swiss cheese (except that from Switzerland) is used to manufacture process Swiss cheese. The natural cheese used for processing is generally that which develops imperfect eyes or holes while being produced. Swiss cheese from Switzerland is generally consumed as natural cheese in sandwiches, hors d'oeuvres, or as dessert cheese.

U.S. production

The annual U.S. production of Swiss cheese, which has been increasing gradually for several decades, rose from 109 million pounds in 1962 to 137 million pounds in 1966. In volume of output, Swiss cheese ranks fourth among all cheeses (excluding cottage cheese) produced in the United States. The domestic production of Swiss cheese is surpassed only by the output of Cheddar, Colby, and the soft Italian-type cheeses. In 1966, Swiss cheese accounted for 7 percent of aggregate U.S. output of cheeses.

A large part of the domestic Swiss cheese traditionally was produced in Wisconsin in the form of large 180-200-pound wheels. In

recent years, however, much of the domestic output of Swiss cheese has been accounted for by blocks of rindless Swiss. Many plants which formerly produced wheels of Swiss cheese do not have the patent rights to produce rindless Swiss; some of these plants have begun producing Cheddar cheese.

The number of U.S. plants that produce Swiss cheese declined from 147 in 1962 to 119 in 1966. In 1958, Illinois became the first State to produce more Swiss cheese than Wisconsin; from 1958 to 1966 Illinois was the leading producing State. In 1966 Illinois produced 38 percent of the domestic output, while Wisconsin produced 30 percent; Ohio and Pennsylvania produced large quantities.

U.S. firms do not have affiliates that produce Swiss cheese in other countries. Some of the leading U.S. producers of Swiss cheese, however, are also large importers of such cheese.

U.S. exports and imports

Although U.S. exports of Swiss cheese are not separately reported, they are believed to be small.

Annual imports of Swiss cheese declined from 12.5 million pounds in 1962 to 10.4 million pounds in 1965; in 1966, however, they amounted to 14.8 million pounds. Imports supplied from 8 to 10 percent of annual consumption during the period 1962-66.

In recent years about half of the U.S. imports of Swiss cheese have come from Switzerland (table 34), although the share of the total imports supplied by that country has declined. The bulk of the

remaining imports have come from Finland, Austria, and Denmark. Finland and Denmark supplied the bulk of the increase in imports that occurred from 1965 to 1966.

Channels and methods of distribution

As mentioned earlier, the domestic Swiss cheese that is retailed as natural cheese is prepackaged in small portions for conventional chainstore marketing. However, a large part of the U.S. output of natural Swiss cheese, as well as the imports thereof from countries other than Switzerland, is made into process Swiss cheese; this cheese is also prepackaged by assemblers and marketed through conventional chainstore channels.

Many of the wheels of Swiss cheese imported from Switzerland are displayed in cheese shops and grocery stores in the United States and then cut into pieces as they are marketed. Some of the cheese from Switzerland is also prepackaged for conventional chainstore marketing.

Prices

The wholesale prices of domestic and imported Swiss cheeses in the United States have been increasing in recent years. The following tabulation shows the range of wholesale prices in New York City for Swiss cheese produced in the United States, Switzerland, Finland,

Austria, and Denmark in 1962-66 (in cents per pound): 1/

Year	: United States :	Switzer-land :	Finland :	Austria :	Denmark :
1962-----	: 51-55 :	90-97 :	59-65 :	61-67 :	56-63 :
1963-----	: 52-56 :	89-96 :	59-65 :	61-70 :	58-64 :
1964-----	: 51-56 :	91-96 :	58-64 :	60-70 :	63-67 :
1965-----	: 54-58 :	95-98 :	59-65 :	64-73 :	65-69 :
1966-----	: 61-66 :	96-101 :	63-68 :	66-72 :	65-69 :
	:	:	:	:	:

The cheese from Switzerland has been higher priced than that imported from other countries or that produced in the United States. Consumption of Swiss cheese (domestic and imported) in the United States has been increasing, however, notwithstanding higher prices.

Foreign production and trade

The Swiss Cheese Union, an organization of Swiss farmers, milk buyers, and cheese dealers, closely supervises the production and exportation of Swiss cheese in Switzerland. The annual output of Swiss cheese in Switzerland amounts to about 65 million pounds, of which about half is exported. The United States takes about one-fourth of the exports; a larger amount generally goes to Italy than to the United States.

The annual output of Swiss cheese in Finland has amounted to about 40 million pounds in recent years; the output in Denmark has averaged some 160 million pounds. Data are not readily available on the output of Swiss cheese in Austria. The aggregate output of cheese

1/ Compiled from the Wednesday price quotations reported by the Dairy and Poultry Market News, U.S. Department of Agriculture.

in Austria, however, has averaged about 77 million pounds in recent years.

In recent years the United States has taken about 9 percent of the Swiss cheese exported by Finland, about 7 percent of that exported by Austria, and a smaller amount of that exported by Denmark. These countries have generally exported more Swiss cheese to other countries, particularly to Italy, than to the United States.

Blue-Mold Cheese

Description

Blue-mold cheese, commonly referred to as "blue" cheese, is a mold-ripened, blue-veined cheese. Blue cheese is semisoft in texture and generally made from cow's milk. "Gorgonzola" and "Stilton" cheeses are specialty varieties of blue cheese. Gorgonzola is produced both in the United States and abroad, whereas Stilton is produced exclusively in the United Kingdom. Roquefort cheese, the only other blue cheese of importance, is made from sheep's milk; it is discussed later in this report.

Gorgonzola, which has a sharper flavor and a stronger odor than the other blue cheeses, is declining in popularity; consumers in the United States generally prefer a milder cheese. Stilton is a high-quality, specialty cheese that is imported principally for use during the holiday seasons. Imports of Stilton have been small for many years.

U.S. tariff treatment and other import restrictions

Since August 1963, imports of blue-mold cheese have been dutiable at the rates of 15 percent ad valorem (for cheese in original loaves) and 20 percent ad valorem (for other blue cheese) under items 117.00 and 117.05 of the Tariff Schedules of the United States (TSUS), respectively (table 19). These rates have been applicable to imports from countries (except the Philippine Republic) other than those

designated as being under Communist control. 1/ The United States did not grant concessions on the aforementioned rates in the sixth (Kennedy) round of trade negotiations under the General Agreement on Tariffs and Trade (GATT).

Under the Tariff Act of 1930, imports of blue-mold cheese originally were dutiable at the rate of 7 cents per pound, but not less than 35 percent ad valorem (par. 710). Pursuant to concessions granted by the United States under bilateral trade agreements and the GATT, the rate was reduced to 3 cents per pound but not less than 15 percent ad valorem when applicable to cheese in original loaves and to 5 cents per pound but not less than 20 percent ad valorem for all other blue cheese (table 20). When the TSUS was adopted in 1963, the specific rate was eliminated and the ad valorem rate retained.

Since 1953 annual imports of blue-mold cheese 2/ have been subject to a quota under section 22 of the Agricultural Adjustment Act, as amended. In March 1962, the quota was increased from 4,167,000 pounds per year to 5,016,999 pounds (see item 950.07 of the appendix to the TSUS). In the year ending June 30, 1967, 94 percent of the quota was allocated by the U.S. Department of Agriculture to Denmark; 4 percent to Italy; and the remaining 2 percent to Norway, Sweden, and France, combined. 3/

1/ Imports from these Communist-controlled areas are dutiable at the rate of 35 percent ad valorem.

2/ The quota restrictions apply to "blue-mold (except Stilton) cheese and substitutes for cheese containing, or processed from, blue-mold cheese."

3/ Pursuant to Presidential Proclamation No. 3790 of June 30, 1967, the quota year (ending June 30) was changed to a calendar-year basis.

U.S. consumption

In recent years, the annual apparent U.S. consumption of blue cheese increased steadily, rising from 19.2 million pounds in 1962 to a record level of 25.4 million pounds in 1966 (table 35). The quantity of blue cheese consumed in manufactured salad dressings and in other processed foods has increased substantially in the United States during the past decade. Most of the blue cheese used in processed foods is domestic cheese; imported blue cheese, which is higher priced than the domestic product, is not generally used in manufactured products inasmuch as the cheese so used ordinarily loses its original identity. In recent years U.S. producers of blue cheese and the Danish Cheese Export Board have undertaken extensive promotional efforts.

U.S. production

The annual domestic production of blue cheese has been increasing largely because of the growing demand for such cheese and the restrictive effect of the section 22 quota on imports. Annual U.S. output increased from 14.5 million pounds in 1962, the year that the quota was enlarged, to 20.2 million pounds in 1966. The output in 1966 was larger than production in any other year, notwithstanding the fact that imports in 1966 were larger than they had been in any earlier year.

The number of U.S. firms producing blue cheese declined from 21 in 1962 to 14 in 1966. Firms in Wisconsin produced slightly more

than 60 percent of the U.S. output in 1966; firms in Minnesota, Illinois, Indiana, Iowa, and Oregon accounted for the bulk of the remainder. In 1966 about 0.2 percent of the milk produced in the United States was used in the production of blue cheese.

U.S. exports and imports

U.S. exports of blue cheese have been negligible or nil for many years.

Annual U.S. imports of blue cheese ranged from 3.9 million pounds to 4.7 million pounds in 1962-65; they supplied from 19 to 24 percent of annual consumption in that period. In 1966 the imports amounted to 5.2 million pounds--equivalent to about 20 percent of consumption.

About 90 percent of the blue cheese imported in recent years has consisted of such cheese in 5- to 6-pound original loaves. Some cheese not in original loaves has been imported regularly; it has consisted principally of 3-, 4-, or 8-ounce pieces wrapped in a transparent plastic film that adheres to the cheese. Blue cheese in small packages wrapped in paper or foil spoils more easily than that in original loaves. In recent years, however, the spoilage of blue cheese in small packages has been reduced by wrapping the cheese in a plastic film.

In the past few years more than 100 U.S. firms have imported blue cheese; 10 firms, however, have accounted for about 70 percent of the total imports. Most of these importers are long-established dealers in several kinds of domestic and imported cheese; some are

large retailers. Generally, the importers of blue cheese do not produce that type of cheese.

Approximately 95 percent of the blue cheese imported into the United States has been Danish Blue; the great bulk of the import quota is allocated to Denmark. The Danish product has generally been superior to, and more uniform in quality than, the bulk of the domestic blue cheese. In most recent quota years (ending June 30), Denmark used 96 percent or more of its quota (table 36).

Italy, the second leading source of U.S. imports, has supplied 2 to 3 percent of the U.S. imports of blue cheese in recent years. The blue cheese from Italy has consisted of Gorgonzola exclusively; all U.S. imports of Gorgonzola have come from Italy. The cheese has entered the United States in the form of 10- to 20-pound original loaves. Italy has not utilized its quota for blue cheese as effectively as Denmark (table 36). Imports of Stilton cheese, which have come only from the United Kingdom, supplied about 1 percent of the imports of blue cheese in 1966.

Channels and methods of distribution

Most blue cheese, regardless of origin, is produced in the form of 5- to 6-pound loaves. Most of it is marketed in that form; a small part is marketed in 3- to 8-ounce separately wrapped pieces. The bulk of the blue cheese is sold to consumers through retailers (mostly chainstores); some goes to cheese variety stores, restaurants, hotels, and manufacturers of prepared salad dressings and other

processed foods. Chainstores generally repackage the loaves of blue cheese in small wedges, which they wrap in a plastic film; a small part of the blue cheese sold at the retail level bears the brand name of the firm that produced the cheese.

Gorgonzola and Stilton cheeses are marketed mainly through cheese variety stores, luxury restaurants, and hotels. Gorgonzola is difficult to market through conventional chainstore channels because it is highly perishable. The high price at which Stilton retails in the United States tends to limit its purchase mainly to connoisseurs of cheese.

Prices

The wholesale prices of domestic and imported blue cheeses in the United States have generally been increasing in recent years. The following tabulation shows the average annual wholesale price ranges in New York City for imported and domestic blue cheese (other than Gorgonzola or Stilton) during 1962-66 (in cents per pound): 1/

<u>Year</u>	<u>Imported</u>	<u>Domestic</u>
1962-----	67-72	55-64
1963-----	65-71	56-64
1964-----	62-68	56-64
1965-----	62-67	58-66
1966-----	65-71	63-70

The average wholesale prices of the imported blue cheese have been above those of the domestic cheese, although the difference has been

1/ Compiled from Wednesday price quotations reported by the Dairy and Poultry Market News, U.S. Department of Agriculture.

narrowing. The Danish Cheese Export Board controls both the quality and the price (c.i.f. U.S. port) of the blue cheese exported from Denmark.

The wholesale prices of the imported Gorgonzola have averaged 30 to 35 cents per pound more than Danish blue cheese in recent years. Stilton cheese is higher priced than either Danish blue or Gorgonzola cheeses.

Foreign production and trade

The annual output of blue cheese in Denmark has averaged some 23 million pounds in recent years, only slightly more than the output in the United States. About 40 Danish firms produce blue cheese. In 1966 about three-fifths of the blue cheese produced in Denmark was exported. About 35 percent of the exports went to the United Kingdom--Denmark's traditional large export market for blue cheese--and 25 percent went to the United States. West Germany was Denmark's third largest export market for blue cheese.

As mentioned earlier, all U.S. imports of Gorgonzola are from Italy and all imports of Stilton are from the United Kingdom. The production of Gorgonzola cheese in Italy declined from 46 million pounds in 1964 to 38 million pounds in 1966. The annual output of Stilton in the United Kingdom has averaged about 6 million pounds in recent years.

Edam and Gouda Cheeses

Description

Edam and Gouda are semisoft-to-hard cheeses made from cow's milk. The Standards of Identity established by the Food and Drug Administration require, among other things, that the solids of Edam cheese shall contain not less than 40 percent of milk fat and those of Gouda not less than 46 percent. Both imported and domestic cheeses must conform to these standards to be labeled and sold as Edam or Gouda in the United States.

Natural Edam cheese is usually made in a ball-shaped loaf of about 5 pounds; it is sometimes made in a rectangular loaf of about 2 pounds. Natural Gouda cheese is made in loaves of several sizes. The larger loaves are shaped like short cylinders, with rounded ends; they customarily weigh from 5 to 25 pounds each. The smallest loaves of Gouda cheeses, referred to as "Baby Goudas," are made in thick disc-like shapes, usually weighing less than a pound. Virtually all loaves of Edam and Gouda cheese are covered with an inedible protective coating of wax and are wrapped in a transparent film. The wax coatings on Edam and "Baby Gouda" cheeses are invariably red in color, whereas those on the larger Gouda cheeses are orange.

Process Edam and Gouda cheeses differ markedly from the natural cheeses from which they were made. The texture of the natural cheeses is changed substantially by processing; process Edam and Gouda is smoother and more homogeneous than the natural cheese. Many deem that the flavor of the process cheese is more bland than that of the natural cheese. Some process Edam and Gouda is flavored with ingredients such

as onions and spices, which are added during the processing; natural Edam and Gouda rarely, if ever, contain added ingredients. Process Edam and Gouda cheeses--nearly all from abroad--are largely in the form of small foil-wrapped wedges or blocks that weigh no more than a few ounces each; small quantities are in the form of link shapes.

U.S. tariff treatment and other import restrictions

Since August 1963, U.S. imports of Edam and Gouda cheeses have been dutiable at the rate of 15 percent ad valorem under item 117.25 of the Tariff Schedules of the United States (TSUS) (table 19). That rate is currently applicable to imports from all countries (except the Philippine Republic) other than those designated as being under Communist control. 1/

Under the Tariff Act of 1930, imports of Edam and Gouda cheeses were dutiable at the rate of 7 cents per pound but not less than 35 percent ad valorem (par. 710). Pursuant to concessions granted by the United States under bilateral trade agreements and the General Agreement on Tariffs and Trade (GATT), the rate was reduced to 3 cents per pound but not less than 15 percent ad valorem 2/ (table 20). When the TSUS was adopted in 1963, the specific rate was eliminated and the ad valorem rate retained.

1/ Imports from these Communist-controlled areas are dutiable at the rate of 35 percent ad valorem.

2/ The concession rate was applicable only to Edam and Gouda cheeses containing 40 percent or more of butterfat. Edam cheese containing less than 40 percent butterfat and Gouda cheese containing less than 46 percent butterfat cannot be labeled and sold as such in the United States.

The existing rate of duty is not one on which the United States granted a concession in the sixth (Kennedy) round of trade negotiations under the GATT.

Since 1953, U.S. imports of natural (but not processed) Edam and Gouda cheeses have been subject to an annual absolute quota imposed under section 22 of the Agricultural Adjustment Act, as amended (see item 950.09 of the appendix to the TSUS). In 1960, the annual quota of 4,600,200 pounds was increased to 9,200,400 pounds. For the quota year ending June 30, 1967, 92 percent of the quota for these 2 cheeses was allocated to the Netherlands, 3 percent to Denmark, 2 percent to Sweden, 2 percent to Argentina, and the remaining 1 percent to Finland, Portugal, and Norway combined. 1/

U.S. consumption

The annual U.S. consumption of Edam and Gouda cheeses, which has been increasing for many years, rose from about 12.2 million pounds in 1962 to 13.9 million pounds in 1965 (table 37); consumption amounted to 18.5 million pounds in 1966. During the period 1962-66, imports of Edam and Gouda cheeses supplied from a half to three-fifths of consumption. Although both annual domestic production and annual imports increased from 1965 to 1966, imports--mainly cheese in original loaves--supplied the bulk of the increase in consumption that occurred in the latter year. Imports of process Edam and Gouda,

1/ Pursuant to Presidential Proclamation No. 3790 of June 30, 1967, the quota year (ending June 30) was changed to a calendar-year basis.

which supply virtually all of the domestic consumption of such cheese, have been increasing gradually in recent years.

U.S. production

The domestic production of Edam and Gouda cheeses is estimated to have increased from 4.0 million pounds in 1958 to 4.6 million pounds in 1960, the year in which the import quota on Edam and Gouda was enlarged by 100 percent. Since then, domestic production has continued to increase. During the period 1962-66, the estimated annual output increased each year from 5.6 to 7.6 million pounds (table 37). No more than 6 plants, all located in Wisconsin, produce Edam and Gouda cheeses in the United States. The bulk of the output is accounted for by 1 producer. Most of the domestic output in recent years has been of the "Baby Gouda." Little process Edam and Gouda cheeses are produced in the United States.

U.S. exports and imports

U.S. exports of Edam and Gouda cheeses have been negligible or nil. Prices of such cheeses in foreign markets generally have been lower than the domestic prices of the U.S. product.

Annual U.S. imports of natural and process Edam and Gouda cheeses increased irregularly from 6.7 million pounds in 1962 to 7.6 million pounds in 1965; in 1966 they amounted to 10.9 million pounds. The share of the total imports supplied by natural Edam and Gouda declined from 84 percent in 1962 to 73 percent in 1966 (table 38).

The utilization of the section 22 quota for natural Edam and Gouda cheeses declined from 65 percent in the 1962 quota year (ending June 30) to 57 percent in 1965; it amounted to 77 percent in the 1966 quota year (table 39). Imports of process Edam and Gouda are not subject to quota restrictions.

In each of the years 1962-64, about half of the U.S. imports of natural Edam and Gouda entered Puerto Rico; in 1965 and 1966, however, about one-third of the imports entered Puerto Rico. The bulk of the remainder entered at New York in all of those years. Most of the imports into Puerto Rico were hard-cured (natural) Edam, specially packaged to retard spoilage when stored without refrigeration in areas with warm and humid climates. Inasmuch as refrigeration has become more widespread in Puerto Rico in recent years, consumers have been substituting other more perishable types of cheese (particularly Cheddar) for Edam and Gouda.

Over 90 percent of the natural Edam and Gouda cheeses imported into the United States in recent years has come from the Netherlands (table 39); the bulk of the remainder has come from Denmark, Sweden, and Argentina. Although U.S. imports of Edam and Gouda cheeses from the Netherlands have been increasing somewhat in recent years, the annual quota allocated to that country has not been filled since the quota was enlarged in 1960. The share of the Netherlands' allocation used by importers declined from 87 percent in the 1960 quota 1/

1/ Ending June 30 of the year shown.

year to 57 percent in the 1965 quota year. In the 1966 quota year, however, 79 percent of the allocation was used. The decline in the quota utilization in the early 1960's resulted in part from the keener competition of domestic Edam and Gouda and Cheddar cheeses shipped to Puerto Rico from the U.S. mainland. Part of this decline may also be attributed to the failure of some importers to transfer their licenses to permit their shipments to enter the U.S. mainland rather than Puerto Rico. The Holland Cheese Exporters Association, which has been promoting the sale of Edam and Gouda cheeses in the United States, predicts that the Netherlands will fill its quota in the near future.

The bulk of the imports of process Edam and Gouda cheeses have come from Denmark, West Germany, Norway, Ireland, and the Netherlands. Only the Netherlands has been allocated a substantial share of the annual import quota for natural Edam and Gouda; Ireland and West Germany have no share. The following tabulation presents data on the amount of natural Edam and Gouda permitted entry under the quota, the actual U.S. imports of such cheese, the amount of the quotas unused, and imports of process Edam and Gouda cheeses, by the principal suppliers

of the process cheese, in the year ending June 30, 1966 (in thousands of pounds):

Country	Natural Edam and Gouda			U.S. imports of process Edam and Gouda
	Aggregate im- ports permitted under the quota	Actual imports	Unused licenses	
Netherlands-----	8,412	6,642	1,770	117
Denmark-----	406	195	211	1,231
West Germany-----	-	-	-	446
Norway-----	11	10	1	242
Ireland-----	-	-	-	171
All other-----	371	226	145	72
Total-----	9,200	7,073	2,127	2,279

As shown above, the four largest foreign suppliers of process Edam and Gouda (which is free of quota)--Denmark, West Germany, Norway, and Ireland--were each allocated only a small share, or none, of the quota for natural Edam and Gouda cheeses. Imports of process Edam and Gouda from the Netherlands were small in volume compared with the quantity of natural Edam and Gouda that was licensed for entry from that country but not imported.

Channels and methods of distribution

Natural Edam and Gouda cheeses are invariably marketed in the United States in the form of the loaves in which they are produced. Although the bulk of the cheese is marketed through supermarkets and chainstores, such cheese is also sold in cheese variety shops, hotels, and restaurants. A large part of the Edam and Gouda is marketed under the brand name of the firm that produced the cheese. The "Baby Gouda," which accounts for the greater part of the U.S. sales, is conducive to conventional chainstore marketing, since it is a small cheese that requires no cutting or packaging by the retailer. The wedges, blocks, and links of process Edam and Gouda cheeses (virtually all imported) are ready for immediate sale at the retail level. They are marketed in boxes, or in gift packages that frequently contain a variety of cheeses, meats, and other specialty foods.

Prices

The wholesale prices of domestic and imported Edam and Gouda cheeses in the United States have been increasing in recent years. The following tabulation shows the average annual wholesale price ranges at Chicago for imported and domestic Edam cheeses during 1963-66 (in cents per 2-pound loaf): ^{1/}

<u>Year</u>	<u>Domestic</u>	<u>Imported</u>
1963-----	56-66	65-72
1964-----	54-66	70-76
1965-----	56-66	69-79
1966-----	64-75	69-84

^{1/} Compiled from Wednesday price quotations reported in Dairy Market Statistics, U.S. Department of Agriculture.

The average wholesale price ranges of the imported Edam cheeses have been substantially above those of the domestic cheese.

Prices for comparable sizes of Gouda cheeses are not reported. The average annual wholesale price ranges at Chicago for the domestic "Baby Gouda" (in 8-ounce loaves) and the imported cheese (in 10-ounce loaves) are shown in the following tabulation (in dollars per dozen): 1/

<u>Year</u>	<u>Domestic</u>	<u>Imported</u>
1963-----	4.21-4.29	6.20-6.95
1964-----	4.06-4.38	6.68-7.45
1965-----	4.07-4.83	6.35-7.68
1966-----	4.28-5.47	6.37-8.05

On a product-weight basis, the imported "Baby Goudas" are only slightly higher in price than the domestic cheeses. This small difference in the prices of the domestic "Baby Gouda" as compared with the prices of the imported cheese, reflects both the high quality and the aggressive marketing of the U.S. product.

The Holland Cheese Exporters Association controls exports of Edam and Gouda cheeses from the Netherlands to the United States. It also collaborates with the Netherlands Government in controlling the export prices of Edam and Gouda cheeses. The prices of Edam and Gouda exported from the Netherlands to the United States are generally higher than the prices of such cheeses exported to other countries. The Association maintains, however, that the differences in

1/ Compiled from Wednesday price quotations reported in Dairy Market Statistics, U.S. Department of Agriculture.

prices are attributable to differences in quality, unit weights, packaging, and freight charges.

Foreign production and trade

The annual output of all cheese in the Netherlands averaged about 470 million pounds in 1964-66. The bulk of the total output is believed to have consisted of Edam and Gouda. During that period, the Netherlands exported annually about 150 to 175 million pounds of Edam and Gouda cheeses. West Germany, the Netherlands' largest customer for Edam and Gouda cheeses, took 36 percent of the country's exports in 1966. The Belgium-Luxembourg Economic Union took 24 percent; France, 12 percent; the United Kingdom, 10 percent; and Japan, 4 percent. The United States, Holland's sixth largest customer, took 3 percent of that country's exports of Edam and Gouda in 1966.

The annual output of Edam and Gouda in Denmark has averaged about 40 million pounds in recent years. Data on the output of Edam and Gouda in Sweden and Argentina are not readily available. The annual output of all cheese in Sweden has averaged only 130 million pounds in recent years. The annual output of semihard cheese (which includes Edam and Gouda) in Argentina has averaged slightly over 100 million pounds in recent years.

Gruyere-Process Cheese

Description

Gruyere-process cheese is made from natural Gruyere or from a blend of natural Gruyere and natural Swiss cheeses. In the latter situation, the Federal Standards of Identity require that the blend must contain not less than 25 percent by weight of natural Gruyere (21 CFR 19.750). Natural Gruyere cheese is discussed later in this report.

Gruyere-process cheese has a distinctive sharp flavor imparted by the natural Gruyere used in its production. In recent years the bulk of the Gruyere-process cheese marketed in the United States (mostly imported) has consisted of small (about 1 ounce) individual wedge-shaped pieces that are foil-wrapped and packed in circular boxes. Gruyere-process cheese in this form is intended for consumption as hors d'oeuvres or as a dessert cheese. In 1966 substantial quantities of such cheese in 5-pound loaves were imported. In this form the cheese is used principally by the institutional trade (restaurants, hotels, and hospitals) in cheese sandwiches; some of the loaves, particularly the small quantity imported from Switzerland, were marketed at the retail level for use in sandwiches.

U.S. tariff treatment

Gruyere-process cheese is dutiable at the rate of 14 percent ad valorem under item 117.60 of the Tariff Schedules of the United States (TSUS) (table 19). The rate is applicable to imports from all countries (except the Philippine Republic) other than those designated as

being under Communist control. ^{1/} There are no quantitative restrictions on imports of Gruyere-process cheese.

Under the Tariff Act of 1930, imports of Gruyere-process cheese originally were dutiable at the rate of 7 cents per pound but not less than 35 percent ad valorem (par. 710). Pursuant to concessions granted by the United States under bilateral trade agreements and the General Agreement on Tariffs and Trade (GATT), this rate was reduced to 4 cents per pound, but not less than 16 percent ad valorem (table 20). When the TSUS was adopted in 1963, the specific rate was eliminated, and the 16 percent ad valorem rate retained. That rate of duty is one on which the United States granted a concession in the sixth (Kennedy) round of trade negotiations under the GATT. The rate of duty will be reduced in 5 annual stages, from 16 percent ad valorem (the rate in effect on December 31, 1967) to 8 percent ad valorem. The first-stage rate (14 percent ad valorem) became effective January 1, 1968.

U.S. consumption

The annual U.S. consumption of Gruyere-process cheese averaged about 5 million pounds during the period 1962-65. In 1966, however, consumption apparently doubled, probably amounting to 10 million pounds in that year. Imports have generally supplied the bulk of the consumption of Gruyere-process cheese. U.S. production has been small

^{1/} Imports from these Communist-controlled areas are dutiable at the rate of 35 percent ad valorem.

and exports have been nil. The sudden rise in consumption is attributable largely to the promotion of Gruyere-process cheese in loaf form by the importers and foreign exporters.

U.S. production

As mentioned earlier, the U.S. output of Gruyere-process cheese has been small. Only 1 U.S. firm produces Gruyere-process cheese. That firm, which also imports such cheese, is a large producer, importer, and distributor of various other cheeses. Gruyere-process cheese accounts for only a small part of the firm's sales of cheese.

U.S. imports and prices

Annual U.S. imports of Gruyere-process cheese increased gradually from 4.8 million pounds in 1962 to 5.3 million pounds in 1965; in 1966 they rose sharply to a record level of 9.1 million pounds (table 40). A large part of the increase in annual imports of Gruyere-process cheese that occurred from 1965 to 1966 was accounted for by entries of such cheese in 5-pound loaves rather than in the traditional small wedge-shaped pieces. Nonetheless, the bulk of the imports of Gruyere-process cheese in 1966 consisted of the small wedges.

Switzerland has been the leading supplier of Gruyere-process cheese in the United States for many years, although the share of the total imports supplied by Switzerland declined from about 63 percent in 1965 to 44 percent in 1966. Nonetheless, the total imports from Switzerland, like those from all countries, have been increasing. Gruyere-process cheese produced in Switzerland is of higher quality

and contains larger amounts of natural Gruyere than such cheese produced in any other country. The bulk of the Gruyere-process cheese in 5-pound loaves came from countries other than Switzerland. Imports of Gruyere-process cheese from Finland, the second largest U.S. supplier, increased from about 21 percent of the total imports in 1965 to 33 percent in 1966. Austria, Denmark, and West Germany have accounted for the bulk of the remaining imports.

