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UNITED STATES DEPARTMENT OF AGRICULTURE
Economic Research Service

OUTLOOK FOR DAIRY

Talk by A. G. Mathis
Economic and Statistical Analysis Division
at the 1971 National Agricultural Outlook Conference
Washington, D. C., 11:00 A.M., Wednesday, February 24, 1971

Production

A good supply of herd replacements, the easier labor situation, and record-high milk prices favor a rise in milk production this year. On the other hand, grain and concentrate prices are higher and net incomes from dairying are lagging. Thus, a limited rise in milk production from the 117.4 billion pounds of 1970 seems likely. In January, output was up 1.0 percent, following the 1.6 percent gain in the fourth quarter of 1970.

Herd replacements on hand at the beginning of 1971 were 31.7 per 100 cows, about the same as last year's adequate supply. Though the current and prospective prices for slaughter cows are relatively high, the decline in milk cow numbers likely will continue at a slow rate. The 1.4 percent decline during 1970 was the smallest annual rate since 1960. The prospect of another small decline strongly indicates a gain in milk output this year, since milk output per cow rose more than 1.6 percent each year since 1952. The annual increase for 1965-70 averaged 2.4 percent.

The recent increases in national unemployment made more labor available for dairying. The unemployment rate will likely continue relatively high in coming months, but may decline if economic activity picks up as expected. Apparently, less favorable off-farm employment opportunities have helped slow the decline in dairy farms and milk cow numbers.

Milk prices farmers received have set new records since 1965 and price gains from that year's levels exceed 34 percent. Though farmers sold less milk, they grossed about 30 percent more income from dairying in 1970 than in 1965. However, production costs rose substantially last year and limited gains in net returns. Also, damage to the 1970 corn crop and the large feed grain requirements for livestock raised dairy ration prices sharply.

These adverse conditions--limited gains in net income and higher grain and concentrate prices--are expected to hold down production increases this year, although the milk-feed price ratio likely will remain favorable to heavy grain and concentrate feeding.

Prices and Income

Farmers received an average \$5.69 per 100 pounds for milk this past year, some $3\frac{1}{2}$ percent more than in 1969. Assuming no change in dairy price support levels and purchase prices or in Federal order pricing, a slower rise is likely in 1971. In the first quarter, prices are averaging about 3 percent over last year's \$5.68 per 100 pounds

Supply-demand conditions indicate that manufacturing grade milk prices (adjusted to the average annual fat test) will likely hold close to support levels during most of 1971. After March, manufacturing milk prices will depend largely on the 1971/72 level of support, which must be set before April 1.

In 1971, prices for milk used in bottling (Class I) will again depend on policies established in Federal order markets, which price about two-thirds of Grade A milk, and on the ability of fluid milk cooperatives to maintain premium prices above Class I minimums in Federal order markets.

Last year, higher prices and larger farm marketings caused farm gross income from dairying to climb about 5 percent to \$6 $\frac{1}{2}$ billion. A smaller price gain is in prospect this year, but larger farm marketings of milk and cream are expected, so gross dairy income for 1971 may exceed \$6.6 billion.

Utilization

Despite rising retail prices, relatively high unemployment, and competition from other foods, dairy sales in 1970 held slightly above the 109 billion pounds (milk equivalent) of 1969. Competition of milk substitutes slackened, and sales of cheese and lowfat fluid milk improved enough to overcome declines in sales of butter, whole milk, canned milk, and cream.

Last year, domestic per capita civilian consumption of milk in all dairy products fell to 562 pounds from the 568 pounds in 1969. The decline in 1971 may be slightly larger.

In 1970, larger farm marketings of milk and more imports of dairy ingredients increased USDA's removals of dairy products from the market, through the price support and related programs, to the equivalent of 5.8 billion pounds of milk, compared with 4.5 billion pounds in 1969. Prospects for a production increase this year, with little change in sales from 1970, point to a further increase in removals.

Foreign Trade

In 1970, imports of dairy products were equivalent (fat solids basis) to more than 1.9 billion pounds of milk, a fifth more than in 1969. Last year, at Secretary Hardin's request, President Nixon ordered the Tariff Commission to investigate the dairy import situation and at the end of December extended dairy import quotas to include 4 more imported dairy products. As a result, this year's imports likely will total less than last year.

Dairy exports in 1970 were equivalent to less than 0.5 billion pounds of milk, lowest since 1967. Exports in 1971 may increase slightly, because U.S. dairy product supplies may increase and world supplies are less abundant. World casein production appears down, and prices are up sharply; export prices of nonfat dry milk have increased and world milk production is below the 1969 level.

Stocks

Because more of market requirements in the seasonally low production period could be met from current output, commercial storage was relatively light in 1970--down 5 percent from a year earlier. Government holdings of butter rose sharply during 1970 and were about 100 million pounds on January 1, 1971, up from 64 million a year earlier. However, government stocks of cheese continued to be negligible and those of nonfat dry milk were only about one-third of the 138 million pounds of a year earlier. Total stocks (government and commercial) at year-end were up about 9 percent to 5.7 billion pounds milk equivalent. This year, the prospect of increased milk production without a corresponding rise in consumption indicates larger year-end stocks than in 1970.

