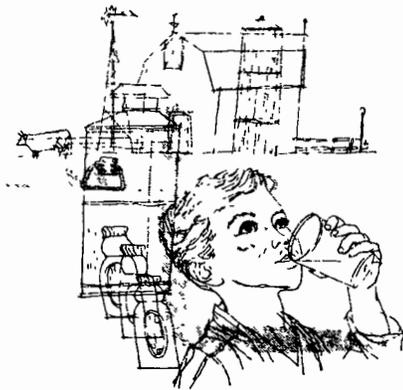


FLUID MILK and CREAM Consumption

in **Northeastern
Marketing Areas**

1950-56



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This report, the eighth under the same or a similar title, was first published in February 1941 in response to widespread interest in fluid milk and cream consumption data in the Northeast. Subsequent mimeographed publications were issued in February 1942, July 1943, February 1945, October 1948, and March 1950. The last issue, carrying several additional markets, was published as Statistical Bulletin No. 168 in January 1956. That number carried data for 1940 through 1954. As population and sales data for the years prior to 1950 remain unchanged in most instances, this report includes the data for 1950-56 only. Data for the Merrimack Valley and Fall River, Mass., markets have been added while data for Allegheny County, Pa., have been deleted, leaving a total of 19 markets reported in this issue.

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FLUID MILK AND CREAM CONSUMPTION IN NORTHEASTERN MARKETING AREAS

1950-56 1/

SUMMARY

Sales of fluid milk and cream products in major markets of the Northeastern United States have kept pace with or slightly exceeded the growth in population since 1950. Increases in per capita consumption of whole milk and skim milk items offset or slightly more than offset decreases in the consumption of milk used for fluid cream in most markets.

Among the larger marketing areas, annual per capita consumption of whole milk increased from 1950 to 1956 in Boston, Connecticut, and New Jersey. Most smaller markets also showed increases from 1950 through 1956. The New York metropolitan and Philadelphia areas indicated slightly lower annual usage of whole milk per person. In the markets where sales of whole milk and skim milk products are reported together, per capita rates were substantially higher in all but two and in these consumption was slightly higher. Plain skim milk, although only a fraction of the total fluid consumption, made substantial gains in every market for which the data are reported separately. Consumption rates for flavored milk (mostly chocolate milk) and buttermilk in 1956 were steady to slightly higher than in 1950.

Consumption of cream in milk equivalent terms was substantially lower in 1956 than in 1950 in most markets. The downward trend in per capita usage of cream was most noticeable for heavy cream and to a lesser extent for light cream and sour cream.

1/ Prepared by L. W. Haynes and H. M. Walters, Agricultural Statisticians, Agricultural Estimates Division, AMS, under the general supervision of I. E. Wissinger, Chief, Dairy Statistics Branch. Acknowledgement is due numerous city, State, and Federal agencies which furnished basic sales and population data and helpful comments.

INTRODUCTION

Fluid milk and cream consumption estimates in selected individual marketing areas in the Northeast are presented in this report. Annual sales of whole milk and various skim milk and fluid cream products were obtained from city, State, and Federal agencies responsible for either regulating milk prices or reporting milk marketing statistics. These sales data, together with estimated populations of marketing areas, have been used in calculating per capita rates of consumption for the several products by markets. A special effort has been made by the respective market Administrators and by the Standardization and Program Development Branch of the Dairy Division, Agricultural Marketing Service, to report the data from Federal Order markets in greater detail for the period beginning with 1950.

A more detailed breakdown of skim milk and cream items was supplied by the Market Administrator for Connecticut for this report. The totals of whole milk, skim milk, and flavored milk shown for Connecticut in this report are comparable with total sales of Class I and IA milk for the years prior to 1950 as published in the previous bulletin. The Richmond marketing area definition has been changed because of the growth of the marketing area and as a result per capita consumption rates do not correspond with those of the previous bulletin. For all other markets, the 1950-56 data in this report as revised are comparable with the previous published series.

The data used in this report represent quantities of the respective items as reported under the classified system of pricing milk. For markets reporting milk and milk drinks together, the quantities reported are those classified for fluid use. Fluid cream sales and consumption are shown in product pounds, along with the fat test where available, but for comparison purposes cream consumption has been calculated for all markets on a milk equivalent basis.

The accuracy of the resulting rates of consumption between products and markets is dependent on the degree to which sales areas are identical with the areas represented by the population estimates. The data are not expected to be precise measures of levels of consumption. However, by using comparable data and methods of estimating, it is believed that the per capita estimates accurately show general trends in consumption of fluid milk and cream items.

All sales data and per capita rates are presented in pounds on an annual basis. For comparison with the data given in pints and quarts in previous issues, a table in the appendix shows the approximate weights for the more important milk and cream items by size of container.

POPULATION ESTIMATES

Population estimates for this bulletin (table 1) have been calculated somewhat differently from those in prior issues. The annual estimates in previous editions were made largely by comparing the differences in population between the two latest decennial censuses, interpolating the difference for the intercensal years and extrapolating for the years following. Increased birth rates in the postwar period have made the rate of growth from 1940 to 1950 generally inapplicable to the period 1950-56.

The principal method of preparing estimates for this issue has been to use local and State population data wherever possible, making adjustments for differences in the marketing areas and the areas covered by the respective population estimates. The estimates published in this series tie in with the data published in previous editions of the bulletin except where noted.

For Rhode Island, Connecticut, and New Jersey, the basic data used have been the latest U. S. Bureau of the Census annual July 1 estimate of resident population for each State. For the five Federal Order markets of Massachusetts, a composite method has been used. Year-to-year estimates have been made on the indication of changes as shown by the annual estimates of population of the State made by the U. S. Bureau of the Census, some extrapolation of the 1940-50 differences in the market area populations prepared by the Census, and the January 1, 1955, Massachusetts State Census. The source of population estimates for the New York metropolitan area was Bulletin A.E. 1078, Cornell Agricultural Experiment Station, "Consumption and Distribution of Milk and Cream in the New York Market" by Leland Spencer and Ida Parker. Estimates of population for the remaining market areas were made from annual county and city estimates prepared by State and local agencies, where available, as described in each table.

A particular problem has been the coordination of population estimates of milk marketing areas with those of the areas for which the local population estimates have been prepared. Many of the estimates available for local areas are for the population within the city limits of the central or larger cities. In most instances, the increase in number of persons living outside the city limits, which has not been estimated annually, has been at a much greater rate than that of the central city for which official estimates have been made. In some cases, population growth in the suburbs entirely outside the marketing area has been difficult to separate from the market area for which sales data are available. In all cases, estimates have been made on the basis of available data adjusted for reasonableness where necessary, plus a judgment for the area not covered, and based on economic and other general factors available at the time.

The three States and a number of the defined marketing areas include sizable numbers of farm people who consume milk produced on their own farms. This segment of the population has been estimated on the basis of the numbers of farms keeping cows and the size of farm families on these farms based on the 1950 and 1954 Censuses of Agriculture. The resulting number has then been subtracted from the estimate of population for the entire marketing area.

Changes in estimated population for 1950-56 in table 1 range from increases of 2 percent in the Fall River, Mass., and Amsterdam-Johnstown-Gloversville, N. Y., markets to 19 percent in Richmond, Va. Other markets which have grown fairly rapidly have been the Niagara Frontier and the Middle Hudson areas in New York, both with 17-percent increases. Markets with small gains are Boston and Baltimore, each with a 3-percent increase.

SALES AND PER CAPITA CONSUMPTION OF FLUID MILK AND CREAM PRODUCTS

Tables 2 and 3 show annual sales and per capita consumption rates of whole milk, skim milk items, and the milk equivalent of fluid cream products. Markets are included in these tables according to the way the sales are compiled for each area. Also appearing in the tables are comparisons of the percentage change in both sales and population by markets for each item separately from 1950 to 1956.

Whole Milk

Sales of whole milk in all of the 11 markets which have separate data were higher in 1956 than in 1950. Largest gains were in Connecticut and Richmond, Va., both showing increases of 21 percent over the 7-year period. Smallest increases were recorded in Philadelphia sales, which were 4 percent higher. On a per capita basis, consumption showed varied trends. Decreases of 4 pounds per person per year in Philadelphia and 2 pounds in the New York metropolitan area were recorded. The other 9 markets reported increases up to 32 pounds in Connecticut. Other large increases were 27 pounds per person in Springfield and 21 in Baltimore.

Milk and Milk Drinks

These totals include whole milk, plain skim milk, flavored milk or drink, buttermilk, and other skim products. Sales increases for 1950-56 varied from 3 percent in the Amsterdam-Johnstown-Gloversville, N. Y., area to 25 percent in the Niagara Frontier, N. Y., marketing area. Per capita consumption rose in all 8 areas during the period. Increases ranged from 3 pounds per person annually in the A-J-G area to 28 pounds per person in Syracuse, N. Y. Other large increases in yearly per capita consumption were 23 pounds per person in Binghamton, N. Y., and 18 pounds in the Niagara Frontier marketing area.

Plain Skim Milk

Skim milk totals include not only plain skim milk as separated in the plant but also the skim product to which milk solids have been added and which is known as fortified skim milk. This product may have a small fat content. Increases in skim milk sales were shown for all markets. The largest percentage increase in sales was in Boston, which had a 282-percent increase. Sales increased 200 percent in Fall River, Mass., and 140 percent in Connecticut.