Altogether 80 or 90 U.S. firms have imported Gruyere-process cheese in recent years. The bulk of the increase in imports that occurred in 1966 were made by firms which generally had not previously been large importers of Gruyere-process cheese.

The unit values of imported Gruyere-process cheese from all countries have declined somewhat in recent years (table 40). Gruyere-process cheese from Switzerland sells at substantial premiums over that from other countries. In most recent years, imports of Gruyere-process cheese from Finland have sold at prices which approximate those of such cheese produced in the United States; imports from the remaining countries, however, generally sell at prices somewhat higher than those of the U.S. product.

Channels and methods of distribution

Boxes containing the traditional wedge-shaped pieces of Gruyere-process cheese are sold largely through chainstores, although some of the cheese is marketed by specialty cheese shops, restaurants, and hotels. The Gruyere-process cheese in 5-pound loaves, however, is sold primarily to the institutional trade for use in making cheese

sandwiches. Some of the loaves of such cheese from Switzerland, however, have been cut into 6 to 8 ounce pieces and marketed through chainstores. Gruyere-process cheese, particularly from countries other than Switzerland, was closer in price to domestic Swiss and Cheddar in 1966 than in earlier years.

Foreign production and trade

The annual production of Gruyere-process cheese in Switzerland, the largest supplier of such cheese to the United States, has amounted to about 20 million pounds in recent years. The United States is Switzerland's largest export market for such cheese. Italy, Canada, and Great Britain are also important importers of Gruyere-process cheese from Switzerland. Although data are not readily available, it is believed that the output of Gruyere-process cheese in Switzerland is larger than that in other countries that export such cheese to the United States.

Sheep's Milk Cheeses (Except Roquefort)

Description

In the United States, sheep's milk cheeses (virtually all of which are imported) are usually considered to be specialty-type cheeses, which are only slightly competitive with domestically produced cow's milk cheeses.

Bryndza is a soft, white, sharp-flavored cheese that is similar to Roquefort in texture; Bryndza does not, however, contain blue veins of mold. In the United States it is generally consumed as a cheese spread on bread or crackers, although it is sometimes dried, grated, and mixed with other sheep's milk cheeses such as Pecorino Romano. Bryndza is normally imported in casks or barrels that each contain several hundred pounds of cheese.

Sheep's milk cheeses in original loaves suitable for grating are cheeses that are hard in texture. Such cheeses do not spoil easily; because of their sharp flavor, they are particularly suitable for use as a grated cheese in well-seasoned foods. The bulk of U.S. imports of sheep's milk cheeses suitable for grating have consisted of Pecorino Romano, a sharp cheese that is generally cured for two years or more. It is usually imported in cylindrical loaves weighing from 15 to 30 pounds. Some grated sheep's milk cheese packed in small jars is imported.

Sheep's milk cheeses not suitable for grating (other than Bryndza) are softer than those used for grating. They have a milder flavor than the grating types and are often consumed as table cheeses.

The bulk of the U.S. imports of this type consists of Feta , a moist, white, table cheese that has a mild flavor. Feta is usually imported in triangular-shaped original loaves that have been packed in barrels of brine; each loaf generally weighs from 5 to 7 pounds. Several other types of cheese not suitable for grating, such as soft Ricotta made from sheep's milk and Kasseri, are usually imported in loaves weighing from 5 to 10 pounds.

U.S. tariff treatment

U.S. imports of sheep's milk cheese (except Roquefort) are dutiable under the Tariff Schedules of the United States (TSUS), as follows: 1/

<u>TSUS</u> <u>item</u>	<u>Commodity</u>	<u>Rate of duty</u>
117.10	Bryndza cheese-----	15.5% ad val.
	Other cheeses made from sheep's milk:	
117.65	In original loaves and suitable for grating.	11% ad val.
117.67	Pecorino, in original loaves, not suitable for grating.	15% ad val.
117.70	Other-----	19% ad val.

These rates are currently applicable to imports from all countries (except the Philippine Republic) other than those designated as being under Communist control. 2/ When the TSUS was adopted in 1963 the specific rates were eliminated and the ad valorem rates retained.

Under the Tariff Act of 1930 U.S. imports of sheep's milk cheeses were dutiable at the rate of 7 cents per pound but not less than 35

1/ For the statutory description see table 19 in the appendix to this report.

2/ Imports from those Communist-controlled areas are dutiable at the rate of 35 percent ad valorem.

percent ad valorem (par. 710). Pursuant to concessions granted by the United States under bilateral trade agreement and in the General Agreement on Tariffs and Trade (GATT), this rate was reduced (table 20).

The rates of duty on sheep's milk cheese are ones on which the United States gave concessions in the sixth (Kennedy) round of trade negotiations in the GATT. The rates of duty will be reduced in 5 annual stages; the first-stage rates (shown above) became effective January 1, 1968. The rates in effect prior to January 1, 1968 and the final-stage rates are:

<u>TSUS</u> <u>item</u>	<u>Rate prior to</u> <u>January 1, 1968</u>	<u>Final-stage</u> <u>rate</u>
117.10-----	17.5% ad val.	8.5% ad val.
117.65-----	12% ad val.	9% ad val.
117.67-----	16% ad val.	12% ad val.
117.70-----	20% ad val.	15% ad val.

U.S. consumption and imports

U.S. consumption of sheep's milk cheeses is virtually all supplied by imports. There is no known commercial production of such cheeses in the United States.

Annual U.S. imports of sheep's milk cheeses (except Roquefort) increased irregularly to a peak of 18.1 million pounds in 1962, and then declined, amounting to 15.8 million pounds in 1966 (see table 41). The decline in annual imports resulted largely from decreased imports of cheeses suitable for grating; nonetheless, such cheeses accounted for almost 70 percent of the total imports of sheep's milk cheeses in 1966. Annual imports of the cheeses not suitable for grating increased somewhat during 1962-66. Imports of Bryndza have been small.

Nearly all of the sheep's milk cheeses imported have been in original loaves.

In recent years Italy has supplied about 95 percent of the U.S. imports of sheep's milk cheeses suitable for grating (chiefly Pecorino Romano) and about half of the imports of cheeses not suitable for grating or not in original loaves. Virtually all imports of Bryndza have come from Czechoslovakia. Smaller amounts of sheep's milk cheeses have also been regularly imported from Bulgaria, Greece, Rumania, and Yugoslavia.

Channels and methods of distribution

Virtually all the sheep's milk cheese consumed in the United States is imported in original loaves. The bulk of the cheese--that suitable for grating, mainly Pecorino Romano--is then grated by importers or food distributors; most of these dealers also trade in several varieties of cow's milk cheeses (usually the Italian-types). The grated cheese is generally marketed at retail in cylindrical cardboard containers or small glass jars each containing a few ounces of cheese. The grated cheese sold at retail is used in a variety of foods such as lasagna and pizza.

Bryndza, which spoils rapidly when removed from the casks or barrels in which it is shipped, is generally sold at wholesale in plastic containers holding about 5 pounds of cheese. It is then retailed in small plastic cups that contain one-half to 1 pound of cheese. Other sheep's milk cheeses (except Feta) are generally imported and sold at wholesale in 5- to 10-pound original loaves. Feta

is marketed in glass jars of various sizes or is sold over-the-counter in pieces cut from the original loaves. In order to maintain the freshness of the softer cheeses, retail establishments often cut portions from the original loaves only as needed for sale to individual consumers.

Most of the sheep's milk cheese consumed in the United States is sold at retail in stores specializing in cheeses or Italian-type foods. Such stores are located principally in large metropolitan areas having sizable numbers of people of Mediterranean or Balkan birth or extraction.

Foreign production and trade

Although cheese made from sheep's milk is not commercially produced in the United States, numerous varieties are produced in other countries throughout the world. These cheeses, which frequently take the name of the town or community in which they are made, are often produced on farms or small establishments and consumed chiefly within the surrounding area.

The commercial production of sheep's milk cheese is concentrated principally in the Mediterranean and Balkan countries. Italy, which produced about 95 million pounds of sheep's milk cheese in 1966, is by far the leading exporter of such cheese. In recent years about 20 percent of the quantity produced in Italy has been exported, chiefly to the United States. Other leading producers of cheeses made from sheep's milk include Greece (Feta), Bulgaria, Yugoslavia, Rumania, and Czechslovakia (Bryndza).

Roquefort Cheese

Description

Roquefort, a semisoft cheese made from sheep's milk, is characterized by a salty, piquant flavor and a white body mottled by bluish-green veins of mold. The cheese is produced and cured in natural limestone caves in the Community of Roquefort, France, where the product originated. Under a French law adopted in 1925, the only cheese that may be sold in France as "Roquefort" is sheep's milk cheese made in, and certified by, the Community of Roquefort. The certification mark "Roquefort" is registered with the U.S. Patent Office. U.S. imports of blue-veined sheep's milk cheese made in other areas of France or in other countries, and blue cheese made from cow's milk, are classified as blue-mold cheeses.

Virtually all the Roquefort cheese consumed in the United States is imported in the original loaves in which it is produced; Roquefort cheese keeps better when in the original loaves than when cut into pieces. These loaves are round with a flat top and bottom; they ordinarily weigh 5 to 6 pounds. The bulk of the Roquefort that is sold by retail stores or restaurants is in 3-ounce, $1\frac{1}{4}$ -ounce, and $\frac{3}{4}$ -ounce wedges that have been custom wrapped in foil. Roquefort is used both as a table cheese and in making prepared salad dressings; such salad dressings may vary widely in appearance and taste, depending upon their other ingredients. Both the cheese wedges wrapped in foil and the bottled Roquefort dressing are required to bear the

"Roquefort, France" certification mark and a characteristic red sheep seal.

U.S. tariff treatment

U.S. imports of Roquefort cheese are dutiable under the Tariff Schedules of the United States (TSUS), as follows: 1/

<u>TSUS</u> <u>item</u>	<u>Commodity</u>	<u>Rate of duty</u>
	Roquefort cheese:	
117.45	In original loaves-----	10.5% ad val.
117.50	Other-----	18% ad val.

These rates are currently applicable to imports from all countries (except the Philippine Republic) other than those designated as being under Communist control. 2/

Under the Tariff Act of 1930, U.S. imports of Roquefort cheese were originally dutiable at the rate of 7 cents per pound but not less than 35 percent ad valorem (par. 710). Pursuant to concessions granted by the United States under bilateral trade agreements and the General Agreement on Tariffs and Trade (GATT), this rate was reduced to 3 cents per pound but not less than 12 percent ad valorem (for Roquefort cheese in original loaves) and 5 cents per pound but not less than 20 percent ad valorem (for other Roquefort cheese)

1/ For the statutory description see table 19 in the appendix to this report.

2/ Imports from these Communist-controlled areas are dutiable at the rate of 35 percent ad valorem.

(table 20). When the TSUS was adopted in 1963, the specific rates were eliminated and the ad valorem rates of 12 percent (item 117.45) and 20 percent (item 117.50) were retained. These rates of duty are ones on which the United States gave concessions in the sixth (Kennedy) round of trade negotiations in the GATT. The rates of duty will be reduced in 5 annual stages, the final-stage rates being 6 percent ad valorem (item 117.45) and 10 percent ad valorem (item 117.50). The first-stage rates (10.5 percent and 18 percent ad valorem, respectively) became effective January 1, 1968.

There are no quantitative limitations on U.S. imports of Roquefort cheese.

U.S. consumption and imports

U.S. consumption of Roquefort cheese is supplied entirely by imports from France; there is no domestic production.

Annual U.S. imports have not changed significantly in recent years; such imports averaged 2.1 million pounds during the period 1962-66 (table 42). The domestic consumption of Roquefort cheese is divided approximately as follows: about 50 percent of the quantity imported is consumed as table cheese, 25 percent is used as an ingredient in salads, and the remaining 25 percent is used in making commercially prepared Roquefort dressing.

Roquefort is usually considered to be a specialty-type cheese only slightly competitive with domestic blue cheeses made from cow's

milk. The annual imports of Roquefort have been equivalent to about 15 percent of the annual U.S. production of blue cheese.

Channels and methods of distribution

The producers of Roquefort cheese export their product through a French export agency; the agency employs a producers' representative, known as The Roquefort Cheese Association, in the United States. The Association promotes the use of Roquefort cheese in this country, guards against infringements of the "Roquefort" certification mark, and issues licenses to authorized importers and distributors of Roquefort cheese and products made therefrom.

Some 30 U.S. firms import Roquefort cheese. Most of the importers are located in New York, Chicago, and Los Angeles, the cities in which most of the custom packagers of such cheese are located. The largest importers of Roquefort cheese are also large producers and distributors of various domestic cheeses. The smaller importers usually sell the cheese to food distributors or chainstores.

About 45 percent of the loaves are cut into wedges at the wholesale level by importers and distributors; the bulk of this cheese is distributed to hotels, restaurants, and chainstores. Some 30 percent of the loaves are sold as such; part of this cheese is then cut into portions by chainstores. The remaining 25 percent of the cheese is further processed by manufacturers of prepared salad dressings.

Prices

The producers in France control the price of the Roquefort cheese imported into the United States. Their stated objective is to maintain the price of Roquefort at a high level relative to other types of cheese, and to regard any decline in the price of Roquefort as detrimental to its reputation and prestige. They claim that the maintenance of a high-quality image is essential to compete successfully with the imported and domestic blue cheeses.

The wholesale price of Roquefort increased by one-third from 1963 to mid-1966; since mid-1966 the price has increased only slightly. The increase in the wholesale price has followed an increase in the unit value of imports; the wholesale price has generally been about 40 percent greater than the unit value of imports. Roquefort generally sells in the United States at somewhat over twice the price of either imported or domestic blue cheese and this difference in price has widened since 1963. The following tabulation shows the unit value of imports and the range in the New York wholesale prices of Roquefort and domestic blue cheese for specified periods in recent years:

Year	Unit value of imports of Roquefort	New York wholesale price ^{1/}	
		Roquefort	Domestic Blue
1962-----	\$0.84	\$1.15-1.20	\$0.55-0.64
1963-----	.84	1.15-1.20	.56- .65
1964-----	.98	1.38-1.42	.56- .63
1965-----	1.09	1.50-1.57	.58- .66
1966-----	1.13	1.56-1.62	.63- .69

^{1/} Prices given are those during the first week of July.

Foreign production and trade

The supply of ewe's milk and the available cave space for curing cheese in the Roquefort area of France limit the annual production of Roquefort cheese to 25 million to 30 million pounds. There are 25 establishments that may legally call their cheeses Roquefort; none of these are a subsidiary of a U.S. firm. The establishments are operated by 20 local producers, one of whom accounts for about half of the annual production of Roquefort cheese.

In recent years about 12 percent of the annual production of Roquefort cheese has been exported. The United States is by far the leading market, taking 60 to 65 percent of the exports each year. Exports go to many other countries, none of which takes as much as 1 percent of the annual production.

Gjetost, Goya, Gammelost, Nokkelost Cheeses, and Cheeses not
Elsewhere Enumerated (Including Cottage Cheese)

Description

This section deals with all of the cheeses which have not been discussed elsewhere in this report. Four of them--Gjetost, Goya, Gammelost, and Nokkelost cheeses--are separately provided for in the Tariff Schedules of the United States (TSUS); the others are dutiable under the "basket" provisions of the TSUS for "other cheese and substitutes for cheese".

Gjetost cheeses are made from whey. Some are made from cow's milk whey, and some from goat's milk whey. The principal constituent of Gjetost cheeses is lactose (milk sugar). The cheeses are golden brown in color; they have a gritty texture and a caramel flavor. They are usually sold in the form of half-pound bars that are wrapped in parchment paper. Neither Gjetost cheeses nor cheeses similar to them are produced on a commercial scale in the United States.

Goya is a hard grating cheese usually made from cow's milk; it is produced mainly in Argentina. U.S. imports of Goya have been nil in the past decade; there has been no U.S. production for many years.

Gammelost is made from sour skimmed cow's milk. It has a brownish rind, a brownish-yellow interior, and a sharp aromatic flavor; these characteristics result in part from the various species of mold used to ripen it. Nokkelost is usually made from partly skimmed cow's milk. It is spiced with cloves, cumin seed, and occasionally caraway seed. The U.S. imports of Gammelost and Nokkelost are mainly from

Norway; the U.S. output of such cheeses has been negligible or nil for many years.

There are many other cheeses classified in the group considered here. Natural Gruyere and process Swiss cheeses, while mentioned in the earlier sections of this report on Gruyere-process and natural Swiss cheeses, are covered here. Natural Gruyere is a semihard, extremely sharp flavored cheese made from cow's milk; it is characterized by holes or eyes which are much smaller than those in natural Swiss cheese. It is used in making Gruyere-process cheese. U.S. production and imports of natural Gruyere have been negligible. Process Swiss cheese is made from natural Swiss that develops imperfect eyes or holes while being produced. U.S. output of process Swiss cheese has been substantial, and imports of such cheese have been small.

The bulk of the imports of the other cheeses considered here consists predominantly of specialty-type cheeses of which there is little or no domestic production. They are generally regarded as being only slightly competitive with domestically produced cheeses because they are usually priced substantially above the most similar domestic varieties. Such cheeses are not consumed widely in the United States.

The major domestically produced cheeses classified here are varieties of cow's milk cheeses not imported in large quantities. Among them are cottage and cream cheeses (which are not suitable for long-distance shipment), brick, Munster, Neufchatel, Limburger, and soft Italian-type cheeses such as Mozzarella and Ricotta made from cow's milk. Cottage cheese, which accounts for the great bulk of the U.S.

production of the cheeses classified here, is an unaged cheese made from skimmed cow's milk or reconstituted nonfat dry milk. Cottage cheese supplies protein at a lower cost than most other high-protein foods. It is used largely in salads in the United States. Cream cheeses are used in cheese dips and other foods in the United States. The soft Italian-type cheeses are used mainly in pizza and lasagna. Most of the remaining miscellaneous cheeses are consumed as natural cheeses for table use.

U.S. tariff treatment

The cheeses discussed in this portion of the report are dutiable as follows: 1/

<u>TSUS</u> <u>item</u>	<u>Commodity</u>	<u>Rate of duty</u>
117.30	Gjetost cheese: Made from goat's milk whey or from whey obtained from a mixture of goat's milk and not more than 20 percent of cow's milk.	12% ad val.
117.35	Other-----	18% ad val.
117.40 (pt.)	Goya cheese-----	25% ad val.
117.60 (pt.)	Gammelost and Nokkelost cheeses----- Other cheese and substitutes for cheese [except Colby]:	14% ad val.
117.75 (pt.)	Valued not over 25 cents per pound---	5¢ per lb.
117.85 (pt.)	Valued over 25 cents per pound-----	18% ad val.

These rates are currently applicable to imports from all countries (except the Philippine Republic) other than those designated

as being under Communist control. 2/ The ad valorem equivalent of the

1/ For the statutory description see table 19 in the appendix to this report.

2/ Imports from these Communist-controlled areas are dutiable at the rate of 35 percent ad valorem except imports classifiable under item 117.75 which are dutiable at the rate of 8.75 cents per pound.

specific rate on item 117.75 (pt.), based on imports that entered during 1966, is 24 percent.

Under the Tariff Act of 1930, imports of the cheeses considered here were originally dutiable at the rate of 7 cents per pound, but not less than 35 percent ad valorem (par. 710). Pursuant to concessions granted by the United States under bilateral trade agreements and in the General Agreement on Tariffs and Trade (GATT), this rate was reduced to rates generally equivalent to the various rates shown above 1/ (table 20).

The United States granted concessions in the sixth (Kennedy) round of trade negotiations under the GATT on the rates of duty on Gjetost, Gammelost, and Nokkelost, and on "other" cheeses (except Colby) valued over 25 cents per pound. The rates of duty will be reduced in 5 annual stages; the first-stage rates (shown above) became effective January 1, 1968. The rates in effect prior to January 1, 1968 and the final-stage rates are:

<u>TSUS</u> <u>item</u>	<u>Rate prior to</u> <u>January 1, 1968</u>	<u>Final-stage</u> <u>rate</u>
117.30-----	13.5% ad val.	6.5% ad val.
117.35-----	20% ad val.	10% ad val.
117.60-----	16% ad val.	8% ad val.
117.85-----	20% ad val.	10% ad val.

U.S. imports of the cheeses discussed herein are not restricted by quantitative limitations.

1/ Effective Aug. 31, 1963, with the adoption of the TSUS, the specific rates for most kinds of cheese were eliminated, inasmuch as the dutiable values of imported cheeses had made the specific rates obsolete.

In addition to the duty, imports of filled cheese--cheese made with an admixture of butter, animal oils or fats, or vegetable or other oils--classifiable under items 117.75 (pt.) and 117.85 (pt.) are subject to an internal revenue tax of 8 cents per pound under section 4831(b) of the Internal Revenue Code of 1954; the domestic filled cheese is subject to a tax of 1 cent per pound under section 4831(a). U.S. imports and production of such cheese have been nil for many years.

U.S. consumption

The apparent U.S. consumption of the cheeses herein considered increased from 1,128 million pounds in 1962 to 1,275 million pounds in 1966 (table 43). The increasing consumption of these cheeses has resulted primarily from increased demand for cottage cheese and soft Italian-type cheeses. The increased consumption reflects a variety of factors--rising consumer incomes, the popularity of pizza, improvements in the quality of products, promotional efforts of both domestic producers and importers, and increasing acceptance of many cheese varieties associated with increasing international travel by U.S. residents.

U.S. production

U.S. production of the miscellaneous cheeses increased from 1,126 million pounds in 1962 to 1,264 million pounds in 1966. U.S. output

is shown in the following tabulation (in thousands of pounds):

Year	Cottage cheese ^{1/}	Soft Italian-type cheese	Cream cheese	Brick and Munster	Other types	Total
1962----	812,237	107,802	116,607	46,728	42,472	1,125,846
1963----	820,695	124,092	107,831	48,009	44,498	1,152,125
1964----	861,869	149,092	114,127	52,396	45,332	1,222,786
1965----	863,943	163,793	116,266	53,030	45,166	1,242,198
1966----	856,743	186,883	111,194	57,721	51,061	1,263,602

^{1/} Includes creamed and partially creamed cottage cheese.

In recent years, cottage cheese has accounted for nearly 70 percent of the output of the above-mentioned cheeses; soft Italian-type cheese accounted for more than half of the increase in annual output between 1962 and 1966.

The number of plants producing the types of cheeses under discussion decreased from about 1,600 in 1962 to 1,200 in 1966. Three-fourths of these plants in operation in 1966 produced cottage cheese. The plants that produce cottage cheese are located throughout the United States, particularly in heavily populated areas; those that produce the other cheeses herein considered are located mostly in the North Central States. Many plants that produce various manufactured dairy products make cottage cheese in order to utilize nonfat dry milk and skimmed milk which are byproducts of the production of butter. Plants that produce the other types of cheeses often specialize in the production of one or two varieties of cheese.

U.S. exports

Aggregate annual U.S. exports of the cheeses considered here declined from 5 million pounds in 1962 to 3 million pounds in 1966; they were equivalent to less than 1 percent of the annual production of such cheeses during that period. The bulk of the exports has consisted of process cheese. Canada, one of the principal markets for U.S. exports of these cheeses for many years, took about a third of the U.S. exports of such cheeses in 1966. Venezuela, the Philippine Republic, Panama, and the Bahamas were also major export markets in 1966.

U.S. imports

Aggregate annual U.S. imports of the cheeses discussed here increased from 7 million pounds in 1962 to 10 million pounds in 1965. Imports were equivalent to less than 1 percent of the consumption of such cheeses in that period. In 1966 annual imports nearly doubled, amounting to 19 million pounds; they were equivalent in that year to about 1.5 percent of consumption. The imports consist in large part of varieties not produced in the United States, and they are usually considered to be specialty-type cheeses.

Total U.S. imports of Gjetost cheeses increased from 179,000 pounds in 1964 to 257,000 pounds in 1966. Norway was virtually the sole supplier. Total imports of Nokkelost cheese amounted to 137,000 pounds in 1964 and to 178,000 pounds in 1965. Virtually all the imports of Nokkelost cheese in those years came from Norway, the

traditional U.S. supplier. In 1966, however, U.S. imports of Nokkelost cheese increased to 1,099 million pounds; most of the increase was supplied by Switzerland. U.S. imports of Gammelost and Goya cheeses have been nil or negligible in recent years.

U.S. imports of the other cheeses considered here generally come from about 20 countries. Denmark has supplied about 40 percent of the total imports in recent years. In 1963, the latest year on which information is readily available, about three-fifths of the imports from Denmark consisted of Esrom, Harvarti, Camembert, Castello, and Tybo cheeses. France, the second largest supplier, furnished 12 percent of the total imports in 1966; cheeses from France consisted primarily of Bombel, Port Salut, and Camembert. Annual U.S. imports of these cheeses from Denmark doubled from 1965 to 1966, while those from France also increased. In the latter year, however, U.S. imports of such cheeses from several countries which had previously not been large suppliers increased substantially (table 44).

Channels and methods of distribution

Most of the domestically produced cheeses discussed herein are made by plants that send their output to concerns, known as assemblers, who market the cheese under their individual brand names.

Although the domestic varieties of cheeses are generally marketed in supermarkets and chainstores throughout the United States, they are sometimes marketed through specialty cheese shops and gourmet stores. The imported cheeses, however, are marketed predominantly through cheese shops and gourmet stores. Generally, the imported cheeses are sold at retail in the containers or packages in which they are imported.

Prices

Data on prices of the imported cheeses considered here are not regularly reported. As mentioned earlier, however, the imported varieties are usually prices at retail above the most similar domestic varieties.

Foreign production and trade

In recent years, Denmark, the principal foreign supplier to the United States of the cheeses considered herein--and a leading world supplier--has produced some 30 million pounds of such cheeses annually. West Germany, Denmark's largest market for cheese, has taken about 50 percent of the Danish cheese exports in recent years. The United Kingdom, Italy, Sweden, and the United States have generally been Denmark's next largest export markets for cheese. The United States has not been a large importer of these cheeses from Denmark primarily because many of them are high-priced, and the U.S. market for the specialty-type cheeses produced in other countries is small.

The output in France--the second largest foreign supplier to the United States of the varieties of cheeses considered here--is not reported separately. The production of all cheese in France, however, has been increasing substantially in recent years. In 1966, the French output of cheese (excluding Roquefort) amounted to 1.2 billion pounds.

Condensed or Evaporated Milk or Cream

Description

Condensed milk consists of milk from which a portion of the water has been removed by evaporation under a partial vacuum. It usually has a caramelized flavor since the milk sugar is slightly cooked in the condensing process. If packaged without sugar being added, it is known as plain condensed milk; it is perishable in this form, and is usually sold in bulk. If sugar is added, the product, which is called sweetened condensed milk, is usually canned; the sugar content is sufficient to prevent spoilage. Evaporated milk is similar to plain condensed milk in that water has been removed by evaporation under a partial vacuum and no sugar has been added. Evaporated milk, however, is both homogenized and sterilized; it is generally in hermetically sealed retail-sized metal containers. The characteristic caramelized flavor is less pronounced in evaporated milk than in condensed milk. In the United States, condensed and evaporated milk are used primarily in home cooking and in the preparation of baby formulas, candy, and ice cream. Condensed or evaporated cream is not an important article of commerce.

Condensed and evaporated milk are both made from whole milk and skim milk, however, little evaporated skim milk is produced. About four-fifths of that made from whole milk is packaged in retail-size containers; virtually all of the evaporated whole milk, but only about 10 percent of the condensed whole milk, is so packaged. Condensed skim milk is virtually all sold in bulk (i.e., not in retail-size containers).

U.S. tariff treatment and other import restrictions

Since August 1963, U.S. imports of condensed or evaporated milk and cream were dutiable under the Tariff Schedules of the United States (TSUS), as follows: 1/

<u>TSUS item</u>	<u>Commodity</u>	<u>Rate of duty</u>
	Milk and cream, condensed or evaporated: In airtight containers:	
115.30	Not sweetened-----	1¢ per lb.
115.35	Sweetened-----	1.75¢ per lb.
115.40	Other-----	1.5¢ per lb.

These rates are currently applicable to imports from all countries (except the Philippine Republic) other than those designated as being under Communist control 2/. The ad valorem equivalent of the specific rates of duty, based on imports entered during 1966. are:

<u>TSUS item</u>	<u>Percent</u>
115.30	9.3
115.35	10.1
115.40	21.0

U.S. imports of condensed or evaporated milk or cream were dutiable at rates ranging from 1-8/10 cents per pound to 2-3/4 cents per pound under paragraph 708(a) of the Tariff Act of 1930. Pursuant to concessions granted by the United States under the General Agreement on Tariffs and Trade (GATT), these rates were reduced to the current levels (table 20).

1/ For the statutory description see table 19 in the appendix to this report.

2/ Imports from these Communist-controlled areas are dutiable at the rates of 1.8 cents per pound (item 115.30), 2.75 cents per pound (item 115.35) and 2.53 cents per pound (item 115.40).

The existing rates of duty are not ones on which the United States gave concessions in the sixth (Kennedy) round of trade negotiations under the GATT. There are no quantitative limitations on U.S. imports of condensed and evaporated milk and cream. These products, however, are subject to the sanitary restrictions imposed by the Federal Import Milk Act of 1927; that act has been discussed earlier in this report.

U.S. consumption, production, and stocks

The United States is both the world's largest consumer and producer of condensed and evaporated milk. During 1962-66, evaporated milk accounted for about 55 percent, and condensed milk, about 45 percent of the aggregate U.S. consumption of the two products.

In the 2 decades following World War II, annual U.S. consumption of condensed and evaporated milk declined materially. Average annual consumption amounted to 4.4 billion pounds (milk equivalent) in 1962-66, compared with 5.9 billion pounds in 1945-49 (table 6). The decrease in consumption resulted from a steady decline in per capita consumption of evaporated milk; consumption of evaporated milk amounted to 16 pounds per capita (milk equivalent) in 1966, compared with an average of 38 pounds in 1945-49 (table 5). Per capita consumption of condensed milk, which has been substantially lower than that of evaporated milk, has not changed greatly in recent years. The decline in U.S. consumption of evaporated milk has been caused

largely by food processors substituting nonfat dry milk for evaporated milk, and the increasing use of other products in babies' formulas.