DAIRY OUTLOOK CHARTS

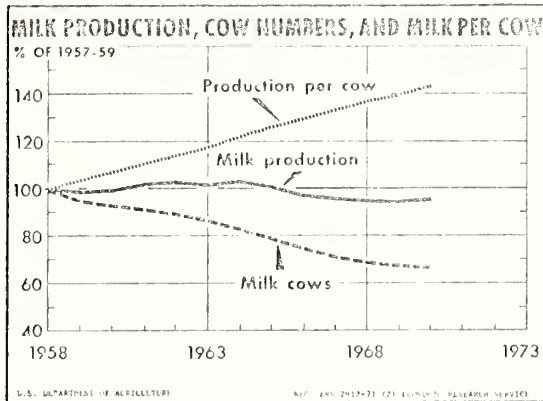


Figure 1

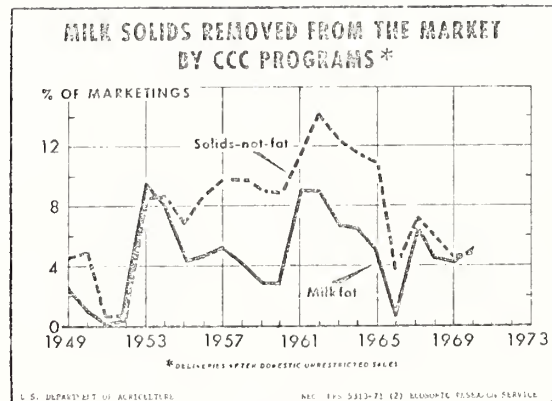


Figure 4

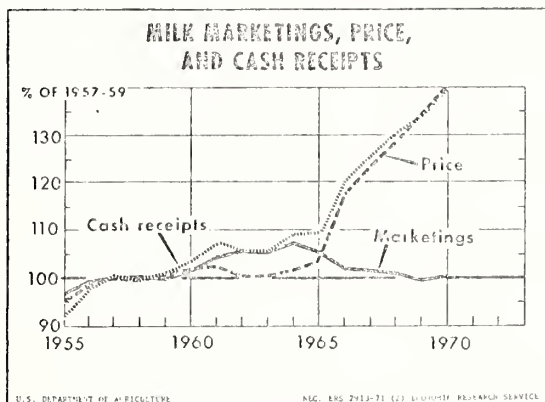


Figure 2

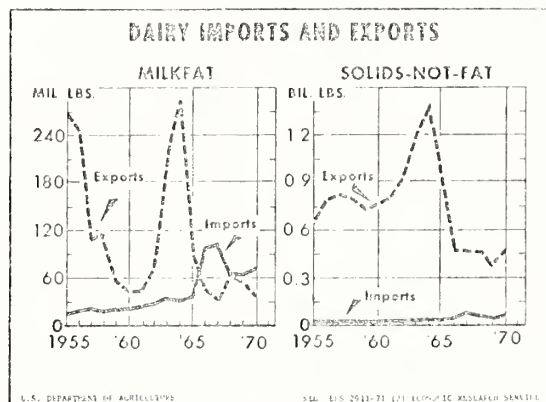


Figure 5

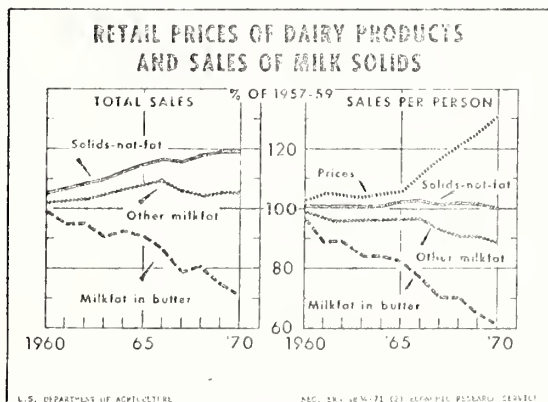


Figure 3

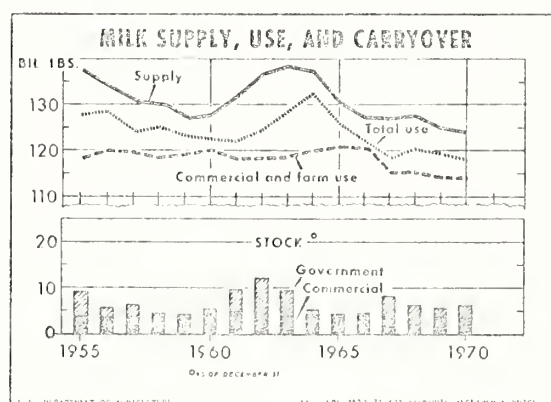


Figure 6

Table 1.--Milk production and factors affecting supply, United States, selected years, 1950-71 ^{1/}

Year	Milk cattle on farms January 1			Milk cows on farms, average during year	Milk production		Prices received by farmers, 1957-59-100	
	Cows and heifers 2/ years old and over	Heifers 1-2 years	Heifer calves under 1 year		Per cow	Total	Dairy products	All farm products
	Thou.	Thou.	Thou.	Thou.	Lb.	Mil. lb.		
1950	23,853	5,394	6,208	21,994	5,314	116,602	97	107
1955	23,462	5,786	6,094	21,044	5,842	122,945	96	95
1960	19,527	5,079	5,575	17,515	7,029	123,109	101	99
1961	19,271	5,016	5,446	17,243	7,290	125,707	101	99
1962	18,953	4,887	5,264	16,842	7,496	126,251	99	101
1963	18,379	4,708	4,935	16,260	7,700	125,202	99	100
1964	17,647	4,395	4,692	15,577	8,099	126,967	100	98
1965	16,981	4,149	4,420	14,954	8,304	124,173	102	103
1966	15,987	3,860	4,151	14,093	8,507	119,892	115	110
1967	15,198	3,636	4,089	13,501	8,797	118,769	119	105
1968	14,644	3,579	4,028	13,038	9,992	117,234	124	108
1969	14,152	3,525	3,939	12,693	9,166	116,345	129	114
1970 ^{2/}	13,838	3,469	3,867	12,509	9,388	117,436	134	116
1970 ^{2/}	3/12,578	4/3,974						
1971 ^{2/}	12,445	3,939						
Average prices received by farmers per 100 pounds					Parity prices per 100 pounds ^{2/}			
	All milk: whole- sale	Milk eligible for fluid market	Milk, manufac- turing grade	Bot- tling milk ^{5/}	Milk- fat in cream ^{7/}	All milk: whole- sale	Milkfat in cream ^{7/}	Equivalent for manu- facturing milk
	Dol.	Dol.	Dol.	Dol.	Ct.	Dol.	Ct.	Dol.
1950	3.89	4.36	3.16	4.86	62.0	4.32	69.2	3.82
1955	4.01	4.50	3.15	5.18	57.8	4.71	74.1	3.94
1960	4.21	4.69	3.25	5.48	60.5	5.01	74.1	4.01
1961	4.22	4.65	3.36	5.43	61.5	5.13	74.9	4.09
1962	4.09	4.54	3.20	5.35	59.4	5.25	76.2	4.15
1963	4.10	4.53	3.21	5.31	59.5	5.33	77.2	4.18
1964	4.15	4.58	3.26	5.35	60.2	5.38	77.3	4.20
1965	4.23	4.63	3.34	5.39	61.1	5.53	79.2	4.31
1966	4.81	5.18	3.97	5.82	67.2	5.73	82.1	4.47
1967	5.01	5.43	4.06	6.20	68.2	5.88	84.0	4.62
1968	5.24	5.67	4.22	6.50	68.7	6.06	86.1	4.79
1969	5.49	5.87	4.45	6.70	69.0	6.49	91.5	5.15
1970 ^{2/}	5.69	6.07	4.70	6.94	70.9	6.87	95.3	5.49

