

As the minimum standard for butterfat content prescribed by the regulations under the sale of Food and Drugs Act is 3·25 per cent. and that for solids not fat is 8·50 per cent., the tests may seem to be satisfactory. But it must be borne in mind that the prescribed percentages are minimum and ought to apply to every individual producer's supply at every season of the year. An average of 3·93 per cent. of butterfat in an area where there are a number of Jersey cattle and some straight Friesian herds suggests that there must be times when the supply of individual dairy-farmers falls below the legal minimum; and this proves to be the case. Unfortunately, the results of tests that would disclose the bacterial condition of the milk on a satisfactory scale are not available.

Price to Producer

Milk is paid for in the Christchurch area purely on a gallonage basis. The year is divided into three periods, and there are marked differences between the seasonal prices. The periods and prices are as follows:—

						s.	d.
May to August	..	..	..	..	..	1	2½
September to February	..	..	..	..	..	0	9
March and April	..	..	..	..	..	0	11

The average price all the year round is 11·17d., and this is now fixed by the Price Tribunal. In comparing these prices with those paid in other areas the difference in quality should be noted.

COLLECTION

Method of Control

In the Christchurch area the collection of milk is controlled entirely by vending interests. This statement may need modification in the case of the producer-vendors, but this is due solely to the fact that in this case it is not possible to separate completely the interests of the vendor from those of the producer. The contracts made for supply are for supply at the dairy-farm, and the responsibility for collecting rests upon the milk-vendors who purchase from the producer.

The effects of this condition are manifested in a number of ways. Each of the milk-vendors is interested only in that portion of the total supply which he handles; and so each makes his own separate arrangements. There is striking demonstration of the waste involved in the multiplication of units of service. Again, the price paid is paid for milk at the farm, and the interest in avoiding harmful exposure or avoidable time-lag is neither so direct nor so certain as it would be if the farmer were responsible for collection and his financial return depended upon the condition of the milk when delivered at the treating-house or the vendor's depot.

Time, Place, and Manner of Collection

The largest of the treating and vending companies, which with its associated company handles almost half of the total milk-supply of the metropolitan area, engages cartage contractors to collect its milk. It also collects in the same way some of the milk of the smaller treating and vending company. For the greater part of the year one collection only is made daily—the night's and the following morning's milk being picked up at the one time. On days when the atmospheric conditions are particularly bad two collections are arranged. The time occupied in collecting is often much longer than ought to be permitted. As many as three trips with one truck are made by the contractor in one day. As the contractor starts after the morning's milking, this means that the last lot is brought in late, sometimes not until after midday. As the milk collected includes that of the night before, some of the milk is over eighteen hours old before it is delivered at the treating-house. To make matters worse, the milk is frequently picked up at the farm-gate instead of at the dairy. It is placed on a stand at the roadside to suit the convenience of the contractor and remains there exposed to the heat of the sun, sometimes for several hours. Then it is carted into the city in an open truck and, in the summer-time, continues throughout the journey exposed to the heat of the sun and the dust of the highway. It was not surprising to learn that there had been complaints of the condition of the milk even after pasteurization. The time-lag after milking, the fact that while waiting to be collected the cans in which it is contained are exposed to the heat of the sun instead of being retained in a cooler, and the condition under which it is transported are sufficient to cause much of the milk to become stale before it reaches the pasteurizing-plant.

Some of the raw-milk vendors collect their milk twice a day. Many collect the morning's and the evening's milk in the evening and then store it on their premises overnight for delivery next morning. The general rule is for each vendor to collect his own milk only, though in some cases two vendors will combine to make one collection. The general practice is bad for two reasons. In the first place, it delays the delivery of milk too long after milking and exposes it to undesirable conditions. In the second place, it involves serious wastage of man-hours, and of petrol, rubber, and other materials. The practice means that a morning's milk is held for about twelve hours before being collected; that it is then transported with the evening's milk in an open truck, and in many cases over considerable distances; and that it is then held overnight on the vendor's premises, where satisfactory cool storage space may, or may not, be provided. The total distances travelled for relatively small quantities of milk are startling. It is a common circumstance that a vendor travels 10 miles to 15 miles to collect 40 gallons to 80 gallons of milk and brings it to his own premises. He then has to travel the distance to and from his round as well as the distance on the round. One vendor gave evidence of travelling 44 miles each day to collect his own and another vendor's milk.

The practice of producer-vendors varies. Generally the producer-vendor delivers in the morning the milk of that morning and of the night before. He collects it from his own cooling-room. In such cases the milk is fresh when delivered. In the case of the two closely associated companies, which for the present purpose are treated as though they were one society operating as a producer-vendor, nearly half the milk is pasteurized and the pasteurizing is done immediately after each milking is complete. This eliminates the time-lag that is so noticeable a feature in the case of other treating-houses. The wastage due to distances travelled is avoided in some cases, but is serious in others. Some producer-vendors have their dairy-farms close to their zones. Others travel long distances to and from their rounds. One gave evidence of travelling 20 miles to deliver 30 gallons of milk wholesale and 45 gallons retail. Of this 20 miles, 5 miles only was travelled on the round itself.