Domestic production of condensed and evaporated milk has supplied virtually all of the domestic consumption (and small exports) (table 45). U.S. production of condensed and evaporated milk made from whole milk and skimmed milk for the years 1962-66, is shown in the following tabulation (in millions of pounds):

Item	1962	1963	1964	1965	1966
Condensed:					
Unskimmed, retail-size-----	74.1	79.0	94.6	95.9	128.6
Unskimmed, bulk----	405.8	392.7	412.1	388.9	360.1
Skimmed, bulk-----	874.3	834.9	889.3	956.7	1,035.3
Total-----	1,354.2	1,306.6	1,396.0	1,441.5	1,524.0
Evaporated (retail-size):					
Unskimmed-----	1,928.8	1,897.3	1,880.1	1,693.0	1,696.1
Skimmed-----	11.8	11.4	10.4	10.4	10.5
Total-----	1,940.6	1,908.7	1,890.5	1,703.4	1,706.6
Grand total-----	3,294.8	3,215.3	3,286.5	3,144.9	3,230.6

In 1966 nearly 5 billion pounds of whole milk, equivalent to 4 percent of the U.S. production of milk, was used to make evaporated and condensed milk. The value of shipments of condensed and evaporated milk from condenseries in 1963 was \$362 million compared with \$435 million in 1958.

In 1962-66 yearend stocks of evaporated and condensed milk at condenseries ranged from 139 million pounds (1963) to 205 million pounds (1966). The stocks on hand at the end of 1966 were equivalent to 6.4 percent of the domestic production in that year; average

yearend stocks in 1962-65 were equivalent to 4.8 percent of average domestic production in those years. The stocks consisted almost wholly of evaporated milk in retail-size containers; stocks of bulk condensed and evaporated milk generally are negligible.

U.S. producers

Some 200 plants (condenseries) produced condensed and evaporated milk in 1966. Most of them probably marketed such milk in bulk, as well as in retail-size containers. Most of these condenseries are owned by large concerns, which manufacture other dairy products and other foods. California, Kentucky, Pennsylvania, Wisconsin, and Tennessee were the leading producing States in 1966. Condenseries usually pay the farmer a premium over the price of milk used for producing most other dairy products. Producers of condensed and evaporated milk can readily convert their facilities to produce butter, Cheddar cheese, or nonfat dry milk, which the U.S. Government purchases under the price-support program.

U.S. exports

U.S. exports of condensed and evaporated milk averaged 111.9 million pounds annually in 1962-66--equivalent to about 3 percent of domestic production. Total exports of such milk in 1966 amounted to 132.7 million pounds. In recent years exports have consisted almost wholly of evaporated or condensed milk in retail-size containers.

The principal markets for U.S. exports of condensed and evaporated milk in recent years were South Viet-Nam and Mexico. Nearly all of the exports to South Viet-Nam consisted of condensed milk that was

paid for in local currencies under the provisions of the Agricultural Trade Development and Assistance Act of 1954 (Public Law 480, 83d Cong.). Exports have gone largely to countries having warm climates; condensed and evaporated milk are less susceptible to spoilage than is fluid milk.

U.S. imports

Annual U.S. imports of condensed and evaporated milk increased from 75,000 pounds in 1962 to 3.3 million pounds in 1966. In the latter year they were equivalent to about one-tenth of 1 percent of U.S. production.

Imports have consisted principally of condensed and evaporated milk in airtight containers; the Netherlands, Denmark, and Canada have been the principal sources in recent years (table 46). Imports of canned condensed milk increased from 69,000 pounds in 1962 to 2.1 million pounds in 1966, while imports of canned evaporated milk increased from 4,000 pounds in 1962 to 611,000 pounds in 1966. Imports of condensed or evaporated milk in bulk increased from 2,000 pounds in 1962 to 576,000 pounds in 1966; West Germany, the Netherlands, and Denmark were the sources of the imports in 1966 (table 47).

As indicated earlier, imports of condensed and evaporated milk are subject to the provisions of the Federal Import Milk Act of 1927. Two firms in Canada currently hold permits, issued by the U.S. Food and Drug Administration (FDA), to export sweetened condensed milk to the United States; one firm in Canada holds a permit to export concentrated milk to the United States. Before September 1966, it had

been a longstanding practice of the FDA to allow imports of condensed and evaporated milk from foreign firms not holding permits, if such milk was packed in 6-ounce or 14-ounce hermetically-sealed tins. As a result, significant quantities of canned condensed and evaporated milk not authorized by individual permit had been imported. In 1966, for example, more than half of the condensed milk and all of the evaporated milk imported came from foreign firms not holding import permits; these imports in the aggregate comprised nearly two-thirds of the total imports in 1966. In September 1966, the FDA decided that it must discontinue this practice. It concluded that "the Federal Import Milk Act (21 U.S.C. 141 et seq.) prohibits the importation of all imported milk and cream, whether sterilized or not, unless the shipper holds a valid import milk permit. There is no authority to waive this requirement." ^{1/} Currently, therefore, only condensed and evaporated milk produced by the three foreign firms holding permits is eligible for entry into the United States.

Channels and methods of distribution

Condensed milk and evaporated milk in retail-size containers are usually distributed through chain and independent warehouses to grocery stores where they are marketed. Bulk condensed milk is usually sold by the condenseries to other dairy and food processors such as candy makers, bakers, and ice cream manufacturers; often the condensed milk is manufactured to the specifications of the purchaser.

^{1/} F.R. Doc. 66-9943; filed Sept. 9, 1966.

Foreign production and trade

The principal foreign producers of condensed and evaporated milk are the Netherlands, West Germany, the Soviet Union, the United Kingdom, Canada, and France. Production in the 14 largest producing countries (including the United States, but excluding the Soviet Union, for which data are not available) increased from 6.7 billion pounds in 1960 to 7.3 billion pounds in 1964 (table 48); the United States accounted for about half of the total output of these countries in 1960-64.

Annual exports of condensed and evaporated milk from the 8 principal exporting countries increased from 1.1 billion pounds in 1960 to 1.3 billion pounds in 1964; these countries accounted for the great bulk of world exports. By far the largest exporter of condensed and evaporated milk in recent years has been the Netherlands; that country exported about three-fourths of the condensed and evaporated milk it produced. France, the United States, Australia, and the United Kingdom have also exported large quantities (table 49).

The bulk of the condensed and evaporated milk which entered international trade in recent years was shipped to tropical Asian and African countries. The diets of the people in tropical countries are usually low in animal protein; condensed and evaporated milk supply protein in a form that is easily transported and not highly perishable. The principal countries importing condensed and evaporated milk in 1960-64 were Malaysia, Thailand, the Philippines, South Viet-Nam, Greece, Hong Kong, Nigeria, Ghana, and Senegal. Imports

into these countries, which increased from 571 million pounds in 1960 to 631 million pounds in 1964, accounted for nearly half of world imports of condensed and evaporated milk in those years (table 50).

Dried Milk and Cream (Except Nonfat Dry Milk)

Description

Dried milk and cream are the products resulting from the removal of water from the original fluid products. Nonfat dry milk is the most important of these products; it is discussed in the following section of this report.

Imported and domestic dried milk and cream products are used for the same purposes. In recent years, over three-fourths of the dried whole milk has been used in making chocolate coatings for candy; some of the dried whole milk and nearly all of the dried buttermilk, dried cream, and dried whey (the product that remains and is dried after cheese is made from milk) have been used in bakery products (including dietary breads in the case of dried buttermilk) and dairy products, prepared dry mixes, and baby foods. Dried whey is also used in animal feeds and in the chemical industry. The dried milk products considered herein are rarely reconstituted for beverage purposes.

The category of articles considered here includes malted milk. Malted milk is dried from a combination of whole milk and the fluid separated from a mash of ground barley malt and wheat flour. The imported and the domestic products, which are quite comparable, have been used mainly in making malted milk drinks. However, malted milk is also used for infants and invalids because of its high food value and easy digestibility.

U.S. tariff treatment and other import restrictions

Since August 1963, U.S. imports of dried milk and cream products (except nonfat dry milk) have been dutiable as follows: 1/

<u>TSUS item</u>	<u>Commodity</u>	<u>Rate of duty</u>
	Dried milk and cream:	
115.45	Buttermilk containing not over 6 percent of butterfat.	1.5¢ per lb.
	Other: <u>1/</u>	
115.55	Containing over 3 percent but not over 35 percent butter- fat.	3.1¢ per lb.
115.60	Containing over 35 percent butterfat.	6.2¢ per lb.
118.05	Dried whey-----	1.5¢ per lb.
118.30	Malted milk; and articles not specially provided for, of milk or cream.	17.5% ad val.

1/ The TSUS classification of "Dried milk and cream (other than buttermilk) containing not over 3 percent of butterfat"--TSUS item 115.50--(which is not shown above) applies almost exclusively to nonfat dry milk; see the following section of this report.

These rates are currently applicable to imports from all countries (except the Republic of the Philippines) other than those designated as being under Communist control. 2/ The ad valorem equivalents of the specific rates, based on imports entering in 1966 are as follows:

<u>TSUS item</u>	<u>Percent</u>
115.45-----	11.5
115.55-----	12.8

There were no imports under items 115.60 or 118.05.

1/ For the statutory description see table 19 in the appendix to this report.

2/ Imports from those Communist-controlled areas are dutiable at the rates of 3 cents per pound (items 115.45 and 118.00), 6.2 cents per pound (item 115.55), 12.4 cents per pound (item 115.60), and 35 percent ad valorem (item 118.30).

Under the Tariff Act of 1930 U.S. imports of these dried milk products were originally dutiable at the rates of 6-1/12 cents per pound (whole milk), 3 cents per pound (buttermilk and whey), and 12-1/3 cents per pound (cream) (par. 708(b)). Imports of dried whey were dutiable under paragraph 1559 at the rate of 3 cents per pound by virtue of similitude to dried buttermilk. Malted milk and compounds or mixtures of, or substitutes for, milk and cream were dutiable at the rate of 35 percent ad valorem under paragraph 708(c). Pursuant to concessions granted by the United States under bilateral trade agreements and the General Agreement on Tariffs and Trade (GATT), these rates were reduced to the rates currently in effect (table 20).

The existing rates of duty are not ones on which the United States gave concessions under the sixth (Kennedy) round of trade negotiations under the GATT.

Since July 1, 1953, imports of dried milk products have been subject to annual quotas under section 22 of the Agricultural Adjustment Act, as amended (see items 950.01, 950.03, 950.04, and 950.11 of the appendix to the TSUS). The following tabulation shows the quantity permitted entry, as well as the countries receiving the principal allocations, in the quota year ending June 30, 1967. 1/

1/ Pursuant to Presidential Proclamation No. 3790 of June 30, 1967, the quota year (ending June 30) was changed to a calendar year basis.

TSUS item	Quota	Countries and share of quota
	Pounds	
115.45 and		
118.05----	496,000	Canada (72 percent), New Zealand (28 percent)
115.55-----	7,000	New Zealand (100 percent)
115.60-----	500	<u>1/</u>
118.30-----	6,000	Australia (100 percent)

1/ No allocation was made.

U.S. consumption

In recent years U.S. apparent consumption of dried milk and cream has increased each year; annual consumption rose from 458 million pounds in 1962 to 646 million pounds in 1966 (see table 51). The great bulk of the increase in consumption in those years resulted from increased use of dried whey--a high protein, low butterfat product; it accounted for about two-thirds of U.S. consumption of dried milk and cream in 1966. The consumption of the other products considered herein--dried whole milk, dried cream, and malted milk--has not changed greatly in the 1960's because many consumers have been reducing their intake of products high in butterfat.

U.S. production and stocks

U.S. production of dried milk and cream (except nonfat dry milk) increased from 473 million pounds in 1962 to 665 million pounds in 1966. The U.S. output in those years is shown in the following tabulation (in thousands of pounds):

Year	Dried whey	Dried buttermilk	Dried whole milk	Malted milk	Dried cream	Total
1962----	283,557	86,375	79,090	23,111	659	472,792
1963----	316,923	87,516	91,015	22,495	1,018	518,967
1964----	371,947	92,035	87,622	22,369	1,121	575,094
1965----	404,301	87,442	88,622	22,184	982	603,531
1966----	470,931	76,193	94,350	22,904	528	664,906

In recent years, the production of dried whey has accounted for two-thirds or more of the U.S. output of dried milk and cream. In 1963-66, the average annual output of dried whey was twice the average annual output in the 1948-50 period. The increase in domestic production of this product is attributable mainly to growing U.S. demand; the section 22 import quotas have limited supplies from foreign sources.

Yearend stocks of dried milk and cream have consisted entirely of commercially-owned dried whole milk. They have been small compared with domestic production. In 1962-66 they ranged from 5 million to 7 million pounds.

U.S. exports

Although U.S. annual exports of dried milk and cream have been larger than imports, they have been small compared with domestic production. Prices of these products have generally been higher in the United States than in other countries. During the period 1962-66, U.S. exports of dried milk and cream ranged from 15 million to 32 million pounds annually. In recent years, practically all of such exports have consisted of commercial sales of dried whole milk. In 1966, Japan, Venezuela, and the Congo were the largest export markets.

U.S. imports

Since 1953 annual U.S. imports of dried milk and cream have been limited to relatively small quantities because of the section 22 quotas imposed on those products (see the section on tariff treatment). Aggregate imports ranged from 89,000 pounds to 640,000 pounds in 1962-66. Imports supplied less than half of 1 percent of consumption during that period.

U.S. imports of dried buttermilk have accounted for practically all of the imports of dried milk and cream in recent years. Imports of that product amounted to 400,000 pounds in 1966. In 1966 three-fourths of the imports of dried buttermilk came from Canada and the remainder from New Zealand. Imports of dried whole milk, dried cream, dried whey, and malted milk were nil in 1966.

The quotas on dried whole milk and malted milk have generally been almost filled in recent years (tables 52 and 53). The quota on dried buttermilk has been almost filled in some years, but only partially filled in others (table 54). There have been no recent imports under the dried cream quota; the small quantity permitted entry is not regarded as an amount that would be traded commercially.

Channels and methods of distribution

Inasmuch as none of these dried products are purchased by the CCC, virtually all of the domestic production moves to industrial users either directly from manufacturers or through intermediate

handlers. Some of the products are further processed and repackaged for retail sale.

Prices

Spot price quotations on some of these dried milk products are reported by the U.S. Department of Agriculture for several cities. In 1966 the average of these prices for whey powder was about 10 cents per pound; that for whole milk powder was slightly above 40 cents per pound; that for dried sweet cream buttermilk was almost 22 cents per pound. The prices for all of the products have generally been increasing in recent years.

Foreign production and trade

Although the United States is the world's largest producer of the products discussed in this section, it has not been important in the international trade of these products in recent years. The Netherlands (the largest producer of dried whole milk), Denmark, and New Zealand have been the largest exporters of dried milk and cream. Venezuela, the United Kingdom, West Germany, the Congo, and Ceylon have been the largest import markets.

Nonfat Dry Milk

Description

Nonfat dry milk (dried skimmed milk) is the product resulting from the removal of fat and water from milk. 1/ It is produced largely in the United States by concerns that produce butter; these concerns, known as butter-powder plants, have large quantities of skimmed milk remaining after cream is separated from whole milk to produce butter. The foreign and domestic products are identical and are generally competitive.

In 1964 about one-fourth of the nonfat dry milk utilized in the United States was sold to bakeries, one-fourth was packaged for home use, one-fourth was used in dairy products, and the remaining fourth was used in processed meat products, prepared food mixes, confectionery, chemicals and pharmaceuticals, soft drinks, soups, and animal feeds.

Because of its low moisture content, nonfat dry milk is easy to handle and store. An inexpensive source of protein, nonfat dry milk has appealed to many consumers because of its low butterfat content. Virtually all nonfat dry milk consumed in the United States contains not over 1.5 percent of butterfat, the maximum content permitted therefor by statute (21 U.S.C. 321c).

1/ Other dried milk and cream products are discussed in the previous section of this report.

U.S. tariff treatment and other import restrictions

Since August 1963, U.S. imports of nonfat dry milk have been dutiable at the rate of 1.5 cents per pound under item 115.50 of the Tariff Schedules of the United States (TSUS) (table 19). That rate is the rate currently applicable to imports from all countries (except the Philippine Republic) other than those designated as being under Communist control. 1/ The rate has been in effect since January 1, 1948. The ad valorem equivalent, based on imports entering during 1966, is 11.5 percent.

Under the Tariff Act of 1930, U.S. imports of nonfat dry milk were originally dutiable at the rate of 3 cents per pound (par. 708(b)). Pursuant to concessions granted by the United States in the General Agreement on Tariffs and Trade (GATT), this rate was reduced to 1.5 cents per pound (table 20). The existing rate of duty is not one on which the United States gave a concession in the sixth (Kennedy) round of trade negotiations in the GATT.

Since July 1, 1953, U.S. imports of "dried skimmed milk" (a term synonymous with nonfat dry milk) have been subject to an annual quota of 1,807,000 pounds under section 22 of the Agricultural Adjustment Act, as amended (see item 950.02 of the appendix to the TSUS). In the quota year ending June 30, 1967, 73 percent of the quota was allocated to Australia and the remaining 27 percent was allocated to Canada. 2/

1/ Imports from these Communist-controlled areas are dutiable at the rate of 3 cents per pound.

2/ Pursuant to Presidential Proclamation 3790 of June 30, 1967, the quota year (ending June 30) was changed to a calendar-year basis.

U.S. consumption

The annual U.S. consumption of nonfat dry milk in 1962-66 ranged from 1,147 million pounds to 1,245 million pounds (table 55). Annual consumption in these years has been markedly higher than that in the late 1940's. The per capita U.S. consumption of nonfat dry milk has increased substantially since World War II. Per capita consumption averaged 3.4 pounds annually during the period 1948-50; it averaged 5.9 pounds during 1962-66.

Although bakeries have been the largest users of nonfat dry milk for many years, consumption of that product in the home has been increasing more rapidly than consumption in other uses. Sales of nonfat dry milk packaged for home use increased from about 2 million pounds in 1948 to 245 million pounds in 1964. Since 1962 sales of nonfat dry milk packaged for home use have been second in importance to sales to bakeries. The household consumption of the product has been stimulated by the low price of nonfat dry milk compared with many other milk products, recent improvement in the quality of the product, and the promotional efforts of domestic producers. Although nonfat dry milk is generally reconstituted into fluid milk in the home, it is also used for cooking purposes.

Small quantities of nonfat dry milk (not included above) are used as animal feed.

U.S. production and stocks

Annual U.S. production of nonfat dry milk did not exceed 400 million pounds before World War II. During the 1940's, however, the output expanded in response to increased domestic demand, wartime military needs, and foreign requirements; nonfat dry milk was readily exported because its transportation costs were low and spoilage was negligible. Annual U.S. production amounted to 1.7 billion pounds in 1958. It amounted to 2.2 billion pounds in 1962, valued at about \$332 million--the highest level on record. Production in 1964 amounted to nearly 2.2 billion pounds, but output declined to 1.6 billion pounds in 1966. The decline in U.S. output of nonfat dry milk in 1965 and 1966 was associated with a reduction in both the total U.S. output of milk and the production of butter. The general increase in the production of nonfat dry milk in the 1950's and early 1960's coincided with a shift in farmers' sales from farm-separated cream to whole milk. Many dairy farmers who had marketed farm-separated cream (and used the skimmed milk as animal feed) ceased doing so. Hence, concerns producing butter increasingly had purchased whole milk and separated the cream; most of them dried the skimmed milk.

Total yearend stocks of nonfat dry milk (commercial and Government-owned) amounted to a record high of 675 million pounds in 1962 (the year in which production was also at a record high). By 1966 stocks had decreased to 119 million pounds. At the end of 1962, stocks were equivalent to nearly a third of the U.S. production of

that year; the Government owned about 85 percent of the total. At the end of 1966, however, stocks were equivalent to less than a tenth of production, and none were owned by the Government (see the section on prices).

U.S. exports

U.S. exports of nonfat dry milk increased from 872 million pounds in 1962 to 1.1 billion pounds in 1963 and to 1.3 billion pounds in 1964; subsequently they declined, amounting to only 388 million pounds in 1966. In 1963 and 1964, more than half of the U.S. output of nonfat dry milk was exported. A decline in the output of nonfat dry milk in Europe and strong European demand for the product for feeding to calves to produce veal largely stimulated these exports. By 1965, however, the European output of nonfat dry milk had increased, and U.S. exports to Europe declined. A large part of the exports to Europe were subsidized under the Payment-in-Kind (PIK) program for dairy products because domestic prices were generally higher than foreign prices, and substantial shares of the exports to other countries were donated by the Government.

Under the PIK program, nonfat dry milk is purchased by U.S. exporters at domestic market prices and exported at prices prevailing in the foreign markets. The U.S. Government affords the exporter a subsidy (in the form of CCC-owned commodities) approximately equal to the difference between the U.S. and foreign market prices of nonfat dry milk. The average export subsidy rate for nonfat dry milk

decreased from 8.6 cents per pound in 1963 to 6.5 cents in 1964. In March 1966 the payment of export subsidies under the PIK program was temporarily suspended by the U.S. Department of Agriculture until the domestic dairy situation again justified its use.

In 1963 and 1964 about a third of total U.S. exports of nonfat dry milk were donated by the Department of Agriculture; about half of the exports were donated in 1965, and about four-fifths in 1966. In earlier years, donations generally accounted for the bulk of the U.S. exports. In recent years, the Netherlands, Japan, Spain, Brazil, Mexico, India, and Viet Nam have been the major markets for U.S. exports of nonfat dry milk.

U.S. imports

Annual U.S. imports of nonfat dry milk have generally been insignificant compared with the domestic output. Since 1953 imports have been limited to the amount provided in the annual section 22 quota, discussed in an earlier section. The quota--1.8 million pounds--has been generally filled in recent years (table 56). Because the quota has been imposed for 12-month periods ending June 30 and because imports have entered irregularly during the quota year, imports recorded on a calendar-year basis have varied substantively. U.S. imports, for example, ranged from 1.3 million to 2.8 million pounds annually in the period 1962-66. U.S. imports of nonfat dry milk have virtually all been supplied by Australia, Canada, and New Zealand.

Channels and methods of distribution

Nonfat dry milk is distributed from the manufacturer through three main channels--(1) from the manufacturer directly to the users (principally industrial users, such as manufacturers of baked goods and foods); (2) through intermediate handlers which resell to industrial users or retail outlets; and (3) to the Government under the price-support program (which later disposes of most of its purchases by donation overseas).

The nonfat dry milk consumed as a beverage is packaged principally by dairy companies and chainstores. It is sold at wholesale and retail as a staple grocery item.

Prices (including pricing practices)

The price of nonfat dry milk is supported directly by the U.S. Department of Agriculture under the price-support program for dairy products. The Commodity Credit Corporation (CCC) stands ready to purchase all nonfat dry milk offered to it at announced prices ^{1/} (see the earlier section of this report on Federal Programs for Dairy Products). Moreover, the Department of Agriculture generally stands ready to resell dairy products to the domestic commercial users for unrestricted use at announced prices, which are always above the Government purchase prices. Although the quantities of nonfat dry milk

^{1/} Under section 709 of P.L. 89-231, the Secretary of Agriculture, beginning Nov. 3, 1965, was authorized to purchase dairy products--including nonfat dry milk--at market prices above support prices if CCC supplies purchased at support prices are deemed insufficient to meet commitments under various Government programs such as the school lunch program. Thus far, there have been no purchases of nonfat dry milk under section 709.

resold to the commercial market have been small, the resale prices ordinarily set a ceiling on the wholesale market prices for nonfat dry milk inasmuch as market prices probably would exceed the CCC resale prices only when Government stocks are low.

The dairy price-support program has generally played a central role in determining market prices of nonfat dry milk in the United States in recent years. Market prices have usually remained close to the Government purchase prices (table 10), and the Government has generally purchased about half of the domestic output. After 1964, however, the share of the annual U.S. output of nonfat dry milk purchased by the Department was generally smaller than in earlier years. As mentioned earlier, the domestic output of nonfat dry milk has been declining since 1964; moreover, the consumption of that product has been increasing for many years.

The share of the U.S. production of nonfat dry milk purchased by the Government in 1953-66 is shown in the following tabulation:

Year	U.S. production	CCC purchases	
		Total	Share of U.S. production
	Million pounds	Million pounds	Percent
Average:			
1953-57-----	1,406	662	47
Annual:			
1958-----	1,710	886	52
1959-----	1,723	830	48
1960-----	1,819	853	47
1961-----	2,020	1,086	54
1962-----	2,231	1,378	62
1963-----	2,106	1,019	48
1964-----	2,178	672	31
1965-----	1,993	882	44
1966-----	1,594	364	23

Over the years, U.S. prices of nonfat dry milk, like those of many dairy products, have generally been lower during the middle of a calendar year when milk production is at its highest. The large quantities of surplus milk going into butter manufacturing at that time of year yield large supplies of skimmed milk for drying; hence, the production of nonfat dry milk is larger in the spring and summer than at other times of the year. Certain grades and types of nonfat dry milk generally sell at higher prices than others. For example, so-called low-heat powder ordinarily averages about one-half cent per pound higher at wholesale than high-heat powder. The low-heat powder, after further processing, is packaged for home use.

Foreign production and trade

The United States has accounted for about 60 percent of the total world production of nonfat dry milk in recent years; France, West Germany, and Canada also have produced large quantities. The United States has also been the world's leading exporter of nonfat dry milk in recent years. In 1963 and 1964, the United States supplied over two-thirds of the total world exports; France and New Zealand were the next largest suppliers. By 1966, however, the U.S. exports of nonfat dry milk had declined substantially inasmuch as the U.S. supplies available for export were virtually exhausted.

Western Europe has accounted for about 35 percent of the total world imports of nonfat dry milk in recent years. In 1963, Japan became an important import market for nonfat dry milk because of

increased use in that country in school lunch programs. In Europe nonfat dry milk is used for animal feed as well as for human consumption. In most other countries, however, it is used principally for human consumption; plants have been established in many Asian, African, Caribbean, and Latin American countries for reconstituting nonfat dry milk into fluid milk for human use.

Ice Cream, Ice Milk, and Other Frozen Dairy Desserts

Description

The products considered herein are frozen dairy foods which are consumed as a dessert or a snack. Ice cream is made from cream (or butterfat), flavoring, sweetening, and usually eggs. Under the Standards of Identity of the Food and Drug Administration, 1/ ice cream generally must contain not less than 10 percent by weight of butterfat and not less than 20 percent by weight of total milk solids. 2/ Several States, however, require higher butterfat and total-milk-solids contents than do the Federal regulations. Frozen custard must conform to the standards for ice cream and in addition contain not less than 1.4 percent by weight of egg yolk solids. Ice milk must conform to the standards for ice cream, except that it must contain more than 2 percent but not more than 7 percent by weight of butterfat and not less than 11 percent by weight of total milk solids. Sherbets, which are frozen mixtures of fruit juices, sweeteners, and dairy ingredients, must contain not less than 1 percent and not more than 2 percent by weight of butterfat and not less than 2 percent and not more than 5 percent by weight of total milk solids.

1/ 21 CFR 20.1-.4.

2/ When certain bulky flavoring ingredients are used (e.g., chocolate, fruit, nuts, etc.) the butterfat content must not be less than 8 percent and the total milk solids content not less than 16 percent by weight of the finished ice cream.

"Mellorine-type desserts" are similar to ice cream except that the fat content of the former products is supplied from vegetable fats rather than butterfat; coconut, corn, cottonseed, or safflower oil are the usual sources of fat. There are no Federal standards of identity for mellorine desserts but they may only be sold when permitted by State law; as of January 1, 1967, such products could be legally sold in 13 States, principally in the Southwest.

Water ices (popsicles, etc.) do not contain milk or milk products and are not included herein although they do compete with the frozen dairy desserts.

The principal dairy products used in the manufacture of frozen dairy desserts include milk, cream, condensed milk, butter, butter oil, butterfat-sugar mixtures, and dried milk; each of these products is discussed elsewhere in this report. Frozen dairy desserts generally furnish a minor end use for all these dairy products (with the exception of butterfat-sugar mixtures and butter oil).

U.S. tariff treatment

Since August 1963, U.S. imports of ice cream have been dutiable at the rate of 20 percent ad valorem under item 118.25 of the Tariff Schedules of the United States (TSUS) and imports of ice cream bars coated with chocolate or other coatings, ice cream sandwiches, and other novelties consisting of ice cream flavored or decorated with other products, and sherbet have been dutiable as edible preparations not specially provided for, at the rate of 20 percent ad

valorem under item 182.91 of the TSUS (table 19). ^{1/} These rates are currently applicable to imports from all countries except the Philippine Republic. Under the Tariff Act of 1930, U.S. imports of the aforementioned products were dutiable at the existing rate--20 percent ad valorem--(par. 1558). The United States has never granted a trade-agreement concession on ice cream (table 20). The existing rate on the edible preparations dutiable under item 182.91 of the TSUS and considered herein is one on which the United States gave a concession in the sixth (Kennedy) round of trade negotiations under the General Agreement on Tariffs and Trade (GATT); the final stage of the reduced rate will be 10 percent ad valorem. U.S. imports of ice cream and other frozen dairy desserts are not subject to quantitative restriction.

U.S. consumption and production

Total U.S. consumption of ice cream and other frozen dairy desserts, which approximates production inasmuch as imports and exports are negligible, increased from 989 million gallons in 1962 to 1,098 million gallons in 1966 (table 57). In the period 1962-66, the annual production of ice cream increased from 704 million gallons to 752 million gallons, that of ice milk, from 188 million gallons to 240 million gallons, and that of milk sherbet, from 41 million gallons to 48 million gallons. The production of mellorine-type desserts in that period remained virtually unchanged; it averaged about 51 million gallons annually. Annual average production of all

^{1/} The Bureau of Customs has not classified imports of ice milk or other frozen dairy desserts.

frozen dairy desserts increased at a rate of 3.0 percent annually during 1956-66 and averaged 15 percent larger in 1962-66 than in the preceding 5-year period.

