failure to reach the standard for non-fatty solids. Milk is required to contain 8·5 per cent. of non-fatty solids (protein, milk sugar, and salts) and 3·25 per cent. of fat, and the milk of some breeds of cows at certain times of the year fails to reach this standard. This milk, of course, is a perfectly wholesome food, though it has a lower food value than milk which complies with the standard. Cows which give a low-testing milk give also a large quantity of milk, and if the milk is sold on a gallonage basis such cows are profitable. The standard for milk set by the regulations had been purposely designed to require milk such as can be produced by an average well-fed herd containing a proportion of animals producing milk of better than lowest quality. In many districts the milk consistently shows test results very considerably higher than the legal minimum. It is considered that the production and sale of large quantities of low-testing milk constitutes an economic fraud on the consuming public, who are paying the same price as those who receive a far richer milk.

The remedy lies in the hands of the authorities who buy the milk from the producers. If payment is made in such a way that butterfat content as well as total volume is taken into account, the public will receive milk of higher food value. This has been the consistent policy of the Wellington City Council, and milk sold in Wellington normally contains more than 4 per cent. butterfat and a correspondingly high proportion of other solids.

In Palmerston North the prosecution of a producer found sending watered milk to a treatment house failed on a legal technicality as the milk was to undergo " bulking " before being sold. It was therefore not legally " milk for sale." A necessary amendment has since been made to the Food and Drugs Act, and a similar prosecution would now be followed by a conviction.

The preference of a large section of the public for raw milk continues, in spite of all the advice given by the Department. In one district 76 samples of raw milk were tested bacteriologically, and 17·1 per cent. of these samples were found to contain living tubercle bacilli, while 22·3 per cent. contained Br. abortus, the micro-organism which causes undulant fever. It is quite certain that the latter disease is far more common than is revealed by notification, and most of this infection could be prevented if only pasteurized milk were drunk. The foolishness of drinking raw milk that may contain living tubercle bacilli does not need any stressing.

Owing to a shortage of Health Inspectors, routine milk sampling in one district had to be discontinued for some months. On the resumption of sampling, 26 out of 38 non-complying samples contained added water. This shows clearly the importance of routine sampling, even when the general quality of milk appears to be satisfactory.

The effectiveness of the Department in maintaining a high quality in the milk sold to the public is still more seriously hampered by its exclusion from all places where milk is produced and processed. Milk sampling and testing, except for the detection of economic frauds, goes only a very little way towards ensuring a safe milk supply, and defects or faulty methods of handling, leading to possible infection of the milk, may exist, and will not be revealed by sampling and testing alone. A reasonable measure of safety can only be ensured if the same authority is combining sampling and inspection. The two procedures are complementary, and effective control is impossible when one Department inspects milk-processing plants and another Department samples and tests the milk. Either one Department or the other should be responsible for the oversight of milk processing and sale.