^{1/} Includes available data for Alaska and Hawaii beginning 1960. ^{2/} Preliminary. ^{3/} New series beginning 1970. Milk cows and heifers that have calved. ^{4/} New series beginning 1970. Heifers 500 pounds and over kept for milk cow replacement. ^{5/} At beginning of marketing year. ^{6/} Dealers' average buying price for milk used in fluid products. ^{7/} Cents per pound.

Table 2.--Dairy: Feed costs, milk cow and other livestock prices, milk-livestock price ratios, and feed consumed, United States, selected years, 1950-70

Year	Dairy ration cost		Milk cow cost		Livestock prices and milk-livestock price ratios				
	Value	Milk-	Price	Milk	Beef-	Manufac-	Hog	Manufac-	
	per 100 pounds	feed price ratio	received per head	required to buy a cow	cattle price per 100 pounds	turing price milk-beef: price ratio:	price per 100 pounds	turing milk-hog price ratio	
	Dol.	Lb.	Dol.	Cwt.	Dol.	Lb.	Dol.	Lb.	
1950	3.16	1.24	198	51	23.30	0.14	18.00	0.18	
1955	3.16	1.28	146	36	15.60	.20	15.00	.21	
1960	2.92	1.45	223	53	20.40	.16	15.40	.21	
1961	2.92	1.45	224	53	20.20	.17	16.60	.20	
1962	2.95	1.40	221	54	21.30	.15	16.30	.20	
1963	3.04	1.36	215	52	19.90	.16	14.90	.22	
1964	3.03	1.38	209	50	18.00	.18	14.80	.22	
1965	3.03	1.40	212	50	19.90	.17	20.60	.17	
1966	3.15	1.53	246	51	22.20	.18	22.80	.18	
1967	3.23	1.56	260	52	22.30	.18	18.90	.22	
1968	3.10	1.70	274	52	23.40	.18	18.60	.23	
1969	3.15	1.74	300	55	26.20	.17	23.00	.20	
1970 1/	3.30	1.72	332	58	27.05	.17	21.90	.22	
	Grain and other concentrates fed to milk cows		Dairy pasture feed condition, as percent of normal	Alfalfa hay prices	Quantity fed per cow, winter feeding period ending in May 2/				
	Total fed 3/	Per cow 3/	Per 100 pounds of milk produced 4/	Received by farmers per ton	Paid by farmers per ton	Hay	Silage	Total hay equivalent	
	Thou. tons	Lb.	Lb.	Pct.	Dol.	Dol.	Tons	Tons	Tons
1950	18,516	1,629	30.6	83	23.10	30.90	2.2	1.7	2.9
1955	18,664	1,758	30.1	77	22.00	33.70	2.2	2.2	3.0
1960	19,821	2,259	32.2	82	21.00	31.60	2.5	2.7	3.4
1961	20,916	2,404	33.2	84	21.00	30.90	2.5	2.6	3.4
1962	21,617	2,533	34.3	80	21.40	30.60	2.5	2.8	3.4
1963	21,858	2,646	35.1	73	23.50	32.90	2.4	2.8	3.4
1964	22,464	2,800	35.9	73	24.00	32.60	2.4	3.1	3.5
1965	22,827	2,953	36.7	80	24.00	33.00	2.4	3.2	3.5
1966	22,569	3,000	37.6	78	24.70	33.40	2.3	3.3	3.4
1967	22,790	3,374	38.3	80	23.60	34.08	2.4	3.5	3.5
1968	22,886	3,519	39.1	83	23.00	32.94	2.4	3.6	3.6
1969	23,615	3,726	40.7	82	23.81	34.08	2.4	3.9	3.7
1970 1/	24,200	3,880	41.4	81	24.39	34.69	2.4	3.9	3.7

1/ Preliminary.

2/ In herds kept by dairy reporters.

3/ Not comparable to earlier years, beginning 1966.

4/ On farms where milk or cream was sold. Beginning 1966, data are for all farms where milk was produced.

5/ Estimated.

Table 3.--Milk marketings by farmers, income and utilization, United States, 1950, 1955, and 1960-70 1/