In the decade 1957-66, per capita consumption of ice cream, sherbet, and mellorine-type desserts remained nearly constant at 15.5, 0.9, and 1.0 quarts, respectively, while that of ice milk increased from 2.6 quarts to 4.9 quarts. The increased consumption of ice milk resulted from increased consumer preference for low-fat products and the increased popularity of drive-in frozen dessert stands which usually sell ice milk and sometimes the other frozen dairy desserts herein considered. Generally most stands that sell frozen desserts market them from direct-serve or shake machines (counter freezers) that draw the product directly into a cone or cup; in the trade such products are called "soft-frozen" products. In 1964, 45 percent of the ice milk produced in the United States was soft-frozen; only 5 percent of the mellorine and 2 percent of the ice cream was marketed in the soft form in that year. Of the total soft-frozen dairy products produced in 1964, ice milk accounted for 83 percent, ice cream for 15 percent, and mellorine for 2 percent.

In 1963 nearly 2,500 plants produced frozen dairy desserts in the United States (excluding counter freezers)--a decline of nearly 30 percent from the 3,400 plants operating in 1957. In recent years, nearly all of these plants produced their own ice cream mix. Generally these plants produced only frozen desserts; some of them, however, also produced cottage cheese, butter, condensed milk, or other

dairy products. Shipments of frozen dairy desserts from the manufacturers in 1963 were valued at \$1,117 million.

U.S. imports and exports

U.S. imports and exports of frozen dairy desserts have been negligible or nil for many years. Recently, a few shipments of ice cream in retail-size packages have been transported by air from the United States to Europe; such shipments have been largely promotional, however, and the trade does not expect large commercial sales to develop.

Foreign production and trade

The United States is by far the world's largest producer of frozen dairy desserts. The other major producers have a large domestic production of milk or are industrialized nations with a high standard of living (e.g., Japan and the United Kingdom). The following tabulation shows production of frozen dairy desserts in

specified countries for the latest year available: 1/

Country	Year	Million gallons	Per capita production (pints)
Canada-----	1966	69.1	29.1
Japan <u>1/</u> -----	1966	51.2	4.1
Australia-----	1966	49.2	33.9
Italy <u>2/</u> -----	1966	48.2	7.4
West Germany <u>2/</u> -----	1966	45.7	6.1
United Kingdom <u>3/</u> -----	1966	38.4	<u>4/</u>
Sweden-----	1966	14.2	14.5
France <u>1/</u> -----	1965	13.7	2.3
Venezuela <u>1/</u> -----	1966	9.4	8.4
New Zealand <u>2/</u> -----	1961	7.4	24.9
Netherlands <u>2/</u> -----	1965	7.3	4.8
Republic of South Africa <u>2/</u> -----	1961	7.3	3.6
Denmark <u>1/</u> -----	1965	6.0	10.1
Belgium <u>2/</u> -----	1965	5.5	4.6
Ireland <u>1/</u> <u>3/</u> -----	1966	5.3	<u>4/</u>
Poland <u>1/</u> -----	1966	5.3	1.4
Finland-----	1966	4.6	8.0

1/ Ice cream only. 2/ Includes water ices.

3/ Production of large manufacturers only. 4/ Not available.

Frozen dairy desserts and the mixes from which they are made do not enter international trade in significant quantities. The components of frozen dairy desserts and dairy dessert mixes (e.g., cream, condensed milk, and sugar) are traded more frequently than the finished products.

1/ Data from the International Association of Ice Cream Manufacturers.

Butterfat-Sugar Mixtures

Description

Butterfat-sugar mixtures are products made up wholly or largely of the two specified components--butterfat and sugar. The principal mixture consists by weight of approximately 44 percent butterfat and 56 percent sugar. Similar products contain about the same proportion of butterfat (43 to 44 percent) but various proportions of sugar, and other ingredients (chiefly nonfat milk solids). ^{1/} The percentages of butterfat and sugar in the mixtures have resulted largely from the effects of various U.S. import quotas as discussed later in this report.

Butterfat-sugar mixtures, which have much the same appearance as butter, are solids at room temperatures; they become thick oily liquids at high temperatures. They are usually stored and shipped under refrigeration, generally in polyethylene-lined cardboard boxes containing 56 pounds each. If properly refrigerated, butterfat-sugar mixtures can be stored for about a year without deterioration of quality.

Butterfat-sugar mixtures are used in large quantities principally in making ice cream. Attempts to promote their use in the manufacture of other foods such as confectionery and bakery products have generally been unsuccessful. In the manufacture of ice cream, the ingredients are heated to facilitate dissolving and blending, and to pasteurize, the various ingredients of the mix. When butterfat-sugar

^{1/} The butterfat-sugar mixtures are marketed under various trade names, such as Ernex, Isex, Junex and Lorex.

mixtures are heated with the other ingredients, the mixtures are readily incorporated into the ice cream mix. Commercial ice cream plants do not need additional equipment to utilize butterfat-sugar mixtures.

The principal constituents of ice cream are butterfat, nonfat milk solids, sugar, and water. The formulas for making ice cream vary widely, depending on the ingredients available, costs, prospective selling prices, and the desired quality of the finished product. Sources of butterfat used in making ice cream include fresh and frozen milk and cream, butter, butter oil, condensed and evaporated milk, and--recently--butterfat-sugar mixtures.

When butterfat-sugar mixtures are used as a source of butterfat in the ice cream mix, they generally do not provide more than half of the butterfat content of the finished ice cream; seldom, if ever, are they the exclusive source of the butterfat. The proportion of butterfat, nonfat milk solids, and sugar in the butterfat-sugar mixtures is not the same as that found in ice cream; therefore, other ingredients must be incorporated in the mix, generally to increase the proportion of nonfat milk solids and to decrease the proportion of sugar. The sugar in butterfat-sugar mixtures, moreover, is generally all sucrose (cane or beet sugar); ice cream manufacturers, however, usually use dextrose or dextrose sirup (corn sugar or corn sirup) to provide about 30 percent of the sugar in ice cream, because the dextrose improves the body, texture, flavor, and shelf life of ice cream. Fresh milk and cream are usually added to mixes containing

butterfat-sugar mixtures to increase the amount of nonfat milk solids in the mix and to provide the quality imparted to ice cream from the use of those products.

U.S. tariff treatment and other import restrictions

U.S. imports of butterfat-sugar mixtures from all countries (except Cuba and the Philippine Republic) are currently dutiable at 20 percent ad valorem as edible preparations, not specially provided for under item 182.92 of the Tariff Schedules of the United States (TSUS). ^{1/} Under the Tariff Act of 1930 these products were dutiable at the existing rates under paragraph 1558 (table 20). The existing rate of duty is not one on which the United States gave a concession in the sixth (Kennedy) round of trade negotiations under the GATT.

Quotas have been imposed on U.S. imports of butterfat-sugar mixtures under the provisions of section 22 of the Agricultural Adjustment Act, as amended (see items 950.12 and 950.13 of the appendix to the TSUS), and the provisions of the Sugar Act of 1948, as amended. The character of the quotas and their effect on U.S. imports of butterfat-sugar mixtures are described in the following section of the report.

The imported butterfat-sugar mixtures have been made from butter or butter oil rather than from cream. If made from milk or cream, such mixtures would be classifiable for tariff purposes as an article of milk or cream, n.s.p.f. (TSUS item 118.30) and subject to the annual absolute quota of 6,000 pounds applicable to U.S. imports of such products.

^{1/} For the statutory description, see table 19 in the appendix to this report.

U.S. consumption and trade

The butterfat-sugar mixtures consumed in the United States are supplied entirely by imports. Although the ingredients from which butterfat-sugar mixtures are made--butterfat, sugar, and nonfat milk solids--are used widely in the United States, the mixtures of those products are not produced in this country except in the manufacture of various foods. Trade in the product has developed principally because U.S. prices for butterfat and sugar have been high in relation to world prices. In addition, stocks of butterfat in many of the countries that have exported butterfat-sugar mixtures to the United States have been large. Until recently, moreover, the importation of butterfat into the United States in this form had not been subject to quantitative restrictions under section 22, as had imports of many dairy products.

Imports of butterfat-sugar mixtures first entered the United States in 1961. Prior thereto, such mixtures were not articles of commerce, either in the United States or abroad. U.S. imports of the mixtures are estimated to have totaled 2.5 million pounds in 1961, 4.1 million pounds in 1962, and 3.3 million pounds in 1963. 1/ In 1964 they were negligible and in 1965 they amounted to only 684,000 pounds. In 1966, when U.S. production of milk declined and domestic prices of dairy products rose sharply, imports of butterfat-sugar mixtures amounted to 108 million pounds (table 58). In the first

1/ Separate quantitative data on U.S. imports of butterfat-sugar mixtures were not reported prior to September 1963.

6 months of 1967 imports continued at a high level, amounting to 92 million pounds compared with 60 million pounds, in the corresponding months of 1966.

In the period 1961-65, imported butterfat-sugar mixtures provided less than a half of one percent of the butterfat used in the manufacture of ice cream in the United States. In 1966, the butterfat in such mixtures was equivalent to 12 percent of the butterfat content of domestically produced ice cream and ice milk and 1 percent of the total butterfat production in the United States. Data on the amount of butterfat contained in ice cream and ice milk produced in the United States in recent years and the amount of butterfat in imported butterfat-sugar mixtures are shown in the following tabulation:

(In millions of pounds)

Year	Butterfat in ice cream and ice milk	Butterfat in imported butterfat- sugar mixtures
1961-----	363	1
1962-----	370	2
1963-----	379	1
1964-----	391	<u>1</u>
1965-----	403	<u>1</u>
1966-----	404	47
January-June:		
1966-----	197	26
1967-----	198	41

1/ Less than 500,000 pounds.

As noted earlier, U.S. imports of butterfat-sugar mixtures have been subject to import quotas imposed under both section 22 of the

Agricultural Adjustment Act and the Sugar Act of 1948. The quotas have materially influenced the character and the volume of U.S. imports of such mixtures. U.S. imports of certain articles (including butterfat-sugar mixtures) that contain more than 45 percent of butterfat are embargoed as a result of action taken in 1957 under section 22; the imported mixtures, therefore, have ordinarily contained slightly less than 45 percent of butterfat. In mid-1966 quotas were imposed under the Sugar Act on imports of butterfat-sugar mixtures containing more than 25 percent of sugar; the terms of the quotas were as described in an earlier section of this report. Before the quotas were imposed, U.S. imports of the mixtures generally contained 56 percent of sugar (and 44 percent of butterfat). After the quotas were imposed, imports that entered under the quota contained 56 percent of sugar; some imported mixtures, which were made with only about 24 percent of sugar, entered outside the quota. Whatever their sugar content, however, all of the mixtures contained about 44 percent of butterfat.

On July 1, 1967, under the provisions of section 22, imports of butterfat-sugar mixtures for the remainder of 1967 were limited to 1,290,000 pounds; imports in subsequent years will be limited to 2,580,000 pounds (Proclamation 3790). 1/ As a result of these quotas, the volume of U.S. imports of the mixtures will be greatly reduced from the levels that had been attained in the immediately preceding months. In the first half of 1967, U.S. imports of butterfat-sugar mixtures totaled 92 million pounds, whereas the quota

1/ The amounts permitted entry are allocated to Australia, Belgium, and Denmark.

amount for the second half of that year is 1,290,000 pounds. Inasmuch as the absolute limit imposed by the quotas was less than provided by the annual quotas under the Sugar Act, the butterfat-sugar mixtures that enter under the new section 22 quota undoubtedly will contain about 56 percent of sugar and 44 percent of butterfat.

The principal sources of imported butterfat-sugar mixtures in 1966 were Canada, Belgium, Denmark, the United Kingdom, Switzerland, Australia, and France. Stocks of butter in Western Europe in 1966 (515 million pounds as of January 1, 1967) were substantially larger than average annual stocks (324 million pounds) in the preceding 5 years. Hence, supplies of butter were readily available for conversion into butterfat-sugar mixtures. In 1961-63 Australia had been the principal source of imports. During 1963-65 Australia undertook, at the request of the United States, to limit its annual exports of butterfat-sugar mixtures to the United States to 2,240,000 pounds (see the section of this report on commitments by exporting countries). Entries of such mixtures from Australia into the United States in 1963 were substantially in excess of that amount, but they were nil in 1964 and 1965.

Butter Oil

Description

Butter oil is a concentrated butterfat product made from butter, cream, or milk. It usually contains 99.5 percent or more of butterfat. ^{1/} Butter oil is also known as dehydrated butter or anhydrous milk fat; it is a bland, yellowish product, lacking in butter flavor, and having a jelly-like consistency at room temperature.

When made from fresh milk or cream, the product is usually called anhydrous milk fat. Milk or cream is first processed to form plastic cream (a concentrated cream containing over 80 percent butterfat) and then the remaining water and curd are removed. When made from butter, the product is usually known as butter oil and sometimes as dehydrated butter. When making butter oil, butter is melted, passed through a separator, pasteurized, and vacuum dried. Cream or butter that does not contain off-flavors is generally used to make good quality butter oil; although butter oil tastes bland, any off-flavor becomes more pronounced upon emulsification with skimmed milk (as in making ice cream or reconstituting fluid milk).

Butter oil is usually stored under light refrigeration to prevent the development of off-flavors; it can be stored, however, for about a year without refrigeration. The principal advantages of butter oil compared to butter or cream are its good keeping quality, lower shipping and storing costs, and ability to supply milk fat which can be used with or without nonfat milk solids.

^{1/} There are no Federal Standards of Identity for butter oil.

While not widely used in the United States, butter oil is employed as a source of milk fat in the manufacture of ice cream, confectioners' coatings, and reconstituted milk (principally for the Armed Forces). Most of the butter oil produced in the United States has been for export to foreign countries where it is used as a source of fat in cooking and baking, and in reconstituting milk.

U.S. tariff treatment and other import restrictions

U.S. imports of butter oil are dutiable at the rate of 10 percent ad valorem under item 177.67 of the Tariff Schedules of the United States (TSUS). 1/ That rate is the rate currently applicable to imports from all countries (except the Philippine Republic) other than those designated as being under Communist control. 2/

Under the Tariff Act of 1930, U.S. imports of butter oil were originally classified under paragraph 709. In July 1962, however, it was determined that such imports were properly classifiable under paragraph 52, at a rate of 10 percent ad valorem. The rate in paragraph 52 had previously been reduced from 20 percent to 10 percent, pursuant to a concession granted by the United States in the General Agreement on Tariffs and Trade (GATT) (table 20).

The existing rate of duty is not one on which the United States gave a concession in the sixth (Kennedy) round of trade negotiations in the GATT.

1/ For the statutory description, see table 19 in the appendix to this report.

2/ Imports from these Communist-controlled areas are dutiable at the rate of 20 percent ad valorem.

An absolute quota on U.S. imports of butter oil and butter substitutes containing over 45 percent of butterfat (item 116.30) has been in effect pursuant to section 22 since 1957 (see item 950.06 of the appendix to the TSUS). The aggregate quota was set at 1,800,000 pounds for 1957; for subsequent years it was reduced to 1,200,000 pounds annually. Unlike most other section 22 quotas, that on butter oil is administered on a first-come first-served basis by the Department of the Treasury.

U.S. consumption and production

In recent years the annual U.S. consumption of butter oil has been small and stable. Most prospective industrial users of butter oil prefer to use fresh milk and cream as sources of butterfat because the fresh products impart a higher quality to the finished product than does butter oil. Moreover, because butter oil is produced by further processing butter, cream, or milk, the unit cost of butterfat in domestic butter oil is higher than the unit cost of butterfat in domestic fluid milk or cream. Domestic butter oil, therefore, generally cannot compete with domestic milk or cream as a source of butterfat in the U.S. market.

Nevertheless, butter oil is produced in the United States but almost wholly for export rather than domestic consumption. It usually has been produced under contract by creameries for export under public and private donation programs or for export by the Department of

Defense. The good keeping quality of butter oil makes it a desirable source of butterfat in hot climates. As will be noted below, moreover, butter oil is imported regularly for consumption in the United States. Because the U.S. price-support program maintains the domestic price of butterfat above world levels, imported butter oil can be sold in the United States at prices that compete with prices of butterfat in milk and cream. The quantity that may be imported, however, is limited by quota.

The principal use of butter oil consumed in the United States has been to make ice cream. Butter oil is also used in the confectionery industry, principally to prevent heat bloom (discoloration resulting from exposure to heat) from occurring on chocolate candy; inasmuch as only a small amount of butterfat (2 percent of the total fat content) will prevent heat bloom, and as butter oil is generally a higher priced ingredient than cocoa butter, only small amounts of butter oil have been used by the confectionery industry.

Although the number of producers is not known, it is believed that fewer than 25 concerns have probably produced butter oil in recent years. Data on domestic production of butter oil are not available; however, average annual production in the period 1962-66 was probably only slightly larger than the average annual exports (14.2 million pounds) in that period.

U.S. exports

U.S. exports of butter oil increased from 5.1 million pounds in 1962 to 25.3 million pounds in 1964 and then declined to 9.1 million pounds in 1966 (table 59). The principal destinations for U.S. exports of butter oil in recent years have been South Viet Nam, South Korea, Nansei and Nanpo Islands, Chile, Japan, Peru, and the Philippine Republic. Average exports in 1962-66, although larger than exports in 1957-61, were small in comparison to exports of 87 million pounds in 1955 and 57 million pounds in 1956.

U.S. exports of butter oil in recent years have been shipped predominantly under foreign aid programs or have consisted of donations for relief or charity by individuals or private agencies. Inasmuch as the price of butter (and butter oil) has generally been higher in the United States than in other countries, commercial exports of butter oil from the United States have been insignificant.

U.S. imports

U.S. imports of butter oil are limited to 1.2 million pounds annually under a section 22 quota (see separate section on section 22 quotas). Inasmuch as the U.S. price for butterfat has generally been higher than that in other countries, the quota has been quickly filled in recent years. The principal sources of imported butter oil have been Australia, New Zealand, Netherlands, Denmark, Belgium, and Canada.

Yoghurt and Other Fermented Milk

Description

Yoghurt and other fermented milk products have a smooth body and firm texture similar to custard. They have a moderately sour taste due to the acidity caused by the bacteria used in their manufacture. Because they are usually made from partly skimmed milk, they ordinarily are low in butterfat.

Yoghurt and similar products are usually marketed at retail in 6 or 8-ounce cups; they are often flavored, particularly with various fruit flavorings. They serve both as part of a meal or as a snack; many persons consume them for dietary purposes--either to aid in weight control, or to soothe intestinal disturbances, or both.

The fermented milks, which are also called cultured milks, are known by several names--e.g., yoghurt, koumiss, kefir, and kaeldermaelk. They differ from one another in taste and appearance. Yoghurt is the principal fermented milk produced in the United States.

U.S. tariff treatment and other import restrictions

U.S. imports of yoghurt and other fermented milk from all countries (except the Philippine Republic) are dutiable under item 118.10 of the Tariff Schedules of the United States (TSUS) at the rate of 20 percent ad valorem (table 19). Under the Tariff Act of 1930 these products were dutiable at the existing rate (par. 1558) (table 20). Imports of all fermented milks are subject to the provisions of the

Federal Import Milk Act of 1927, which is discussed in another section of this report. The Food and Drug Administration has not issued any permits to import fermented milks.

Comment

U.S. consumption of yoghurt and similar products probably amounted to 30 million to 35 million pounds in 1966. In recent years, consumption is believed to have been increasing at a rate of about 10 percent annually. In addition to developing a taste for yoghurt, the American people have become increasingly weight and diet conscious. Domestic production has supplied all of the U.S. consumption. U.S. imports and exports of fermented milk have been negligible or nil for many years.

Several hundred plants produce yoghurt in the United States. One firm is believed to account for over half of the U.S. output. For nearly all of the producing firms, yoghurt is produced to supplement the incomes from other dairy products.

Fermented milks seldom enter international trade. They are popular foods in many countries, particularly in the Mediterranean area. Data on foreign production and trade are not available.

Appendix A
Statistical Tables

Table 1.--U.S. dairy farms: Number, by categories,
in selected (census) years, 1945-64

(In thousands)

Item	:	1945	:	1950	:	1954	:	1959	:	1964
Farms reporting milk cows-----	:	<u>1/</u>	:	3,648	:	2,936	:	1,792	:	1,134
Farms selling milk or cream <u>2/</u> -----	:	2,473	:	2,007	:	1,475	:	1,017	:	648
Commercial dairy farms:	:	:	:	:	:	:	:	:	:	:
Total <u>3/</u> -----	:	<u>1/</u>	:	602	:	549	:	428	:	367
With sales more than \$10,000 <u>4/</u> -----	:	<u>1/</u>	:	71	:	88	:	155	:	186

1/ Not available.

2/ 1945, any dairy product sold; 1950 and 1959, any milk or cream sold, 1954 and 1964, farms selling milk plus farms selling cream.

3/ Dairy products accounted for more than 50 percent of total sales. Farms with an annual value of sales amounting to \$2,500 or more, and farms with sales of \$50 to \$2,499 if the farm operator was under 65 years of age and (1) he did not work off the farm 100 or more days during the year and (2) the income received by the operator and members of his family from nonfarm sources was less than the value of all farm products.

4/ Dairy products accounted for more than 50 percent of total sales.

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

Table 2.--U.S. farms producing milk: Number of farms reporting milk cows, number of milk cows and sales of whole milk, classified by size of milk cow herd, 1954, 1959, and 1964

Size of milk cow herd	1954		1959		1964	
	Number of farms reporting milk cows					
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Less than 30----	2,862,204	96.8	1,712,315	93.2	986,418	87.0
30-49-----	70,948	2.4	89,315	4.9	100,971	8.9
50-99-----	19,026	.6	27,940	1.5	37,633	3.3
100 and over----	4,722	.2	6,551	.4	8,890	.8
Total-----	2,956,900	100.0	1,836,121	100.0	1,133,912	100.0
	Number of milk cows (in thousands)					
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Less than 30----	15,779	77.5	10,582	63.0	6,897	47.2
30-49-----	2,541	12.5	3,246	19.3	3,701	25.3
50-99-----	1,203	5.9	1,782	10.6	2,384	16.3
100 and over----	842	4.1	1,198	7.1	1,640	11.2
Total-----	20,365	100.0	16,808	100.0	14,622	100.0
	Sales of whole milk (in millions of pounds)					
	<u>Pounds</u>	<u>Percent</u>	<u>Pounds</u>	<u>Percent</u>	<u>Pounds</u>	<u>Percent</u>
Less than 30----	52,785	63.9	50,012	51.3	38,384	36.2
30-49-----	15,805	19.1	24,282	24.9	31,485	29.7
50-99-----	7,714	9.4	13,301	13.7	20,587	19.5
100 and over----	6,308	7.6	9,889	10.1	15,479	14.6
Total-----	82,612	100.0	97,484	100.0	1/105,940	100.0

1/ Data do not add to the total; information for a few farms were not reported by size of milk cow herd in the Census data used as source material, because to do so might reveal the operations of individual farms.

Source: Compiled from official statistics of the Bureau of the Census.

Table 3.--U.S. milk production, number of milk cows on farms and output of milk per cow, average 1947-49, 1950-54, and annual 1955-67

Year	Milk production <u>1/</u>	Milk cows on farms <u>2/</u>	Output of milk per cow <u>1/</u>
	Million pounds	Thousands	Pounds
Average:			
1947-49-----	115,196	22,563	5,108
1950-54-----	117,654	21,612	5,444
Annual:			
1955-----	122,945	21,044	5,842
1956-----	124,860	20,501	6,090
1957-----	124,628	19,774	6,303
1958-----	123,220	18,711	6,585
1959-----	121,989	17,901	6,815
1960-----	123,109	17,515	7,029
1961-----	125,707	17,243	7,290
1962-----	126,251	16,842	7,496
1963-----	125,202	16,260	7,700
1964-----	126,967	15,677	8,099
1965-----	124,173	14,954	8,304
1966-----	120,230	14,123	8,513
1967-----	119,583	13,600	8,810

1/ Excludes milk sucked by calves.

2/ Excludes heifers not yet fresh. Averaged from monthly data.

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

Table 4.--U.S. apparent consumption of milk and other dairy products (milk equivalent), by selected categories, average 1947-49, 1950-54, 1955-59, 1960-64, annual 1955-67

Period	(In millions of pounds)						Apparent consumption	
	Consumed on farms 1/	Federal programs		School lunch and special milk programs	Commercial channels 3/	All categories	Excluding Federal programs	
		CCC donations to welfare programs 2/						
Average:								
1947-49 4/	15,458	134	482	93,085	109,159	108,543		
1950-54	13,027	1,071	753	96,800	111,651	109,827		
1955-59	9,411	3,636	1,890	103,881	118,818	113,292		
1960-64	5,409	4,545	2,749	107,632	120,335	113,041		
Annual:								
1955	11,359	3,804	1,394	101,324	117,881	112,683		
1956	10,508	3,828	1,743	103,189	119,268	113,697		
1957	9,431	2,666	1,917	104,410	118,424	113,841		
1958	8,380	4,536	2,113	104,466	119,495	112,846		
1959	7,378	3,350	2,284	106,013	119,025	113,391		
1960	6,610	2,344	2,455	107,487	118,896	114,097		
1961	5,950	3,746	2,602	106,302	118,600	112,252		
1962	5,334	5,473	2,755	107,183	120,745	112,517		
1963	4,813	5,478	2,902	107,654	120,847	112,467		
1964	4,337	5,688	3,031	109,533	122,589	113,870		
1965	3,915	4,025	3,215	110,351	121,506	114,266		
1966 5/	3,522	1,129	3,373	111,070	119,094	114,592		
1967 5/	3,100	3,014	3,441	106,629	116,484	109,729		

1/ Milk and butter consumed in households on milk-producing farms, 1947-54; 1955-67 includes a small amount of farm-churned butter.

2/ Includes donations to the Military; such donations averaged about 490 million pounds annually during the period 1955-65. In 1966 and 1967 they were nil.

3/ Includes milk purchased by the Military; such purchases have been stable for a number of years.

4/ Data for 1945 and 1946 are not readily available. 5/ Preliminary.

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

Table 5.---Milk: U.S. per capita civilian consumption of selected dairy products, average 1945-49 and 1950-54, annual 1955-66

Year	Manufactured dairy products										Grand total	
	Fluid use ^{1/}	Butter ^{2/}	Cheese		Evapo-rated milk	Con-densed milk	Frozen prod-ucts	Other factory prod-ucts ^{3/}	Total	Total		
			Ameri-can	Other								
Average:												
1945-49-----	372.9	212.4	50.0	18.5	68.5	4.4	47.7	16.3	387.0	759.9		
1950-54-----	349.7	185.6	53.3	21.6	74.9	4.7	46.5	13.3	359.4	709.1		
Annual:												
1955-----	348.1	182.1	53.7	24.0	77.7	4.8	48.7	14.9	358.3	706.4		
1956-----	348.2	176.6	54.2	24.4	78.6	5.3	49.7	14.8	354.0	702.2		
1957-----	342.6	170.8	50.6	23.3	73.9	5.4	49.3	15.2	342.4	685.0		
1958-----	335.3	175.8	53.2	21.1	74.3	5.6	49.5	14.5	344.5	679.8		
1959-----	327.8	168.7	50.7	22.3	73.0	5.7	52.2	14.4	337.8	665.6		
1960-----	320.3	160.0	52.3	22.9	75.2	5.8	51.5	16.7	331.6	651.9		
1961-----	309.8	157.7	55.0	22.1	77.1	6.0	51.5	15.8	329.4	639.2		
1962-----	306.4	156.9	58.9	23.2	82.1	5.5	51.6	16.3	332.8	639.2		
1963-----	305.1	148.0	59.8	23.5	83.3	5.2	51.9	17.2	324.7	629.8		
1964-----	302.2	148.5	60.8	24.4	85.2	5.5	52.8	17.2	327.6	629.8		
1965-----	299.3	138.3	60.5	24.9	85.4	5.2	53.7	17.2	317.1	616.4		
1966-----	296.0	121.5	61.9	26.4	88.3	5.0	53.4	22.2	306.3	602.3		

^{1/} Beginning in 1960, includes sales plus farm use.

^{2/} Includes farm butter.

^{3/} Includes dry whole milk, malted milk, dry ice-cream mix, creamed cottage cheese, and other miscellaneous products.

Source: Compiled from official statistics of the U.S. Department of Agriculture, Economic Research Service, Dairy Section.

Table 6.--Milk: U.S. aggregate civilian consumption of selected dairy products, average 1945-49 and 1950-54, annual 1955-66

Period	Fluid use ^{1/}	Manufactured dairy products							Grand total		
		Butter ^{2/}	Ameri-can	Cheese		Evapo-rated milk	Con-densed milk	Frozen prod-ucts		Other factory prod-ucts ^{3/}	Total
				Ameri-can	Other	Total	Evapo-rated milk	Con-densed milk	Frozen prod-ucts	Other factory prod-ucts ^{3/}	Total
Average:											
1945-49-----	52,300	29,829	7,050	2,590	9,640	5,316	621	6,721	2,250	54,377	106,677
1950-54-----	53,820	28,532	8,202	3,338	11,540	5,287	719	7,161	2,040	55,279	109,099
Annual:											
1955-----	56,500	29,552	8,723	3,888	12,661	4,887	782	7,900	2,370	58,152	114,652
1956-----	57,600	29,203	8,966	4,038	13,004	4,798	875	8,227	2,438	58,545	116,145
1957-----	57,700	28,770	8,523	3,932	12,455	4,682	917	8,303	2,522	57,649	115,349
1958-----	57,500	30,152	9,121	3,619	12,740	4,249	960	8,494	2,490	59,085	116,585
1959-----	57,200	29,443	8,843	3,896	12,739	4,154	997	9,102	2,526	58,951	116,151
1960-----	57,073	28,511	9,326	4,089	13,415	3,985	1,032	9,186	2,962	59,091	116,164
1961-----	56,135	28,576	9,968	4,005	13,973	3,863	1,081	9,332	2,868	59,693	115,828
1962-----	56,319	28,830	10,818	4,260	15,078	3,753	1,005	9,482	3,009	61,157	117,476
1963-----	56,970	27,634	11,170	4,390	15,560	3,573	968	9,689	3,189	60,613	117,583
1964-----	57,242	28,123	11,512	4,630	16,142	3,490	1,048	10,002	3,235	62,040	119,282
1965-----	57,443	26,543	11,613	4,772	16,385	3,312	1,007	10,309	3,288	60,844	118,287
1966-----	57,360	23,552	11,995	5,114	17,109	3,089	977	10,342	4,294	59,363	116,723

^{1/} Beginning in 1960, includes sales plus farm use.