Per capita increases were also sizable but consumption is still relatively small in comparison with whole milk. The largest increase in per capita consumption was in Springfield, Mass., from 4.2 pounds in 1950 to double that amount in 1956. The smallest quantitative increase, from 0.9 pound in 1950 to 2.2 pounds in 1956, occurred in Fall River.

Flavored Milk

Depending on State law and custom, the products included in this category vary between markets. This item includes, for the most part, products made with plain skim or part skim milk and chocolate syrup and is usually called chocolate drink. In some markets, however, the skim milk and chocolate product is called chocolate milk rather than chocolate drink. In others, this item includes chocolate milk that meets the minimum fat requirement for whole milk but is not carried in that category. In additional markets, this item includes both chocolate drink and chocolate milk. Sales of small quantities of other flavored items may also appear under this class. Although varying from market to market, the same products or combination of products are included for each market for the period shown and are reasonably comparable for measuring consumption trends.

Sales of these items varied from a decrease of 6 percent in Fall River, Mass., to an increase of 22 percent in Connecticut, in 1950 to 1956. On a per capita basis, small decreases in consumption of flavored milk occurred in Springfield and Fall River, Mass. The largest increase was reported in Baltimore where usage increased from 15.2 pounds to 17.0 pounds per person. In Connecticut, annual per capita consumption increased from 6.9 to 7.7 pounds.

Buttermilk

Annual sales and per capita consumption of buttermilk and buttermilk products increased from 1950 to 1956 in 6 of the 10 markets reporting. In 2 markets, sales were lower but in 2 markets were about the same. The largest increases were 64 percent in Richmond, 28 percent in Connecticut, and 27 percent in New Jersey. On a per capita basis, the largest increase in sales for this period was 3.9 pounds per person in Richmond. Three marketing areas, Worcester, Fall River, and Philadelphia, showed slight decreases.

Milk Equivalent of Fluid Cream

Sales of fluid cream on a milk equivalent basis (table 3) varied from a decline of 17 percent between 1950 and 1956 in Baltimore to an increase of 23 percent in the Middle-Hudson, N. Y., marketing area. Other important sales increases were 18 percent in Syracuse and 13 percent in Springfield, Mass. On a per capita basis, sales varied from a 10-pound-per-person decrease in New York City to a 3-pound increase in the Amsterdam-Johnstown-Gloversville area. In the important New Jersey area, a 4-pound decrease was reported.

Table 1.--Estimated annual average populations using purchased milk
in specified Northeastern markets, 1950-56 1/

Market	1950	1951	1952	1953	1954	1955	1956	1956 as % of 1950
	Thous.	Percent						
Boston, Mass.....	2,172	2,165	2,175	2,210	2,225	2,230	2,245	103
Springfield, Mass.....	393	392	398	406	415	425	432	110
Merrimack Valley, Mass.....	267	2/ 278	322	328	335	343	352	3/109
Worcester, Mass.....	290	4/ 285	282	290	302	305	310	3/110
Fall River, Mass.....	126	125	126	127	127	128	128	102
Rhode Island.....	771	770	791	809	813	821	841	109
Connecticut.....	1,988	1,967	2,002	2,079	2,152	2,172	2,185	110
New York metropolitan area....	9,455	9,706	9,794	9,909	10,007	10,057	10,038	106
Niagara Frontier, N. Y.....	1,060	1,090	1,120	1,150	1,180	1,210	1,215	117
Rochester, N. Y.....	472	478	490	500	510	525	540	114
Hudson-Mohawk, N. Y.....	505	515	525	533	542	550	560	111
Middle Hudson, N. Y.....	380	390	400	415	425	435	445	117
Binghamton, N. Y.....	169	172	174	176	179	181	184	109
Syracuse, N. Y.....	318	322	328	336	344	354	363	114
Amsterdam-Johnstown- Gloversville, N. Y.....	80	80	81	81	81	81	82	102
New Jersey.....	4,801	4,922	5,002	5,093	5,201	5,319	5,474	114
Philadelphia, Pa.....	2,600	2,615	2,630	2,655	2,685	2,710	2,730	105
Baltimore, Md.....	950	953	961	963	966	966	974	103
Richmond, Va.....	355	368	379	391	404	412	422	119

1/ For Rhode Island, Connecticut and New Jersey, the population estimates are based on the July 1 estimates of resident population including Armed Forces stationed in each state as published by the Bureau of the Census, U. S. Department of Commerce, less an estimated number of persons in farm operators' households who use home produced milk. The source of population data for the New York metropolitan area was Cornell University Bulletin A. E. 1078. Data for Baltimore, Md., were obtained from the Bureau of Biostatistics, Baltimore City Health Department. For the remaining areas, the population estimates have been based on the April 1, 1950, Census of Population of the respective marketing areas projected forward to July 1, 1950, and each succeeding year on the basis of indications of change from local sources. Estimates of population for the Niagara Frontier, Rochester, Middle Hudson, Binghamton, and Syracuse, N. Y., and Richmond, Va. marketing areas have been reduced by an estimated number of people in farm operators' households using home produced milk.

2/ Marketing area enlarged October 1, 1951.

3/ 1956 as % of 1952.

4/ Marketing area reduced October 1, 1951.

Table 2 .--Fluid milk and skim products: Annual sales and per capita consumption in specified Northeastern markets, 1950-56

Product and market	1950	1951	1952	1953	1954	1955	1956	1956 as % of 1950	
								Sales	Popu-lation
WHOLE MILK									
Annual sales:									
Boston, Mass.....	681.3	677.9	688.8	690.7	697.1	720.0	735.0	108	103
Springfield, Mass.....	131.4	133.0	136.3	138.4	140.1	148.5	156.1	119	110
Merrimack Valley, Mass..	78.6	80.9	93.8	95.3	95.9	100.6	106.1	1/113	1/109
Worcester, Mass.....	97.1	97.1	96.4	98.3	99.0	102.6	105.8	1/110	1/110
Fall River, Mass.....	40.2	40.3	40.4	41.0	40.4	41.3	42.2	105	102
Connecticut.....	622.7	634.6	660.5	675.5	689.3	725.0	754.5	121	110
New York metropolitan area	3,134.7	3,151.9	3,192.8	3,171.2	3,194.9	3,278.8	3,315.3	106	106
New Jersey.....	1,430.4	1,469.0	1,517.0	1,549.1	1,583.8	1,654.4	1,718.8	120	111
Philadelphia, Pa.....	699.0	698.7	699.5	704.1	711.6	720.5	724.2	104	105
Baltimore, Md.....	229.0	231.4	234.4	235.0	236.1	245.5	255.2	111	103
Richmond, Va.....	61.9	63.3	67.2	67.0	67.2	70.0	75.0	121	119
Per capita consumption:									
Boston, Mass.....	314	313	317	313	313	323	327		
Springfield, Mass.....	334	339	342	341	338	349	361		
Merrimack Valley, Mass..	294	291	291	291	286	293	301		
Worcester, Mass.....	335	341	342	339	328	336	341		
Fall River, Mass.....	319	322	321	323	318	322	330		
Connecticut.....	313	323	330	325	320	334	345		
New York metropolitan area	332	325	326	320	319	326	330		
New Jersey.....	298	298	303	304	305	311	314		
Philadelphia, Pa.....	269	267	266	265	265	266	265		
Baltimore, Md.....	241	243	244	244	244	254	262		
Richmond, Va.....	174	172	177	171	166	170	178		
MILK AND MILK DRINKS 2/									
Annual sales:									
Rhode Island.....	229.6	235.4	244.6	242.4	242.8	250.2	254.9	111	109
Niagara Frontier, N. Y..	304.1	316.8	327.5	337.4	343.9	365.4	379.2	125	117
Rochester, N. Y.....	139.3	141.7	144.3	147.4	153.0	158.3	164.5	118	114
Hudson-Mohawk, N. Y.....	158.3	160.7	165.3	169.8	173.0	179.0	183.4	116	111
Middle Hudson, N. Y.....	111.1	113.7	117.7	124.4	126.9	130.9	132.7	119	117
Binghamton, N. Y.....	57.2	58.8	60.0	60.4	61.7	63.8	66.5	116	109
Syracuse, N. Y.....	96.8	102.0	105.9	109.1	110.6	116.8	120.4	124	114
Amsterdam-Johnstown- Gloversville, N. Y.....	29.1	29.4	29.7	29.5	28.8	29.5	30.0	103	102
Per capita consumption:									
Rhode Island.....	298	306	309	300	299	305	303		
Niagara Frontier, N. Y..	287	291	292	293	291	302	305		
Rochester, N. Y.....	295	296	295	295	300	301	305		
Hudson-Mohawk, N. Y.....	313	312	315	319	319	325	327		
Middle Hudson, N. Y.....	292	291	294	300	299	301	298		
Binghamton, N. Y.....	338	342	345	343	345	353	361		
Syracuse, N. Y.....	304	317	323	325	321	330	332		
Amsterdam-Johnstown- Gloversville, N. Y.....	363	368	367	365	355	364	366		

See footnotes at end of table, page 11.

