

While the tube-drawn samples gave somewhat lower average counts, the milk was drawn intermittently during the milking and may not have been fully representative of the entire milking.

Variation in Different Quarters

Investigations have shown wide differences in the bacterial count of milk aseptically drawn from different quarters of the udder. In order to check this factor, five cows from the college herd were selected at random for the test. The milk was drawn from each quarter by means of a sterile catheter and run directly into a sterile sampling tube. Data representing the milk from five cows in the college herd are given in Table III, and show wide differences in bacterial counts of milk from each cow and also from the individual quarters of each cow. With cow No. 504-1 the bacterial count ranged from 150 to 3468 per ml. per quarter, while the milk from cow No. 519 showed less than 10 bacteria per ml. in each of the four quarters. With cows No. 502-1 and 423 the counts were less than 10 per ml. in the two front quarters and from 116 to 1142 per ml. in the rear quarters.

Although no data was obtained on the relative quantities of milk obtained from the different quarters, in some cases these differences were considerable.

Table 3. VARIATION IN THE BACTERIA COUNT OF ASEPTICALLY DRAWN MILK FROM DIFFERENT QUARTERS OF THE UDDER

Cow No.	No. Trials	Average bacterial count per ml. of milk drawn aseptically from quarters:			
		Left front	Right front	Left rear	Right rear
504-1.....	20	810	1130	3468	150
502-1.....	12	40	10*	500	890
519.....	4	10*	10*	10*	10*
423.....	4	10*	10*	116	1142
528.....	4	50	10*	10*	30

*Signifies less than 10 per ml.

The five-year decline in the number of milk cows which ended in 1949 left it the lowest in history compared with the population. However, consumption per person of all dairy products, except butter, was well above prewar. Consumption of several products such as evaporated milk, cheese and nonfat dry milk solids is at or near record levels. Record milk production per cow and more complete utilization of nonfat ingredients of milk has partly offset the decline in the number of cows.—USDA.

WHERE IT ALL CAME FROM

The drainage area of the Red River of the North at Fargo, North Dakota is 6800 square miles; its drainage area at Wahpeton is 4,010 square miles. The Wild Rice River near Abercrombie has a drainage area of 2,710 square miles. The Maple River at Mapleton has a drainage area of 1,480 square miles. (Data from Water Resources Review, USGS, March, 1950).