Year	Used on farms where produced	Milk marketed by farmers				Cash receipts from milk marketed by farmers													
		Sold to plants and dealers		Retailed by farmers as milk and cream	Total	Milk sold to plants and dealers	Cream sold to plants and dealers	Retailed by farmers	Total										
		As whole milk	As farm-separated cream																
- - - - -Billion pounds- - - - -										- - - - -Billion dollars- - - - -									
1950	18.3	74.2	20.2	3.9	98.3	2.9	0.5	0.3	3.7										
1955	14.6	91.0	14.7	2.7	108.3	3.6	.3	.3	4.2										
1960	9.2	103.9	7.9	2.1	114.0	4.4	.2	.2	4.8										
1961	8.4	108.4	6.9	2.1	117.3	4.6	.2	.2	4.9										
1962	7.7	110.7	5.9	2.0	118.6	4.5	.1	.2	4.9										
1963	7.1	111.2	5.1	1.9	118.1	4.6	.1	.2	4.9										
1964	6.5	114.2	4.4	1.9	120.5	4.7	.1	.2	5.0										
1965	6.0	112.7	3.6	1.8	118.2	4.8	.1	.2	5.0										
1966	5.5	109.7	3.0	1.7	114.4	5.3	.1	.2	5.5										
1967	5.2	109.4	2.4	1.8	113.6	5.5	.1	.2	5.7										
1968	4.7	108.8	2.0	1.8	112.5	5.7	4/	.2	6.0										
1969 2/	4.4	108.6	1.6	1.7	111.9	6.0	4/	.2	6.2										
1970 3/	4.1	110.4	1.3	1.7	113.3	6.3	4/	.2	6.5										
Utilization of milk supply 5/																			
Fluid	Creamery butter, net	Cheese		Evapo-rated, condensed and whole milk	Frozen dairy products, net	Creamed cottage cheese and other products	Total factory products	Miscel-laneous 6/											
		American	Other																
- - - - -Billion pounds- - - - -																			
1950	42.4	27.8	9.0	2.9	7.9	6.9	0.7	55.2	0.7										
1955	49.1	28.0	10.1	3.5	7.1	8.2	1.2	58.0	1.2										
1960	53.0	29.4	9.7	3.7	6.2	9.5	1.4	59.8	1.2										
1961	52.6	31.8	11.2	3.7	6.0	9.6	1.3	63.6	1.2										
1962	53.3	33.1	10.7	3.7	5.7	9.7	1.4	64.1	1.2										
1963	54.3	30.7	10.9	3.9	5.6	9.9	1.5	62.7	1.3										
1964	54.9	31.3	11.5	4.2	5.7	10.3	1.7	64.5	1.1										
1965	55.4	28.5	11.5	4.3	5.3	10.6	1.6	61.8	1.2										
1966	55.4	23.7	12.2	4.5	5.4	10.5	1.7	57.9	2.5										
1967	54.0	26.1	12.7	4.5	4.6	10.5	1.4	59.7	1.2										
1968	53.7	24.9	12.7	4.7	4.5	11.0	1.5	59.2	-.2										
1969 2/	52.8	23.7	12.7	4.9	4.4	11.0	1.6	58.3	1.1										
1970 2/	52.0	24.0	14.3	5.3	3.9	11.0	1.7	60.2	1.6										

1/ Includes available data for Alaska and Hawaii beginning 1960; totals may not add due to rounding.
 2/ Preliminary. 3/ Estimated. 4/ Less than 50 million dollars. 5/ Total supply includes milk marketed by farmers, net imports of ingredients such as frozen cream and butterfat-sugar mixtures, and net change in storage cream. 6/ Residual, including miscellaneous minor uses and any inaccuracies of independently determined use items.

Table 4.--Factors influencing and indicative of the demand for milk
and dairy products, United States, 1950-70 1/

Year	Total population July 1 (including Armed Forces overseas)	Total civilian employment	BLS consumer price index 1957-59=100	Per capita disposable income		Civilian per capita disappearance			
				Actual	Deflated by consumer price index	Milk equivalent		Milk solids	
						Fat solids basis	Calcium content basis	Milk fat	Solids- not- fat
	Million	Million		Dollars	Dollars	Pounds	Pounds	Pounds	Pounds
1950	151.7	58.9	83.8	1,364	1,628	740	507	29.3	43.6
1951	154.3	60.0	90.5	1,468	1,622	712	507	28.1	43.5
1952	157.0	60.3	92.5	1,518	1,641	698	520	27.2	44.1
1953	159.6	61.2	93.2	1,582	1,697	689	510	26.7	43.5
1954	162.4	60.1	93.6	1,585	1,693	697	514	27.0	43.8
1955	165.3	62.2	93.3	1,666	1,786	706	525	27.2	44.5
1956	168.2	63.8	94.7	1,743	1,841	702	525	26.9	44.6
1957	171.3	64.1	98.0	1,801	1,838	682	518	26.1	44.3
1958	174.1	63.0	100.7	1,831	1,818	687	514	25.7	43.7
1959	177.1	64.6	101.5	1,905	1,877	667	514	25.1	43.7
1960	180.7	65.8	103.1	1,937	1,879	653	512	24.5	43.4
1961	183.8	65.7	104.2	1,983	1,903	641	505	24.0	43.0
1962	186.7	66.7	105.4	2,064	1,958	641	505	23.9	43.0
1963	189.4	67.8	106.7	2,136	2,002	631	503	23.4	42.3
1964	192.1	69.3	108.1	2,280	2,109	631	505	23.3	42.5
1965	194.6	71.1	109.9	2,432	2,213	618	503	22.9	42.4
1966	196.9	72.9	113.3	2,599	2,298	602	503	22.2	42.2
1967	199.1	74.4	116.3	2,745	2,360	580	494	21.4	41.5
1968	201.2	75.9	121.2	2,939	2,425	576	497	21.1	41.7
1969	203.2	77.9	127.7	3,108	2,434	568	492	20.9	41.4
1970 <u>2/</u>	205.4	78.6	135.3	3,333	2,463	562	492	20.6	41.0
Average retail prices, BLS index, 1957-59=100									
Year	All foods	Dairy prod- ucts	Fluid milk, grocery	Butter	Cheese, American, process	Ice cream	Evaporated milk	Margarine, colored	Per capita margarine consumption
									Pounds
1950	85.8	84.7	81.8	96.7	88.6	---	84.4	104.8	6.1
1951	95.4	94.5	90.7	108.5	100.9	101.1	96.1	117.4	6.6
1952	97.1	98.5	95.2	113.3	103.7	101.8	99.5	99.9	7.9
1953	95.6	96.8	94.1	105.3	103.4	101.0	97.4	100.4	8.1
1954	95.4	93.7	92.1	96.5	98.7	99.2	92.5	101.3	8.5
1955	94.0	93.6	92.3	94.5	98.7	97.5	91.1	98.2	8.2
1956	94.7	96.0	95.1	96.7	99.1	97.3	94.0	99.0	8.2
1957	97.8	98.8	98.4	99.6	99.9	99.3	97.5	102.7	8.6
1958	101.9	100.3	100.3	99.5	100.1	100.2	100.9	100.8	9.0
1959	100.3	101.0	101.3	101.0	100.0	100.4	101.6	96.3	9.2
1960	101.4	103.2	103.7	100.5	103.9	99.7	105.3	92.9	9.4
1961	102.6	104.7	104.0	102.6	110.4	99.5	106.1	99.0	9.4
1962	103.6	104.1	103.5	101.1	109.8	98.8	104.2	98.4	9.3
1963	105.1	103.8	103.0	101.0	110.4	98.1	103.1	95.4	9.6
1964	106.4	104.7	103.3	102.0	113.4	96.2	102.9	95.4	9.7
1965	108.8	105.0	102.8	103.6	116.6	94.4	105.3	101.9	9.9
1966	114.2	111.8	109.4	112.8	130.6	96.6	110.6	104.5	10.5
1967	115.2	116.7	113.8	115.9	136.3	99.0	117.4	104.8	10.5
1968	119.3	120.6	118.5	116.8	139.2	98.8	119.8	103.3	10.8
1969	125.5	124.5	121.8	118.3	146.8	99.5	123.5	103.0	10.8
1970 <u>2/</u>	132.4	130.5	127.0	121.1	157.5	103.8	131.4	111.1	10.8