Table 2 .--Fluid milk and skim products: Annual sales and per capita consumption in specified Northeastern markets, 1950-56--Continued

Product and market	1950	1951	1952	1953	1954	1955	1956	1956 as % of 1950	
								Sales	Population
PLAIN SKIM MILK 3/	Mil. pounds	Percent	Percent						
Annual sales:									
Boston, Mass.....	3.3	5.0	6.2	6.9	8.5	9.1	12.6	382	103
Springfield, Mass.....	1.7	2.1	2.6	3.1	3.5	3.6	3.8	224	110
Merrimack Valley, Mass.	0.2	0.3	0.4	0.5	0.6	0.7	0.9	$\frac{1}{225}$	$\frac{1}{109}$
Worcester, Mass.....	0.8	0.6	0.7	0.9	1.0	1.2	1.4	$\frac{1}{200}$	$\frac{1}{110}$
Fall River, Mass.....	0.1	0.1	0.2	0.2	0.2	0.2	0.3	300	102
Connecticut.....	6.5	8.2	9.9	10.2	11.3	13.1	15.6	240	110
Philadelphia, Pa.....	12.7	10.5	12.5	13.9	15.7	19.1	21.0	165	105
Per capita consumption:	<u>Pounds</u>								
Boston, Mass.....	1.5	2.3	2.8	3.1	3.8	4.1	5.6		
Springfield, Mass.....	4.2	5.4	6.6	7.6	8.5	8.4	8.9		
Merrimack Valley, Mass.	0.8	1.2	1.4	1.6	1.9	2.0	2.6		
Worcester, Mass.....	2.6	2.1	2.5	2.9	3.4	3.8	4.6		
Fall River, Mass.....	0.9	1.1	1.3	1.5	1.6	1.8	2.2		
Connecticut.....	3.3	4.2	5.0	4.9	5.3	6.0	7.1		
Philadelphia, Pa.....	4.9	4.0	4.8	5.2	5.8	7.0	7.7		
FLAVORED MILK 4/	Mil. pounds	Percent	Percent						
Annual sales:									
Boston, Mass.....	11.1	12.5	11.9	10.9	10.5	11.9	11.4	103	103
Springfield, Mass.....	2.4	2.9	3.0	2.8	2.6	2.5	2.3	96	110
Merrimack Valley, Mass.	1.2	1.4	1.8	1.8	1.7	1.9	2.1	$\frac{1}{117}$	$\frac{1}{109}$
Worcester, Mass.....	1.5	2.0	2.0	2.1	1.7	2.0	2.0	$\frac{1}{100}$	$\frac{1}{110}$
Fall River, Mass.....	1.6	1.8	1.8	1.7	1.5	1.6	1.5	94	102
Connecticut.....	13.7	15.4	15.9	16.4	15.4	16.8	16.7	122	110
New Jersey.....	19.6	21.5	22.3	23.1	20.3	22.1	20.9	107	114
Philadelphia, Pa.....	17.3	18.7	18.7	19.6	18.7	18.8	17.4	101	105
Baltimore, Md.....	14.5	14.5	14.6	14.6	15.1	16.1	16.5	114	103
Richmond, Va.....	3.1	-	3.1	3.0	2.8	3.0	3.1	100	119
Per capita consumption:	<u>Pounds</u>								
Boston, Mass.....	5.1	5.8	5.5	5.0	4.7	5.3	5.1		
Springfield, Mass.....	6.0	7.4	7.4	6.9	6.2	5.8	5.4		
Merrimack Valley, Mass.	4.4	5.2	5.5	5.5	5.0	5.6	6.0		
Worcester, Mass.....	5.3	7.0	7.0	7.2	5.8	6.5	6.6		
Fall River, Mass.....	12.8	14.5	14.2	13.2	12.0	12.6	12.0		
Connecticut.....	6.9	7.9	8.0	7.9	7.2	7.7	7.7		
New Jersey.....	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Philadelphia, Pa.....	6.6	7.1	7.1	7.4	7.0	6.9	6.4		
Baltimore, Md.....	15.2	15.2	15.2	15.2	15.6	16.7	17.0		
Richmond, Va.....	8.7	-	8.2	7.8	6.9	7.3	7.3		

See footnotes at end of table, page 11.

Table 2 .--Fluid milk and skim products: Annual sales and per capita consumption in specified Northeastern markets, 1950-56--Continued

Product and market	1950	1951	1952	1953	1954	1955	1956	1956 as % of 1950	
								Sales	Population
<u>BUTTERMILK</u> 5/	Mil. pounds	Percent	Percent						
<u>Annual sales:</u>									
Boston, Mass.....	2.7	2.8	3.1	3.0	2.8	3.0	2.8	104	103
Springfield, Mass.....	0.7	0.8	0.8	0.8	0.8	0.8	0.8	114	110
Merrimack Valley, Mass..	0.2	0.3	0.3	0.3	0.3	0.3	0.3	1/100	1/109
Worcester, Mass.....	0.4	0.5	0.5	0.5	0.4	0.5	0.4	1/80	1/110
Fall River, Mass.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100	102
Connecticut.....	2.9	3.2	3.7	3.6	3.5	3.9	3.7	128	110
New Jersey.....	12.4	14.0	15.9	16.6	15.5	16.6	15.7	127	114
Philadelphia, Pa.....	9.1	9.8	10.1	9.8	9.2	9.4	8.5	93	105
Baltimore, Md.....	3.5	3.5	3.7	3.4	3.5	3.6	3.6	103	103
Richmond, Va.....	3.6	-	4.8	5.3	5.3	5.5	5.9	164	119
<u>Per capita consumption:</u>	Pounds								
Boston, Mass.....	1.2	1.3	1.4	1.4	1.2	1.4	1.2		
Springfield, Mass.....	1.7	1.9	2.0	2.1	1.9	1.9	1.7		
Merrimack Valley, Mass..	0.8	1.0	1.0	1.0	0.9	0.9	1.0		
Worcester, Mass.....	1.4	1.8	1.8	1.6	1.4	1.5	1.2		
Fall River, Mass.....	0.7	0.6	0.7	0.7	0.6	0.7	0.6		
Connecticut.....	1.4	1.6	1.8	1.7	1.6	1.8	1.7		
New Jersey.....	2.6	2.8	3.2	3.3	3.0	3.1	2.9		
Philadelphia, Pa.....	3.5	3.7	3.9	3.7	3.4	3.4	3.1		
Baltimore, Md.....	3.7	3.7	3.9	3.6	3.6	3.7	3.7		
Richmond, Va.....	10.1	-	12.7	13.4	13.2	13.4	14.0		

1/ 1956 as % of 1952

2/ Milk and milk drinks - includes milk classified for fluid use in most markets - whole milk, plain skim milk, flavored milk or drink, buttermilk, etc.

3/ Plain skim milk - may include plain and fortified skim and part skim milk.

4/ Flavored milk - may include product with or without milkfat content.

5/ Buttermilk - buttermilk and cultured products.

Table 3. --Milk equivalent of fluid cream: Annual sales and per capita consumption in specified Northeastern markets, 1950-56 ^{1/}

Item and market	1950	1951	1952	1953	1954	1955	1956	1956 as % of 1950	
								Sales	Population
<u>Annual sales:</u>	<u>Mil. pounds</u>	<u>Percent</u>	<u>Percent</u>						
Boston, Mass.....	201.3	193.0	186.2	186.4	181.5	186.8	190.0	94	103
Springfield, Mass.....	22.5	21.5	21.3	21.7	22.7	23.5	25.4	113	110
Merrimack Valley, Mass.....	13.1	13.2	15.4	14.9	14.4	13.9	16.8	2/ 109	2/ 109
Worcester, Mass.....	19.1	19.6	18.6	19.0	18.8	18.1	17.9	2/ 96	2/ 110
Fall River, Mass.....	6.6	6.3	5.9	5.9	5.9	6.1	6.4	97	102
Connecticut.....	110.5	111.7	110.8	113.1	113.9	117.5	122.1	110	110
Rhode Island.....	45.8	46.1	43.0	38.9	41.1	47.3	47.1	103	108
New York metropolitan area	821.0	811.7	787.3	780.4	768.9	768.5	768.0	94	106
Niagara Frontier, N. Y.....	42.0	43.7	43.5	43.6	41.6	42.9	43.4	103	117
Rochester, N. Y.....	16.8	17.0	16.3	16.4	16.1	16.5	17.3	103	114
Hudson-Mohawk, N. Y.....	25.8	26.1	27.0	27.6	26.9	27.3	27.8	108	111
Middle Hudson, N. Y.....	17.4	17.4	17.4	18.5	19.3	20.1	21.4	123	117
Binghamton, N. Y.....	10.1	10.2	10.3	10.1	10.4	10.8	10.1	100	109
Syracuse, N. Y.....	16.4	17.1	18.5	18.7	18.2	19.0	19.4	118	114
Amsterdam-Johnstown- Gloversville, N. Y.....	3.6	3.6	3.7	3.8	3.6	3.9	3.9	108	102
New Jersey.....	252.7	265.5	262.3	284.3	278.5	273.5	267.1	106	114
Philadelphia, Pa.....	103.0	101.8	102.6	103.3	100.0	99.4	101.2	98	105
Baltimore, Md.....	30.0	29.2	26.5	26.4	26.7	25.9	24.9	83	103
Richmond, Va.....	6.6	6.3	6.1	6.7	6.5	6.2	6.6	100	119
<u>Per capita consumption:</u>	<u>Pounds</u>								
Boston, Mass.....	93	89	86	84	82	84	85		
Springfield, Mass.....	57	55	54	53	55	55	59		
Merrimack Valley, Mass.....	49	47	48	46	43	40	48		
Worcester, Mass.....	66	69	66	65	62	59	58		
Fall River, Mass.....	53	50	47	47	46	48	50		
Connecticut.....	56	57	55	54	53	54	56		
Rhode Island.....	59	60	54	48	51	58	56		
New York metropolitan area.	87	84	80	79	77	76	77		
Niagara Frontier.....	40	40	39	38	35	35	35		
Rochester, N. Y.....	36	36	33	33	32	31	32		
Hudson-Mohawk, N. Y.....	51	51	51	52	50	50	50		
Middle Hudson, N. Y.....	46	45	43	44	45	46	48		
Binghamton, N. Y.....	60	59	59	57	58	60	55		
Syracuse, N. Y.....	52	53	56	56	53	54	54		
Amsterdam-Johnstown- Gloversville, N. Y.....	45	45	45	47	44	48	48		
New Jersey.....	53	54	52	56	54	51	49		
Philadelphia, Pa.....	40	39	39	39	37	37	37		
Baltimore, Md.....	32	31	28	27	28	27	26		
Richmond, Va.....	18	17	16	17	16	15	16		

^{1/} Milk equivalent of fluid cream - the quantity of milk from producers required to obtain the milkfat of cream used. See appendix page 27 for explanation of milk equivalent.

