

Rations Fed to Milk Cows, 1949

By O. E. Grenier¹

In 1949 milk cows on farms of the United States were fed about 18.6 tons of grain, mill feeds, and other concentrates, worth approximately one and one-tenth billion dollars. The quantity fed per cow in 1949 set a new high record. The total quantity fed was larger than in any year except 1945, when the number of milk cows on farms was much larger. The unit value of concentrate rations fed was \$3.02 per 100 pounds, down 21 per cent from the 1948 record and the lowest since 1945. The quantity of grain and other concentrates fed per 100 pounds of milk produced averaged 31.3 pounds in 1949, the highest of record, but the cost was only 95 cents compared with \$1.14 in 1948. Home-grown feeds made up slightly over half the concentrate ration fed to milk cows. Corn, oats, and commercially mixed feeds were the major individual feeds in the concentrate ration in 1949. In the first half of 1949, dairy product-feed price relationships were more favorable for feeding than in the same period of 1948, but for the year as a whole they were only slightly better than in 1948 and little different from the long time averages.

About 2.2 tons of hay, 1.6 tons of silage, and 0.2 tons of other roughage were fed per milk cow in dairy reporters' herds during the October 1948—May 1949 winter feeding period. Alfalfa made up two-fifths of all hay fed; clover, clover mixtures, and lespedeza together made up about one-third; and a variety of other hays, the remainder. Approximately seven-eighths of the hay fed to milk cows was grown on the farm where fed. On February 1, 1949, the hay fed to milk cows was valued at \$24.28 per ton, just a trifle above the value a year earlier, and the highest for that date in six years. About two-fifths of the dairymen fed baled hay. Corn silage made up 86 per cent of the silage fed to milk cows during the five winter feeding periods, 1944-49.

Concentrate Rations Fed to Milk Cows

The feeding of grain and other concentrates to milk cows on farms was at a record high rate per cow in 1949. Also, in spite of the reduced number of milk cows, the total quantity fed was the second largest on record. The estimated total of 18,593,000 tons fed to milk cows was about six per cent above the 17,482,000 tons fed in 1948, but about three per cent under the record of 19,225,000 tons fed in 1945. Of the concentrates fed to milk cows in 1949, 89 per cent or 16,504,000 tons was fed on farms where some milk or cream was sold, and 11 per cent or 2,089,000 tons on farms where milk was produced for home use only. In Wisconsin, where more grain and concentrates were fed to milk cows than in any other

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state, the 1,997,000 tons fed in 1949 was five per cent more than was fed in 1948. Among other large feeding states, Iowa showed an increase of four per cent, Pennsylvania six per cent, New York 10 per cent, and Minnesota 14 per cent.

The quantity of grain and other concentrates fed per milk cow in the United States in 1949 averaged 1,640 pounds, compared with 1,516 pounds in 1948 and the range of 1,392 to 1,509 pounds in the 1944-47 period. As usual, feeding rates were highest in the North Atlantic and East North Central areas, and lowest in the South Central region where the grazing season is long and cows are smaller and less productive. Among individual states, the largest quantity of concentrate ration fed per cow—2,950 pounds—was in Florida where dry citrus pulp is used extensively in lieu of roughage.¹ Other states showing high rates of concentrate feeding in 1949 were New Jersey, with an average of 2,490 pounds per cow; Pennsylvania, with 2,150 pounds; Rhode Island, with 2,100 pounds; and New York, with 2,030 pounds.

The amount of grain and concentrates fed per milk cow set a new high record for the date in each month of 1949. In herds kept by dairy reporters the amount fed per cow increased from 7.05 pounds per day at the beginning of 1949 to the year's peak of 7.55 pounds per cow on March 1. Feeding rates then declined seasonally, as cows went on pasture, reaching a low point of 4.86 pounds per day on July 1.

During the summer the amount fed per cow was maintained about 10 per cent higher than in 1948 as a result of lower feed prices, a good small grain crop, and short pastures in the Northeast and some other areas. As cows went on winter rations in late 1949, the bumper corn crop augmented the grain supply available on farms and the feeding of milk cows increased about seasonally, maintaining a record high rate.

In 1949 it took more grain and concentrates to produce 100 pounds of milk than in any other of the last six years. The 31.3 pounds of grain and concentrates fed per 100 pounds of milk produced on farms selling milk or cream exceeded the 29.8 pounds in 1948, 30.0 pounds in 1947, 30.3 pounds in 1946, 31.1 pounds in 1945, and 30.5 in 1944. Increases over 1948 were recorded in all regions, with the West North Central States showing the largest and the South Central the smallest. Seasonally, the amount of grain fed per 100 pounds of milk ranged from a high of 42 pounds in January to a low of 19 pounds in June.

More Than Half Home-Grown

Of the estimated 16,504,000 tons of grain and other concentrates fed to milk cows on farms selling milk and cream in 1949, over 8,731,000 tons or 53 per cent were home-grown and 7,773,000 tons

¹In 1949 citrus pulp was included as a part of the concentrates fed to milk cows in Florida for the first time. The current data are therefore not comparable with those for previous years when considerable quantities of citrus pulp were omitted.

were purchased. Regionally, there were wide variations in the proportion home-grown. In the heavy grain-producing North Central regions, home-grown feeds made up more than 72 per cent of the total ration fed. On the other hand, in the deficit feed-producing North Atlantic and Western regions, less than a fourth of the concentrate ration was grown on farms where fed.

Individual states varied widely in regard to the proportion of home-grown feeds in the milk cow concentrate ration. In some New England states, only a fraction of one per cent of the rations fed by dairy reporters was made up of home-grown feeds. On the other hand, in Iowa, Nebraska, and the Dakotas, 85 per cent or more of all concentrate feeds in the milk cow ration were home-grown.

WORLD OUTPUT OF MILK AND BUTTER

By C. Jensen¹

The world's output of manufactured dairy products rose markedly in the major producing countries in 1949, according to information recently released by the United States Department of Agriculture. This rise was due to higher milk production in nearly all countries and to stabilization of milk consumption, resulting in a larger proportion of the milk being diverted to manufactured products.

The increase in milk production took place mainly in the fourth quarter of 1949, which was considerably higher than the fall of 1948. The higher milk production reflects a satisfactory feed situation, healthy dairy animals, increases in number of milk cows and in some cases increased milk yields. Abundant rains, coupled with mild fall weather made possible late fall grazing of cows on pastures in most of the major milk producing countries of Europe. Increased production of milk in the United Kingdom made possible the derationing of milk on January 15, 1950. Favorable growth conditions and abundant feeds caused substantial increases in milk output in Australia and New Zealand.

Better than average pasture conditions and ample fodder caused an increase in 1949 Canadian milk production despite some decline in cow numbers. Milk production in the United States also rose over 1948. While the number of cows on farms was lower than in 1948, the production per cow in 1949 was at a record high level. This was due to mild fall weather and a higher rate of concentrate feeding than a year earlier.

Factory production in 1949 increased in practically all major producing countries over 1948. The increases ranged from six per cent in Australia to 29 per cent in Denmark. Other countries which had increased butter production are the Netherlands, Sweden, Switzerland, France and Ireland. The Union of South Africa experienced a decline in butter production in 1949 as compared with 1948.

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