

PART VII.—NUTRITION.

I have the honour to present my report.

At the conference held to consider public-health problems arising out of the war, the following statement was given forecasting any nutritional difficulties that might arise as a result of the war:—
“Nutritional Errors in New Zealand and those that are likely to be accentuated as a result of the War.”

“It is first necessary to summarize what we suspect as being the existing errors: Judging by Year-Book figures, the *average* New-Zealander probably eats (a) too much meat, sugar, cakes, and confectionery; and (b) too little fish, raw vegetables, milk, eggs, unrefined cereals, and cheese.

“The use of too much meat is more accentuated in country districts than in towns. While meat has not been proved to be harmful *per se*, too much nevertheless tends to diminish the consumption of milk, cheese, and fish. This is a matter related partly to costs, partly to habit and inclination.

“It is likely that in the majority of homes there is a sub-optimal intake of vitamin B₁, for two reasons: The use of too little unrefined cereal lowers the absolute intake of vitamin B₁, of which it is the best source, added to which there is the fact that the total calories ingested in the form of sugar, cakes, confectionery, and white bread should be accompanied by a proportional increase in the vitamin B₁, the amount recommended being according to a scale of from 10 to 14 International Units for every 100 calories. By some the scale is put even higher—viz., up to 20 I.U. This can be remedied most easily by an improvement in the B₁ content of bread, the introduction of the new germ loaf being a step in the right direction. Ninety per cent. of the people are unmoved by propaganda about wholemeal bread, so that it becomes advisable to improve the white bread. The Nutrition Committee has under consideration the best method of doing this, taking our own particular conditions into account. It is hoped to evolve a method by co-operation with the Wheat Research Institute.

“The quantities of vitamin C recommended recently by nutritional authorities are probably not reached. Though there are few cases of scurvy, there is apparently need to go considerably beyond the antiscorbutic level, judging by saturation tests done elsewhere. The low intake is due partly to restricted supplies of oranges and other citrus fruits and to their cost, and partly to food habits.

“Food surveys in New Zealand have shown that there is a deficiency of calcium, to combat which there should be a greater use of milk and cheese.

“Similarly, food surveys have gone to show that the intake of iron is low in many homes. This could be overcome by the use of more whole cereals, eggs, and vegetables.

“The deficiencies which may be accentuated by the war are largely bound up with the following factors:—

“(1) The rise in costs and the tendency to rely more on bread and other carbohydrates as articles of diet. If present food habits persist, the necessity for B₁ will be emphasized. As previously stated, the Wheat Research Institute and the Nutrition Committee have in hand the matter of improvement of white bread. Addition of calcium is also under consideration.

“(2) The rise in costs will tend to diminish the intake of milk, fresh fruit, vegetables, and fish. Under such conditions of sub-optimal consumption of protective foodstuffs, it is possible that epidemics may find more fertile soil. It is recommended, therefore—

“(a) That nutrition should be kept up on the home front to prevent the spread of epidemics.

“(b) That provision of nutritional addenda, if not already provided for our troops in Egypt and the war front, be considered by the Army Authorities, for it is felt that if resistance is lowered in the war zone, by reliance on an incomplete ration, epidemics may occur among the troops, increase in virulence, and spread to the civil population.”

FEEDING OF PRE-SCHOOL AND SCHOOL CHILDREN.

The next conspicuous event was a meeting on 9th October with the Plunket Society executive, Dr. Deem (their medical adviser), and Dr. Turbott to consider organizing for the medical supervision of pre-school children. A very promising meeting was held, as a result of which collaboration between the Plunket Society and the Health Department was agreed upon. Arising from this, the Health Department's Nutrition Officer was asked to prepare sheets giving instructions on the feeding of pre-school children. These were to be distributed by School Medical Officers in the hope that they would reach homes not reached by the Plunket Society. Tentative instructions have been prepared and issued as cyclostyled sheets; these are already in use. It is hoped to expand and improve on them if permission for the expenditure is granted.

Diets for children of school age have also been issued, set out briefly on a cyclostyled sheet. Again it is hoped, with permission, to expand these.

TOURS.

Two brief tours have been made to date. The first one was used chiefly to get initiated into Head Office procedure and to make contacts with appropriate Departments in Wellington. The latter were directed towards understanding such problems as the marketing of apples and oranges, and the problems relating to fisheries. Courtesy calls were also paid to appropriate Ministers of the Crown, such as the Ministers of Marketing, Health, Education, and Scientific and Industrial Research. The Directors of Education, Educational Research, and Physical Education were also visited.