^{2/} 1956 as % of 1952.

SALES AND PER CAPITA CONSUMPTION FOR
INDIVIDUAL MARKETS

In six of the Federal Order markets and for the State of Connecticut, a larger number of fluid milk and cream items are now reported. Skim milk product sales, previously shown only as milk drinks and reported in total or in a combination with whole milk, are now shown separately as skim milk, flavored milk, and buttermilk. Fluid cream items, which were on either a total pound basis or in total milk equivalent terms in the previous report, are now listed as light cream, heavy cream, and sour cream in the six Federal Markets and as extra light, light, medium, and heavy cream for Connecticut. In addition, annual average percentages of milkfat are given when available.

Massachusetts Federal Order Markets

In the Boston marketing area (table 4), total sales of whole milk and skim milk in 1956 were generally higher than in 1950 while sales of fluid cream were lower. The marketing area includes the city of Boston and 36 surrounding cities and towns. Per capita consumption of whole milk at 327 pounds in 1956 had increased 13 pounds from 1950. Skim milk consumption at 5.6 pounds per person in 1956 was up 4.1 pounds. The milk equivalent of fluid cream consumed in 1956 was 85 pounds per capita - a decline of 5 pounds from 1950 with the largest declines in light and heavy cream. Total consumption of all items reported, on a milk equivalent basis, increased 6 pounds per person in this 7-year period.

Increases in Springfield market sales (table 5) from 1950 to 1956 were sizable for whole milk, skim milk, and heavy cream. However, sales of flavored milk decreased. Per capita consumption of whole milk increased 27 pounds or 8 percent, and skim milk increased 4.7 pounds per person to more than double the 1950 level. Heavy cream consumption advanced 0.5 pound per person or 14 percent. On a milk equivalent basis, total consumption of all items in this market increased 24 pounds per person.

Annual sales of fluid items in the Merrimack Valley marketing area (table 6) increased markedly for skim and flavored milk and light and sour cream. The marketing area includes Lowell, Lawrence, and Haverhill and 13 surrounding towns. Per capita increases in consumption for 1950-56 were 7 pounds for whole milk, 1.8 pounds for skim milk and 1.6 pounds for flavored milk. Consumption of light cream increased 1.5 pounds while heavy cream decreased 0.5 pound per person for the same period. Total consumption of all fluid items in terms of the milk equivalent increased 10 pounds per person or 3 percent.

In the Worcester market (table 7), annual sales of skim and flavored milk and light and sour cream increased substantially, but declines occurred in buttermilk and heavy cream. Considered relative to population, the higher sales represented increased per capita consumption of whole milk by 6 pounds, skim milk 2.0 pounds, and flavored items 1.3 pounds. Consumption of heavy cream on a product pound basis declined 0.6 pound per capita from 1950 to 1956. Total annual consumption of all fluid milk items reported on a milk equivalent basis declined 6 pounds per person.

Sales of fluid milk products in the Fall River marketing area (table 8) from 1950 to 1956 were marked by substantial increases in skim milk and light cream and decreases in heavy and sour cream. On a per capita basis, consumption of whole milk was up 3 percent. Skim milk more than doubled, while light cream consumption was up one-fifth. Small per capita declines for all other items were reported. Total consumption of these products on a milk equivalent basis was 3 pounds per person or 1 percent higher in 1956 than in 1950.

Rhode Island

Annual sales of milk and milk drinks for Rhode Island (table 9) were 11 percent higher in 1956 than in 1950 while cream advanced only 3 percent. On a per capita basis, milk and milk drink sales increased 5 pounds per person; cream sales in terms of milk equivalent declined 3 pounds per person. Together, milk and milk drinks and the milk equivalent of cream increased 2 pounds per person.

Connecticut

Annual sales of skim milk, buttermilk, and medium cream in Connecticut (table 10) increased during 1950-56. Sales of light and heavy cream declined. Sales of extra-light cream, for which data are available for the period 1952-56 only, made sizable increases. The most important per capita consumption increases were: whole milk 32 pounds, or 10 percent; skim milk 3.3 pounds, to more than double; and medium cream 0.7 pound, almost triple. The total consumption of all listed items on a milk equivalent basis increased 33 pounds per person from 1950 through 1956.

New York metropolitan marketing area

Sales of whole milk increased and cream decreased in the New York metropolitan area in 1956 as compared with 1950 (see table 11). The metropolitan area included New York City, and Nassau, Suffolk (except Fisher's Island), and Westchester counties in New York. However, per capita consumption of whole milk was down 2 pounds and cream (milk equivalent basis) 10 pounds. In total, consumption of milk and the milk equivalent of cream declined 12 pounds per capita.

It should be pointed out that all fluid whole milk shipped into the New York marketing area for the period was classified as IA milk regardless of whether it was used as fluid whole milk or separated into fluid cream and fresh skim milk. However, the quantities of Class IA milk actually separated are not known but are believed to be small. In addition to sales under the order, sales of non-pooled milk sold for fluid consumption in the marketing area and both sweet and sour fluid cream made from storage cream have been included in the data.

Upstate New York marketing areas

Data for the upstate New York markets vary somewhat due to the method of

compilation (see table 12). For Niagara Frontier and Rochester, sales are confined largely to the market areas as defined by State Orders. Binghamton sales figures have been revised from previous issues of this bulletin to exclude known "out-of-area" deliveries for 1955 and 1956 and on the basis of known trends in the market for prior years. The remaining marketing areas are believed to be sufficiently isolated from other areas so that portions of sales outside the areas represented by the population estimates are small.

In the Niagara Frontier marketing area, annual sales of milk and milk drinks were 25 percent higher in 1956 than in 1950, with sales of cream up 3 percent. The marketing area includes Niagara County, and the cities of Buffalo, Tonawanda and Lackawanna and 19 towns in Erie and Orleans counties. On a per capita basis, consumption of milk and milk drinks increased 18 pounds for the period; cream, in milk equivalent terms, declined 5 pounds per person. Total consumption of milk and milk drinks and the milk equivalent of cream increased 13 pounds per person.

For the Rochester marketing area, annual sales of milk and milk drinks during 1956 were 18 percent above 1950; cream sales were 3 percent higher. On a per capita basis, consumption of milk and milk drinks was 10 pounds higher. Cream, in terms of milk equivalent, declined 4 pounds per person. For the total of milk and milk drinks and the milk equivalent of cream, consumption increased 6 pounds per person.

In the Hudson-Mohawk marketing area, annual sales of milk and milk drinks were up 16 percent from 1950 and cream sales were up 8 percent. The marketing area comprises the cities of Albany, Schenectady and Troy and 27 surrounding cities and towns. Per capita consumption for the same period was 14 pounds larger for milk and milk drinks, 1 pound smaller for cream (milk equivalent), and 13 pounds larger for the total of both items.

The Middle Hudson marketing area (Dutchess, Orange, Putnam and Ulster counties) reported increases in annual sales of 19 percent for milk and milk drinks and 23 percent for cream during 1950-56. Per person, the expansion in consumption was 6 pounds for milk and milk drinks and 2 pounds for the milk equivalent of cream, or a total increase of 8 pounds per person.

In Binghamton, yearly sales of milk and milk drinks were 16 percent higher in 1956 than in 1950; cream sales were about unchanged. In per capita terms, milk and milk drink consumption was 23 pounds higher, while cream (milk equivalent) declined 5 pounds. The combined consumption of these items was up 18 pounds per person.

For Syracuse, sales in 1956 were higher than in 1950 by 24 percent for milk and milk drinks and 19 percent for cream. On a per person basis, Syracuse consumers used 28 pounds more milk and milk drinks and 2 pounds more milk equivalent of cream for a total increase of 30 pounds.

For the Amsterdam-Johnstown-Gloversville marketing area, sales during 1956 were 3 percent higher than during 1950 for milk and milk drinks and 9 percent higher for cream. In per capita terms, milk and milk drink consumption

increased 3 pounds and cream (milk equivalent) was up 3 pounds for a total gain of 6 pounds.