^{2/} Includes farm butter.

^{3/} Includes dry whole milk, malted milk, dry ice-cream mix, creamed cottage cheese, and other miscellaneous products.

Source: Compiled from official statistics of the U.S. Department of Agriculture, Economic Research Service, Dairy Section.

Table 7.--Manufacturing grade milk: Share of all milk sold by farmers to plants and dealers, by regions, selected years, 1950-66

(in percent)

Region	1950	1955	1960	1965	1966
North Atlantic-----	3	2	1	1	1
East North Central-----	56	52	45	40	39
West North Central-----	63	66	69	72	71
South Atlantic-----	17	13	10	7	6
South Central-----	38	33	27	22	20
Western-----	41	36	26	18	16
United States-----	39	37	33	31	30

Source: Compiled from the official statistics of the Department of Agriculture.

Table 8.--Milk: U.S. utilization of domestic output, 1953-66 ^{1/}
 (In billions of pounds of milk or milk equivalent)

Year	Fluid use ^{2/}	Manufactured dairy products										Grand total
		Butter ^{3/}	Cheese		Evapo- rated milk	Con- densed milk	Frozen prod- ucts	Other factory prod- ucts ^{4/}	Total			
		Ameri- can	Other	Total								
1953	55.0	32.4	10.2	3.1	13.3	5.4	0.8	7.8	2.5	62.2	117.2	
1954	56.2	32.9	10.5	3.3	13.8	5.4	.7	7.7	2.3	62.8	119.0	
1955	57.5	31.2	10.1	3.5	13.6	5.5	1.0	8.2	3.0	62.3	119.8	
1956	58.7	31.5	9.9	3.8	13.7	5.4	1.0	8.5	2.9	63.0	121.7	
1957	59.2	31.4	10.0	3.5	13.5	5.2	1.0	8.4	3.0	62.5	121.7	
1958	58.7	31.7	9.5	3.2	12.7	4.6	1.0	8.8	3.0	61.8	120.5	
1959	58.5	30.3	9.2	3.4	12.6	4.6	1.1	9.4	2.8	60.8	119.3	
1960	58.3	30.7	9.7	3.7	13.4	4.3	1.1	9.5	3.3	62.3	120.6	
1961	57.4	32.9	11.2	3.7	14.9	4.2	1.2	9.6	3.1	65.9	123.3	
1962	57.7	34.0	10.7	3.7	14.4	3.9	1.1	9.7	3.1	66.2	123.9	
1963	58.4	31.5	10.9	3.9	14.8	3.9	1.1	9.8	3.5	64.6	123.0	
1964	58.7	31.9	11.5	4.2	15.7	3.8	1.2	10.2	3.3	66.1	124.8	
1965	58.8	29.0	11.5	4.3	15.8	3.5	1.2	10.4	3.4	63.3	122.1	
1966	58.8	24.2	12.2	4.6	16.8	3.5	1.2	9.2	4.6	59.5	118.3	

^{1/} Does not include milk fed to calves.

^{2/} Beginning in 1960, includes sales plus farm use.

^{3/} Includes farm and nonfarm butter.

^{4/} Includes dry whole milk, malted milk, dry ice cream mix, creamed cottage cheese, and other miscellaneous products.

Source: Compiled from official statistics of the U.S. Department of Agriculture, Economic Research Service, Dairy Section.

Table 9.--Dairy products: U.S. milk production, and whole-milk equivalent of U.S. exports of domestic merchandise and imports for consumption, 5-year averages 1935-39, 1945-49, and 1950-54, annual 1955-67

Period	Exports				Imports			Export or import (-) balance
	Total milk production	Commercial sales ^{1/}	Donations ^{2/}	Total	Quantity	Quantity	Ratio to total milk production	
Average:								
1935-39	105,924	3/	3/	138	138	679	0.6	-541
1945-49	117,623	1,898	1,968	3,866	3,866	218	.2	3,648
1950-54	118,074	887	778	1,664	1,664	532	.5	1,133
Annual:								
1955	123,045	919	5,743	6,662	6,662	458	.4	6,204
1956	124,860	1,432	4,797	6,229	6,229	514	.4	5,715
1957	124,628	1,028	1,675	2,703	2,703	661	.5	2,042
1958	123,220	757	2,047	2,804	2,804	507	.4	2,297
1959	121,989	651	503	1,154	1,154	578	.5	576
1960	123,109	755	21	776	776	604	.5	172
1961	125,707	645	10	655	655	760	.6	-105
1962	126,251	434	853	1,287	1,287	795	.6	492
1963	125,202	552	4,484	5,036	5,036	915	.7	4,121
1964	126,967	368	6,504	6,872	6,872	830	.7	6,042
1965	124,173	416	1,420	1,836	1,836	918	.7	918
1966	120,230	785	-	785	785	2,775	2.3	-2,001
1967 ^{4/}	119,583	-	-	500	500	2,800	2.3	-2,300

^{1/} Includes negligible commercial sales subsidized by the Commodity Credit Corporation.

^{2/} Although these donations were chiefly to relief agencies for shipment to overseas destinations, there was a very small financial recovery to the Commodity Credit Corporation.

^{3/} Not available.

^{4/} Preliminary.

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

Table 1.Q--Butter, Cheddar cheese, nonfat dry milk, and all milk for manufacturing: U.S. market prices, Commodity Credit Corporation purchase prices, and CCC support objectives, marketing years 1953-66 and Apr. 1, 1967

(In cents per pound)										
Marketing year beginning Apr. 1	Butter (Grade A)		Cheddar cheese		Nonfat dry milk (spray process)		Milk for manufacturing			
	Market price at Chicago	CCC purchase price	Market price (Wisconsin assembly points)	CCC purchase price	Market price (U.S. average)	CCC purchase price	Market price (U.S. average)	CCC support objective		
								Actual	Percent of parity	
1953-----	65.5	65.8	36.8	37.0	15.5	16.0	3.46	3.74	89	
1954-----	57.8	57.5	33.1	<u>1/</u> 33.2	15.3	<u>1/</u> 16.0	3.15	3.15	75	
1955-----	57.4	57.5	33.2	33.2	15.6	16.0	3.19	3.15	80	
1956-----	59.7	59.5	34.7	<u>2/</u> 35.0	15.5	16.0	3.31	<u>2/</u> 3.25	<u>2/</u> 84	
1957-----	59.6	59.5	34.8	35.0	15.5	16.0	3.28	3.25	82	
1958-----	58.2	57.8	33.3	32.8	13.8	14.2	3.16	3.06	75	
1959-----	59.7	58.0	34.0	32.8	13.7	14.2	3.22	3.06	77	
1960:										
Apr. 1-										
Sept. 16-	58.1	58.0	34.4	32.8	14.4	13.4	3.21	3.06	76	
Sept. 17-										
Mar. 9, (1961)---	60.6	<u>3/</u> 60.5	39.1	<u>3/</u> 34.2	14.7	<u>3/</u> 13.9	3.39	<u>3/</u> 3.22	80	
Mar. 10-31, (1961)---	60.5	60.5	37.2	36.1	15.9	15.9	3.37	3.40	85	
1961:										
Apr. 1-										
July 17--	60.5	60.5	36.7	36.1	15.9	15.9	3.36	<u>4/</u> 3.40	83	
July 18-										
Mar. 31, (1962)---	60.5	60.5	37.2	36.5	16.0	16.4	3.39	<u>4/</u> 3.40	83	
1962-----	58.6	58.0	36.0	34.6	14.4	14.4	3.19	3.11	75	
1963-----	58.2	58.0	36.1	35.6	14.5	14.4	3.24	3.14	75	
1964-----	59.1	58.0	36.8	35.6	14.6	14.4	3.30	3.15	75	
1965-----	61.1	59.0	39.8	36.1	14.9	14.6	3.45	3.24	75	
1966:										
Apr. 1-										
June 29--	62.8	61.0	43.4	39.3	16.9	16.6	3.70	3.50	78	
June 30-										
Mar. 31, (1967)---	71.2	66.5	46.9	43.8	19.5	19.6	4.24	4.00	89.5	
1967:										
Apr. 1----	66.5	66.5	44.9	43.8	20.1	19.6	4.07	4.00	87	

1/ Cheddar supported at 32.25 cents and nonfat dry milk at 15 cents per pound from Apr. 1 to July 11, 1954.

2/ Applies to the period Apr. 19, 1956-Mar. 31, 1957; for Cheddar cheese for the period Apr. 1-18, 1956, the support price was 34.0 cents per pound.

3/ Increase required by Public Law 86-799.

4/ The U.S. Department of Agriculture later found that the purchase prices of March 1961 reflected a per hundredweight support objective of only \$3.36-\$3.37; the new purchase prices of July 1961 more accurately reflected the \$3.40 price-support objective.

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

Table 11.--Dairy products: Commercial and U.S. Government yearend stocks, 1953-66

(In millions of pounds)								
Year	Butter	American cheese	Other cheese	Evaporated and condensed milk	Dry whole milk	Cream	Milk equivalent	Nonfat dry milk
Commercial								
1953-----	30	159	31	268	10	11	3,246	74
1954-----	35	162	30	211	8	7	3,187	56
1955-----	28	213	27	218	9	9	3,586	88
1956-----	23	210	40	234	11	8	3,607	78
1957-----	32	206	34	230	9	15	3,684	86
1958-----	28	238	44	199	6	8	3,795	88
1959-----	20	245	38	236	6	9	3,734	97
1960-----	21	291	41	228	7	9	4,197	103
1961-----	20	366	53	231	7	8	4,990	133
1962-----	31	307	38	147	5	7	4,342	99
1963-----	32	283	39	138	5	5	4,134	82
1964-----	37	272	42	193	7	8	4,325	109
1965-----	27	270	38	141	5	8	3,919	58
1966-----	30	322	50	206	7	13	4,791	119
U.S. Government								
1953-----	252	242	-	-	-	-	7,515	466
1954-----	344	357	-	-	-	-	10,517	268
1955-----	135	279	-	-	-	-	5,509	162
1956-----	3	191	-	-	-	-	1,960	123
1957-----	55	171	-	-	-	-	2,785	137
1958-----	41	11	-	-	-	-	981	155
1959-----	11	21	-	-	-	-	433	60
1960-----	56	1	-	-	-	-	1,195	280
1961-----	205	54	-	-	-	-	4,912	355
1962-----	328	79	-	-	-	-	7,824	576
1963-----	239	39	-	-	-	-	5,557	405
1964-----	34	24	-	-	-	-	973	65
1965-----	25	^{1/}	-	-	-	-	543	96
1966-----	2	-	-	-	-	-	44	-
Total								
1953-----	282	401	31	268	10	11	10,761	540
1954-----	379	519	30	211	8	7	13,704	324
1955-----	163	492	27	218	9	9	9,095	250
1956-----	26	401	40	234	11	8	5,567	201
1957-----	87	377	34	230	9	15	6,469	223
1958-----	69	249	44	199	6	8	4,776	243
1959-----	31	266	38	236	6	9	4,167	157
1960-----	77	292	41	228	7	9	5,392	383
1961-----	225	420	53	231	7	8	9,902	488
1962-----	359	386	38	147	5	7	12,166	675
1963-----	271	322	39	138	5	5	9,691	487
1964-----	71	296	42	193	7	8	5,298	174
1965-----	52	270	38	141	5	8	4,462	154
1966-----	32	322	50	206	7	13	4,835	119

^{1/} Less than 500,000 pounds.

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

Table 12.--Butter, Cheddar cheese, and nonfat dry milk: Commodity Credit Corporation (CCC) and section 32 purchases, utilization (disposals), and CCC stocks, average 1953-57, annual 1958-67

(In millions of pounds)

Period	Purchases	Utilization	Uncommitted supplies at end of period <u>1/</u>
<u>Butter</u>			
Average, 1953-57-----	236	233	122
Annual:			
1958-----	184	208	7
1959-----	124	130	-
1960-----	145	129	16
1961-----	330	196	150
1962-----	403	259	294
1963-----	308	482	120
1964-----	266	368	18
1965-----	216	225	9
1966-----	29	32	6
1967-----	259	128	137
<u>Cheddar cheese</u>			
Average, 1953-57-----	233	204	228
Annual:			
1958-----	80	215	<u>3/</u> 3
1959-----	57	53	7
1960-----	<u>2/</u>	7	-
1961-----	124	70	54
1962-----	203	194	63
1963-----	120	164	19
1964-----	119	121	17
1965-----	39	56	<u>2/</u>
1966-----	20	12	8
1967-----	182	133	57

See footnotes at end of table.

Table 12.--Butter, Cheddar cheese, and nonfat dry milk: Commodity Credit Corporation (CCC) and section 32 purchases, utilization (disposals), and CCC stocks, average 1953-57, annual 1958-67--
Continued

(In millions of pounds)			
Period	Purchases	Utilization	Uncommitted supplies at end of period ^{1/}
	Nonfat dry milk		
Average, 1953-57-----	666	681	118
Annual:			
1958-----	783	765	45
1959-----	838	783	-
1960-----	873	696	177
1961-----	1,193	1,185	186
1962-----	1,300	972	514
1963-----	998	1,146	366
1964-----	677	977	66
1965-----	888	823	131
1966-----	367	433	64
1967-----	615	478	201

^{1/} The supplies at the end of a year do not always equal the supplies at the beginning plus purchases less utilization, owing to rounding of figures and purchase contract tolerances.

^{2/} Less than 0.5 million pounds.

^{3/} Adjusted for a decrease of 5 million pounds owing to claims actions, underdeliveries against purchase contracts, and overdeliveries on disposition contracts.

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

Table 13.--Net U.S. expenditures on dairy price-support and related programs, years ending June 30, 1950-67

(In millions of dollars)

Year ending June 30--	Surplus disposal (price-support) programs					Total	Special milk program ^{5/}
	CCC net expenditures ^{1/}	Military milk program ^{2/}	Payment-in-kind program ^{3/}	Sec. 32 expenditures ^{4/}			
1950-----	170.5	-	-	17.6	188.1	-	
1951-----	^{6/} 49.1	-	-	^{6/} .9	^{6/} 50.0	-	
1952-----	1.6	-	-	7.5	9.1	-	
1953-----	274.9	-	-	25.1	300.0	-	
1954-----	400.4	-	-	74.0	474.4	-	
1955-----	217.4	4.3	-	24.4	246.1	22.2	
1956-----	218.0	7.3	-	39.0	264.3	48.5	
1957-----	206.0	16.4	-	75.6	298.0	61.0	
1958-----	195.2	30.4	-	123.7	349.3	66.7	
1959-----	98.7	23.0	-	106.2	227.9	74.7	
1960-----	147.6	23.6	-	35.1	206.3	81.2	
1961-----	170.1	25.3	-	82.1	277.5	87.0	
1962-----	529.4	25.9	-	47.1	602.4	91.7	
1963-----	439.7	24.8	6.7	-	471.2	93.7	
1964-----	292.0	26.5	36.5	4.4	359.4	97.1	
1965-----	152.5	26.2	44.7	105.6	329.0	86.5	
1966-----	11.6	-	3.8	38.7	54.1	97.0	
1967-----	223.8	-	-	.9	^{7/} 299.0	96.1	

^{1/} Purchase, processing, repacking, transportation, storage, and handling costs borne by CCC minus proceeds from sales (including sales to programs using sec. 32 funds).

^{2/} CCC reimbursements to military agencies, Veterans Administration, and other participants.

^{3/} Value of certificates issued to support exports of nonfat dry milk, butter and high-milkfat products; redeemable for like products for export from CCC stocks.

^{4/} Expenditures made to provide dairy products for certain domestic welfare programs. Commodities acquired by purchases from CCC, and, in some years, by purchases on the open market using sec. 32 funds (obtained from certain customs receipts).

^{5/} Federal grants to subsidize local purchase of milk for school children (not considered by the U.S. Department of Agriculture to be a price-support expenditure).

^{6/} Net receipt.

^{7/} Includes \$14.2 million for expenditures under section 709 of the Food and Agricultural Act of 1965.

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

Note.--Data do not include any costs of activities under titles I, II, and IV of Public Law 480; under these programs commodities are exported to various countries and are paid for in local currency.

Table 14.--Aggregate cash receipts from the sale of milk and cream by all U.S. farms, average 1950-54, 1955-59, and 1960-64, and annual 1960-66

(In millions of dollars)

Period	Actual	In constant purchasing power ^{1/}
<u>Average:</u>		
1950-54-----	4,204	4,345
1955-59-----	4,498	4,581
1960-64-----	4,888	4,756
<u>Annual:</u>		
1960-----	4,760	4,704
1961-----	4,932	4,855
1962-----	4,860	4,714
1963-----	4,861	4,665
1964-----	5,027	4,843
1965-----	5,037	4,752
1966-----	5,516	5,029

^{1/} Actual receipts adjusted for changes in prices paid by farmers for commodities and services, 1957-59 = 100.

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

Table 15.--Receipts, expenses, and income of typical milk-producing farms in the United States, average, 1955-59 and 1960-64, annual 1960-66

Year	Central Northeast dairy						Eastern Wisconsin dairy - Grade A					
	Receipts			Net farm income			Receipts			Net farm income		
	Dairy prod-ucts	Other 1/	Total	Total ex-penses 2/	Actual	In constant purchasing power 3/	Dairy prod-ucts	Other 1/	Total	Total ex-penses 2/	Actual	In constant purchasing power 3/
Average:												
1955-59	\$8,328	\$2,439	\$10,767	\$6,636	\$4,131	\$4,121	\$7,574	\$4,118	\$11,692	\$6,738	\$4,954	\$4,932
1960-64	11,049	2,496	13,545	9,427	4,118	3,915	10,414	4,766	15,180	8,751	6,429	6,111
Annual:												
1960	9,820	2,536	12,356	8,122	4,234	4,071	9,447	3,971	13,418	7,560	5,858	5,632
1961	10,420	2,150	12,570	8,073	4,497	4,324	10,258	4,817	15,075	8,143	6,932	6,665
1962	10,942	2,596	13,538	10,046	3,492	3,326	10,373	4,935	15,308	8,690	6,618	6,303
1963	11,642	2,571	14,213	10,112	4,101	3,869	10,345	4,832	15,177	9,172	6,005	5,665
1964	12,423	2,626	15,049	10,785	4,264	3,985	11,645	5,275	16,920	10,189	6,731	6,291
1965	13,262	2,813	16,075	11,697	4,378	4,017	11,847	5,653	17,500	11,396	6,104	5,600
1966 4/	15,094	3,249	18,343	11,812	6,531	5,780	13,882	6,474	20,356	10,706	9,650	8,540

1/ Includes value of perquisites.

2/ Includes inventory changes.

3/ Actual income adjusted for changes in the index of prices paid by farmers for consumption goods (index adjusted to 1955-59 = 100).

4/ Preliminary.

Source: U.S. Department of Agriculture, Cost and Returns on Commercial Farms, Long Term Study, 1954-63, Statistical Bulletin, No. 368; Farms, Costs and Returns, Agriculture Inf. Research Bulletin No. 230, revised Aug. 1966. Economic Research Service Aug. 1967, Commercial Dairy Farms N.E. and Mid-west 1966.

Table 15.--Receipts, expenses, and income of typical milk-producing farms in the United States, average, 1955-59 and 1960-64, annual 1960-66--Continued

Year	Eastern Wisconsin dairy - Grade B					Western Wisconsin dairy - Grade B						
	Receipts		Total ex-penses		Net farm income		Receipts		Total ex-penses		Net farm income	
	Dairy prod-ucts	Other 1/	Total	Dairy prod-ucts	Actual	In constant purchasing power 3/	Dairy prod-ucts	Other 1/	Total	Dairy prod-ucts	Actual	In constant purchasing power 3/
Average:												
1955-59	\$4,038	\$3,133	\$7,170	\$4,854	\$2,317	\$2,306	\$4,012	\$3,336	\$7,348	\$4,276	\$3,072	\$3,057
1960-64	5,303	3,484	8,788	5,504	3,284	3,121	5,473	3,721	9,194	5,085	4,109	3,905
Annual:												
1960	4,766	3,242	8,008	5,209	2,799	2,691	4,793	3,572	8,365	4,729	3,636	3,496
1961	5,221	3,416	8,637	5,061	3,576	3,438	5,261	3,650	8,911	4,427	4,484	4,312
1962	5,253	3,693	8,946	5,652	3,294	3,137	5,362	3,869	9,231	4,578	4,653	4,431
1963	5,382	3,514	8,896	5,639	3,257	3,073	5,655	3,975	9,630	4,799	4,831	4,558
1964	5,895	3,556	9,451	5,958	3,493	3,264	6,295	3,540	9,835	6,896	2,939	2,747
1965	6,036	3,924	9,960	7,012	2,948	2,705	6,601	3,992	10,593	6,139	4,454	4,086
1966 4/	7,218	4,390	11,608	6,681	4,927	4,360	7,989	4,999	12,988	6,281	6,707	5,935

1/ Includes value of perquisites.

2/ Includes inventory changes.

3/ Actual income adjusted for changes in the index of prices paid by farmers for consumption goods (index adjusted to 1955-59 = 100).

4/ Preliminary.

Source: U.S. Department of Agriculture, Cost and Returns on Commercial Farms, Long Term Study, 1954-63, Statistical Bulletin, No. 368; Farms, Costs and Returns, Agriculture Inf. Research Bulletin No. 230, revised Aug. 1966. Economic Research Service Aug. 1967, Commercial Dairy Farms N.E. and Midwest 1966.

Table 15.--Receipts, expenses, and income of typical milk-producing farms in the United States, average, 1955-59 and 1960-64, annual 1960-66--Continued

Year	Southeastern, Minnesota - dairy-hog farms					Net farm income	
	Receipts		Total expenses ^{2/}	Actual	In constant purchasing power ^{3/}	Actual	In constant purchasing power ^{3/}
	Dairy products	Other ^{1/}					
Average:							
1955-59-----	\$4,173	\$4,505	\$8,677	\$4,802	\$3,875	\$3,867	
1960-64-----	5,542	5,104	10,646	6,312	4,334	4,121	
Annual:							
1960-----	4,882	4,591	9,473	5,921	3,552	3,415	
1961-----	5,496	4,842	10,338	5,245	5,093	4,897	
1962-----	5,549	5,480	11,029	6,365	4,664	4,442	
1963-----	5,568	5,776	11,344	6,799	4,545	4,288	
1964-----	6,215	4,829	11,044	7,229	3,815	3,565	
1965-----	6,397	6,225	12,622	7,348	5,274	4,839	
1966 ^{4/} -----	7,418	7,935	15,353	7,349	8,004	7,083	

^{1/} Includes value of perquisites.

^{2/} Includes inventory changes.

^{3/} Actual income adjusted for changes in the index of prices paid by farmers for consumption goods (index adjusted to 1955-59 = 100).

^{4/} Preliminary.

Source: U.S. Department of Agriculture, Cost and Returns on Commercial Farms, Long Term Study, 1954-63, Statistical Bulletin, No. 368; Farms, Costs and Returns, Agriculture Inf. Research Bulletin No. 230, revised Aug. 1966. Economic Research Service Aug. 1967, Commercial Dairy Farms N.E. and Midwest 1966.

Table 16.--Production of cow's milk, in the major producing countries, average, 1956-60, annual, 1964-66

Country	Production of milk (In millions of pounds)			
	1956-60	1964	1965	1966 1/
North America:				
Canada-----	17,407	18,505	18,361	18,375
United States-----	123,561	126,967	124,173	120,230
Total-----	140,968	145,472	142,534	138,605
Latin America:				
Mexico-----	5,079	8,777	9,037	9,130
Argentina 2/-----	10,187	10,805	10,215	10,310
Brazil-----	10,170	12,437	13,958	3/14,185
Colombia-----	4,021	4,100	4,200	4,320
Peru-----	885	1,099	1,102	1,015
Uruguay-----	1,501	1,649	1,622	1,620
Venezuela-----	4/ 894	1,323	1,192	1,195
Total-----	32,737	40,190	41,326	41,775
Western Europe:				
Belgium-----	8,320	8,426	8,690	8,823
Luxembourg-----	388	400	414	420
Netherlands-----	13,833	15,335	15,745	15,952
West Germany-----	39,604	45,945	46,701	47,084
France-----	46,037	55,615	53,572	55,842
Italy 3/-----	19,580	19,768	21,520	22,473
Total EEC-----	127,762	145,489	146,642	150,594
Austria-----	6,048	6,896	7,075	7,055
Denmark-----	11,633	11,537	11,832	11,704
Finland-----	7,118	8,435	8,298	8,131
Greece-----	801	1,225	1,299	1,325
Ireland-----	5,973	6,606	6,910	7,124
Norway 6/-----	3,566	3,675	3,693	3,791
Sweden-----	8,657	8,016	8,058	7,815
Switzerland 5/-----	6,451	6,645	6,872	6,949
United Kingdom 7/-----	22,295	24,086	25,101	24,858
Spain-----	8/	7,116	7,452	7,500
Portugal-----	8/	705	712	728
Total, other Western Europe-----	72,542	84,942	87,302	86,980
Total Western Europe-----	200,304	230,431	233,944	237,574
Eastern Europe:				
Bulgaria-----	1,318	1,980	1,870	2,015
Czechoslovakia-----	8,298	8,296	8,640	8,865
East Germany-----	12,119	12,678	13,228	13,545
Hungary-----	4,056	4,092	3,977	3,895
Poland-----	25,560	27,785	29,418	30,685
Romania 9/-----	5,578	6,045	6,338	6,651
Yugoslavia-----	4,750	4,934	5,077	5,270
U.S.S.R-----	107,099	119,048	127,867	132,275
Total-----	168,786	184,858	196,415	205,201
Asia:				
Japan-----	3,380	6,658	7,116	7,615
Oceania:				
Australia-----	14,005	16,005	15,364	16,210
New Zealand 10/-----	4/ 11,522	12,603	13,137	13,680
Total-----	25,527	28,608	28,501	29,890

1/ Preliminary.

2/ Excludes milk used on farms.

3/ Estimate as of early 1966.

4/ Less than 5-year average.

5/ Production includes sheep and goat milk.

6/ Production includes goat milk.

7/ Under Milk Marketing Schemes only.

8/ Not available.

9/ Includes buffalo milk.

10/ 1956-60 figures are for years ending June 30; 1964, 1965, and 1966 figures are for years ending May 31.

Source: Compiled from data of the U.S. Department of Agriculture, Foreign Agriculture Circular, Dairying, FD3-66, August 1966, FD2-67, June 1967; and (milk production figures) Dairy Situation, D-316, July 7, 1967.

Table 17.--Exports of dairy products by major supplying countries, 1964 and 1965, in terms of milk equivalent ^{1/}
(In millions of pounds)

Country	Butter ^{2/}		Cheese		Dry whole milk		Nonfat dry milk		Evaporated whole milk		Condensed whole milk	
	1964	1965 ^{3/}	1964	1965 ^{3/}	1964	1965 ^{3/}	1964	1965 ^{3/}	1964	1965 ^{3/}	1964	1965 ^{3/}
Argentina-----	523.0	299.5	-	-	-	-	-	-	-	-	-	-
Australia-----	4,438.0	4,019.2	624.0	581.1	130.3	128.2	52.2	44.5	-	-	167.2	131.5
Canada-----	-	-	-	-	132.5	141.1	42.1	86.3	-	-	-	-
Denmark-----	4,971.9	5,527.5	1,762.8	1,609.7	522.8	532.9	-	-	26.5	21.6	75.2	61.7
Finland-----	1,145.9	926.7	464.1	416.3	-	-	-	-	-	-	-	-
France-----	1,688.4	1,423.7	1,250.0	1,302.5	-	-	86.8	155.9	86.0	88.5	203.3	223.5
Italy-----	-	-	491.4	445.6	-	-	-	-	-	-	-	-
Netherlands-----	1,206.6	1,679.7	2,276.6	2,576.9	525.0	573.7	-	-	822.6	805.1	716.5	629.0
New Zealand-----	9,182.1	9,010.7	2,102.1	1,935.4	-	-	143.5	151.4	-	-	-	-
Switzerland-----	-	-	708.8	760.5	-	-	-	-	-	-	-	-
United Kingdom-----	-	-	-	-	-	-	8.4	19.6	97.4	120.8	93.7	95.6
United States ^{5/} -----	3,279.2	1,184.9	88.0	68.0	98.8	131.1	6/ 641.2	5/ 265.4	79.4	52.1	134.0	139.2
Other countries-----	7/ 3,702.4	7/ 4,090.8	8/ 1,810.6	8/ 1,983.2	9/ 1,183.2	9/ 1,338.6	10/ 87.3	10/ 278.6	11/ 91.8	11/ 62.8	12/ 25.0	12/ 27.5
Total-----	30,137.5	28,162.7	11,578.4	11,759.3	2,592.6	2,845.6	1,061.5	1,001.7	1,203.7	1,151.0	1,414.9	1,308.0

^{1/} Except nonfat dry milk for which figures are on product-weight basis.

