

Table Showing Comparison of Yields from Machine and Hand Milking for two-week periods in February and March.

No. of Cow.	Average for 2 periods of machine milking.		One period of hand milking.		Gain (+) or loss (-) in 2 weeks hand milking.	
	Lbs. Milk.	Lbs. Fat.	Lbs. Milk.	Lbs. Fat.	Lbs. Milk.	Lbs. Fat.
106	629	21.38	656	22.16	+ 27.0	+ 2.58
107	450	16.17	485	18.43	+ 35.0	+ 2.26
56	567	20.39	558	20.64	- 9.0	+ 0.25
15	280	8.50	315	10.39	+ 26.0	+ 1.80
Average of each of 4 cows for two weeks..	483.7	16.38	503.5	18.10	+19.75	+ 1.72

The foregoing table indicates a gain in pounds of milk for the hand milking in three out of four cows amounting to 79 pounds milk in 14 days, or an average of 19.7 pounds per cow in two weeks. Each and all of the four cows gave an increased amount of fat during the period when milked by hand amounting to a gain of 6.89 pounds milk fat in 14 days, or an average of 1.72 pounds fat per cow, which is equal to about 2 pounds butter per cow for the two weeks. Was this apparent gain due to hand milking or to some other factor or factors?

A similar experiment was made from March 30th to May 10th, with cows Nos. 15, 56 and 76. From March 30th to April 13th, inclusive, the cows were milked with the machine. Milk was weighed separately from each cow every seven days, and composite samples were taken every seven days for testing with the Babcock test. From April 13th to 26th these three cows were milked by hand, milk was weighed and sampled daily. From April 27th to May 10th, inclusive, they were milked with the machine.

Averaging the two machine periods, same as in the previous experiment, and comparing the results with the hand milking, we find that the average of the two periods where the three cows were milked by the machine, was 1,085 pounds milk and 34.8 pounds fat for the three cows in 14 days. During the fourteen days when milked by hand the same cows gave 1,005 pounds milk and 33.71 pounds fat. Apparently at this time these cows, two of which were the same as were used in the previous experiment, gave 80 pounds more milk and 1.9 pounds more milk fat when milked by the machine than they did in two weeks when milked by hand. But again we may reasonably ask, was this difference due to methods of milking or to something else?