

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL ECONOMICS
WASHINGTON, D. C.

June 30, 1933

MILK PRODUCED AND MILK USED IN THE NORTHEASTERN STATES IN 1931

Adequate returns to dairymen in the Northeastern Market Milk area are largely dependent on the adjustment of local milk production to local milk requirements. There is, therefore, widespread interest in the local balance of production and utilization of milk, in the volume of milk and cream shipped into the area and in the volume of milk and cream produced within the area that is available for fluid consumption.

For this reason such statistics on local production and utilization as were already available have been brought together and estimates for some missing items have been supplied so as to complete some preliminary estimates of total milk production and utilization in the various states that supply important quantities of milk and cream to the Northeastern markets. For the purposes of this survey this area was assumed to include New England, New York, New Jersey, Pennsylvania, Delaware, Maryland, the District of Columbia, and seven counties in northern Virginia that ship important quantities of milk into Washington, D. C. In 1931 the milk produced in this area had about 24 per cent of the value of all milk produced in the United States.

It is estimated that in 1931 about 17,792,000,000 pounds of milk were produced in this Northeastern Market Milk area, this estimate including a rough allowance of 351,000,000 pounds (about 2 per cent) for milk produced by cows that were not on farms. As shown in detail, by States, in Table 1, the quantity of milk used for all purposes on the farms of this area in 1931 is estimated at 2,841,000,000 pounds. This includes some 1,008,000,000 pounds of milk used on the farms for making butter. Part of this milk would probably have been marketed as milk or cream if prices had been more favorable.

After allowing for butterfat recovered from whey, condensed milk used in manufacturing ice cream and such other duplications as can be calculated, the quantity of milk (including milk equivalent of cream) used in this area in 1931 for producing butter, cheese, condensed and evaporated milk, dry milk and ice cream is estimated at 2,544,000,000 pounds. Part of this milk would have been available for consumption in fluid form, if needed, but much of it was produced during the season of the year when production exceeded fluid milk requirements. The milk (including also the milk equivalent of the cream) sold locally to the urban and non-farm rural populations for fluid consumption (including some local sales to bakeries, retail ice cream manufacturers, etc.) is estimated from Board of Health reports to have totaled 13,292,000,000 pounds. Adding together the estimates of these various consumption items, and adjusting for consumption on farms within city limits and other minor duplications they show a total consumption of 18,653,000,000 pounds of milk compared with estimates of production totaling 17,792,000,000 pounds. This estimate includes only the milk used in the area as milk or cream. It does not include the milk used in other States to produce the very large quantity of butter, cheese, and other manufactured dairy products shipped into the area.

Taking these independent production and consumption estimates for 1931 as they stand, without adjustment and without attempting to force them into agreement, they suggest that in this area the quantity of milk and cream utilized exceeded local production by some 861,000,000 pounds or nearly 5 per cent.

However, this balance is too small to be accurately calculated from the difference between the production and the utilization indications. Records of market receipts and other data give the impression that the net deficit was closer to 700,000,000 pounds or about 4 per cent. Thus in 1931 the three markets of New York, Philadelphia and Boston received from States outside of this group some 13,318 cans of milk and 442,595 cans of cream (not counting Virginia shipments) a total equivalent to perhaps 373,000,000 pounds of milk, which would equal 2.1 per cent of the estimated production in this northeastern area. The total quantity of middlewestern milk and cream received at Pittsburgh, Buffalo, Washington and other cities in this area is not known but it seems probable that the total net of shipments of milk and cream into the area in 1931 were equivalent to somewhere around 500,000,000 to 700,000,000 pounds of milk. Canadian imports of milk and cream into this area were equivalent to about 11,000,000 pounds of milk, exclusive of about 1,500,000 pounds included in the New York City receipts. In addition, cold storage holdings of cream in this area decreased during 1931 by about 120,000 cans equivalent to about 100,000,000 pounds of milk. While the available records of shipments and holdings appear in fair agreement with the estimates of production and consumption in the area as a whole the estimates for the various States (shown in Table I) cannot as yet be checked in this way and they should be considered as approximations only.

A more detailed explanation of the statistical problems involved and of the methods used will be included in a subsequent report that will show also tentative estimates of production, sales from farms and consumption, by counties and by milk sheds.