1/ Includes available data for Alaska and Hawaii beginning 1960. 2/ Preliminary.

Table 5 . ---Commercial disappearance: Total milk, annual and by quarters, 1968-70 1/

Item	1969										1970 2/									
	1968		By quarters								Annual		By quarters							
	Total		1st	2nd	3rd	4th	Total		1st	2nd	3rd	4th	Total		1st	2nd	3rd	4th	Total	
----- Billion pounds -----																				
Production	117.2	28.3	32.1	29.0	27.0	116.3	28.5	32.2	29.3	27.5	117.4									
Farm use	4.7	1.1	1.1	1.1	1.1	4.4	1.1	1.0	1.0	1.0	4.1									
Marketings	112.5	27.1	30.9	27.9	26.0	111.9	27.4	31.2	28.3	26.5	113.3									
Beginning commercial stocks 3/	4.2	3.9	3.4	4.6	4.6	3.9	3.8	3.5	4.8	4.3	3.8									
Imports	1.8	.3	.4	.3	.6	1.6	.5	.4	.5	.6	1.9									
Total supply	118.5	31.3	34.7	32.8	31.2	117.5	31.7	35.1	33.6	31.4	119.1									
Ending commercial stocks 3/	3.9	3.4	4.6	4.6	3.8	3.8	3.5	4.8	4.3	3.6	3.6									
Net removals (CCC and FIK)	5.2	1.4	2.1	.7	.3	4.5	1.3	2.9	1.2	.5	5.8									
Commercial disappearance Actual	109.4	26.5	28.0	27.5	27.2	109.2	26.9	27.5	28.0	27.4	109.7									
Percent change from previous year	-0.2	-0.6	-1.2	0.8	0.3	-0.2	1.2	-1.8	1.6	0.8	0.4									

1/ Totals may not add due to rounding. 2/ Preliminary. 3/ Excludes cream and bulk condensed milk.

Table 6.--Commercial disappearance: Selected dairy products, United States, annual 1965-70,
by quarters, 1969-70

Year and quarter	Butter, creamery 1/		Cheese		Nonfat dry milk		Canned milk		Frozen products 3/	
	Mil. lb.		American 2/	Other	Mil. lb.		Mil. lb.		Mil. gal.	
1965	1,095.8		1,127.4	665.2	942.1		1,841.7		1,033.4	
1966	1,086.0		1,207.8	706.2	1,156.8		1,776.8		1,038.7	
1967	973.9		1,175.9	738.2	1,012.2		1,571.5		1,040.2	
1968	976.0		1,213.3	803.0	1,058.1		1,496.8		1,082.3	
1969	924.8		1,280.9	857.9	1,021.5		1,391.0		1,093.8	
1970	900.7		1,407.3	903.4	1,061.1		1,196.8		1,094.5	
1969										
1st	237.9		322.8	196.1	239.7		372.7		228.3	
2nd	227.3		316.6	216.2	295.2		343.6		307.0	
3rd	218.4		321.3	203.7	237.3		316.5		335.0	
4th	241.2		320.2	241.9	249.3		358.2		223.5	
1970										
1st	238.2		354.1	224.5	262.7		325.3		233.2	
2nd	199.5		340.6	217.7	286.4		299.7		304.8	
3rd	216.9		368.3	205.2	262.6		272.6		329.2	
4th	246.1		344.3	256.0	249.4		299.2		227.3	
1970/69 percent change										
	Pct.		Pct.	Pct.	Pct.		Pct.		Pct.	
1st	0.1		9.7	14.5	9.6		-12.7		2.1	
2nd	-12.2		7.6	.7	-3.0		-12.8		-.7	
3rd	-.7		14.6	.7	10.7		-13.9		-1.7	
4th	2.0		7.5	5.8	0		-16.5		1.7	

1/ Imports include butter equivalent of butteroil. 2/ Imports include Colby cheese; stocks do not include processed cheese. 3/ Excludes Mellorine.