^{2/} Includes anhydrous butterfat, butteroil, and ghee; hence, exports of butter shown here for some countries may be larger than the production of butter shown in earlier table.

^{3/} Preliminary.

^{4/} Only eleven-month export data available.

^{5/} Exclusive of donation shipments under Public Law 480.

^{6/} Exclusive also of concessional sales for special use, mainly school lunch programs.

^{7/} Includes exports from Ireland, Sweden, Norway, Belgium, Austria, Poland, Canada, and West Germany.

^{8/} Includes exports from Argentina, Ireland, Sweden, Belgium, Austria, West Germany, Norway, and Canada.

^{9/} Exports, which can be identified as dry whole milk, from other important suppliers, namely Ireland, Sweden, Austria, the United Kingdom, France, Belgium, New Zealand, and Finland.

^{10/} Includes exports from Sweden, West Germany, Ireland, Finland, the Netherlands, Belgium, and Denmark.

^{11/} Includes exports from Belgium, Canada, Australia and New Zealand.

^{12/} Includes exports from Switzerland and New Zealand.

Source: Compiled from data in U.S. Department of Agriculture, Foreign Agriculture Circular, Dairying, FD 5-66, October 1966.

Table 18.--Utilization of cow's milk in the major producing countries, average, 1956-60, annual, 1964-66

Country	(In millions of pounds, milk or milk equivalent)															
	Fluid milk $\frac{1}{2}$					Butter					Cheese					
	Average: 1956-60	1964	1965	1966 $\frac{2}{2}$	Average: 1956-60	1964	1965	1966 $\frac{2}{2}$	Average: 1956-60	1964	1965	1966 $\frac{2}{2}$	Average: 1956-60	1964	1965	1966 $\frac{2}{2}$
North America:																
Canada	6,157	6,040	6,084	6,104	7,714	8,346	7,983	7,896	1,211	1,778	1,997	2,160	1,211	1,778	1,997	2,160
United States	58,960	59,200	58,843	58,760	31,122	31,868	28,983	24,190	13,191	15,635	15,736	16,791	13,191	15,635	15,736	16,791
Total	65,117	65,240	64,927	64,864	38,836	40,214	36,966	32,086	14,402	17,413	17,733	18,951	14,402	17,413	17,733	18,951
Western Europe:																
Belgium	2,035	2,166	2,240	2,270	5,219	4,613	4,655	4,699	169	456	521	590	169	456	521	590
Netherlands	2,622	2,484	2,377	2,324	4,161	4,405	5,013	4,881	3,946	4,533	4,625	5,013	3,946	4,533	4,625	5,013
West Germany	12,346	12,173	11,829	12,388	18,915	23,642	24,738	24,816	2,248	2,888	2,976	2,979	2,248	2,888	2,976	2,979
France	9,774	11,123	10,714	11,168	17,853	19,454	18,750	19,545	8,230	10,578	10,170	10,601	8,230	10,578	10,170	10,601
Italy $\frac{3}{4}$	5,835	6,428	6,589	7,063	3,605	2,643	2,910	3,198	6,200	6,966	7,684	8,233	6,200	6,966	7,684	8,233
Total EEC	32,612	34,374	33,749	35,213	49,753	54,757	56,066	57,139	20,793	25,421	25,976	27,416	20,793	25,421	25,976	27,416
Austria	2,392	2,670	2,610	2,608	1,855	2,019	2,106	2,101	389	602	626	646	389	602	626	646
Denmark	1,734	1,905	1,885	1,903	7,349	6,742	7,183	6,973	1,447	1,755	1,609	1,779	1,447	1,755	1,609	1,779
Finland	2,797	2,639	2,597	2,545	3,600	4,773	4,697	4,602	476	590	581	569	476	590	581	569
Greece	448	679	707	722	112	188	188	191	84	155	189	193	84	155	189	193
Ireland	1,256	1,438	1,475	1,485	3,431	3,361	3,413	3,574	74	321	356	388	74	321	356	388
Norway $\frac{3}{4}$	1,643	1,920	1,950	1,959	743	1,012	969	1,024	691	534	567	606	691	534	567	606
Sweden	3,175	3,016	3,007	3,011	4,039	3,686	3,682	3,448	847	774	802	807	847	774	802	807
Switzerland $\frac{3}{4}$	2,364	2,434	2,432	2,432	1,280	1,039	1,168	1,212	1,637	1,920	2,044	2,088	1,637	1,920	2,044	2,088
United Kingdom $\frac{4}{4}$	16,283	18,074	18,269	18,455	1,623	1,266	1,955	1,644	2,418	2,624	2,703	2,550	2,418	2,624	2,703	2,550
Total other Western																
Europe	32,092	34,775	34,932	35,120	24,032	24,096	25,361	24,769	8,063	9,275	9,477	9,626	8,063	9,275	9,477	9,626
Total, Western Europe	64,704	69,149	68,681	70,333	73,785	78,843	81,427	81,908	28,856	34,696	35,453	37,042	28,856	34,696	35,453	37,042
Oceania:																
Australia	2,992	3,387	3,484	3,540	9,156	10,104	9,500	10,165	960	1,449	1,333	1,460	960	1,449	1,333	1,460
New Zealand $\frac{5}{4}$	1,054	1,131	1,075	1,107	8,306	8,986	9,504	9,816	1,825	1,830	2,009	2,017	1,825	1,830	2,009	2,017
Total	4,046	4,518	4,559	4,647	17,462	19,090	19,004	19,981	2,785	3,279	3,342	3,477	2,785	3,279	3,342	3,477

See footnotes at end of table.

Table 18.--Utilization of cow's milk in the major producing countries, average 1956-60, annual, 1964-66--Continued

Country	(In millions of pounds, milk or milk equivalent)							
	Canned milk			Other ^{6/}				
	Average 1956-60	1964	1965	1966 ^{2/}	Average 1956-60	1964	1965	1966 ^{2/}
North America:								
Canada-----	715	732	726	734	912	787	796	772
United States-----	5,861	5,044	4,626	4,766	11,784	13,049	13,924	13,751
Total-----	6,576	5,776	5,352	5,500	12,696	13,836	14,720	14,523
Western Europe:								
Belgium-----	108	145	133	136	77	397	412	424
Netherlands-----	1,573	2,286	2,216	2,114	821	966	908	1,058
West Germany ^{1/} -----	1,798	2,518	2,571	2,510	212	495	538	516
France-----	8/	8/	8/	8/	8/1,304	8/3,337	8/3,224	8/3,360
Italy ^{3/} -----	8/	8/	8/	8/	8/82	8/55	8/55	8/55
Total EEC-----	3,479	4,949	4,920	4,760	2,196	5,250	5,137	5,413
Austria-----	8	26	31	33	281	355	439	421
Denmark-----	8/	8/	8/	8/	8/603	8/694	8/714	8/606
Finland-----	-	-	-	-	51	304	299	293
Greece-----	-	-	-	-	-	-	-	-
Ireland-----	8/	-	-	-	8/363	472	550	544
Norway ^{3/} -----	8/	8/	8/	8/	8/89	8/45	8/50	8/48
Sweden-----	8	2	2	1	148	231	245	272
Switzerland ^{3/} -----	8/	8/	8/	8/	8/155	8/203	8/214	8/203
United Kingdom ^{4/} -----	940	945	1,042	1,013	1,031	1,176	1,132	1,196
Total other Western Europe-----	956	973	1,075	1,047	2,721	3,180	3,643	3,583
Total Western Europe-----	4,435	5,922	5,995	5,807	5,217	8,730	8,780	8,995
Oceania:								
Australia-----	8/	443	376	8/319	8/815	540	589	644
New Zealand ^{5/} -----	8/	8/	8/	8/	8/149	8/318	8/203	8/387
Total-----	-	443	376	319	964	858	792	1,031

^{1/} Includes milk used for cream.

^{2/} Preliminary.

^{3/} Utilization includes goat milk.

^{4/} Under milk marketing schemes only.

^{5/} 1956-60 figures are for years ending June 30; 1964, 1965, and 1966 figures are for years ending May 31.

^{6/} Except that used for feed.

^{7/} Dried milk included with canned milk.

^{8/} Canned milk included with other uses.

Source: Compiled from data of the U.S. Department of Agriculture, Foreign Agriculture Circular, Dairying, FD3-66, August 1966, FD2-67, June 1967.

Table 19.--U.S. rates of duty in the Tariff Schedules of the United States (TSUS) for dairy products, August 31, 1963-January 1, 1968, inclusive

TSUS No.	Reference number (in table 20)	Description	Rates of duty <u>1/</u>	
			1	2
		Fluid milk and cream, fresh or sour:		
115.00	9	Buttermilk-----	1.5¢ per gal.	2.05¢ per gal.
		Other:		
115.05	9	Containing not over 1 percent of butterfat-----	1.5¢ per gal.	2.05¢ per gal.
		Containing over 1 percent but not over 5.5 percent of butterfat:		
115.10	3	For not over 3,000,000 gallons entered in any calendar year-----	2¢ per gal.	6.5¢ per gal.
115.15	3	Other-----	6.5¢ per gal.	6.5¢ per gal.
		Containing over 5.5 percent but not over 45 percent of butterfat:		
115.20	7	For not over 1,500,000 gallons entered in any calendar year-----	15¢ per gal.	56.6¢ per gal.
115.25	7	Other-----	56.6¢ per gal.	56.6¢ per gal.
		Milk and cream, condensed or evaporated:		
		In airtight containers:		
115.30	11	Not sweetened-----	1¢ per lb.	1.8¢ per lb.
115.35	10	Sweetened-----	1.75¢ per lb.	2.75¢ per lb.
115.40	12	Other-----	1.5¢ per lb.	2.53¢ per lb.
		Dried milk and cream:		
115.45	17	Buttermilk containing not over 6 percent of butterfat-----	1.5¢ per lb.	3¢ per lb.
		Other:		
115.50	15	Containing not over 3 percent of butterfat-----	1.5¢ per lb.	3¢ per lb.
115.55	13	Containing over 3 percent but not over 35 percent of butterfat-----	3.1¢ per lb.	6.2¢ per lb.
115.60	14	Containing over 35 percent of butterfat-----	6.2¢ per lb.	12.4¢ per lb.
		Butter, and fresh or sour cream containing over 45 percent of butterfat:		
		When entered during the period from November 1, in any year, to the following March 31, inclusive:		
116.00	19	For not over 50,000,000 pounds-----	7¢ per lb.	14¢ per lb.
116.05	19	Other-----	14¢ per lb.	14¢ per lb.
116.06	21	If product of Cuba-----	11.2¢ per lb. (s)	
		When entered during the period from April 1 to July 15, inclusive, in any year:		
116.10	20	For not over 5,000,000 pounds-----	7¢ per lb.	14¢ per lb.
116.15	20	Other-----	14¢ per lb.	14¢ per lb.
116.16	21	If product of Cuba-----	11.2¢ per lb. (s)	
		When entered during the period from July 16 to October 31, inclusive, in any year:		
116.20	20	For not over 5,000,000 pounds-----	7¢ per lb.	14¢ per lb.
116.25	20	Other-----	14¢ per lb.	14¢ per lb.
116.26	21	If product of Cuba-----	11.2¢ per lb. (s)	
116.30	22	Oleomargarine and butter substitutes-----	7¢ per lb.	14¢ per lb.

See footnotes at end of table.

Table 19.--U.S. rates of duty in the Tariff Schedules of the United States (TSUS) for dairy products, August 31, 1963-January 1, 1968, inclusive--Continued

TSUS No.	Reference number (in table 20)	Description	Rates of duty 1/	
			1	2
		Blue-mold cheese:		
117.00	33	In original loaves-----	15% ad val.	35% ad val.
117.05	83	Other-----	20% ad val.	35% ad val.
117.10	58, 83	Bryndza cheese-----	17.5% ad val.	35% ad val.
			(15.5% ad val., effective Jan. 1, 1968)	
		Cheddar cheese:		
117.15	26	Not processed otherwise than by division into pieces-----	15% ad val.	35% ad val.
117.20	83	Other-----	20% ad val.	35% ad val.
117.25	50	Edam and Gouda cheeses-----	15% ad val.	35% ad val.
		Gjetost cheeses:		
117.30	69	Made from goat's milk whey or from whey obtained from a mixture of goat's milk and not more than 20 percent of cow's milk-----	13.5% ad val. (12% ad val., effective Jan. 1, 1968)	35% ad val.
117.35	83	Other-----	20% ad val. (18% ad val., effective Jan. 1, 1968)	35% ad val.
117.40	45	Goya and Sbrinz cheeses-----	25% ad val.	35% ad val.
		Roquefort cheese:		
117.45	30	In original loaves-----	12% ad val. (10.5% ad val., effective Jan. 1, 1968)	35% ad val.
117.50	83	Other-----	20% ad val. (18% ad val., effective Jan. 1, 1968)	35% ad val.
117.55	36,42,44	Romano made from cow's milk, Reggiano, Parmesano, Provoloni, and Provolette cheeses-----	20% ad val.	35% ad val.
117.60	56, 62	Swiss or Emmenthaler cheese with eye formation, Gruyere-process cheese, Gammelost, and Nokkelost-----	16% ad val. (14% ad val., effective Jan. 1, 1968)	35% ad val.
		Other cheeses, and substitutes for cheese:		
		Cheeses made from sheep's milk:		
117.65	81	In original loaves and suitable for grating-----	12% ad val. (11% ad val., effective Jan. 1, 1968)	35% ad val.
117.67	74	Pecorino, in original loaves, not suitable for grating-----	16% ad val. (15% ad val., effective Jan. 1, 1968)	35% ad val.
117.70	83	Other-----	20% ad val. (19% ad val., effective Jan. 1, 1968)	35% ad val.

See footnotes at end of table.

Table 19.--U.S. rates of duty in the Tariff Schedules of the United States (TSUS) for dairy products, August 31, 1963-January 1, 1968, inclusive--Continued

TSUS No.	Reference (in table 20)	Description	Rates of duty ^{1/}	
			1	2
		Other cheeses, and substitutes for cheese (con.):		
		Other:		
117.75	39,83,85	Valued not over 25 cents per pound-----	5¢ per lb.	8.75¢ per lb.
		Valued over 25 cents per pound:		
2/ 117.81	39,83,85	Colby-----	20% ad val.	35% ad val.
2/ 117.85	39,83,85	Other-----	18% ad val.	35% ad val.
		Whey:		
118.00	3/ 9	Fluid-----	1.5¢ per gal.	2.05¢ per gal.
118.05	15, 3/ 17	Dried-----	1.5¢ per lb.	3¢ per lb.
118.10	86	Yoghurt and other fermented milk-----	20% ad val.	20% ad val.
118.15	86	Chocolate milk drink-----	20% ad val.	20% ad val.
118.25	86	Ice cream-----	20% ad val.	20% ad val.
118.30	18	Malted milk; and articles not specially provided for, of milk or cream-----	17.5% ad val.	35% ad val.
		* * * * *		
		Other animal oils, fats, and greases:		
		Edible:		
4/ 177.67 (pt.)	1	Derived from milk-----	10% ad val.	20% ad val.
		* * * * *		
		Edible preparations, not specially provided for:		
		* * * * *		
		Other:		
		Containing over 5.5 percent by weight of butterfat and not packaged for retail sale-----	20% ad val.	20% ad val.
5/ 182.92	86	If product of Cuba-----	16% ad val. (s)	
6/ 182.93	86			

^{1/} The rates in col. 1 apply to all products except: (a) Philippine articles, which receive preferential treatment, (b) products of Communist-controlled or dominated countries, which are dutiable at the rates shown in col. 2, and (c) certain products of insular possessions.

^{2/} Pursuant to Presidential Proclamation No. 3822 of Jan. 1, 1968, items 117.81 and 117.85 superseded item 117.80 (other cheese valued over 25 cents per pound). The rate of duty on item 117.80 had been 20 percent ad valorem.

^{3/} By similitude.

^{4/} Pursuant to Presidential Proclamation No. 3822 of Jan. 1, 1968, items 177.67 and 177.69 (not included herein) superseded item 177.70 (other edible animal oils, fats, and greases). The rate of duty on other edible animal oils, fats, and greases derived from milk (butter oil, item 177.70 (pt.)) was not changed.

^{5/} Pursuant to Presidential Proclamation No. 3822 of Jan. 1, 1968, items 182.92 and 182.95 (not included herein) superseded item 182.91 (other edible preparations, not specially provided for). The rate of duty on the articles classifiable in item 182.92 was not changed.

^{6/} Pursuant to Presidential Proclamation No. 3822 of Jan. 1, 1968, item 182.93 superseded item 182.92 (edible preparations, N.S.P.F., if products of Cuba).

(s) = Suspended. See general headnote 3(b) of the TSUS. Imports from Cuba have been prohibited since Feb. 7, 1962.

Table 20.--U.S. rates of duty under the Tariff Act of 1930 for dairy products, June 18, 1930-August 30, 1963, inclusive

Tariff paragraph and description	Statutory rate, effective June 18, 1930	Trade-agreement modification			Rate reference No.
		Effective dates	Negotiating partner	Rate	
Par. 52:					
Edible animal oils:					
[Butter oil]	20% ad val.	June 6, 1951	Canada (GATT)	10% ad val. <u>1/</u>	1
Par. 707:					
Whole milk, fresh or sour. <u>2/</u>	6½¢ per gal.	Jan. 1, 1939 to Dec. 31, 1947	Canada	3½¢ per gal. for not over 3,000,000 gal. per calendar year.	2
		Jan. 1, 1948	Canada (GATT)	2¢ per gal. for not over 3,000,000 gal. per calendar year, 6½¢ per gal. for other entries. <u>1/</u>	3
Cream, fresh or sour. <u>3/</u>	56 6/10¢ per gal.	Jan. 1, 1936 to Dec. 31, 1938	Canada	35¢ per gal. for not over 1,500,000 gal. per calendar year.	4
		Jan. 1, 1939 to Dec. 31, 1947	-----do-----	28 3/10¢ per gal. for not over 1,500,000 gal. per calendar year, 56 6/10¢ per gal. for other entries.	5
		Jan. 1, 1948 to June 5, 1951	Canada (GATT)	20¢ per gal. for not over 1,500,000 gal. per calendar year, 56 6/10¢ per gal. for other entries.	6
		June 6, 1951	-----do-----	15¢ per gal. for not over 1,500,000 gal. per calendar year, 56 6/10¢ per gal. for other entries. <u>1/</u>	7
Skimmed milk, fresh or sour, and buttermilk. <u>4/</u>	2 1/20¢ per gal.	Jan. 1, 1939 to Dec. 31, 1947	Canada	2 1/20¢ per gal.	8
		Jan. 1, 1948	Canada (GATT)	1½¢ per gal. <u>1/</u>	9
Par. 708(a):					
Milk, condensed or evaporated:					
In airtight containers:					
Sweetened-----	2 3/4¢ per lb.	Jan. 1, 1948	Benelux (GATT) <u>5/</u>	1 3/4¢ per lb. <u>1/</u>	10
Unsweetened-----	1 8/10¢ per lb.	-----do-----	-----do-----	1¢ per lb. <u>1/</u>	11
Other-----	2 53/100¢ per lb.	-----do-----	-----do-----	1½¢ per lb. <u>1/</u>	12
Par. 708(b):					
Dried whole milk <u>6/</u>	6 1/12¢ per lb.	-----do-----	-----do-----	3 1/10¢ per lb. <u>1/</u>	13
Dried cream-----	12 1/3¢ per lb.	-----do-----	-----do-----	6 1/5¢ per lb. <u>1/</u>	14
Dried skimmed milk <u>7/</u>	3¢ per lb.	-----do-----	-----do-----	1½¢ per lb. <u>1/</u>	15
Dried buttermilk <u>8/</u>	3¢ per lb.	Jan. 1, 1939 to Dec. 31, 1947	Canada	1½¢ per lb.	16
		Jan. 1, 1948	Canada (GATT)	1½¢ per lb. <u>1/</u>	17
Par. 708(c):					
Malted milk, and compounds or mixtures of, or substitutes for, milk or cream.	35% ad val.	June 6, 1951	-----do-----	17½% ad val. <u>1/</u>	18

See footnotes at end of table.

Table 20.--U.S. rates of duty under the Tariff Act of 1930 for dairy products,
June 18, 1930-August 30, 1963, inclusive--Continued

Tariff paragraph and description	Statutory rate, effective June 18, 1930	Trade-agreement modification			Rate refer ence No.
		Effective dates	Negotiating partner	Rate	
Par. 709: Butter-----	14¢ per lb.	Jan. 1, 1948	Australia, New Zealand (GATT)	7¢ per lb. for not over 50,000,000 lbs. in the period from Nov. 1 in any year to the follow- ing Mar. 31 inclu- sive $\frac{1}{2}$, 14¢ per lb. for other entries. $\frac{1}{2}$	19
		May 28, 1950	Denmark (GATT)	7¢ per lb. for not over 5,000,000 lbs. in the period April 1 to July 15 inclusive; 7¢ per lb. for not over 5,000,000 lbs. in the period July 16 to Oct. 31 inclusive; 14¢ per lb. for other entries. $\frac{2}{3}$	20
		Jan. 1, 1948	Cuba $\frac{2}{3}$ (GATT)	11.2¢ per lb. for Cuban products entering when the most-favored-nation rate is in excess of 11.2¢ per lb. $\frac{1}{2}$	21
Oleomargarine and other butter substitutes.	-----do-----	-----do-----	Benelux (GATT)	7¢ per lb. $\frac{1}{2}$	22
Par. 710: Cheddar cheese, in original loaves.	7¢ per lb. but not less than 35% ad val.	Jan. 1, 1936 to Dec. 31, 1938	Canada	5¢ per lb. but not less than 25% ad val.	23
Cheddar cheese, whether or not in original loaves, not otherwise proc- essed than by division into pieces.	-----do-----	Jan. 1, 1939 to Dec. 31, 1947	-----do-----	4¢ per lb. but not less than 25% ad val.	24
		Jan. 1, 1948 to June 5, 1951	Canada (GATT)	$3\frac{1}{2}$ ¢ per lb. but not less than $17\frac{1}{2}$ % ad val.	25
		June 6, 1951	-----do-----	3¢ per lb. but not less than 15% ad val. $\frac{1}{10}$	26
Roquefort cheese, in original loaves.	-----do-----	Jan. 15, 1936 to Dec. 31, 1947	France	5¢ per lb. but not less than 25% ad val.	27
		Jan. 1, 1948 to June 30, 1962	France (GATT)	3¢ per lb. but not less than 15% ad val.	28
		July 1, 1962 to June 30, 1963	EEC $\frac{11}{10}$ (GATT)	3¢ per lb. but not less than $13\frac{1}{2}$ % ad val.	29
		July 1, 1963	-----do-----	3¢ per lb. but not less than 12% ad val. $\frac{1}{10}$	30
Blue-mold cheese (except Roque- fort) in orig- inal loaves.	-----do-----	June 15, 1936 to Dec. 31, 1947	France	5¢ per lb. but not less than 25% ad val.	31
		Jan. 1, 1948 to May 27, 1950	France (GATT)	-----do-----	32
		May 28, 1950	Denmark	3¢ per lb. but not less than 15% ad val. $\frac{1}{10}$	33

See footnotes at end of table.

Table 20.--U.S. rates of duty under the Tariff Act of 1930 for dairy products, June 18, 1930-August 30, 1963, inclusive--Continued

Tariff paragraph and description	Statutory rate, effective June 18, 1930	Trade-agreement modification			Rate	Rate reference No.
		Effective dates	Negotiating partner			
Par. 710--Continued						
Romano cheese (except Peco-rino Romano) in original loaves:						
Made from cow's milk.	7¢ per lb. but not less than 35% ad val.	Nov. 15, 1941 to May 29, 1950	Argentina		5¢ per lb. but not less than 25% ad val.	34
		May 30, 1950 to Nov. 16, 1951	Italy (GATT)		-----do-----	35
		Nov. 17, 1951	-----do-----		5¢ per lb. but not less than 20% ad val. $\frac{1}{10}$	36
Other-----do-----	-----do-----	Nov. 15, 1941 to May 29, 1950	Argentina		5¢ per lb. but not less than 25% ad val.	37
		May 30, 1950 to Aug. 1, 1951	Italy (GATT)		-----do-----	38
		Aug. 2, 1951	Norway, Italy (GATT)		5¢ per lb. but not less than 20% ad val. $\frac{1}{10}$	39
Reggiano, Parme-sano, and Provo-loni, all in original loaves.	-----do-----	Nov. 15, 1941 to May 29, 1950	Argentina		5¢ per lb. but not less than 25% ad val.	40
		May 30, 1950 to Nov. 16, 1951	Italy (GATT)		-----do-----	41
		Nov. 17, 1951	-----do-----		5¢ per lb. but not less than 20% ad val. $\frac{1}{10}$	42
Provolette cheese-----do-----	-----do-----	May 19, 1950 to Nov. 16, 1951	Italy $\frac{12}{10}$, Dom- inican Repub- lic (GATT)		5¢ per lb. but not less than 25% ad val.	43
		Nov. 17, 1951	Norway, Italy		5¢ per lb. but not less than 20% ad val. $\frac{1}{10}$	44
Goya and Sbrinz cheeses in orig-inal loaves.	-----do-----	Nov. 15, 1941	Argentina		5¢ per lb. but not less than 25% ad val. $\frac{1}{10}$	45
Edam and Gouda cheeses:						
Containing 40 percent or more butterfat.	-----do-----	Feb. 1, 1936 to Dec. 31, 1947	Netherlands		-----do-----	46
		Jan. 1, 1948 to June 5, 1951	Benelux, Cuba $\frac{9}{10}$ (GATT)		$3\frac{1}{2}$ ¢ per lb. but not less than 15% ad val.	47
		June 6, 1951	Benelux		3¢ per lb. but not less than 15% ad val. $\frac{1}{10}$	48
Containing less than 40 percent of butterfat.	-----do-----	Feb. 1, 1936 to Dec. 31, 1947	Netherlands		5¢ per lb. but not less than 25% ad val.	49
		Jan. 1, 1948 to June 5, 1951	Benelux (GATT), Cuba (GATT) $\frac{9}{13/14}$		-----do-----	50
		June 6, 1951	-----do-----		5¢ per lb. but not less than 20% ad val. $\frac{14}{10}$	51

See footnotes at end of table.

Table 20.--U.S. rates of duty under the Tariff Act of 1930 for dairy products, June 18, 1930-August 30, 1963, inclusive--Continued

Tariff paragraph and description	Statutory rate, effective June 18, 1930	Trade-agreement modification			Rate	Rate reference No.
		Effective dates	Negotiating partner			
Par. 710--Continued						
Cheese having the eye formation characteristic of the Swiss or Emmenthaler type; and Gruyere-process cheese.	7¢ per lb. but not less than 35% ad val.	Feb. 15, 1936 to Nov. 1, 1936	Switzerland	7¢ per lb. but not less than 20% ad val.		52
		Nov. 2, 1936 to May 24, 1950	Finland	5¢ per lb. but not less than 20% ad val.		53
		May 25, 1950 to June 30, 1962	Finland 15/ Denmark 16/ (GATT)	-----do-----		54
		July 1, 1962 to June 30, 1963	Finland, Switzerland (GATT)	4.5¢ per lb. but not less than 18% ad val.		55
		July 1, 1963	-----do-----	4¢ per lb. but not less than 16% ad val. 1/10/		56
Bryndza cheese, in casks, barrels, or hogsheads weighing with their contents more than 200 pounds each.	-----do-----	Apr. 16, 1938 to Apr. 21, 1939	Czechoslovakia	5¢ per lb. but not less than 25% ad val.		57
		Jan. 1, 1948	Czechoslovakia (GATT)	3½¢ per lb. but not less than 17½% ad val. 1/10/		58
Gammelost and Nokkelost cheeses.	-----do-----	May 19, 1950 to June 5, 1951	Dominican Republic (GATT)	5¢ per lb. but not less than 25% ad val.		59
		June 6, 1951 to June 30, 1962	Italy, Norway (GATT)	5¢ per lb. but not less than 20% ad val.		60
		July 1, 1962 to June 30, 1963	Norway (GATT)	4.5¢ per lb. but not less than 18% ad val.		61
		July 1, 1963	-----do-----	4¢ per lb. but not less than 16% ad val. 1/10/		62
Gjetost cheese made from goat's-milk whey or from whey obtained from a mixture of goat's milk and not more than 20 percent of cow's milk.	-----do-----	May 19, 1950 to Aug. 1, 1951	Dominican Republic (GATT)	5¢ per lb. but not less than 25% ad val.		63
		Aug. 2, 1951 to June 29, 1956	Italy, Norway (GATT)	5¢ per lb. but not less than 20% ad val.		64
		June 30, 1956 to June 29, 1957	Norway (GATT)	4.75¢ per lb. but not less than 19% ad val.		65
		June 30, 1957 to June 29, 1958	-----do-----	4.5¢ per lb. but not less than 18% ad val.		66
		June 30, 1958 to June 30, 1962	-----do-----	4.2¢ per lb. but not less than 17% ad val.		67
		July 1, 1962 to June 30, 1963	-----do-----	3.8¢ per lb. but not less than 15½% ad val.		68
		July 1, 1963	-----do-----	3.4¢ per lb. but not less than 13½% ad val. 1/10/		69
Pecorino cheese, in original loaves, not suitable for grating.	-----do-----	Nov. 15, 1941 to May 18, 1950	Argentina	5¢ per lb. but not less than 25% ad val.		70
		May 19, 1950 to Nov. 16, 1951	Dominican Republic (GATT)	-----do-----		71
		Nov. 17, 1951 to June 30, 1962	Italy, Norway (GATT)	5¢ per lb. but not less than 20% ad val.		72
		July 1, 1962 to June 30, 1963	EEC (GATT)	4.5¢ per lb. but not less than 18% ad val.		73
		July 1, 1963	-----do-----	4¢ per lb. but not less than 16% ad val. 1/10/		74
Other Pecorino cheese, and other cheese made from sheep's milk, if suitable for grating and in original loaves.	-----do-----	Nov. 15, 1941 to May 29, 1950	Argentina 17/	5¢ per lb. but not less than 25% ad val.		75
		May 30, 1950 to June 29, 1956	Italy (GATT)	3½¢ per lb. but not less than 17½% ad val.		76
		June 30, 1956 to June 29, 1957	-----do-----	3.25¢ per lb. but not less than 16½% ad val.		77
		June 30, 1957 to June 29, 1958	-----do-----	3.1¢ per lb. but not less than 15½% ad val.		78

See footnotes at end of table.

