

B UT for an occasional war few New Zealanders would have even a nodding acquaintance with margarine as a table preparation. Rare is the New Zealand housewife who would court matrimonial strife to the extent of insisting that the breakfast toast and marmalade should be separated by a smearing of margarine. Instead, if she uses margarine at all, she keeps it discreetly in the larder as a cooking requisite.

Admittedly New Zealanders are fastidious in their tastes, as well they can afford to be in a country so richly endowed with the good things of life. In countries less fortunately situated, with insufficient butter to go around, the answer is margarine.

Margarine will always have its critics—ask anyone in the army—but the fact remains that it does fill in a satisfactory way the gap between having butter on our bread and having just bread. More, per medium of that symbol of the company quartermaster, the can-opener, margarine fits more smoothly into the overall picture of mobile warfare as it is known today than would, say, a Jersey herd, a milking plant and a separating machine.

By contrast with many other "ersatz" products, margarine does not owe its existence to the exigencies of war. Frenchmen introduced it to the world nearly eighty years ago with a rather crude substance consisting

chiefly of animal fat and known as oleomargarine. The eminent French chemist, Mege-Mouries, having surmised that the formation of the butterfat contained in milk was due to the absorption of fat contained in the animal tissues, experimented on the splitting up of animal fat. The result was that a process was eventually adopted for heating finely minced beef suct with water, carbonate of potash and fresh sheep's stomach cut up into small fragments. The influence of the pepsine of the sheep's stomach with the heat separated the fat from the cellular tissue. The chemist removed the fatty matter and submitted it when cool to powerful hydraulic pressure, extracting the olecmargarine which he used for making artificial butter. When impregnated with milk odour and colouring the substance was found to resemble butter to a remarkable degree.

Methods of production have changed or improved down the years and in the meantime vegetable fats and whale oil have been introduced as basic ingredients to eke out the scarcer or dearer beef fat. Palm-kernel oil, palm-oil and oil from dried coconuts are the vegetable oils most used. As yet the composition of butterfats cannot be imitated, for the reason that whereas animals manufacture butyric acid and put it into milk fats, plant fats are innocent of butyric acids.

Still another disadvantage is that whereas animal fats contain vitamins