Philadelphia marketing area

Important changes in annual sales of fluid items in Philadelphia (table 13) were increases in skim milk and decreases in heavy cream and sour cream. On a per capita basis, whole milk consumption dropped 4 pounds while that of skim milk rose 2.8 pounds. Consumption of cream in milk equivalent terms decreased 3 pounds per person. Consumption of all items reported (milk equivalent) was 5 pounds per person smaller in 1956 than in 1950.

New Jersey

Increases from 1950 to 1956 in New Jersey sales of whole milk and buttermilk were particularly sharp (see table 14). Cream and chocolate drink sales also showed increases. Consumption per person of whole milk increased 16 pounds, or 5 percent. However, consumption of cream decreased 4 pounds per person or 8 percent. Consumption of whole milk and the milk equivalent of fluid cream was 12 pounds per person higher. Per capita consumption of chocolate drink was slightly lower.

Baltimore

Whole milk sales in Baltimore (table 14) in 1956 were higher while cream sales were substantially lower than in 1950. In terms of per person usage, consumption of whole milk increased 21 pounds and that of cream (milk equivalent basis) decreased 6 pounds. The average consumption increase for the two items was 15 pounds per person.

Richmond marketing area

Per capita consumption rates for all products sold in Richmond, Va. (table 14) have been revised from those previously published for 1950-54 because of a general revision in the market area. In prior issues, this market was estimated to include the population within an area of 10 miles of the city hall. In recent years, the marketing area covered by Richmond handlers has expanded beyond this limit. Since sales data from the State Milk Commission are not available for the area presently covered to revise years prior to 1950, the level in per capita consumption rates previously published for 1940-49 varies somewhat from those in this bulletin.

Annual sales of both whole milk and buttermilk increased from 1950 to 1956 while cream sales stayed fairly even and chocolate milk decreased. Per person use of whole milk advanced only slightly while buttermilk consumption jumped 39 percent. However, cream and chocolate drink consumption declined. The combined consumption of whole milk and the milk equivalent of cream increased only 2 pounds per person.

Table 4.--Boston, Mass.: Annual sales, milkfat test, and per capita consumption of fluid milk and cream products, and population, 1950-56

Year	Annual sales for fluid use ^{1/}							
	Whole milk		Skim milk		Flavored milk		Buttermilk	
	Sales	Fat test	Sales	Fat test	Sales	Fat test	Sales	Fat test
	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>
1950.	681,326	3.88	3,344	-	11,116	2.08	2,715	1.41
1951.	677,883	3.87	5,037	-	12,468	2.08	2,810	1.48
1952.	688,843	3.86	6,151	-	11,892	2.06	3,097	1.38
1953.	690,710	3.85	6,867	-	10,935	2.05	3,042	1.31
1954.	697,105	3.86	8,539	-	10,529	2.06	2,777	1.36
1955.	720,025	3.86	9,129	-	11,918	2.05	3,044	1.34
1956.	735,010	3.84	12,631	-	11,357	2.04	2,758	1.35

Year	Annual sales for fluid use (continued) ^{1/}						Population ^{2/}
	Light cream		Heavy cream		Sour cream		
	Sales	Fat test	Sales	Fat test	Sales	Fat test	
	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>Thousands</u>
1950.	29,422	18.27	6,265	37.11	2,082	17.91	2,172
1951.	28,392	18.23	5,927	36.94	1,974	17.90	2,165
1952.	27,545	18.21	5,525	37.20	1,864	18.15	2,175
1953.	27,792	18.23	5,447	37.26	1,894	18.02	2,210
1954.	26,892	18.19	5,403	37.15	1,900	18.00	2,225
1955.	27,367	18.18	5,478	37.00	2,081	18.07	2,230
1956.	26,837	18.10	5,888	36.25	2,044	18.08	2,245

Year	Annual per capita consumption								
	Whole milk	Skim milk	Flavored milk	Butter-milk	Light cream	Heavy cream	Sour cream	Milk equiv. of cream	Milk equivalent of all items reported ^{3/}
	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>
1950.	314	1.5	5.1	1.2	13.6	2.9	1.0	93	400
1951.	313	2.3	5.8	1.3	13.1	2.7	0.9	89	395
1952.	317	2.8	5.5	1.4	12.7	2.5	0.9	86	397
1953.	313	3.1	5.0	1.4	12.6	2.5	0.9	84	389
1954.	313	3.8	4.7	1.2	12.1	2.4	0.8	82	388
1955.	323	4.1	5.3	1.4	12.3	2.5	0.9	84	403
1956.	327	5.6	5.1	1.2	12.0	2.6	0.9	85	406

^{1/} Based on reports from the Federal Market Administrator to the Dairy Division. Sales are segregated to include no significant quantities of out-of-area sales. Quantities include: Skim milk - plain and fortified skim and part skim milk; Flavored milk - may include product with or without milkfat content; Buttermilk - buttermilk and cultured specialties; Light cream - includes mixtures of milk and cream.

^{2/} Estimates of the July 1 resident population of the market area are based on annual estimates for the state by the U. S. Bureau of the Census and changes indicated by the 1955 Census of Mass. The marketing area includes the city of Boston and 36 surrounding cities and towns.

^{3/} See appendix page 27 for explanation of milk equivalent.

Table 5.--Springfield, Mass.: Annual sales, milkfat test, and per capita consumption of fluid milk and cream products, and population, 1950-56

Year	Annual sales for fluid use ^{1/}							
	Whole milk		Skim milk		Flavored milk		Buttermilk	
	Sales	Fat test	Sales	Fat test	Sales	Fat test	Sales	Fat test
	1,000 lbs.	Percent	1,000 lbs.	Percent	1,000 lbs.	Percent	1,000 lbs.	Percent
1950.	131,421	3.82	1,665	-	2,360	1.98	684	1.36
1951.	133,043	3.78	2,099	-	2,899	1.99	754	1.40
1952.	136,314	3.75	2,609	-	2,951	1.98	799	1.12
1953.	138,424	3.76	3,104	-	2,799	1.98	845	0.55
1954.	140,119	3.75	3,531	-	2,567	1.96	777	0.49
1955.	148,454	3.72	3,572	-	2,455	1.88	818	0.28
1956.	156,063	3.69	3,836	-	2,327	1.91	753	0.33

Year	Annual sales for fluid use (continued) ^{1/}						Population ^{2/}
	Light cream		Heavy cream		Sour cream		
	Sales	Fat test	Sales	Fat test	Sales	Fat test	Thousands
	1,000 lbs.	Percent	1,000 lbs.	Percent	1,000 lbs.	Percent	
1950.	1,649	18.74	1,417	38.35	137	17.81	393
1951.	1,689	18.49	1,319	37.83	161	17.69	392
1952.	1,739	18.04	1,292	37.69	143	18.22	398
1953.	1,747	17.89	1,346	37.42	144	17.76	406
1954.	1,764	17.83	1,467	36.81	141	17.80	415
1955.	1,691	17.60	1,572	36.59	143	18.02	425
1956.	1,739	17.53	1,779	35.89	145	18.07	432

Year	Annual per capita consumption								
	Whole milk	Skim milk	Flavored milk	Butter-milk	Light cream	Heavy cream	Sour cream	Milk equiv. of cream	Milk equivalent of all items reported ^{3/}
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
1950.	334	4.2	6.0	1.7	4.2	3.5	0.4	57	388
1951.	339	5.4	7.4	1.9	4.3	3.4	0.4	55	387
1952.	342	6.6	7.4	2.0	4.4	3.2	0.4	54	389
1953.	341	7.6	6.9	2.1	4.3	3.3	0.4	53	388
1954.	338	8.5	6.2	1.9	4.2	3.5	0.3	55	385
1955.	349	8.4	5.8	1.9	4.0	3.7	0.3	55	397
1956.	361	8.9	5.4	1.7	4.0	4.1	0.3	59	412

^{1/} Based on reports from the Federal Market Administrator to the Dairy Division. Sales are segregated to include no significant quantities of out-of-area sales. Quantities include: Skim milk, plain and fortified skim and part skim milk; Flavored milk - may include product with or without milkfat content; Buttermilk - buttermilk and cultured specialties; Light cream - includes mixtures of milk and cream.

^{2/} Estimates of the July 1 resident population of the market area are based on annual estimates for the State by the U. S. Bureau of the Census and changes indicated by the 1955 Census of Massachusetts. The marketing area includes the city of Springfield and 12 surrounding cities and towns. ^{3/} See appendix page 27 for explanation of milk equivalent.