TABLE 1. MILK PRODUCTION AND UTILIZATION IN NORTHEASTERN MARKET MILK AREA IN 1931

	ME.	N.H.	VT.	MASS.	R.I.	CORN.	N.Y.	N.J.	P.A.	DELA.	MD.	VA. (7 counties shipping to D.C.)	Dist. of Colum- bia	11 States, a portion of Va. and Dist. of Columbia
	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.	mill. lbs.
MILK PRODUCTION														
1. Production by cows on farms ^{2/}	649	374	1,336	740	132	597	7,367	705	4,439	130	770	202		17,441
2. Production by cows in towns & villages (not on farms) ^{3/}	22	18	13	48	5	14	54	15	138	1	17	6		351
3. Total milk production	671	392	1,349	788	137	611	7,421	720	4,577	131	787	208		17,792
MILK SOLD FROM FARMS														
4. Milk and milk equivalent of cream sold from farms where produced (item 1 - item 9) ^{2/}	411	306	1,204	662	122	533	6,507	635	3,588	103	584	136		14,791
MILK USED FOR EACH PURPOSE														
Used on farms where produced														
5. Milk and cream in farm households	67	26	60	48	6	38	352	43	359	15	90	28		1,132
6. Fed to calves	15	9	33	16	3	15	228	17	138	3	23	10		510
Used for making butter														
7. For butter used on farms	49	9	8	6	1	6	97	6	122	4	30	18		356
8. For butter sold	107	24	31	8	-	5	183	4	232	5	43	10		552
9. Total on farms where produced	238	68	132	78	10	64	860	70	851	27	186	66		2,650
10. Milk purchased by farm families with no cows or by others while cows were dry ^{3/}	13	6	5	13	2	7	49	18	53	5	18	2		191
11. Total milk used on farms	251	74	137	91	12	71	909	88	904	32	204	68		2,841
12. Milk used for fluid consumption on urban farms, (included in item No. 15) ^{3/}	-4	-4	-1	-22	-3	-4	-8	-5	-5	-1	-1	-1		-57
13. Total milk used on farms, excluding duplication (item 11 - item 12)	247	70	136	69	9	67	901	83	899	32	203	68		2,784
14. Milk used for butter and for feeding calves on non-farm places keeping cows ^{3/}	4	3	2	2	-	1	3	1	14	-	2	1		33
15. Fluid consumption of milk and milk equivalent of cream by (1) Urban and (2) Non-farm rural population	239	158	96	1,714	269	630	4,946	1,429	3,133	60	475	15		13,292
Milk Equivalent of Dairy Products														
Manufactured ^{4/}														
16. Butter ^{2/}	2	-	64	27	8	8	178	1	228	1	2	20		531
17. Cheese ^{2/}	1	-	2	4	-	-	528	-	28	-	-	-		563
18. Condensed and evaporated milk, dry milk and malted milk ^{2/}	-	-	6	-	-	-	320	3	88	-	17	-		434
19. Ice cream ^{2/}	13	8	10	66	14	47	305	104	401	8	22	-		1,016
20. Total, manufacturing purposes ^{2/}	16	8	82	97	14	55	1,331	108	745	9	41	20		2,544
21. Total milk and milk equivalent of cream used for all purposes (Sum of items 13, 14, 15, and 20)	506	239	316	1,882	292	753	7,181	1,621	4,791	101	681	104		18,653
To Balance, Indicated net interstate shipments (Difference between items 3 and 21)	165	153	1,033	1,094	155	142	240	901	214	30	106	104		186
23. Shipped in ^{2/}														861

^{1/} Bureau of Agricultural Economics, United States Department of Agriculture. Items 15 to 21 supplied by E. W. Gemmets, Division of Dairy and Poultry Products. Other items from Statistical Supplement #8 to "Milk Production Trends" or supplied by John B. Shepard, Division of Crop and Livestock Estimates. All estimates are in millions of pounds.

^{2/} Corresponding estimates by counties are being prepared. ^{3/} Rough approximations. Reliable statistics not available.

^{4/} Based on products manufactured and on regional milk requirements per unit, duplications excluded.