Table 7.--Milk equivalent: Domestic civilian disappearance, commercial and noncommercial sources, total and per capita, United States, 1950, 1955, and 1960-70

Year	Civilian disappearance						Consumption excluding donations from USDA supplies		
	Consumed on farms 1/	USDA donations to civilian channels	National School Lunch and Special Milk Programs	Commer- cial sources	All sources	Total military utiliza- tion 2/	Civilian	Military	Total
----- Million pounds -----									
1950	14,250	1,271	623	94,964	111,108	1,766	109,837	1,766	111,603
1955	11,359	3,102	1,394	98,697	114,552	3,329	111,450	2,627	114,077
1960	6,610	2,040	2,455	105,259	116,364	2,532	114,324	2,228	116,552
1961	5,950	3,385	2,602	104,191	116,128	2,472	112,743	2,111	114,854
1962	5,334	4,848	2,755	104,839	117,776	2,969	112,928	2,344	115,272
1963	4,813	4,929	2,902	105,239	117,883	2,964	112,954	2,415	115,369
1964	4,337	5,206	3,031	107,008	119,582	3,007	114,376	2,525	116,901
1965	3,915	3,593	3,215	107,969	118,692	2,819	115,099	2,387	117,486
1966	3,508	1,129	3,373	103,713	116,723	2,376	115,594	2,376	117,970
1967	3,174	3,105	3,441	103,730	113,450	2,117	110,345	2,117	112,462
1968	2,891	4,118	3,519	103,212	113,740	3,225	109,622	2,116	111,738
1969	2,630	4,583	3,494	102,786	113,493	2,647	108,910	2,002	110,912
1970 3/	2,370	4,257	3,494	103,529	113,650	2,518	109,393	1,883	111,276
----- Pounds -----									

1/ Milk and butter consumed in households on milk-producing farms, 1947-54; 1955 to date includes a small amount of farm-churned butter sold. 2/ Includes any quantities used by military in civilian feeding programs abroad. 3/ Preliminary. 4/ Aggregate in each category divided by total civilian population.

Table 8.--Milk and dairy products sales (domestic disappearance, commercial sources) total and per capita, United States, 1965-70 ^{1/}

Year	Fluid milk product sales					Cheese						Evaporated and condensed
	Fluid whole milk	Cream 2/	Low-fat milk 3/	Total		Butter	Whole and part skim milk 5/		Cottage cheese 6/	Whole milk	Skim- and but-ter-milk	
				Product weight	Whole milk equivalent 4/		Amer-ican	Other				
----- Million pounds -----												
Total												
1965	49,750	1,430	6,390	57,570	55,400	1,122	1,106	653	901	2,092	967	
1966	49,640	1,380	7,220	58,240	55,400	1,064	1,206	696	894	1,945	1,038	
1967	48,170	1,300	8,130	57,600	54,000	976	1,182	728	897	1,775	985	
1968	47,785	1,255	9,400	58,440	53,700	986	1,204	794	928	1,735	949	
1969	46,825	1,185	10,640	58,650	52,800	928	1,257	845	966	1,547	1,018	
1970 1/	45,840	1,120	11,570	58,530	52,000	900	1,393	894	1,043	1,410	1,001	

Per capita 8/												
Pounds												
1965	264	7.6	33.9	305	294	5.8	5.7	3.4	4.6	10.8	5.0	
1966	260	7.2	37.8	305	290	5.4	6.2	3.6	4.6	9.9	5.3	
1967	249	6.7	42.0	298	279	4.9	6.0	3.7	4.5	9.0	5.0	
1968	244	6.4	48.0	298	274	4.9	6.0	4.0	4.6	8.7	4.7	
1969	236	6.0	53.6	296	266	4.6	6.2	4.2	4.8	7.7	5.0	
1970 1/	227	5.6	57.4	290	258	4.4	6.8	4.4	5.1	6.9	4.9	

Frozen products					Dry products							
Ice cream	Ice milk	Sherbet	Other	Mello-rine	Whole milk	Nonfat dry milk	Butter-milk	Whey	Malted milk			
----- Million pounds -----												
Total												
1965	3,634	1,270	295	39	255	61	931	79	113	20		
1966	3,606	1,320	309	41	247	65	1,024	63	137	20		
1967	3,578	1,368	299	42	258	51	986	67	148	14		
1968	3,711	1,429	320	42	268	50	1,033	67	149	18		
1969	3,678	1,513	341	36	267	40	1,027	60	151	18		
1970 1/	3,674	1,527	334	34	250	42	1,021	52	154	17		

Per capita 8/												
Pounds												
1965	18.8	6.6	1.5	0.2	1.3	0.3	4.8	0.4	0.6	0.1		
1966	18.4	6.7	1.6	.2	1.3	.3	5.2	.3	.7	.1		
1967	18.1	6.9	1.5	.2	1.3	.3	5.0	.3	.7	.1		
1968	18.6	7.2	1.6	.2	1.3	.3	5.2	.3	.7	.1		
1969	18.2	7.5	1.7	.2	1.3	.2	5.1	.3	.7	.1		
1970 1/	17.9	7.5	1.6	.2	1.2	.2	5.0	.3	.8	.1		

^{1/} Excludes milk used on farms where produced and distribution from USDA supplies; includes sales to the Armed Services for use in the United States. See DS-328, November 1969, table 12 for 1950-64 data.

^{2/} Includes milk and cream mixtures. ^{3/} Includes skim milk, buttermilk, and flavored milk drinks. ^{4/} Fat solids basis. ^{5/} Excludes cottage cheese. ^{6/} Includes full-skim American. ^{7/} Preliminary. ^{8/} Based on resident population, except fluid milk product sales-based on estimated population using fluid products from purchased sources.

Table 9 --Dairy products removed from the commercial market by programs of the United States Department of Agriculture, 1949-71