Table 6 ---Merrimack Valley, Mass.: Annual sales, milkfat test, and per capita consumption of fluid milk and cream products, and population, 1950-56

Year	Annual sales for fluid use 1/							
	Whole milk		Skim milk		Flavored milk		Buttermilk	
	Sales	Fat test	Sales	Fat test	Sales	Fat test	Sales	Fat test
	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>
1950.	78,593	3.77	227	-	1,169	2.60	225	-
1951.	80,899	3.78	326	-	1,433	2.50	266	-
1952.	93,793	3.76	441	-	1,770	2.73	321	0.53
1953.	95,317	3.77	512	-	1,813	2.65	320	0.18
1954.	95,881	3.79	631	-	1,679	2.62	298	0.20
1955.	100,553	3.79	691	-	1,915	2.51	306	0.32
1956.	106,094	3.78	922	-	2,104	2.52	333	0.20

Year	Annual sales for fluid use (continued) 1/						Population 2/ <u>Thousands</u>
	Light cream		Heavy cream		Sour cream		
	Sales	Fat test	Sales	Fat test	Sales	Fat test	
	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	
1950.	893	19.82	839	38.57	13	18.51	267
1951.	981	18.94	817	38.27	31	17.93	278
1952.	1,214	18.66	915	38.55	45	18.26	322
1953.	1,207	18.44	865	38.88	47	17.94	328
1954.	1,200	18.41	826	38.92	56	17.87	335
1955.	1,202	18.34	773	38.67	53	18.15	343
1956.	1,702	16.86	910	37.84	67	18.21	352

Year	Annual per capita consumption								Milk equivalent of all items reported 3/ <u>Pounds</u>
	Whole milk	Skim milk	Flavored milk	Butter- milk	Light cream	Heavy cream	Sour cream	Milk equiv. of cream	
	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	
1950.	294	0.8	4.4	0.8	3.3	3.1	0.1	49	340
1951.	291	1.2	5.2	1.0	3.5	2.9	0.1	47	339
1952.	291	1.4	5.5	1.0	3.8	2.8	0.1	48	340
1953.	291	1.6	5.5	1.0	3.7	2.6	0.1	46	338
1954.	286	1.9	5.0	0.9	3.6	2.5	0.2	43	330
1955.	293	2.0	5.6	0.9	3.5	2.2	0.2	40	335
1956.	301	2.6	6.0	1.0	4.8	2.6	0.2	48	350

1/ Based on reports from the Federal Market Administrator to the Dairy Division. Sales are segregated to include no significant quantities of out-of-area sales. Quantities include: Skim milk - plain and fortified skim and part skim milk; Flavored milk - may include product with or without milkfat content; Buttermilk - buttermilk and cultured specialties; Light cream - includes mixtures of milk and cream.

2/ Estimates of the July 1 resident population of the market area are based on annual estimates for the State by the U. S. Bureau of the Census and changes indicated by the 1955 Census of Massachusetts. The marketing area includes the cities of Lowell, Lawrence, and Haverhill and 13 surrounding towns. Groveland, Haverhill, Merrimack, and West Newbury were added to the area October 1, 1951. 3/ See appendix page 27 for explanation of milk equivalent.

Table 7.--Worcester, Mass.: Annual sales, milkfat test, and per capita consumption of fluid milk and cream products, and population, 1950-56

Year	Annual sales for fluid use ^{1/}							
	Whole milk		Skim milk		Flavored milk		Buttermilk	
	Sales	Fat test	Sales	Fat test	Sales	Fat test	Sales	Fat test
	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>
1950.	97,086	3.78	755	-	1,542	2.85	416	0.97
1951.	97,101	3.78	586	-	1,998	2.86	506	1.02
1952.	96,360	3.78	711	-	1,975	2.82	493	0.90
1953.	98,295	3.78	853	-	2,074	2.65	454	0.25
1954.	99,017	3.76	1,014	-	1,735	2.50	437	0.16
1955.	102,588	3.75	1,153	-	1,973	2.48	456	0.11
1956.	105,815	3.72	1,410	-	2,045	2.53	389	0.54

Year	Annual sales for fluid use (continued) ^{1/}						Population ^{2/}
	Light cream		Heavy cream		Sour cream		
	Sales	Fat test	Sales	Fat test	Sales	Fat test	
	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>Thousands</u>
1950.	1,292	19.44	1,202	37.69	91	18.13	290
1951.	1,439	18.20	1,215	37.24	131	17.88	285
1952.	1,433	18.04	1,117	37.31	145	18.13	282
1953.	1,546	17.88	1,108	37.62	147	18.03	290
1954.	1,556	17.73	1,106	37.30	146	18.05	302
1955.	1,527	17.70	1,038	37.17	146	18.05	305
1956.	1,465	17.06	1,086	36.64	151	18.05	310

Year	Annual per capita consumption								
	Whole milk	Skim milk	Flavored milk	Butter-milk	Light cream	Heavy cream	Sour cream	Milk equiv. of cream	Milk equivalent of all items reported ^{3/}
	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>
1950.	335	2.6	5.3	1.4	4.5	4.1	0.3	66	405
1951.	341	2.1	7.0	1.8	5.0	4.3	0.5	69	416
1952.	342	2.5	7.0	1.8	5.1	4.0	0.5	66	413
1953.	339	2.9	7.2	1.6	5.3	3.8	0.5	65	409
1954.	328	3.4	5.8	1.4	5.2	3.7	0.5	62	390
1955.	336	3.8	6.5	1.5	5.0	3.4	0.5	59	398
1956.	341	4.6	6.6	1.2	4.7	3.5	0.5	58	399

^{1/} Based on reports from the Federal Market Administrator to the Dairy Division. Sales are segregated to include no significant quantities of out-of-area sales. Quantities include: Skim milk - plain and fortified skim and part skim milk; Flavored milk - may include product with or without milkfat content; Buttermilk - buttermilk and cultured specialties; Light cream - includes mixtures of milk and cream.

^{2/} Estimates of the July 1 resident population of the market area are based on annual estimates for the State by the U. S. Bureau of the Census and changes indicated by the 1955 Census of Massachusetts. The marketing area includes the city of Worcester and 12 surrounding towns. Northbridge was excluded from the area October 1, 1951.

^{3/} See appendix page 27 for explanation of milk equivalent.

Table 8.--Fall River, Mass.: Annual sales, milkfat test, and per capita consumption of fluid milk and cream products, and population, 1950-56

Year	Annual sales for fluid use ^{1/}							
	Whole milk		Skim milk		Flavored milk		Buttermilk	
	Sales	Fat test	Sales	Fat test	Sales	Fat test	Sales	Fat test
	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>
1950.	40,242	3.72	116	-	1,615	2.84	83	1.63
1951.	40,264	3.74	135	-	1,816	2.92	80	1.59
1952.	40,410	3.74	169	-	1,783	2.90	89	1.57
1953.	40,971	3.73	194	-	1,676	2.70	86	1.65
1954.	40,447	3.73	209	-	1,521	2.61	76	1.53
1955.	41,271	3.73	228	-	1,611	2.59	87	1.48
1956.	42,243	3.73	285	-	1,538	2.66	81	1.42

Year	Annual sales for fluid use (continued) ^{1/}						Population ^{2/}
	Light cream		Heavy cream		Sour cream		
	Sales	Fat test	Sales	Fat test	Sales	Fat test	<u>Thousands</u>
	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	
1950.	581	18.68	328	38.53	37	18.38	126
1951.	606	18.77	298	39.01	36	18.22	125
1952.	581	18.87	274	38.82	37	18.15	126
1953.	615	18.72	266	38.87	37	18.18	127
1954.	623	18.53	255	38.67	36	18.16	127
1955.	662	18.46	257	38.22	32	18.23	128
1956.	703	18.12	280	37.18	30	18.21	128

Year	Annual per capita consumption								
	Whole milk	Skim milk	Flavored milk	Butter-milk	Light cream	Heavy cream	Sour cream	Milk equiv. of cream	Milk equivalent of all items reported ^{3/}
	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>
1950.	319	0.9	12.8	0.7	4.6	2.6	0.3	53	390
1951.	322	1.1	14.5	0.6	4.8	2.4	0.3	50	382
1952.	321	1.3	14.2	0.7	4.6	2.2	0.3	47	376
1953.	323	1.5	13.2	0.7	4.8	2.1	0.3	47	373
1954.	318	1.6	12.0	0.6	4.9	2.0	0.3	46	371
1955.	322	1.8	12.6	0.7	5.2	2.0	0.2	48	384
1956.	330	2.2	12.0	0.6	5.5	2.2	0.2	50	393

^{1/} Based on reports from the Federal Market Administrator to the Dairy Division. Sales are segregated to include no significant quantities of out-of-area sales. Quantities include: Skim milk - plain and fortified skim and part skim milk; Flavored milk - may include product with or without milkfat content; Buttermilk - buttermilk and cultured specialties; Light cream - includes mixtures of milk and cream.

^{2/} Estimates of the July 1 resident population of the market area are based on annual estimates for the State by the U. S. Bureau of the Census and changes indicated by the 1955 Census of Massachusetts. The marketing area includes the city of Fall River and 2 surrounding towns.

^{3/} See appendix page 27 for explanation of milk equivalent.

Table 9.--Rhode Island: Annual sales and per capita consumption of fluid milk and cream products, and population, 1950-56

Year	Annual sales for fluid use ^{1/}			Popu- lation ^{3/}	Annual per capita consumption		
	Milk and milk drinks	Cream			Milk and milk drinks	Cream (milk equivalent)	Milk and milk equivalent of cream
		40% cream basis	Milk equivalent ^{2/}				
	1,000 pounds	1,000 pounds	1,000 pounds	Thous.	Pounds	Pounds	Pounds
1950.....	229,626	4,465	45,795	771	298	59	357
1951.....	235,408	4,194	46,092	770	306	60	366
1952.....	244,556	4,191	42,985	791	309	54	363
1953.....	242,350	3,788	38,851	809	300	48	348
1954.....	242,774	4,004	41,067	813	299	51	357
1955.....	250,236	4,616	47,344	821	305	58	363
1956... ^{4/}	254,920	4,595	47,128	841	303	56	359

^{1/} Based on data of the Rhode Island Milk Control Board. Sales of Class I milk include those reported to the Board plus estimated sales by dealers not required to report.