Table 20.--U.S. rates of duty under the Tariff Act of 1930 for dairy products,
June 18, 1930-August 30, 1963, inclusive--Continued

Tariff paragraph and description	Statutory rate, effective June 18, 1930	Trade-agreement modification			Rate reference No.
		Effective dates	Negotiating partner	Rate	
Par. 710--Continued					
Other Pecorino cheese, and other cheese made from sheep's milk, if suitable for grating and in original loaves--Continued	7¢ per lb. but not less than 35% ad val.	June 30, 1958 to June 30, 1962 July 1, 1962 to June 30, 1963 July 1, 1963	Italy (GATT) EEC (GATT) -----do-----	3¢ per lb. but not less than 15% ad val. 3¢ per lb. but not less than 13½% ad val. 3¢ per lb. but not less than 12% ad val. <u>1/10</u>	79 80 81
Other cheeses <u>18</u> --	-----do-----	May 19, 1950 to June 5, 1951 June 6, 1951	Italy, Dominican Republic (GATT) Italy, Norway (GATT)	5¢ per lb. but not less than 25% ad val. 5¢ per lb. but not less than 20% ad val. <u>1/10</u>	82 83
Substitutes for cheese.	-----do-----	May 30, 1950 to Aug. 1, 1951 Aug. 2, 1951	Italy (GATT) Italy, Norway (GATT)	5¢ per lb. but not less than 25% ad val. 5¢ per lb. but not less than 20% ad val. <u>1/10</u>	84 85
Par. 1558: Articles, manufac- tured in whole or in part, not specially pro- vided for <u>1</u> mixtures con- taining butter- fat, yoghurt and other fermented milk, chocolate milk drink, and ice cream <u>7</u> .	20% ad val. <u>19</u>				86

1 The concession is essentially reflected in the Tariff Schedules of the United States that became effective Aug. 31, 1963; see, in table 19, the col. 1 rate or rates identified by the rate reference number in this table.

2 Fresh or sour milk containing more than 5½ percent of butterfat dutiable as cream.

3 Fresh or sour cream containing more than 45 percent of butterfat dutiable as butter.

4 Skimmed milk containing more than 1 percent of butterfat dutiable as whole milk.

5 Benelux includes Belgium, Luxembourg, and the Netherlands.

6 Dried whole milk containing more than 35 percent of butterfat dutiable as dried cream.

7 Dried skimmed milk containing more than 3 percent of butterfat dutiable as dried whole milk.

8 Dried buttermilk containing more than 6 percent of butterfat dutiable as dried whole milk.

9 The preferential rates for products of Cuba have been suspended since May 24, 1962; imports therefrom have been prohibited since Feb. 7, 1962.

10 Specific rate eliminated, effective Aug. 31, 1963.

11 The European Economic Community (EEC) includes Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany.

12 Only Italy for cheese in original loaves, effective May 30, 1950.

13 A preferential tariff concession was also granted to Cuba, effective Jan. 1, 1948, at the rate of 4 cents per pound but not less than 20 percent ad valorem.

14 Rate provision not continued in the Tariff Schedules of the United States (TSUS).

15 Effective May 25, 1950 on Gruyere-process cheese.

16 Effective May 28, 1950 on cheese having the eye formation characteristic of the Swiss or Emmenthaler type.

17 Applicable to Pecorino only.

18 Includes all cheese not provided for in the foregoing provisions of this table.

19 Effective Jan. 1, 1948, pursuant to a bilateral agreement, a rate of 16 percent ad valorem applied to Cuban products; on Aug. 31, 1963, this rate was eliminated on dairy products specially provided for in the TSUS.

Table 21.--Butter, and fresh or sour cream containing over 45 percent of butterfat: U.S. production, imports for consumption, exports of domestic merchandise, yearend stocks, and apparent consumption, 1962-66

Year	Production <u>1/</u>	Imports <u>2/</u>	Exports	Yearend stocks <u>1/3/</u>	Apparent consumption
Quantity (1,000 pounds)					
1962-----	1,537,143	711	35,000	359,000	1,368,854
1963-----	1,419,688	707	190,000	271,000	1,318,395
1964-----	1,442,447	665	297,000	71,000	1,346,112
1965-----	1,322,825	748	66,000	52,000	1,276,573
1966-----	1,112,009	667	13,000	32,000	1,119,676
Value (1,000 dollars)					
1962-----	906,914	334	12,250	211,810	<u>4/</u>
1963-----	823,419	339	64,600	157,180	<u>4/</u>
1964-----	836,619	362	115,830	41,180	<u>4/</u>
1965-----	780,467	385	28,380	30,680	<u>4/</u>
1966-----	708,350	365	8,280	20,380	<u>4/</u>

1/ Values based on Commodity Credit Corporation (CCC) purchase prices.

2/ Imports subject to quotas established pursuant to sec. 22 of the Agricultural Adjustment Act, as amended.

3/ Commercial and Government-owned.

4/ Not meaningful.

Source: Production, imports for 1962-63, exports, and yearend stocks compiled from official statistics of the U.S. Department of Agriculture; imports for 1964-66 compiled from official statistics of the U.S. Department of Commerce.

Table 22 -- Butter, subject to U.S. import quotas: Quantities licensed, quantities imported, and proportion of license used, by country of origin, fiscal years 1962-66

Country	Year ending June 30--				
	1962	1963	1964	1965	1966
	Quantity licensed (pounds)				
New Zealand-----	329,728	331,632	331,576	331,981	331,800
Denmark-----	211,232	211,656	211,945	211,750	211,876
Netherlands ^{1/} -----					(162,624
Australia-----	161,280	160,524	162,960	156,750	(-
Norway-----					(-
Sweden-----					(-
Total-----	702,240	703,812	706,481	700,481	706,300
	Quantity imported (pounds)				
New Zealand-----	315,392	316,904	331,486	330,680	331,744
Denmark-----	191,834	199,313	170,191	165,358	190,566
Netherlands-----	145,989	142,772	-	63,803	157,133
Australia-----	5,152	3,528	126,000	-	-
Norway-----	-	-	16,540	43,479	-
Sweden-----	5,040	10,192	1,680	-	-
Total-----	663,407	672,709	645,897	603,320	679,443
	Proportion of license used (percent)				
New Zealand-----	95.7	95.6	99.9	99.6	99.9
Denmark-----	90.8	94.2	80.3	78.1	89.9
Netherlands-----					(96.6
Australia-----	96.8	97.5	88.5	68.4	(-
Norway-----					(-
Sweden-----					(-
Average-----	94.5	95.6	91.4	86.1	96.2

^{1/} The license was not necessarily allocated to the Netherlands, but to any one of the group of countries listed in Presidential Proclamation 3019, comprised of Argentina, Australia, Canada, the Netherlands, Norway, Sweden, and Switzerland.

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

Table 23.--Butter: World production, 1962-66

(In millions of pounds)

Country	1962	1963	1964	1965	1966
U.S.S.R.-----	2,072	1,949	2,099	2,610	2,551
United States-----	1,537	1,420	1,442	1,323	1,112
West Germany-----	1,041	1,087	1,083	1,105	1,105
France-----	654	953	961	981	1,040
New Zealand-----	478	498	554	557	560
Australia-----	444	464	482	452	481
East Germany-----	353	371	385	434	440
Denmark-----	368	329	342	366	353
Canada-----	374	362	361	346	342
Poland-----	201	179	192	231	235
Finland-----	212	226	231	224	224
Netherlands-----	224	208	197	228	220
All other-----	2,842	2,754	2,571	2,843	2,837
Total-----	10,800	10,800	10,900	11,700	11,500

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

Table 24.--Butter: Exports from the principal
exporting countries, 1960-64

(Million pounds)						
Country	1960	1961	1962	1963	1964	
New Zealand-----	346.8	365.3	370.3	382.4	420.4	
Denmark-----	260.3	264.5	252.9	225.6	229.2	
Australia-----	144.3	170.7	159.7	206.1	203.6	
United States-----	1.6	.7	10.8	80.4	152.8	
France-----	51.1	112.9	66.8	89.8	77.7	
Soviet Union-----	82.0	122.5	153.7	143.4	55.8	
Netherlands-----	86.5	68.5	71.9	89.6	55.6	
Finland-----	56.7	38.5	22.4	34.7	52.9	
Poland-----	62.9	58.9	60.5	41.0	44.1	
Total-----	1,092.2	1,202.5	1,169.0	1,293.0	1,292.1	

Source: Compiled from statistics of the Commonwealth Economics Committee.

Table 28.--Colby cheese, valued not over 25 cents per pound: U.S. imports for consumption, by principal sources, 1964-66 and January-June 1967

Country	1964	1965	1966 ^{1/}	January- June 1967 ^{1/}
Quantity (1,000 pounds)				
New Zealand-----	7,779	6,253	14,193	-
Australia-----	2,414	4,609	2,148	-
Austria-----	750	772	1,339	-
Belgium-----	-	134	528	234
Sweden-----	191	246	89	-
All other-----	-	439	50	1,329
Total-----	11,134	12,453	18,347	1,563
Value (1,000 dollars)				
New Zealand-----	1,863	1,493	3,391	-
Australia-----	557	1,157	535	-
Austria-----	174	178	318	-
Belgium-----	-	30	122	58
Sweden-----	44	56	20	-
All other-----	-	93	13	321
Total-----	2,638	3,007	4,399	379

^{1/} Preliminary.

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

Table 25.--Cheddar cheese: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1962-66

Year	Production <u>1/</u>	Imports <u>2/</u>	Exports <u>3/</u>	Total <u>4/</u> year end stocks	Apparent consumption
Quantity (1,000 pounds)					
1962--	955,949	2,471	12,325	386,000	980,095
1963--	965,334	3,157	30,233	322,000	1,002,258
1964--	1,009,118	2,479	5,560	296,000	1,032,037
1965--	1,007,761	1,857	3,876	271,000	1,029,639
1966--	1,043,124	4,181	3,323	322,000	992,982
Value (1,000 dollars)					
1962--	334,222	747	3,853	135,000	<u>5/</u>
1963--	343,659	970	8,827	119,000	<u>5/</u>
1964--	364,971	805	2,186	106,000	<u>5/</u>
1965--	362,794	641	1,814	103,000	<u>5/</u>
1966--	458,975	1,530	1,827	142,000	<u>5/</u>

1/ Values estimated by the U.S. Tariff Commission staff.

2/ Imports are subject to an absolute quota established pursuant to Sec. 22 of the Agricultural Adjustment Act as amended: Values partly estimated by the U.S. Tariff Commission Staff.

3/ Includes exports for relief or charity.

4/ Contains small amounts of cheese other than cheddar.

5/ Not meaningful.

Source: Production, imports for 1962 and 63, and stocks compiled from official statistics of the U.S. Department of Agriculture (except as noted); imports for 1964-66 and exports compiled from official statistics of the U.S. Department of Commerce.

Table 29.--Colby cheese, valued over 25 cents per pound: U.S. imports for consumption, by principal sources, 1964-66 and January-June 1967

Country	1964	1965	1966 ^{1/}	January-June 1967 ^{1/}
	Quantity (1,000 pounds)			
France-----	-	-	8,980	2,566
Denmark-----	3	22	6,913	8,952
New Zealand-----	-	134	5,890	26,518
Belgium-----	-	-	1,880	1,681
Ireland-----	199	1,278	1,299	918
Austria-----	-	-	965	1,279
Australia-----	-	-	482	1,095
Bulgaria-----	-	-	441	-
Canada-----	54	-	223	-
All other-----	38	^{2/} 262	573	1,010
Total-----	294	1,696	27,646	44,019
	Value (1,000 dollars)			
France-----	-	-	2,397	695
Denmark-----	2	6	2,272	2,877
New Zealand-----	-	31	1,772	7,699
Belgium-----	-	-	515	430
Ireland-----	52	370	426	312
Austria-----	-	-	275	390
Australia-----	-	-	146	329
Bulgaria-----	-	-	115	-
Canada-----	21	-	85	-
All other-----	12	^{2/} 85	168	277
Total-----	87	492	8,171	13,009

^{1/} Preliminary.

^{2/} Includes 224 thousand pounds, valued at 60 thousand dollars, from the United Kingdom.

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

Table 30.--Italian-type cheeses (Romano made from cow's milk, Reggiano, Parmesano, Provoloni, Provolette, and Sbrinz): U.S. production, imports for consumption, and apparent consumption, 1961-66

Year	Production <u>1/</u>	Imports <u>2/</u>	Apparent consumption	Ratio (percent) of imports to consumption
Quantity (1,000 pounds)				
1961-----	60,088	8,003	68,091	12
1962-----	<u>3/</u> 64,200	9,374	73,574	13
1963-----	<u>3/</u> 67,900	10,120	78,020	13
1964-----	71,456	8,896	80,352	11
1965-----	<u>3/</u> 76,000	7,788	83,788	9
1966-----	<u>3/</u> 81,000	8,228	89,228	9
Value (1,000 dollars)				
1961-----	36,654	3,926	40,580	<u>4/</u>
1962-----	35,882	4,455	40,337	<u>4/</u>
1963-----	38,993	4,681	43,674	<u>4/</u>
1964-----	41,491	4,993	46,484	<u>4/</u>
1965-----	48,407	5,106	53,513	<u>4/</u>
1966-----	58,580	5,195	63,775	<u>4/</u>

1/ Value estimated by the U.S. Tariff Commission staff.

2/ Partly estimated for 1961-63. Imports in original loaves are controlled by quotas established pursuant to sec. 22 of the Agricultural Adjustment Act, as amended. See TSUS item 950.10.

3/ Estimated by the U.S. Tariff Commission staff.

4/ Not meaningful.

Source: Production compiled from official statistics of the U.S. Department of Agriculture except as noted; imports compiled from official statistics of the U.S. Department of Commerce except as noted; consumption comprises production plus imports, exports in 1961-66 having been nil.

Table 31--Italian-type cheeses, subject to U.S. import quotas: Quantities licensed, quantities imported, and proportion of license used, by country of origin, fiscal years 1962-66

Country	Year ending June 30--				
	1962	1963	1964	1965	1966
	Quantity licensed (pounds)				
Italy-----	6,068,060	6,152,504	5,571,110	5,912,286	5,770,783
Argentina--	5,317,961	5,290,503	5,908,526	5,586,495	5,706,227
Total--	11,386,021	11,443,007	11,479,636	11,498,781	11,477,010
	Quantity imported (pounds)				
Italy-----	5,246,888	5,933,732	4,999,271	5,060,780	4,189,573
Argentina--	3,038,514	3,350,648	5,023,320	3,428,142	3,110,982
Total--	8,285,402	9,284,380	10,022,591	8,488,922	7,300,555
	Proportion of license used (percent)				
Italy-----	86.5	96.4	89.7	85.6	72.6
Argentina--	57.1	63.3	85.0	61.4	54.5
Average---	72.8	81.1	87.3	73.8	63.6

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

Table 32.--Italian-type cheeses (Romano, Parmesano, Provoloni, Provollette, and Sbrinz), not in original loaves: U.S. imports for consumption, by principal sources, 1964-66

Country	1964	1965	1966 ^{1/}
	Quantity (1,000 pounds)		
Argentina-----	126	39	391
Italy-----	196	50	33
All other-----	-	8	27
Total-----	322	97	451
	Value (1,000 dollars)		
Argentina-----	43	17	175
Italy-----	137	44	35
All other-----	-	2	13
Total-----	180	63	223
	Unit value (cents per pound) ^{2/}		
Argentina-----	33.8	42.6	44.8
Italy-----	70.1	88.4	107.3
All other-----	-	33.0	48.1

^{1/} Preliminary.

^{2/} The unit value for all imports is not shown because such an average is not meaningful. Calculated on the exact (i.e. unrounded figures).

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

Table 33--Swiss cheese with eye formation: U.S. production, imports for consumption, and apparent consumption, 1962-66

Year	Production <u>1/</u>	Imports	Apparent consumption	Ratio (percent) of imports to consumption
Quantity (1,000 pounds)				
1962-----	109,412	12,518	121,930	10
1963-----	119,906	11,692	131,598	9
1964-----	121,884	11,506	133,390	9
1965-----	122,732	10,419	133,151	8
1966-----	136,664	14,751	151,415	10
Value (1,000 dollars)				
1962-----	45,898	6,668	<u>2/</u>	<u>2/</u>
1963-----	52,483	6,063	<u>2/</u>	<u>2/</u>
1964-----	52,105	6,427	<u>2/</u>	<u>2/</u>
1965-----	55,880	6,001	<u>2/</u>	<u>2/</u>
1966-----	74,112	7,988	<u>2/</u>	<u>2/</u>

1/ Values are based on average annual prices paid f.o.b. Wisconsin assembly points for Grade A blocks.

2/ Not meaningful.

Source: Production, official statistics of the U.S. Department of Agriculture; imports compiled from official statistics of the U.S. Department of Commerce.

Note.--Exports, which are not separately reported, have been small.

Table 34.--Swiss cheese with eye formation: U.S. imports for consumption, by principal sources, 1962-66

Country	1962	1963	1964	1965	1966
Quantity (1,000 pounds)					
Switzerland-----	7,172	6,221	6,833	6,227	7,011
Finland-----	1,665	1,863	1,982	1,803	3,475
Austria-----	682	792	1,516	1,345	1,745
Denmark-----	2,729	2,481	857	659	1,626
Norway-----	23	154	222	330	469
All other-----	247	181	96	55	425
Total-----	12,518	11,692	11,506	10,419	14,751
Value (1,000 dollars)					
Switzerland-----	4,531	3,905	4,447	4,226	4,740
Finland-----	652	716	794	708	1,421
Austria-----	316	369	671	617	797
Denmark-----	1,065	965	381	286	647
Norway-----	8	56	86	136	198
All other-----	96	52	48	28	185
Total-----	6,668	6,063	6,427	6,001	7,988

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

Table 35.--Blue-mold cheese: U.S. production, imports for consumption, and apparent consumption, 1962-66

Year	Production	Imports <u>1/</u>	Apparent consumption	Ratio (percent) of imports to consumption
Quantity (1,000 pounds)				
1962-----	14,507	4,684	19,191	24
1963-----	15,416	3,916	19,332	20
1964-----	16,835	4,249	21,084	20
1965-----	19,000	4,400	23,400	19
1966-----	20,198	5,173	25,371	20
Value (1,000 dollars) <u>2/</u>				
1962-----	8,294	2,306	<u>3/</u>	<u>3/</u>
1963-----	9,244	1,884	<u>3/</u>	<u>3/</u>
1964-----	10,082	2,136	<u>3/</u>	<u>3/</u>
1965-----	11,400	2,209	<u>3/</u>	<u>3/</u>
1966-----	13,330	2,620	<u>3/</u>	<u>3/</u>

1/ Imports are subject to absolute quotas, established pursuant to section 22 of the Agricultural Adjustment Act, as amended.

2/ Values are based on average annual selling prices at New York City.

3/ Not meaningful.

Source: Production and imports for 1962 and 1963 compiled from official statistics of the U.S. Department of Agriculture, except as noted; imports for 1964-66 compiled from official statistics of the U.S. Department of Commerce.

Note.--Exports have been nil.

Table 36--Blue-mold cheese, subject to import quotas: Quantities licensed, quantities imported, and proportion of license used, by country of origin, fiscal years 1962-66

Country	Year ending June 30--				
	1962	1963	1964	1965	1966
	Quantity licensed (pounds)				
Denmark----	4,165,640	4,673,341	4,531,161	4,595,293	4,703,214
Italy-----	247,510	279,790	340,450	259,745	187,561
Norway-----	19,370	47,400	97,000	112,052	106,520
France-----	6,710	2,550	2,500	11,330	10,170
Sweden-----	11,370	30,630	8,680	34,660	9,200
Argentina--	990	-	1,220	1,220	-
Total--	4,451,590	5,033,711	4,981,011	5,014,300	5,016,665
	Quantity imported (pounds)				
Denmark----	4,164,613	4,497,661	3,579,907	4,022,335	4,522,613
Italy-----	136,783	132,460	115,938	109,825	114,314
Norway-----	16,832	41,379	76,679	90,245	90,838
France-----	2,379	-	867	1,609	4,328
Sweden-----	10,580	29,278	8,630	34,239	8,636
Argentina--	-	-	-	-	-
Total--	4,331,187	4,700,778	3,782,021	4,258,253	4,740,729
	Proportion of license used (percent)				
Denmark----	99.9	96.2	79.0	87.5	96.2
Italy-----	55.3	47.3	34.1	42.3	60.9
Norway-----	86.9	87.3	79.1	80.5	85.3
France-----	35.5	-	34.7	14.2	42.6
Sweden-----	93.1	95.6	99.4	98.8	93.9
Argentina--	-	-	-	-	-
Average--	97.3	93.4	75.9	84.9	94.5

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

Table 37.--Edam and Gouda cheeses: U.S. production, imports for consumption, and apparent consumption, 1962-66

Year	Production <u>1/</u>	Imports <u>2/</u>	Apparent consumption	Ratio (percent) of imports to consumption
Quantity (1,000 pounds)				
1962-----	5,560	6,687	12,247	55
1963-----	5,600	7,469	13,089	57
1964-----	6,200	6,770	12,970	52
1965-----	6,300	7,566	13,866	55
1966-----	7,600	10,897	18,497	59
Value (1,000 dollars)				
1962-----	3,114	2,921	<u>3/</u>	<u>3/</u>
1963-----	3,304	2,279	<u>3/</u>	<u>3/</u>
1964-----	3,720	3,117	<u>3/</u>	<u>3/</u>
1965-----	3,780	3,537	<u>3/</u>	<u>3/</u>
1966-----	5,092	4,990	<u>3/</u>	<u>3/</u>

1/ Estimated by the staff of the U.S. Tariff Commission.

2/ Virtually all imports are subject to absolute quotas, established pursuant to sec. 22 of the Agricultural Adjustment Act, as amended; these statistics include small amounts of processed Edam and Gouda cheeses which are not subject to quotas (CIE 1922/64).

3/ Not meaningful.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--Exports were negligible.

Table 38.--Edam and Gouda cheeses: U.S. imports for consumption, by quota status, 1961-66

Year	Under quota restriction	Not under quota restriction	Total
Quantity (pounds)			
1961-----	5,383,261	1,931,522	7,314,783
1962-----	5,625,072	1,062,010	6,687,082
1963-----	6,001,483	1,487,606	7,489,089
1964-----	5,097,421	1,672,994	6,770,415
1965-----	5,477,945	2,088,479	7,566,424
1966-----	7,917,461	2,979,704	10,897,165
Percent of annual total			
1961-----	73.6	26.4	100
1962-----	84.1	15.9	100
1963-----	80.1	19.9	100
1964-----	75.3	24.7	100
1965-----	72.4	27.6	100
1966-----	72.7	27.3	100

Source: Quota imports compiled from unpublished data of the U.S. Department of Agriculture; total imports compiled from official statistics of the U.S. Department of Commerce.

Table 39.--Edam and Gouda cheese, subject to U.S. import quotas: Quantities licensed, quantities imported, and proportion of license used, by country of origin, fiscal years 1962-66

Country	Year ending June 30--				
	1962	1963	1964	1965	1966
	Quantity licensed (pounds)				
Netherlands--	8,187,413	8,393,635	8,458,580	8,391,673	8,412,298
Denmark-----	340,010	405,240	313,533	401,740	406,099
Sweden-----	60,000	39,360	85,250	88,810	164,074
Argentina----	329,140	285,170	254,140	274,590	136,036
Finland-----	16,100	-	-	7,990	54,270
Portugal-----	22,651	33,900	10,000	15,000	16,400
Norway-----	11,670	14,000	10,955	19,000	10,954
France-----	4,340	-	-	-	-
Ireland-----	5,000	-	-	-	-
Total-----	8,976,324	9,171,305	9,132,458	9,198,803	9,200,131
	Quantity imported (pounds)				
Netherlands--	5,356,504	5,525,938	4,880,370	4,913,187	6,640,054
Denmark-----	208,871	269,738	207,962	220,708	194,549
Sweden-----	59,183	38,513	74,434	70,412	131,398
Argentina----	170,473	260,612	94,750	41,275	34,148
Finland-----	-	-	-	7,975	53,012
Portugal-----	4,561	1,501	7,430	9,915	7,525
Norway-----	4,963	8,797	7,647	13,098	10,319
France-----	-	-	-	-	-
Ireland-----	1,080	-	-	-	-
Total-----	5,805,635	6,105,099	5,272,593	5,276,570	7,071,005
	Proportion of license used (percent)				
Netherlands--	65.4	65.8	57.7	58.5	78.9
Denmark-----	61.4	66.6	66.3	54.9	47.9
Sweden-----	98.6	97.8	87.3	79.3	80.1
Argentina----	51.8	91.4	37.3	15.0	25.1
Finland-----	-	-	-	99.8	97.7
Portugal-----	20.1	4.4	74.3	66.1	45.9
Norway-----	42.5	62.8	69.8	68.9	94.2
France-----	-	-	-	-	-
Ireland-----	21.6	-	-	-	-
Average--	64.7	66.6	57.7	57.4	76.9

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

Table 40.--Gruyere-process cheese: U.S. imports for consumption, by principal sources, 1962-66

Country	1962	1963	1964	1965	1966
	Quantity (1,000 pounds)				
Switzerland-----	3,509	3,369	3,484	3,371	4,023
Finland-----	662	712	968	1,142	2,967
Austria-----	348	492	446	372	1,124
Denmark-----	197	114	119	151	338
West Germany-----	42	35	61	76	392
France-----	8	10	26	15	111
All other-----	39	98	69	186	168
Total-----	4,805	4,830	5,173	5,313	9,123
	Value (1,000 dollars)				
Switzerland-----	2,263	2,144	2,157	2,146	2,463
Finland-----	220	235	314	373	905
Austria-----	154	211	184	158	384
Denmark-----	74	50	54	69	124
West Germany-----	20	17	25	35	124
France-----	4	6	18	10	34
All other-----	18	48	27	95	74
Total-----	2,753	2,711	2,779	2,886	4,108
	Unit value (cents per pound)				
Switzerland-----	64.5	63.6	61.9	63.7	61.2
Finland-----	33.2	33.0	32.4	32.7	30.5
Austria-----	44.3	42.9	41.3	42.5	34.2
Denmark-----	37.6	44.9	45.4	45.7	36.7
West Germany-----	47.6	48.6	41.0	46.1	31.6
France-----	50.0	60.0	69.2	66.7	30.6
All other-----	46.2	49.0	39.1	51.1	44.0
Average-----	57.3	56.1	53.7	54.3	45.0

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

Table 41.--Sheep's milk cheese (except Roquefort):
U.S. imports for consumption, 1962-66

Year	Bryndza	Other sheep's milk cheese			Total
		In original loaves		Not in original loaves	
		Suitable for grating	Not suitable for grating		
Quantity (1,000 pounds)					
1962-----	83	14,463	3,509	$\frac{1}{52}$	$\frac{1}{18,107}$
1963-----	68	13,237	4,270	$\frac{1}{50}$	$\frac{1}{17,625}$
1964-----	63	12,254	4,385	67	16,769
1965-----	89	10,998	4,862	51	15,990
1966-----	85	10,923	4,722	114	15,844
Value (1,000 dollars)					
1962-----	17	7,971	1,267	$\frac{1}{23}$	$\frac{1}{9,278}$
1963-----	14	7,470	1,549	$\frac{1}{29}$	$\frac{1}{9,062}$
1964-----	13	8,654	1,766	44	10,477
1965-----	24	9,901	2,211	49	12,185
1966-----	19	9,260	2,211	85	11,575

$\frac{1}{}$ Estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--U.S. production of sheep's milk cheeses is believed to be nil.

Table 42.--Roquefort cheese: U.S. imports for consumption, 1962-66

Year	Quantity	Value	Unit value
	1,000 pounds	1,000 dollars	Per pound
1962-----	2,392	2,006	\$0.84
1963-----	2,040	1,716	.84
1964-----	2,004	1,959	.98
1965-----	2,191	2,398	1.09
1966-----	1,861	2,102	1.13

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

Table 43.--Gjetost, Goya, Gammelost, and Nokkelost cheeses, and cheeses not elsewhere enumerated, and substitutes for cheese (including cottage cheese): U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1962-66

Year	Production ^{1/}	Imports	Exports	Apparent consumption
Quantity (1,000 pounds)				
1962-----	1,125,846	6,783	4,564	1,128,065
1963-----	1,152,125	7,325	3,359	1,156,091
1964-----	1,222,786	8,604	3,526	1,227,864
1965-----	1,242,198	9,636	2,955	1,248,879
1966-----	1,263,602	19,422	2,679	1,280,345
Value (1,000 dollars)				
1962-----	336,486	2,982	2,429	<u>2/</u>
1963-----	402,796	3,409	1,799	<u>2/</u>
1964-----	431,643	4,074	1,857	<u>2/</u>
1965-----	474,753	4,562	1,685	<u>2/</u>
1966-----	478,269	7,430	1,821	<u>2/</u>

^{1/} Values estimated by the U.S. Tariff Commission staff based on the wholesale prices of similar cheeses in New York City.

^{2/} Not meaningful.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports for 1962 and 1963 estimated from information available to the Tariff Commission; exports and imports for 1964-66 compiled from official statistics of the U.S. Department of Commerce.