Year and month	Removals ^{1/}				Solids content of removals			
	Butter	American cheese	Nonfat dry milk	Milk equivalent	Milk-fat	Solids-not-fat	As a percentage of marketings	
	^{2/}	^{3/}	^{4/}	^{5/}	^{5/}	^{5/}	Milk-fat	Solids-not-fat
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds	Percent	Percent
1949	111.7	25.5	325.5	2,489	100.4	321.1	2.6	4.6
1950	14.6	83.2	327.2	1,126	40.9	339.9	1.1	4.9
1951	6/-27.3	6/-7.1	35.3	6/-618	6/-24.0	31.5	6/	.5
1952	16.1	1.7	42.3	339	13.8	41.2	.4	.6
1953	355.2	302.5	597.1	10,200	387.5	668.9	9.7	8.6
1954	305.1	242.5	644.4	8,588	328.2	695.5	8.0	8.7
1955	162.0	141.3	534.7	4,685	179.6	558.0	4.3	6.8
1956	164.6	186.5	723.4	5,206	197.6	753.0	4.7	8.7
1957	172.5	240.6	825.2	5,870	222.1	867.5	5.2	9.8
1958	183.7	75.0	886.0	4,658	178.2	875.0	4.2	9.8
1959	123.7	57.2	830.3	3,214	123.8	815.6	2.9	9.1
1960	144.8	.3	852.8	3,101	122.6	819.8	2.9	8.9
1961	329.4	100.0	1,085.6	8,019	305.0	1,075.3	6.9	11.2
1962	402.7	212.9	1,386.1	10,724	402.4	1,399.0	9.1	14.3
1963	307.5	110.9	1,219.2	7,745	291.8	1,210.1	6.7	12.3
1964	295.7	128.5	1,168.8	7,676	287.6	1,166.9	6.5	11.6
1965	241.0	48.6	1,098.4	5,665	217.4	1,074.0	5.0	10.8
1966	25.1	10.8	365.8	645	26.2	355.5	.6	3.7
1967	265.1	180.5	686.9	7,427	276.3	719.1	6.6	7.5
1968	194.8	87.5	557.8	5,159	193.2	575.4	4.7	6.0
1969	187.9	27.7	407.2	4,479	171.6	421.5	4.2	4.4
1970 ^{7/}								
Jan.	14.0	1.9	24.9	316	12.1	24.7		
Feb.	27.3	2.2	24.5	599	22.9	24.5		
Mar.	17.8	1.9	33.2	396	15.2	32.7		
Apr.	30.4	.4	35.7	647	24.9	34.8		
May	47.4	5.8	47.8	1,060	40.4	48.2		
June	50.2	9.0	66.4	1,152	43.8	67.2		
July	25.2	8.9	53.4	652	24.6	56.9		
Aug.	12.2	8.1	35.3	354	13.2	37.8		
Sept.	4.9	5.7	35.9	164	6.2	36.7		
Oct.	5.1	2.1	33.2	154	5.9	34.6		
Nov.	7.0	1.8	27.8	179	6.9	28.5		
Dec.	4.9	1.2	33.5	132	5.2	34.0		
Total	246.4	49.0	451.6	5,805	221.3	460.6	5.3	4.8
1971 ^{7/}								
Jan.	25.1	.2	23.3	560	21.5	25.1		
Feb.								

^{1/} Delivery basis, after unrestricted domestic sales. ^{2/} Includes butter equivalent of anhydrous milkfat, PIK, and purchases under Sec. 709. ^{3/} Includes purchases under Sec. 709. ^{4/} Includes PIK certificates issued. ^{5/} Includes evaporated milk beginning 1968. ^{6/} Domestic sales exceeded purchases. ^{7/} Preliminary.

Table 10.--Stocks of dairy products, United States, end of year or month, 1960-70

Year and month	Commercial stocks					Government stocks					Total milk equiv- alent 3/ _
	Butter	Amer- ican cheese	Other cheese	Canned milk	Nonfat dry milk	Butter 1/ _	American cheese 2/ _	Nonfat dry milk	Evapo- rated milk		
											Million pounds - - -
1960	21.2	291.4	40.6	227.5	103.1	55.6	0.6	279.8	---	---	5,392
1961	19.5	366.4	53.0	230.7	132.5	205.3	53.5	354.9	---	---	9,902
1962	31.2	307.1	37.8	145.9	99.0	328.2	79.1	576.0	---	---	12,166
1963	32.1	282.7	39.1	137.4	81.5	239.0	39.1	404.6	---	---	9,691
1964	37.1	271.9	42.3	192.2	108.8	33.8	24.4	65.5	---	---	5,294
1965	27.1	270.2	37.6	140.7	58.2	25.0	.3	96.2	---	---	4,458
1966	30.2	322.1	50.4	204.5	118.2	2.1	.2	---	---	---	4,858
1967	18.4	302.3	46.2	196.0	98.7	150.2	80.8	157.6	---	---	8,252
1968	14.5	291.1	62.3	101.3	79.0	102.9	51.6	198.7	5.6	---	6,634
1969	25.1	264.4	52.1	106.9	83.9	63.6	1.1	137.8	42.9	---	5,246
1970 4/	15.6	251.2	69.6	115.7	101.4	100.5	1.2	42.6	.1	---	5,734
1969											
Mar.	20.2	240.9	54.9	57.2	64.1	101.1	22.0	205.3	.9	---	5,735
June	41.8	296.3	59.1	155.5	141.0	153.5	21.3	203.7	5.4	---	8,106
Sept.	33.9	305.7	60.4	197.6	130.5	121.4	7.0	209.1	27.1	---	7,347
Dec.	25.1	264.4	52.1	106.9	83.9	63.6	1.1	137.8	42.9	---	5,246
1970 4/											
Mar.	28.0	238.5	47.3	88.4	80.6	63.6	.4	79.3	39.8	---	4,952
June	38.9	314.3	55.1	173.2	159.0	147.1	.9	66.4	1.3	---	7,886
Sept.	26.1	285.8	69.4	187.4	144.8	145.1	3.4	70.5	.1	---	7,446
Dec.	15.6	251.2	69.6	115.7	101.4	100.5	1.2	42.6	.1	---	5,734

1/ Includes butter equivalent of butteroil and ghee, 1962-65. 2/ Includes process cheese held by USDA beginning May 1967. 3/ Includes manufactured products for which current monthly series are available (excludes nonfat dry milk). Excludes cream and bulk condensed milk beginning 1968.
4/ Preliminary.