^{2/} Test of milk receipts estimated at 3.90 percent fat.

^{3/} July 1 resident population as estimated by the U. S. Bureau of the Census less estimated number of persons in farm operators' households who use home produced milk.

^{4/} Sales by State handlers to out-of-state government installations omitted in 1956. For comparability with prior years, sales are 283,836,000 pounds and per capita consumption 314 pounds.

Table 10.--Connecticut: Annual sales and per capita consumption of fluid milk and cream products, and population, 1950-56

Year	Annual sales for fluid use ^{1/}									Popu- lation ^{3/}
	Whole milk	Skim milk	Flavored milk	Butter-milk	Extra light cream	Light cream	Medium cream	Heavy cream	Cream (milk equiv.) ^{2/}	
1950.	622,689	6,502	13,682	2,880	-	9,106	725	6,191	110,483	1,988
1951.	634,615	8,180	15,447	3,159	-	9,268	817	5,995	111,701	1,967
1952.	660,496	9,941	15,924	3,681	1,743	7,970	902	5,757	110,836	2,002
1953.	675,488	10,192	16,409	3,608	1,797	7,704	1,119	5,655	113,130	2,079
1954.	689,302	11,336	15,448	3,520	2,169	7,514	1,478	5,426	113,909	2,152
1955.	724,990	13,136	16,754	3,873	2,825	7,527	1,880	5,129	117,508	2,172
1956.	754,477	15,556	16,742	3,657	3,865	7,352	2,429	4,831	122,066	2,185

Annual per capita consumption										
	Pounds ^{4/}									
1950.	313	3.3	6.9	1.4	-	4.6	0.4	3.1	56	369
1951.	323	4.2	7.9	1.6	-	4.7	0.4	3.0	57	380
1952.	330	5.0	8.0	1.8	.9	4.0	0.5	2.9	55	386
1953.	325	4.9	7.9	1.7	.9	3.7	0.5	2.7	54	380
1954.	320	5.3	7.2	1.6	1.0	3.5	0.7	2.5	53	374
1955.	334	6.0	7.7	1.8	1.3	3.5	0.9	2.4	54	388
1956.	345	7.1	7.7	1.7	1.8	3.4	1.1	2.2	56	402

^{1/} Compiled from records of the Connecticut Milk Administrator. Average fat percentages are: Whole milk 3.7, skim milk 0.75, flavored milk 2.0, and buttermilk 1.0. Cream percentages range: extra light 12-15.9, light 16-25.9, medium 26-35.9, and heavy 36 and over.

^{2/} Calculated on the basis of the midpoint of the range of fat percentages by item and the weight of product as shown in the appendix using the average test of receipts as reported.

^{3/} July 1 resident population as estimated by the U. S. Bureau of the Census less estimated number of persons in farm operators' households who use home produced milk.

^{4/} Milk equivalent of all items reported. See appendix page 27 for explanation of milk equivalent.

Table 11.--New York metropolitan area: Annual sales and per capita consumption of fluid milk and cream products, and population, 1950-56 1/

Year	Annual sales for fluid use			Popula- tion	Annual per capita consumption		
	Whole milk	Cream			Whole milk	Cream (milk equiv- alent)	Milk and milk equiv- alent of cream
		38% cream basis	Milk equiv- alent				
	<u>Mil.</u> <u>Pounds</u>	<u>1,000</u> <u>Pounds</u>	<u>1,000</u> <u>Pounds</u>	<u>Thous.</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>
1950....	3,135	79,503	820,951	9,455	332	87	419
1951....	3,152	77,963	811,671	9,706	325	84	409
1952....	3,193	75,411	787,253	9,794	326	80	406
1953....	3,171	74,346	780,414	9,909	320	79	399
1954....	3,195	73,045	768,892	10,007	319	77	396
1955....	3,279	72,599	768,468	10,057	326	76	402
1956....	3,315	72,961	768,006	10,038	330	77	407

1/ Source: Spencer, Leland, and Parker, Ida, Consumption and Distribution of Milk and Cream in the New York Market, Bulletin A. E. 1078, Cornell University Agricultural Experiment Station, 1957. The whole milk series includes nonpooled milk sold for fluid consumption in the market area. The fluid cream series includes fresh sweet cream, half and half, cultured sour cream and cream from reconstituted frozen cream. Annual July 1 estimates of the population of the marketing area include New York City, and Nassau, Suffolk (except Fisher's Island), and Westchester counties in New York.

Table 12.--Upstate New York markets: Annual sales and per capita consumption of fluid milk and cream products, and population, 1950-56

Market and year	Annual sales for fluid use 1/		Popula- tion 2/	Annual per capita consumption		
	Milk and milk drinks	Cream (milk equivalent)		Milk and milk drinks	Cream (milk equiv- alent)	Milk and milk equiv- alent of cream
<u>NIAGARA FRONTIER</u>	<u>1,000</u> <u>Pounds</u>	<u>1,000</u> <u>Pounds</u>	<u>Thous.</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>
1950.....	304,071	42,031	1,060	287	40	327
1951.....	316,806	43,734	1,090	291	40	331
1952.....	327,530	43,526	1,120	292	39	331
1953.....	337,390	43,583	1,150	293	38	331
1954.....	343,872	41,634	1,180	291	35	326
1955.....	365,384	42,923	1,210	302	35	337
1956.....	379,190	43,386	1,245	305	35	340
<u>ROCHESTER</u>						
1950.....	139,273	16,775	472	295	36	331
1951.....	141,721	16,982	478	296	36	332
1952.....	144,342	16,336	490	295	33	328
1953.....	147,383	16,442	500	295	33	328
1954.....	152,991	16,091	510	300	32	332
1955.....	158,287	16,482	525	301	31	332
1956.....	164,512	17,347	540	305	32	337
<u>HUDSON-MOHAUK</u>						
1950.....	158,311	25,792	505	313	51	364
1951.....	160,725	26,051	515	312	51	363
1952.....	165,331	26,964	525	315	51	366
1953.....	169,821	27,565	533	319	52	371
1954.....	172,959	26,886	542	319	50	369
1955.....	178,999	27,318	550	325	50	375
1956.....	183,399	27,775	560	327	50	377

See footnotes at end of table, page 24.

Table 12.--Upstate New York markets: Annual sales and per capita consumption of fluid milk and cream products, and population, 1950-56--Continued

Market and year	Annual sales for fluid use ^{1/}		Population ^{2/}	Annual per capita consumption		
	Milk and milk drinks	Cream (milk equivalent)		Milk and milk drinks	Cream (milk equivalent)	Milk and milk equivalent of cream
<u>MIDDLE HUDSON</u>	1,000 Pounds	1,000 Pounds	Thous.	Pounds	Pounds	Pounds
1949 ^{3/}	111,116	16,387	377	295	43	338
1950.....	111,063	17,386	381	292	46	338
1951.....	113,656	17,368	391	291	45	336
1952.....	117,743	17,376	401	294	43	337
1953.....	124,427	18,455	413	300	44	344
1954.....	126,896	19,313	424	299	45	344
1955.....	130,937	20,111	436	301	46	347
1956.....	132,708	21,439	447	298	48	346
<u>BINGHAMTON</u>						
1949 ^{3/}	56,200	9,800	166	339	59	398
1950.....	57,200	10,100	169	338	60	398
1951.....	58,800	10,200	172	342	59	401
1952.....	60,000	10,300	174	345	59	404
1953.....	60,400	10,100	176	343	57	400
1954.....	61,700	10,400	179	345	58	403
1955.....	63,816	10,806	181	353	60	413
1956.....	66,513	10,136	184	361	55	416
<u>SYRACUSE</u>						
1950.....	96,776	16,399	318	304	52	356
1951.....	101,950	17,127	322	317	53	370
1952.....	105,943	18,527	328	323	56	379
1953.....	109,119	18,697	336	325	56	381
1954.....	110,563	18,212	344	321	53	374
1955.....	116,757	19,049	354	330	54	384
1956.....	120,441	19,434	363	332	54	386
<u>AMSTERDAM-JOHNSTOWN-GLOVERSVILLE</u>						
1949 ^{3/}	28,437	3,500	79	360	44	404
1950.....	29,067	3,596	80	363	45	408
1951.....	29,415	3,618	80	368	45	413
1952.....	29,719	3,683	81	367	45	412
1953.....	29,530	3,769	81	365	47	412
1954.....	28,754	3,595	81	355	44	399
1955.....	29,513	3,893	81	364	48	412
1956.....	29,991	3,914	82	366	48	414

^{1/} Based on data supplied by the New York Crop Reporting Service in cooperation with the Division of Milk Control (including Market Administrators), New York Department of Agriculture and Markets.

^{2/} Estimated July 1 resident population based on estimates by the Office of Vital Statistics, Department of Health, State of New York. For the Niagara Frontier, Rochester, Middle Hudson, Binghamton and Syracuse areas, the data exclude an estimated number of persons in farm operators' households who use home produced milk. Marketing areas: Niagara Frontier: Niagara county, 4 cities and 13 towns in Erie and Orleans counties. Rochester: Rochester and 13 towns in Monroe county. Hudson-Mohawk: Seven cities and 20 towns in Albany, Schenectady, Rensselaer and Saratoga counties. Middle Hudson: Dutchess, Orange, Putnam and Ulster counties. Binghamton: Binghamton and 9 towns in Broome county. Syracuse: Syracuse and 11 towns in Onondaga and Madison counties. Amsterdam-Johnstown-Gloversville: Plus 6 towns in Fulton and Montgomery counties.

