

PART C.—RESULTS OF MILK-ANALYSIS THROUGHOUT THE DOMINION.

OBSERVATIONS ON THE COMPOSITION OF MILK IN THE DOMINION.

| | | | | | |
|--|--------------------|-------------|---------------|----------|-------|
| Total number of observations throughout the Dominion | .. | .. | .. | .. | 483 |
| Average throughout the year—butter-fat | .. | .. | .. | .. | 3.659 |
| Highest amount found | .. | .. | .. | .. | 5.300 |
| Lowest amount found | .. | .. | .. | .. | 1.950 |
| Total number below standard (3.25), 81. | Percentage, 16.77. | | | | |
| | Auckland. | Wellington. | Christchurch. | Dunedin. | |
| Total observations | 102 | 146 | 219 | 16 | |
| Average butter-fat | 3.43 | 3.67 | 3.75 | 3.642 | |

Average Butter-fat for each Month throughout the Dominion.

| Month. | Number of Observations. | Average Butter-fat. |
|-----------|-------------------------|---------------------|
| April .. | 1 | 4.10 |
| May .. | 9 | 4.015 |
| June .. | 48 | 3.79 |
| July .. | 23 | 3.518 |
| August | 152 | 3.71 |
| September | 7 | 3.65 |
| October | 84 | 3.61 |
| November | 34 | 3.20 |
| December | 43 | 3.72 |
| January | 31 | 3.68 |
| February | 8 | 3.79 |
| March | 43 | 3.61 |

In the above table the average butter-fat per month is well above the standard, 3.25 per cent., except in November; but the number of observations in this, as in many other months, is too limited to permit of any reliable deductions being made.

Of the 34 samples examined in November, 24 were taken in Auckland, in the city, and 10 in Christchurch.

Of the 24 Auckland samples, 14 were below the standard in fat; and of the 10 Christchurch samples, 2 were defective.

The average composition in the two centres is shown as follows:—

| | Auckland. | Christchurch. |
|--|-----------|---------------|
| Average butter-fat for month of November | 3.13 | 3.38 |
| Average solids not fat for month of November | 8.76 | 8.89 |

It is worthy of note that even in Auckland the percentage of solids not fat remained well above the standard, 8.5 per cent.

In August alone are the numbers large enough to accept as yielding reliable results. In this month out of 152 samples 11 per cent. were found below the butter-fat standard, while the monthly average, 3.71, is above the general average.

Taking the total observations made during the spring months, we get the following result:—

Date: September, October, November, December.

Number of observations: 168.

Average butter-fat: 3.56 per cent.

In the following table the result of each individual examination is given.

Table showing in Detail the Results of Chemical Analysis of Milk Samples taken throughout the Dominion.

| Date. | District. | Per Cent. of Total Solids. | Per Cent. of Fat. | Per Cent. Solids not Fat. | Date. | District. | Per Cent. of Total Solids. | Per Cent. of Fat. | Per Cent. Solids not Fat. |
|----------------|--------------|----------------------------|-------------------|---------------------------|-------|--------------|----------------------------|-------------------|---------------------------|
| 1908. April | Christchurch | 12.66 | 4.10 | 8.56 | 1908. | Christchurch | 12.87 | 4.10 | 8.77 |
| | | | | | | | 13.02 | 3.70 | 9.32 |
| | | | | | | | 12.35 | 3.39 | 8.96 |
| | | | | | | | 12.28 | 4.00 | 8.28 |
| | | | | | | | 12.54 | 3.70 | 8.84 |
| | | | | | | | 12.30 | 3.70 | 8.60 |
| | | | | | | | 12.44 | 3.80 | 8.64 |
| | | | | | | | 13.03 | 4.40 | 8.63 |
| | | | | | | | 12.68 | 3.70 | 8.98 |
| | | | | | | | 12.87 | 4.20 | 8.67 |
| 12.68 | 4.00 | 8.68 | | | | | | | |
| May | " | 13.11 | 4.15 | 8.96 | June | Christchurch | 12.44 | 3.80 | 8.64 |
| | | | | | | | 13.03 | 4.40 | 8.63 |
| | | | | | | | 12.68 | 3.70 | 8.98 |
| | | | | | | | 12.87 | 4.20 | 8.67 |
| | | | | | | | 12.68 | 4.00 | 8.68 |
| | | | | | | | 11.58 | 3.57 | 8.01 |
| | | | | | | | 11.51 | 3.12 | 8.39 |