

In Christchurch a small treating company has an obsolete plant and building, both of which should be scrapped. The producer-vendors' company has an out-of-date plant, but are turning out good-quality milk. This entails much attention, and they claim that it is not a payable proposition. The large proprietary company has the best combined plant examined by the Commission. The relationship between them and their suppliers is not good. They have been convicted for selling milk not up to standard.

In July, 1942, 14 samples of milk were taken at Harewood Aerodrome from supplies delivered by this company. All the samples contained added water. In November, 1942, 12 samples of milk supplied by this company to Harewood Aerodrome were taken. All were deficient in butterfat. This firm has been placed on probation by the Zoning Committee, the probationary period had not expired when the Commission sat in Christchurch. Much of the milk pasteurized by them is eighteen hours old before being pasteurized. The company insists on the cans being placed on the roadside, where they often stand for several hours with no protection from the sun and weather. The companies are working on a small margin. To make profits it would appear that they have to make a contract which sometimes acts harshly on the producers, and they are not putting out a satisfactory milk to the consumers.

It was difficult to get figures in Christchurch relating to the activities of the raw-milk vendors. Some of them travel long distances to pick up milk and to reach their rounds. The figures available for July, 1942, showed that 153 vendors and producer-vendors delivered on an average less than 29 gallons per day per business. Some of them employed labour, so the delivery per labour unit would be much less.

The Commission has decided on 60 gallons per day as an economic round under present conditions, but out of 153 vendors and producer-vendors in Christchurch only 17 delivered over 60 gallons per day, wholesale and retail.

The Dunedin treating-houses are out of date. The following is a report by Dr. Hercus, of the Medical School, of milk samples taken before and after pasteurization :—

“ Routine investigations have been carried out on milk supplied to one of the city pasteurizing firms. Table III shows the results of raw milks supplied to this firm in 1942 :—

“ Table III.—Raw Milks, 1942

Month.	Number of Samples.	Percentage Unsatisfactory, Coli.	Percentage Unsatisfactory, Plate Count.
January–February	28	71	71
March	19	95	42·1
April	25	12·0	32·0
May	16	62·5	37·5
June	28	11·8	14·3
July	30	23·3	36·6

“ Table IV shows the results of tests done on pasteurized milk from the same firm :—

“ Table IV.—Pasteurized Milk, 1941 and 1942

Month.	Number tested.	Percentage Unsatisfactory, Coli.	Percentage Unsatisfactory, Plate Count.
<i>1-pint Samples</i>			
August–December	60	60	13
January–February	23	95·5	60·8
March	13	100·0	50·0
April	12	50·0	33·0
May	15	40·0	20·0
June	21	14·3	14·3
July	22	18·0	9·0
<i>$\frac{1}{2}$-pint Samples</i>			
January–February	13	100·0	92·3
March	22	95·5	68·5
April	24	58·3	54·2
May	8	87·5	100·0

“ The tests in May were done at the beginning of the month, a period of four warm days (two samples done daily). From Table IV it can be seen that there is a seasonal variation in the number of samples unsatisfactory, due to the presence of *Bacillus coli*—the number markedly increases in the warm summer months.

“ It will be evident from these results that the standard of the raw milks supplied to the firm was generally of a poor hygienic quality, and that after pasteurization the milk was frequently recontaminated before it was received by the consumer. It is observed, from tests done in 1942, that on several occasions samples of pasteurized milk contained more *Bacillus coli* per cubic centimetres than the samples taken from the vat before pasteurization.

“ This occurs mainly during the summer months, but has been recorded even as late as 21st April.”