With an improvement in the shipping position the Imperial authorities decided to accept all available New Zealand factory butter, including second-grade and whey butter. Whey butter wholesale prices (local) were raised last year, when Britain was importing whey and second grade in the form of dry fat. New Zealand prices have remained at last year's figure, but rationing slightly reduced the amount of whey butter being used within New Zealand, though shipments, particularly from the South Island, were heavier than normal. Butter was provided for the winter requirements of districts not producing sufficient for their own use in the same way as in previous years, but, owing to very poor autumn production, in the South Island particularly, shortages occurred which were difficult to fill even from North Island sources. On more than one occasion certain South Island areas were within a few days of complete shortage, but with help from the Export Division and the shipping control authorities all shortages were averted. At the end of the winter, however, certain parts of the North Island were also close to exhausting their stocks. This indicates, however, that the full amount of butter possible had been made available for Britain without a carry-over above our actual requirements. Under rationing, less butter will need to be stored in the winter of 1944 by individual factories in country areas and in the South Island. Some saving in storages and freights under ration conditions will appear in next year's figures.

The great increase in butter consumption noted in last year's report was accentuated during the early period of this year—partly because of unjustified fears of rationing. When rationing came into force, the Division surveyed all stocks of butter held in cool store in anticipation of it and distributed them to manufacturers according to their ration. Those who had stored considerable quantities were allowed to draw the authorized amount week by week until their stock was exhausted, and stocks stored for personal use were taken over by the Division. The former process saved the Division considerable storage costs, but it later led to losses due to deterioration of quality. Unfortunately, it was impossible to differentiate between those who were justified in their storage, being accustomed to do it against winter needs, and those who were not. Very few cases were discovered of deliberate evasion, and as it was considered inadvisable to prosecute except against flagrant breaches, only one prosecution was made, and this was successful.

During the year the Division, in collaboration with the Dairy Research Institute, has, at the request of the military authorities, submitted samples of butter spreads suitable for Pacific conditions. Dr. McDowall, of the Dairy Research Institute, visited Australia to seek the latest information on the necessary ingredients. On his return the military position had altered and the American authorities preferred to take "straight" butter. A tinning plant was installed in the Division's Auckland branch, since the existing plant could not meet the American Pacific demand. Its layout was supervised by Dr. McDowall, based on his observations and experience in Australia, and production has been under the control of Mr. J. J. O'Dea, who had been temporarily transferred from the Dairy Research Institute at Palmerston North to take over the dry-fatting in Auckland. Mr. O'Dea also assisted the Auckland butter-patting plant. As the year advanced, larger quantities of both patted and tinned butter were needed in the Pacific, and it appears that our facilities will be required to their full capacity in the future. Stocks for the Pacific area had to be built up during the autumn in order to carry over the low-production period in the winter. Only butter of suitable quality has been processed either into pats or tins for the Pacific, and the stocks have proved sufficient for requirements.

Owing to the number of complaints received from Great Britain concerning deterioration in the 1 lb. tins forwarded from New Zealand by individuals to civilian friends, it was decided to discontinue tinning for this purpose until a survey of the position had been made. The survey revealed that tins packed with good-quality butter and immediately forwarded in parcels had, in general, kept satisfactorily, but butter sent through normal New Zealand retail channels had often deteriorated, in many cases being unfit for consumption. Selling tinned butter locally for forwarding overseas therefore appeared to be a wasting of butter which could better reach the British public in ration. Accordingly, despite some complaints from those who wished to include tins in parcels, butter is now tinned for military purposes only. Tinning butter for prisoner-of-war parcels is also under review, and it may be found necessary to substitute either tinned dry butterfat or one of the butter spreads.

This report would be incomplete without mention of the help given the Division by the executive officers of dairy factories. In general, they have rendered all returns necessary, and thus allowed the Division to survey from time to time its present and future requirements. During a particularly difficult production year when the quantity manufactured fell severely during normal peak production, but unexpectedly increased in the autumn, the Division would have been in difficulties but for their advice and assistance. The factories have also co-operated by supplying butter for military Forces overseas at short notice, thus assisting the Division when its own facilities were overtaxed. This assistance is particularly appreciated under the difficult conditions through which we are passing. The splendid help of Professor W. Riddet and Dr. F. H. McDowall, of the Dairy Research Institute, has been a major factor in the Division's ability to meet the changing war conditions under which suitable butter is supplied to Allied Forces.

## CHEESE

New Zealand's low per capita consumption of cheese would make rationing difficult to apply. Accordingly, when butter rationing was introduced, regulations were made requiring manufacturers to make for sale within New Zealand during the production year 1943-44 no greater quantity of cheese than that sold in 1942-43. However, part of the Division's production year had already gone and many cheese-factories did not realize for some time the significance of the regulations, so that when their position was surveyed early in 1944 some were found to be well in advance of their previous year's distribution quantities. Nevertheless, with slight allowances here and there, the position has been substantially rectified and the consumption of cheese kept within requirements. In the complete season discrepancies are expected to be negligible.