Table 44.--Gammelost, Gjetost, Goya, and Nokkelost cheeses, cheeses not elsewhere enumerated, and substitutes for cheese: U.S. imports for consumption, by principal sources, 1964, 1965, and 1966

Country	1964	1965	1966
	Quantity (1,000 pounds)		
Denmark-----	3,730	3,698	7,360
France-----	1,292	1,820	2,246
Switzerland-----	443	609	1,525
Iceland-----	5	247	1,956
Italy-----	671	611	555
West Germany-----	394	432	820
Sweden-----	448	439	1,202
Norway-----	607	574	642
Poland-----	106	85	1,122
Belgium-----	4	13	420
Finland-----	344	480	505
United Kingdom-----	104	112	241
Ireland-----	71	82	308
Netherlands-----	147	148	153
Portugal-----	50	85	81
All other-----	187	201	286
Total-----	8,603	9,636	19,422
	Value (1,000 dollars)		
Denmark-----	1,670	1,639	2,505
France-----	794	1,078	1,494
Switzerland-----	279	368	676
Iceland-----	1	59	476
Italy-----	411	399	378
West Germany-----	201	218	352
Sweden-----	114	120	338
Norway-----	264	256	286
Poland-----	21	18	254
Belgium-----	2	4	121
Finland-----	69	105	120
United Kingdom-----	46	51	101
Ireland-----	32	36	96
Netherlands-----	68	71	71
Portugal-----	30	51	50
All other-----	73	89	112
Total-----	4,075	4,562	7,430

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

Table 45.--Condensed and evaporated milk and cream: U.S. production, imports for consumption, exports of domestic merchandise, yearend stocks, and apparent consumption, 1962-66

(In millions of pounds)

Year	Production			Imports	Exports	Yearend stocks	Apparent consumption
	Unskimmed	Skimmed	Total				
1962-----	2,408.7	886.1	3,294.8	0.1	114.0	147.0	3,264.9
1963-----	2,369.0	846.3	3,215.3	.6	122.1	139.0	3,101.8
1964-----	2,386.8	899.7	3,286.5	1.0	100.1	193.0	3,133.4
1965-----	2,177.8	967.1	3,144.9	1.8	90.5	141.0	3,108.2
1966 <u>1</u> /--	2,184.8	1,045.8	3,230.6	3.3	132.7	205.5	3,036.7

1/ Preliminary.

Source: Production and yearend stocks compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce; apparent consumption comprises production plus imports, minus exports, and adjusted for net change in stocks.

Note.--Condensed or evaporated cream is not an important article of commerce; separate data are not available.

Table 46.--Condensed and evaporated milk, in airtight containers: U.S. imports for consumption, by principal sources, 1962-66

Country	1962	1963	1964	1965	1966 ^{1/}
	Quantity (1,000 pounds)				
Netherlands-----	59	573	633	918	1,512
Canada-----	2	2	4	13	480
Denmark-----	12	21	181	413	613
All other-----	-	-	61	14	108
Total-----	73	596	879	1,358	2,713
	Value (1,000 dollars)				
Netherlands-----	8	84	103	146	203
Canada-----	^{2/}	^{2/}	1	2	120
Denmark-----	2	3	29	63	87
All other-----	-	-	14	2	18
Total-----	10	87	147	213	428

^{1/} Preliminary.

^{2/} Less than \$500.

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

Table 47.--Condensed or evaporated milk, not in airtight containers:
U.S. imports for consumption, by sources, 1962-66 1/

Country	1962	1963	1964	1965	1966 <u>2/</u>
	Quantity (1,000 pounds)				
West Germany-----	-	-	-	-	361
Denmark-----	-	-	-	-	89
Netherlands-----	-	-	-	-	126
Canada-----	-	17	112	15	-
New Zealand-----	-	-	-	426	-
France-----	2	-	-	-	-
Total-----	2	17	112	441	576
	Value (1,000 dollars)				
West Germany-----	-	-	-	-	24
Denmark-----	-	-	-	-	9
Netherlands-----	-	-	-	-	8
Canada-----	-	2	17	2	-
New Zealand-----	-	-	-	100	-
France-----	1	-	-	-	-
Total-----	1	2	17	103	41

1/ Preliminary data indicate that there were no imports in January-March 1967.

2/ Preliminary.

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

Note.--Because of rounding, figures may not add to the total shown.

Table 48.--Condensed and evaporated milk: Production in specified countries, 1960-64

(Million pounds)

Country	1960	1961	1962	1963	1964
United States-----	3,461.0	3,499.6	3,294.8	3,215.3	3,286.5
Netherlands-----	852.1	899.6	961.2	993.7	1,045.9
West Germany-----	830.6	862.0	935.4	999.3	1,000.2
United Kingdom-----	417.1	406.6	418.4	408.1	424.7
Canada-----	356.8	367.6	335.1	357.3	359.1
France-----	222.4	231.4	255.8	294.3	310.2
Australia-----	147.8	154.8	172.0	211.5	230.7
Spain-----	80.4	90.9	99.5	110.2	158.8
Japan-----	162.4	181.4	200.0	184.6	154.6
South Africa-----	65.4	68.8	62.0	69.0	83.1
East Germany-----	40.5	40.8	42.3	57.3	72.1
Belgium-----	50.8	47.9	55.3	62.5	68.3
Czechoslovakia-----	46.6	53.3	50.6	53.5	62.0
Denmark-----	59.4	60.0	61.6	53.1	46.4
Total-----	6,693.3	6,964.7	6,944.0	7,069.7	7,302.6

Source: Compiled from statistics of the Commonwealth Economic Committee.

Note.--Data on production of condensed and evaporated milk in the Soviet Union are not available; annual production is believed to exceed 450 million pounds.

Table 49.--Condensed and evaporated milk: Exports from the principal exporting countries, 1960-64

(Million pounds)

Country	1960	1961	1962	1963	1964
Netherlands-----	655.0	671.3	730.5	721.3	770.8
France-----	74.4	104.2	86.7	114.7	140.2
United States-----	143.1	138.2	114.0	122.1	100.1
Australia-----	42.6	47.3	48.2	65.9	94.1
United Kingdom-----	92.1	87.8	78.8	89.8	90.5
Denmark-----	60.3	57.3	68.8	50.6	47.7
Canada-----	3.4	4.7	6.0	5.8	18.1
Switzerland-----	9.2	12.1	9.2	10.3	11.4
Total-----	1,080.1	1,122.9	1,142.2	1,180.5	1,272.9

Source: Compiled from statistics of the Commonwealth Economic Committee.

Table 50.--Condensed and evaporated milk: Imports into the principal importing countries, 1960-64

(Million pounds)

Country	1960	1961	1962	1963	1964
Malaysia-----	165.8	170.0	155.7	162.2	153.7
Thailand-----	107.1	107.3	122.3	128.8	121.2
Republic of the Philippines----	135.7	129.7	138.7	86.0	108.6
South Vietnam-----	49.5	47.9	49.5	47.9	62.0
Greece-----	32.0	41.2	45.9	47.0	58.5
Hong Kong-----	27.8	35.4	36.7	41.0	45.7
Nigeria-----	22.0	22.4	26.2	28.7	35.6
Ghana-----	16.1	22.8	22.0	20.8	25.8
Senegal-----	15.2	17.5	17.2	21.7	19.5
Total-----	571.2	594.2	614.2	584.1	630.6

Source: Compiled from statistics of the Commonwealth Economic Committee.

Table 51.--Dried milk and cream (other than nonfat dry milk): U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1962-66

Year	Production <u>1/</u>	Imports	Exports	Apparent consumption <u>2/</u>
Quantity (1,000 pounds)				
1962-----	472,792	419	15,423	457,788
1963-----	518,967	640	32,092	487,515
1964-----	575,094	221	16,449	558,866
1965-----	603,531	89	22,711	580,909
1966-----	664,906	408	18,988	646,326
Value (1,000 dollars)				
1962-----	58,414	36	8,583	<u>3/</u>
1963-----	69,759	60	14,146	<u>3/</u>
1964-----	71,956	25	6,966	<u>3/</u>
1965-----	92,099	15	9,640	<u>3/</u>
1966-----	112,146	59	5,950	<u>3/</u>

1/ Values partly estimated by the staff of the U.S. Tariff Commission based on wholesale price quotations in Dairy and Poultry Market News, a publication of the Agricultural Marketing Service of the U.S. Department of Agriculture.

2/ Yearend stocks, which have consisted entirely of commercially-owned dried whole milk, have been small compared with domestic production; in 1962-65 they ranged from 5 million to 7 million pounds annually.

3/ Not meaningful.

Source: Production compiled from official statistics of the U.S. Department of Agriculture, except as noted; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 52--Dried whole milk, subject to U.S. import quotas: Quantities licensed, quantities imported, and proportion of license used, by country of origin, fiscal years 1962-66

Country	Year ending June 30--				
	1962	1963	1964	1965	1966
	Quantity licensed (pounds)				
New Zealand-----	6,060	6,060	6,060	5,850	7,000
Total-----	6,060	6,060	6,060	5,850	7,000
	Quantity imported (pounds)				
New Zealand-----	6,000	5,950	6,000	5,800	6,950
Total-----	6,000	5,950	6,000	5,800	6,950
	Proportion of license used (percent)				
New Zealand-----	99.0	98.2	99.0	99.1	99.3
Average-----	99.0	98.2	99.0	99.1	99.3

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

Table 53--Malted milk and compounds, subject to import quotas:
Quantities licensed, quantities imported, and proportion of license
used, by country of origin, fiscal years 1962-66

Country	Year ending June 30--				
	1962	1963	1964	1965	1966
	Quantity licensed (pounds)				
Australia-----	6,000	6,000	6,000	-	-
Denmark-----	-	-	-	6,000	6,000
Total-----	6,000	6,000	6,000	6,000	6,000
	Quantity imported (pounds)				
Australia-----	5,992	5,992	5,992	-	-
Denmark-----	-	-	-	-	6,000
Total-----	5,992	5,992	5,992	-	6,000
	Proportion of license used (percent)				
Australia-----	99.9	99.9	99.9	-	-
Denmark-----	-	-	-	-	100.0
Average-----	99.9	99.9	99.9	-	100.0

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

Table 54.--Dried buttermilk and dried whey, subject to import quotas:
Quantities licensed, quantities imported, and proportion of license
used, by country of origin, fiscal years 1962-66

Country	Year ending June 30--				
	1962	1963	1964	1965	1966
	Quantity licensed (pounds)				
Canada-----	386,280	386,280	386,220	386,220	387,940
New Zealand-----	108,600	108,600	108,600	107,600	108,060
Denmark-----	1,000	1,000	-	-	-
Total-----	495,880	495,880	494,820	493,820	496,000
	Quantity imported (pounds)				
Canada-----	361,220	271,700	271,700	-	272,850
New Zealand-----	107,240	108,248	108,472	87,528	107,968
Denmark-----	-	-	-	-	-
Total-----	468,460	379,948	380,172	87,528	380,818
	Proportion of license used (percent)				
Canada-----	93.5	70.3	70.3	-	70.3
New Zealand-----	98.7	99.7	99.9	81.3	99.9
Denmark-----	-	-	-	-	-
Average-----	94.5	76.6	76.8	17.7	76.8

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

Table 55.--Nonfat dry milk: U.S. production, imports for consumption, exports of domestic merchandise, yearend stocks, and apparent consumption, 1962-66

Year	Production <u>1/</u>	Imports	Exports	Yearend stocks <u>1/</u>	Apparent consumption
Quantity (1,000 pounds)					
1962-----	2,230,629	1,360	872,279	675,000	1,171,710
1963-----	2,106,058	1,950	1,119,190	487,000	1,176,818
1964-----	2,177,189	1,561	1,310,902	174,000	1,180,848
1965-----	1,988,508	1,342	863,074	154,000	1,146,776
1966-----	1,595,104	2,835	387,683	119,000	1,245,256
Value (1,000 dollars)					
1962-----	332,364	100	75,081	100,575	<u>2/</u>
1963-----	303,272	158	94,109	70,128	<u>2/</u>
1964-----	313,462	130	112,677	25,056	<u>2/</u>
1965-----	286,956	169	117,653	22,176	<u>2/</u>
1966-----	312,640	370	63,271	23,324	<u>2/</u>

1/ Values based on Commodity Credit Corporation (CCC) purchase prices.

2/ Not meaningful.

Source: Production and stocks compiled from official statistics of the U.S. Department of Agriculture, except as noted; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 56.--Dried skimmed milk, subject to import quotas: Quantities licensed, quantities imported, and proportion of license used, by country of origin, fiscal years 1962-66

Country	Year ending June 30--				
	1962	1963	1964	1965	1966
	Quantity licensed (pounds)				
Australia----	1,208,740	1,320,740	1,208,740	1,320,740	1,319,110
Canada-----	483,260	483,260	483,260	483,260	483,260
New Zealand--	112,000	-	112,000	-	-
Total----	1,804,000	1,804,000	1,804,000	1,804,000	1,802,370
	Quantity imported (pounds)				
Australia----	1,000,832	1,320,704	1,206,088	1,318,632	1,205,680
Canada-----	412,300	483,250	483,050	-	483,250
New Zealand--	56,000	-	56,000	-	-
Total----	1,469,132	1,803,954	1,745,138	1,318,632	1,688,930
	Proportion of license used (percent)				
Australia----	82.8	99.9	99.8	99.8	91.4
Canada-----	85.3	99.9	99.9	-	99.9
New Zealand--	50.0	-	50.0	-	-
Average--	81.4	99.9	96.7	73.1	93.7

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

Table 57.--Frozen dairy desserts: U.S. production, by type, 1962-66

(In thousands of gallons)

	1962	1963	1964	1965	1966
Ice cream----	704,428	717,597	738,743	757,000	752,164
Ice Milk-----	188,140	203,348	217,722	230,992	240,244
Milk sher- bert-----	40,651	42,170	44,008	45,449	47,674
Other frozen dairy prod- ucts ^{1/} -----	5,225	5,431	5,927	6,486	6,794
"Mellorine- type" des- serts-----	50,594	50,677	51,378	53,169	51,613
Total-----	989,038	1,019,223	1,057,778	1,093,096	1,098,489

^{1/} Includes frosted malted milk.

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

Table 58.--Edible preparations, not specially provided for, containing from 20 to 45 percent by weight of butterfat: U.S. imports for consumption, by principal sources, 1961-66 and January-June 1967

Country	1961	1962	1963	1964	1965	1966 ^{1/}	Jan.-June 1967 ^{1/}
Quantity (1,000 pounds) ^{2/}							
Belgium-----	-	-	-	-	42	37,160	41,599
Canada-----	-	-	-	-	4	40,659	20,021
France-----	-	-	-	-	-	1,316	9,849
Denmark-----	711	5	-	-	628	6,827	1,550
United Kingdom-----	-	-	-	4	-	8,419	1,100
Switzerland-----	-	-	-	1	-	5,357	-
Australia-----	1,800	4,080	3,300	-	-	3,285	1,723
Austria-----	-	-	-	-	-	2,349	-
West Germany-----	-	-	-	-	-	408	-
All other-----	-	-	-	27	10	1,841	16,563
Total-----	2,511	4,085	3,300	32	684	107,621	92,405
Value (1,000 dollars)							
Belgium-----	^{3/}	^{3/}	^{3/}	-	10	8,743	8,428
Canada-----	^{3/}	^{3/}	^{3/}	-	1	9,050	4,242
France-----	^{3/}	^{3/}	^{3/}	-	-	327	2,180
Denmark-----	^{3/}	^{3/}	^{3/}	-	154	1,787	515
United Kingdom-----	^{3/}	^{3/}	^{3/}	1	-	1,662	196
Switzerland-----	^{3/}	^{3/}	^{3/}	1	-	1,280	-
Australia-----	^{3/}	^{3/}	^{3/}	-	-	751	438
Austria-----	^{3/}	^{3/}	^{3/}	-	-	466	-
West Germany-----	^{3/}	^{3/}	^{3/}	-	-	104	-
All other-----	^{3/}	^{3/}	^{3/}	5	3	438	3,666
Total-----	^{3/}	^{3/}	^{3/}	7	168	24,608	19,665
Unit value (per pound)							
Belgium-----	^{3/}	^{3/}	^{3/}	-	\$0.24	\$0.24	\$0.20
Canada-----	^{3/}	^{3/}	^{3/}	-	.25	.22	.21
France-----	^{3/}	^{3/}	^{3/}	-	-	.25	.22
Denmark-----	^{3/}	^{3/}	^{3/}	-	.25	.26	.33
United Kingdom-----	^{3/}	^{3/}	^{3/}	\$0.25	-	.20	.18
Switzerland-----	^{3/}	^{3/}	^{3/}	1.00	-	.24	-
Australia-----	^{3/}	^{3/}	^{3/}	-	-	.23	.25
Austria-----	^{3/}	^{3/}	^{3/}	-	-	.20	-
West Germany-----	^{3/}	^{3/}	^{3/}	-	-	.25	-
All other-----	^{3/}	^{3/}	^{3/}	.19	.30	.24	.22
Average-----	^{3/}	^{3/}	^{3/}	.22	.25	.23	.21

^{1/} Preliminary.

^{2/} Data for 1961-63 estimated by the U.S. Department of Agriculture.

^{3/} Not available.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 59.--U.S. exports of butter oil, by principal markets, 1962-66

Market	1962	1963	1964	1965	1966
	Quantity (1,000 pounds)				
South Viet Nam ^{1/} -----	-	-	95	649	2,324
Republic of Korea-----	1,672	1,786	2,174	1,709	1,639
Nansei and Nanpo Islands----	1,119	1,247	1,468	936	1,232
Chile-----	376	2,107	1,502	1,037	1,370
Japan-----	1,433	1,694	926	1,055	845
Peru-----	-	1,787	4,870	1,374	568
Thailand-----	91	135	124	216	209
Taiwan-----	89	112	461	58	121
Malaysia-----	-	7	670	676	171
Mexico-----	-	118	-	8	88
Philippine Republic-----	19	2,250	1,478	1,247	154
Iran-----	10	23	330	451	149
Jamaica-----	-	834	1,155	414	90
Burundi and Rwanda-----	-	-	-	1	47
Hong Kong-----	154	167	78	-	20
Morocco-----	-	-	-	-	16
All other ^{2/} -----	89	3,322	9,993	6,000	10
Total-----	5,052	15,589	25,324	15,831	9,053
	Value (1,000 dollars)				
South Viet Nam ^{1/} -----	-	-	60	478	1,950
Republic of Korea-----	1,444	1,494	1,825	1,435	1,392
Nansei and Nanpo Islands----	940	1,043	1,219	721	1,075
Chile-----	159	795	747	550	964
Japan-----	1,196	1,437	714	830	724
Peru-----	-	737	2,501	783	275
Thailand-----	74	85	78	180	176
Taiwan-----	70	91	248	48	102
Malaysia-----	-	5	267	370	88
Mexico-----	-	41	-	7	85
Philippine Republic-----	8	881	618	638	76
Iran-----	8	18	190	276	65
Jamaica-----	-	328	514	222	40
Burundi and Rwanda-----	-	-	-	1	37
Hong Kong-----	129	88	66	-	17
Morocco-----	-	-	-	-	13
All other ^{2/} -----	64	1,290	4,019	3,659	5
Total-----	4,092	8,333	13,066	10,198	7,084

^{1/} Includes North Viet Nam prior to January 1, 1966.

^{2/} Includes 2,866 thousand pounds, valued at 1,003 thousand dollars, exported to Mexico in 1963; 1,056 thousand pounds, valued at 357 thousand dollars, exported to Brazil; 2,866 thousand pounds, valued at 946 thousand dollars, exported to Algeria, and 2,281 thousand pounds, valued at 1,333 thousand dollars, exported to Egypt in 1964.

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

Note.--Data for 1962-64 do not include exports donated for relief or charity by individuals or private agencies; such exports amounted to 5.1 million pounds in 1965 and 0.2 million pounds in 1966.

Appendix B

Section 22 Import Quotas on Dairy Products

Since mid-1953 the quotas on imports of a variety of dairy products have been imposed under the provisions of section 22 of the Agricultural Adjustment Act.

Origin

U.S. imports of certain dairy products--butter, butter oil, dried milk products, certain articles containing over 45 percent of butterfat, and certain cheeses--were controlled by quotas in the early 1950's under section 104 of the Defense Production Act of 1950. Section 104 expired on June 30, 1953. In April, however, the President requested the U.S. Tariff Commission to institute an investigation under section 22 of the Agricultural Adjustment Act to determine whether, in the absence of the import restrictions under section 104, certain articles (including some dairy products) were practically certain to be imported into the United States under such conditions and in such quantities as to render or tend to render ineffective, or materially interfere with, the U.S. Department of Agriculture's price-support programs for milk and butterfat.

In accordance with the recommendations of a majority of the Commission, the President proclaimed the following annual import

quotas on dairy products, to be effective on July 1, 1953: ^{1/}

<u>Article</u>	<u>Quantity</u>
Butter-----	707,000 pounds
Dried whole milk-----	7,000 pounds
Dried buttermilk and dried whey-----	496,000 pounds
Dried cream-----	500 pounds
Dried skimmed milk-----	1,807,000 pounds
Malted milk, and compounds or mixtures of or substitutes for milk or cream-----	6,000 pounds (aggregate quantity)
Cheddar cheese, and cheese and substi- tutes for cheese containing, or processed from, Cheddar cheese-----	2,780,100 pounds (aggregate quantity)
Edam and Gouda cheese-----	4,600,200 pounds (aggregate quantity)
Blue-mold (except Stilton) cheese, and cheese and substitutes for cheese con- taining, or processed from, blue-mold cheese-----	4,167,000 pounds (aggregate quantity)
Italian-type cheeses, made from cow's milk, in original loaves (Romano made from cow's milk, Reggiano, Parmesano, Provoloni, Provolette, and Sbrinz)-----	9,200,100 pounds (aggregate quantity)

The quantities designated in these quotas for butter were determined on the basis of the average annual imports during 1930-34; those for the other imports were determined on the basis of the average annual imports during 1948-50.

^{1/} Presidential Proclamation No. 3019 of June 8, 1953. Licensing arrangements for the imports under quotas are discussed in the section of this report on Administration of section 22 quotas.

Changes since 1953

Since 1953 the Tariff Commission has conducted several supplementary investigations on designated dairy products under the provisions of section 22. As a result of the Commission's investigations, various import quotas on dairy products have been modified, and quotas on butter oil, certain American-type cheese, fluid or frozen cream, and certain articles containing butterfat have been established. 1/

Butter oil.--In March 1957 the Commission recommended that a quota be imposed on U.S. imports of butter substitutes (including butter oil) containing 45 percent or more of butterfat, as follows:

For the period April 1, 1957 to June 30, 1957, inclusive, a total aggregate quantity of 450,000 pounds; for each 12-month period thereafter a total aggregate quantity of 1,800,000 pounds.

The total quantity of butter substitutes (including butter oil) that had been imported prior to the time of the Commission's report to the President in 1957 amounted to 2.4 million pounds. Of that amount, 1.8 million pounds was imported in 1956; the Commission considered the year 1956 to be as a representative period for the establishment of the size of the quota. In April 1957, the President issued a proclamation 2/ limiting imports of butter substitutes containing 45 percent or more of butterfat to 1,800,000 pounds in the 1957 calendar year and to 1,200,000 pounds in each subsequent calendar year.

1/ In July 1955, the Commission declined to recommend the modification of the definition of Italian-type cheeses in the June 1953 proclamation. The modifications suggested by the Department of Agriculture as being necessary could not, in any event, have been made pursuant to the 1955 investigation, the Commission having held that they would have involved the imposition of import restrictions on products not then subject to restriction, an action which requires a new proceeding under sec. 22(a) instead of a supplemental investigation under sec. 22(d).

2/ T.D. 54345.

Certain articles containing butterfat.--In July 1957 the Commission, pursuant to section 22 of the Agricultural Adjustment Act, recommended that an embargo be imposed on certain articles containing 45 percent or more of either butterfat or a combination of butterfat and other fat or oil. In that investigation the Commission determined that imports of the product in question, Exylone, had entered under "abnormal" conditions; the Commission considered that Exylone had been created as an article of commerce for the purpose of avoiding the U.S. import quota on butter. Accordingly, the Commission found that there was no "representative period" for imports of the product in question, and that the imports of the articles should be embargoed. In August 1957, the President issued a proclamation prohibiting the importation of certain articles containing butterfat. 1/

Italian-type and Edam and Gouda cheeses.--Following an investigation completed in April 1960, the Commission recommended that the then existing quotas on Italian-type and Edam and Gouda cheeses be increased because conditions in the U.S. dairy industry had improved

1/ T.D. 54416. Excluded from the embargo were: (1) articles the importation of which was restricted pursuant to existing sec. 22 quotas; (2) cheeses the importation of which was not restricted by quotas established pursuant to sec. 22; (3) evaporated milk and condensed milk; (4) products imported packaged for distribution in the retail trade and ready for use by the purchaser at retail for an edible purpose or in the preparation of an edible article; and (5) articles containing butterfat and other fat or oil, if the importer establishes to the satisfaction of the collector of customs that the butterfat content thereof is less than 45 percent.

to such an extent that such quotas could be liberalized without adversely affecting the Department of Agriculture's price-support program for milk and butterfat. The President subsequently increased the annual import quota for certain Italian-type cheeses from 9,200,100 pounds to 11,500,100 pounds, and the import quota for Edam and Gouda cheese from 4,600,200 pounds to 9,200,400 pounds, effective July 1, 1960. 1/

Blue-mold and Cheddar cheese.--At the request of the President, the Tariff Commission in May 1961, instituted an investigation to determine whether the quotas on blue-mold (except Stilton) cheese and Cheddar cheese--and cheese and substitutes for cheese containing, or processed from, the aforementioned cheeses--or either of them, should be enlarged or eliminated. In its report to the President 2/ the Commission concluded that the circumstances which had led to the imposition of the existing quotas on blue-mold cheese and Cheddar cheese had not so changed that either of those quotas could be enlarged or eliminated without resulting in material interference with the price-support program of the Department of Agriculture for milk and butterfat. The President accepted the Commission's findings and recommendation respecting Cheddar cheese, but not those respecting blue-mold cheese. In March 1962 he increased the quota on blue-mold cheese by 283,333 pounds for the remainder of the quota year (ending June 30, 1962) and enlarged the annual quota for subsequent years from 4,167,000 pounds to 5,016,999 pounds. 3/

1/ 25 F.R. 4343, May 17, 1960.

2/ T.C. Publication 32, Sept. 1, 1961.

3/ Proclamation No. 3460 of March 29, 1962.

On March 31, 1966, the President increased the existing import quota on Cheddar cheese from 2,780,100 pounds to 3,706,800 pounds for the quota year ending June 30, 1966. Such increase was to continue in effect pending Presidential action upon receipt of the report and recommendations of the Tariff Commission with respect thereto. On May 19 the Commission submitted a report to the President with respect to the emergency increase in the quota for the year ending June 30, 1966, and on June 1, 1966 it submitted a report with respect to the enlargement of the quota for subsequent years; these reports were released by the President in July 1967. For the year ending June 30, 1967, however, the Department of Agriculture issued import licenses for 2,780,100 pounds of Cheddar cheese.

Fluid or frozen milk and cream, Cheddar cheese, certain American-type cheese, certain articles containing over 5.5 percent but not over 45 percent of butterfat.--Following an investigation completed by the Tariff Commission in June 1967 (TC Publication 211) the President imposed additional quotas on certain dairy products (and modified the existing quota on Cheddar cheese) as listed below:

<u>Commodity</u>	<u>Quantity</u>
Milk and cream, fluid or frozen, fresh or sour, containing over 5.5 percent but not over 45 percent by weight of butterfat:	
For the 12-month period ending December 31, 1967:	
New Zealand-----	The quantity entered on or before June 30, 1967, plus 750,000 gallons
Other-----	None
For each subsequent year	
New Zealand-----	1,500,000 gallons
Other-----	None
Cheddar cheese, and cheese substitutes for cheese containing, or processed from, Cheddar cheese:	
For the 12-month period ending December 31, 1967-----	The quantity entered on or before June 30, 1967, plus 5,018,750 pounds <u>1/</u>
For each subsequent 12-month period-----	10,037,500 pounds <u>2/</u>
American-type cheese, including Colby, washed curd, and granular cheese (but not including Cheddar) and cheese and substitutes for cheese containing, or processed from, such American-type cheese:	
For the 12-month period ending December 31, 1967-----	The quantity entered on or before June 30, 1967, plus 3,048,300 pounds
For each subsequent 12-month period-----	6,096,600 pounds
Articles containing over 5.5 percent, but not over 45 percent by weight of butterfat, the butterfat content of which is commercially extractable, or which are capable of being used for any edible purpose (except articles provided for in subparts A, B, C, or item 118.30, of part 4, schedule 1 of the TSUS, and except articles imported packaged for distribution in the retail trade and ready for use by the purchaser at retail for an edible purpose or in the preparation of an edible article) and classifiable for tariff purposes under item 182.92:	
For the 12-month period ending December 31, 1967:	
Australia-----	The quantity entered on or before June 30, 1967 plus 1,120,000 pounds

<u>Commodity</u>	<u>Quantity</u>
Belgium and Denmark (aggregate)-----	The quantity entered on or before June 30, 1967, plus 170,000 pounds
Other-----	None
For each subsequent 12- month period:	
Australia-----	2,240,000 pounds
Belgium and Denmark (aggregate)-----	340,000 pounds
Other-----	None

1/ Not more than 4,406,250 pounds shall be products other than natural Cheddar cheese made from unpasteurized milk and aged not less than 9 months.

2/ Not more than 8,812,500 pounds shall be products other than natural Cheddar cheese made from unpasteurized milk and aged not less than 9 months.

The proclamation also changed the quota year (ending June 30) for all the dairy products subject to quotas to a calendar-year basis. The quantities designated in the quotas were substantially below the amounts recommended by the Tariff Commission. Although the investigation concerned process Edam and Gouda cheeses, certain Italian-type cheeses not in original loaves, and certain articles containing over 5.5 percent, but not over 45 percent by weight of butterfat and not classifiable in TSUS item 182.92, these products were not made subject to quantitative limitations.