Table 11.--Dairy products: U.S. imports, quota and non-quota products, 1969-70 1/

Product	Calendar year quota	December		1970 as a		Annual	
		1969	1970	percentage of 1969	1969	1970	1970 as a percentage of 1969
	Thou. lb.	Thou. lb.	Thou. lb.	Pct.	Thou. lb.	Thou. lb.	Pct.
Cheese, quota types							
American-Cheddar	10,037.5	1,513	3,491	231	9,606	10,132	105
-Other	6,096.6	2,447	256	10	6,034	1,682	28
Italian-Original loaves	11,500.1	1,180	1,328	113	10,547	6,617	63
-Other	1,494.0	53	6	11	1,742	672	39
Edam and Gouda-Natural	9,200.4	[1,671]	[1,736]	[104]	[11,457]	[11,798]	[103]
-Processed	3,151.0	640	737	115	4,878	4,767	98
Blue mold	5,017.0	606	543	90	3,678	3,148	86
Swiss-Emmenthaler, -47¢	4,271.0	191	210	110	3,125	3,155	101
-Gruyere-process, -47¢	3,289.0	2,980	3,836	129	28,912	22,640	78
Other, -47¢	25,001.0	11,281	12,143	108	79,979	64,611	81
Total	79,057.6						
Cheese, non-quota types							
Swiss-Emmenthaler, 47¢ +		1,612	2,484	154	16,430	23,281	142
-Gruyere-process, 47¢ +		950	930	98	9,524	10,720	113
Other, 47¢ + 2/		4,439	5,668	128	16,262	38,467	237
Peccorino		2,305	2,862	124	19,227	20,616	107
Roquefort		220	168	76	2,061	2,065	100
Other 3/		93	334	359	619	1,588	257
Total		9,619	12,446	129	64,123	96,737	151
Other quota products							
Butter	707.0	29	56	193	678	4,747	110
Butteroil	1,200.0	---	---	---	1,200	1,200	100
Butterfat mixtures	2,580.0	135	---	---	2,741	2,397	87
Frozen cream	12,540.0	1,013	2,806	277	14,748	11,063	75
Dried skim milk	1,807.0	67	---	---	1,914	1,760	92
Dried buttermilk	496.0	10	100	1,000	174	420	241
Evaporated milk	1,312.0	61	---	---	1,313	1,235	94
Condensed milk	4,079.0	153	161	105	4,058	1,507	37
Chocolate crumb	17,000.0	1,756	1,230	70	18,603	13,746	74
Non-quota products							
Ice cream		5,760	841	15	20,263	62,688	309
Casein		11,752	18,157	155	116,108	135,262	116
Lactose		609	263	43	4,187	4,221	101
Milk equivalent, fat solids ba-							
cis, total all products	5/	224,720	248,386	111	1,621,003	1,926,904	119

1/ Preliminary. 2/ Includes low-fat cheese. 3/ Gjetost, Bryndza, Camembert and Mozzarella, and Goya. 4/ Includes 40,400 pounds not subject to quota. 5/ Milk equivalent of import quotas for dairy products, 946 million pounds.

Table 12.--Dairy product exports, annual 1960-68,
by months, 1969-70

Year and month	Butter 1/	Cheese	Evapo- rated milk	Con- densed milk	Dry whole milk	Nonfat dry milk	Malted milk	Infant and dietetic foods	Milk equiv- alent 2/
Million pounds									
1960	8.0	9.1	101.5	41.9	28.1	446.7	2.9	16.3	776
1961	6.7	8.8	92.3	47.3	17.5	734.2	2.9	19.1	655
1962	34.9	19.1	66.3	47.7	13.4	873.6	2.1	16.0	1,287
1963	192.5	33.6	65.5	56.6	29.8	1,119.2	2.3	18.0	5,036
1964	296.5	9.1	37.3	62.8	12.3	1,310.9	2.6	18.6	6,872
1965	65.7	6.8	24.7	65.8	18.6	863.4	2.7	16.0	1,836
1966	13.7	6.0	38.4	94.3	15.6	387.7	2.5	16.5	778
1967	2.9	6.4	33.8	29.2	11.9	409.0	1.4	17.2	363
1968	32.2	6.8	32.7	42.5	17.2	397.1	2.2	18.5	1,188
1969									
Jan.	4/	0.4	3.7	1.0	0.6	21.1	4/	0.6	25
Feb.	4/	.5	2.9	.9	1.1	21.5	0.1	.5	29
Mar.	4/	.8	4.1	3.5	1.4	27.2	.2	1.6	45
Apr.	1.4	.5	2.2	4.5	2.1	41.5	.1	1.3	76
May	10.2	.6	2.9	7.4	1.4	32.6	.2	3.3	271
June	8.9	.5	2.4	6.1	1.5	41.8	.1	1.6	238
July	4/	.4	4.2	4.5	1.2	19.7	4/	1.5	40
Aug.	4/	1.7	2.0	4.0	1.3	23.7	4/	1.3	49
Sept.	4/	.4	2.8	8.2	1.1	15.9	.1	1.3	45
Oct.	4/	.6	4.2	7.0	1.2	36.9	.1	1.5	51
Nov.	4/	.4	3.4	4.5	.4	26.8	4/	1.4	34
Dec.	4/	.5	2.4	.6	.6	20.6	4/	.9	22
Total 5/	20.8	7.2	37.1	52.2	13.9	329.4	1.0	16.9	926
1970 3/									
Jan.	1.5	0.7	2.3	4/	1.4	41.3	4/	1.3	65
Feb.	.1	.5	3.2	4/	3.7	44.7	0.1	1.0	52
Mar.	4/	.4	2.3	0.1	1.2	28.5	.1	.7	27
Apr.	4/	.8	4.4	4/	1.0	27.9	.1	1.2	33
May	4/	.7	3.6	4/	.9	31.6	4/	1.7	31
June	4/	.4	1.8	4/	.7	28.7	.1	1.6	22
July	.1	.6	2.5	---	.5	33.4	.3	1.5	29
Aug.	4/	.5	3.1	4/	.6	57.0	.2	1.7	32
Sept.	.1	.5	1.2	.6	.5	38.3	.1	1.9	26
Oct.	4/	.7	2.0	6.9	.7	21.1	4/	2.1	42
Nov.	4/	.6	3.0	4.6	.7	46.9	.1	1.7	42
Dec.	4/	.4	3.9	4.2	.9	16.7	.1	2.2	37
Total 5/	1.9	6.7	33.3	16.4	12.6	416.1	1.3	18.6	437

1/ Includes butter equivalent of butteroil, ghee, and anhydrous milkfat. 2/ Includes milk equivalent of minor products not shown separately. 3/ Preliminary. 4/ Less than 50,000 pounds. 5/ May not add due to rounding.