^{3/} Revised and carried for comparability with present series.

Table 13.--Philadelphia, Pa.: Annual sales, milkfat test, and per capita consumption of fluid milk and cream products, and population, 1950-56

Year	Annual sales for fluid use ^{1/}							
	Whole milk		Skim milk		Flavored milk		Buttermilk	
	Sales	Fat test	Sales	Fat test	Sales	Fat test	Sales	Fat test
	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>
1950.	699,012	3.82	12,744	0.30	17,280	2.99	9,106	1.75
1951.	698,738	3.80	10,458	.44	18,658	2.71	9,760	1.76
1952.	699,477	3.79	12,534	.39	18,745	2.56	10,140	1.77
1953.	704,104	3.79	13,862	.37	19,633	2.41	9,794	1.66
1954.	711,623	3.79	15,701	.39	18,694	2.40	9,195	1.61
1955.	720,476	3.78	19,074	.38	18,767	2.36	9,350	1.62
1956.	724,180	3.76	21,023	.37	17,371	2.37	8,531	1.61

Year	Annual sales for fluid use (continued) ^{1/}						Population ^{2/} <u>Thousands</u>
	Light cream		Heavy cream		Sour cream		
	Sales	Fat test	Sales	Fat test	Sales	Fat test	
	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>	<u>Percent</u>	
1950.	15,055	19.73	1,952	38.86	1,474	18.86	2,600
1951.	15,581	19.96	1,573	39.77	1,464	18.91	2,615
1952.	15,336	19.89	1,495	39.33	1,481	18.90	2,630
1953.	15,523	19.88	1,461	39.73	1,473	19.03	2,655
1954.	15,123	19.67	1,408	39.69	1,428	19.19	2,685
1955.	15,354	19.36	1,376	39.70	1,337	19.20	2,710
1956.	15,985	18.88	1,472	39.77	1,280	19.04	2,730

Year	Annual per capita consumption								
	Whole milk	Skim milk	Flavored milk	Butter-milk	Light cream	Heavy cream	Sour cream	Milk equiv. of cream	Milk equivalent of all items reported ^{3/}
	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>
1950.	269	4.9	6.6	3.5	5.8	0.8	0.6	40	311
1951.	267	4.0	7.1	3.7	6.0	0.6	0.6	39	304
1952.	266	4.8	7.1	3.9	5.8	0.6	0.6	39	310
1953.	265	5.2	7.4	3.7	5.8	0.6	0.6	39	309
1954.	265	5.8	7.0	3.4	5.6	0.5	0.5	37	307
1955.	266	7.0	6.9	3.4	5.7	0.5	0.5	37	308
1956.	265	7.7	6.4	3.1	5.9	0.5	0.5	37	306

^{1/} Based on reports from the Federal Market Administrator to the Dairy Division. Sales are segregated to include no significant quantities of out-of-area sales. Quantities include: Skim milk - plain and fortified skim and part skim milk; Flavored milk - may include product with or without milkfat content; Buttermilk - buttermilk and cultured specialties; Light cream - includes mixtures of milk and cream.

^{2/} Estimated July 1 resident population based on biennial estimates of county populations by the Pennsylvania Department of Commerce. Marketing area includes most of Philadelphia county, all of Delaware county and part of Montgomery county, all in Pennsylvania.

^{3/} See appendix page 27 for explanation of milk equivalent.

Table 14.--New Jersey, Baltimore, Md., and Richmond, Va.: Annual sales and per capita consumption of fluid milk and cream products, and population, 1950-56

Market and year	Annual sales for fluid use ^{1/}				Population ^{4/}	Per capita consumption				
	Whole milk ^{2/}	Cream (milk equivalent)	Chocolate milk or drink ^{3/}	Butter-milk		Whole milk	Cream (milk equivalent)	Milk and milk equivalent of cream	Chocolate milk or drink	Butter-milk
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	Thousands	Pounds	Pounds	Pounds	Pounds	Pounds
NEW JERSEY										
1950..	1,430,428	252,680	19,628	12,417	4,801	298	53	351	4.1	2.6
1951..	1,468,984	265,518	21,545	13,996	4,922	298	54	352	4.4	2.8
1952..	1,517,048	262,264	22,268	15,945	5,002	303	52	356	4.5	3.2
1953..	1,549,063	284,310	23,058	16,650	5,093	304	56	360	4.5	3.3
1954..	1,583,819	278,533	20,293	15,535	5,201	305	54	358	3.9	3.0
1955..	1,654,354	273,492	22,107	16,586	5,319	311	51	362	4.2	3.1
1956..	1,718,759	267,125	20,868	15,745	5,474	314	49	363	3.8	2.9
BALTIMORE MD.										
1950..	229,036	30,010	14,477	3,478	950	241	32	273	15.2	3.7
1951..	231,376	29,199	14,530	3,488	953	243	31	274	15.2	3.7
1952..	234,424	26,525	14,599	3,727	961	244	28	272	15.2	3.9
1953..	234,982	26,415	14,643	3,436	963	244	27	271	15.2	3.6
1954..	236,125	26,722	15,067	3,481	966	244	28	272	15.6	3.6
1955..	245,514	25,897	16,144	3,566	966	254	27	281	16.7	3.7
1956..	255,207	24,860	16,534	3,576	974	262	26	288	17.0	3.7
RICHMONT VA.										
1950..	61,912	6,555	3,103	3,580	355	174	18	192	8.7	10.1
1951..	63,278	5/6,274	-	-	368	172	17	189	-	-
1952..	6/67,231	6,137	3,108	7/4,818	379	177	16	193	8.2	12.7
1953..	67,038	6,654	3,046	5,260	391	171	17	188	7.8	13.4
1954..	67,220	6,512	2,804	5,315	404	166	16	182	6.9	13.2
1955..	69,961	6,246	3,004	5,500	412	170	15	185	7.3	13.4
1956..	75,041	6,595	3,090	5,911	422	178	16	194	7.3	14.0

1/ Sources of sales data: New Jersey - The Office of Milk Industry, New Jersey Department of Agriculture; Baltimore, Md. - Bureau of Milk Control, Baltimore City Health Department; Richmond, Va. - Richmond Cooperative Milk Producers' Federation and compiled by The Milk Market Board, Richmond, Va. for 1950-51. The Virginia Milk Commission supplied data for 1952-56.

2/ For New Jersey, includes sales of Grade A, Grade B, vitamin D, Guernsey, certified, and chocolate whole milk as reported plus an estimate for sales not reported.

3/ Chocolate milk in Baltimore; chocolate drink in New Jersey and Richmond, Va.

4/ Sources of population data: New Jersey - July 1 resident population of the state as estimated by the U. S. Bureau of the Census less estimated number of persons in farm operators' households who use home produced milk. Baltimore, Md. - July 1 resident population of the city as estimated by the Bureau of Biostatistics, Baltimore city Health Department. Richmond, Va. - July 1 resident population of the market area less estimated number of persons in farm operators' households who use home produced milk. Market area defined as including the city of Richmond and Henrico, Chesterfield (excluding Colonial Heights), Hanover, New Kent, Charles City, Goochland and Powhatan counties. Annual population estimates of counties made by the Bureau of Population and Economics Research, University of Virginia.

5/ 250,958 pounds of milkfat converted to milk equivalent at 4 percent.

6/ Includes cultured whole milk beginning with 1952.

7/ Includes plain skim beginning with 1952.

APPENDIX

Weights of milk and cream

The following table is presented primarily to aid in comparing data in this issue with previous editions, as the sales items for some markets were formerly carried in quarts. Calculated weights of fluid milk and cream are shown for common sizes of containers. The figures are for an average temperature of milk and cream at the time of bottling and do not allow for adherence to the sides of containers. They are, therefore, not usable for commercial calculation of yield.

Table 15.--Approximate Weights of Milk and Cream by Size of Container 1/

Item	Gallon	Half Gallon	Quart	Pint	Half Pint
	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>	<u>Pounds</u>
Skim milk.....	8.65	4.32	2.16	1.08	0.54
Whole milk.....	8.60	4.30	2.15	1.08	.54
Cream, fat content:					
10 percent.....	8.57	-	-	1.07	.54
15 percent.....	8.55	-	-	1.07	.54
20 percent.....	8.51	-	-	1.06	.53
25 percent.....	8.47	-	-	1.06	.53
30 percent.....	8.43	-	-	1.05	.52
35 percent.....	8.40	-	-	1.05	.52
40 percent.....	8.37	-	-	1.05	.52

1/ Not for use in commercial calculations. Source: Approximate Weight per Gallon of Milk and Cream at Various Temperatures, U. S. Department of Agriculture, Agricultural Research Administration, BDIM 287.

Milk equivalent of milk and cream

Milk equivalent figures for milk and cream items have been used in a number of places in the bulletin. This figure is the quantity of producer milk required to provide the milkfat in the product or products shown.

For example: 300 pounds of 20 percent cream is equivalent to 1,500 pounds of producer milk containing 4 percent fat:

$$300 \times .20 = 60 \text{ pounds of milkfat}$$

$$\frac{60}{.04} = 1,500 \text{ pounds of milk equivalent}$$