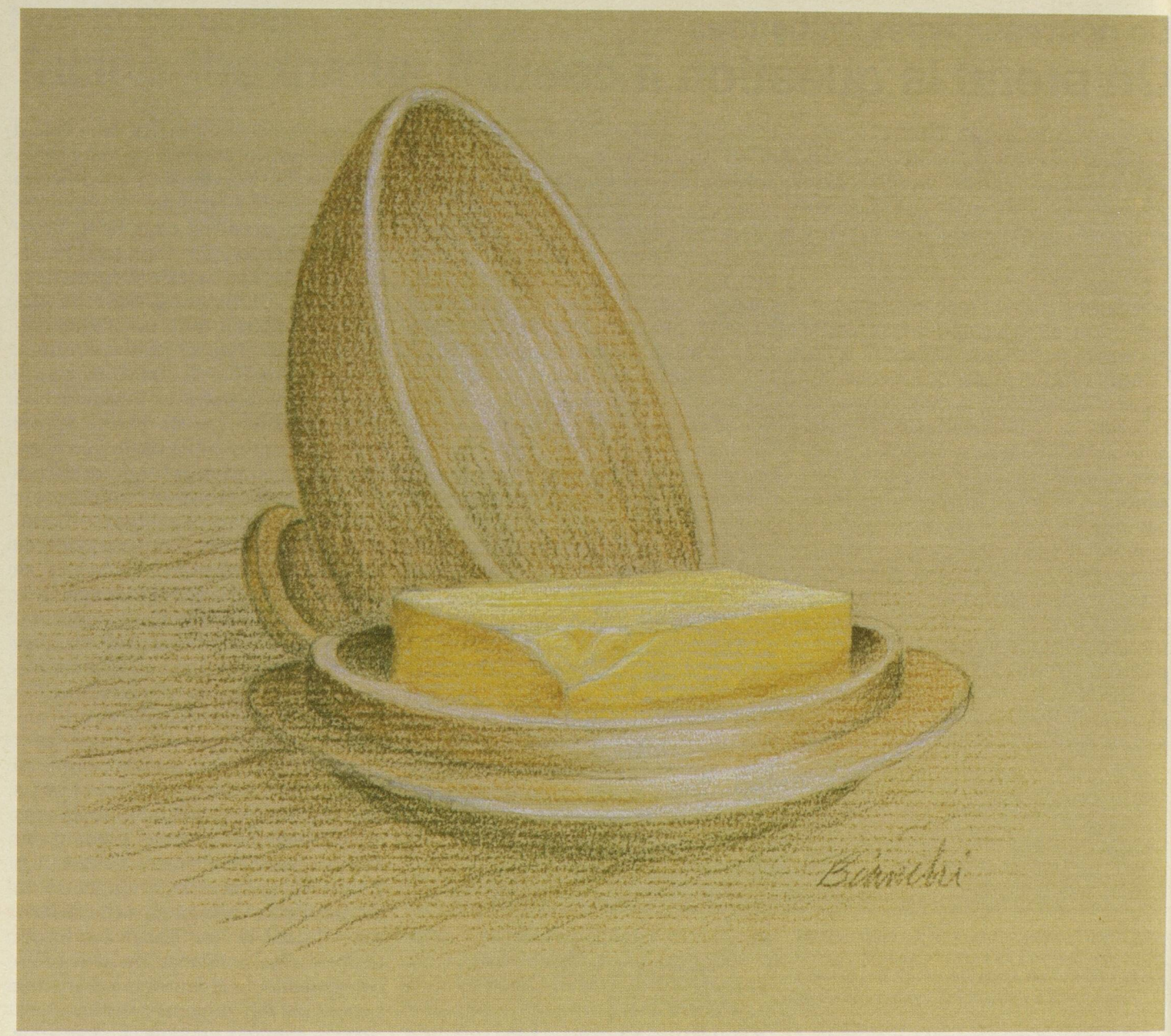

Gay Lea has now developed two spreads: one, a butter spread, which has been test marketed by a leading grocery chain, contains approximately half the fat and half the calories of conventional butter and consists of a higher level of milk solids — not fat — than butter. The second is a high fat (80 per cent) spread, 65-70 per cent of the fat being butterfat and 30-35 per cent Canadian nonhydrogenated sunflower seed oil. It is high in polyunsaturated fats (21-24 per cent) and was found to be even softer than Swedish Bregott. It has been developed at both the pilot-scale and full-scale levels using a special processing technique. Both products may be marketed cheaper than butter and will spread easily straight from the refrigerator.

"We feel," says Dr. Amer, "that these two newly developed spreads will support the campaign initiated by nutritionists and health authorities to change the Canadian diet to reduce fat intake, as well as provide the consumer with an up-to-date diet. In addition, there will be a definite economic benefit to dairy farmers and to the dairy industry, especially butter manufacturers, through increased per capita consumption of butterfat. A pound of these blends and low-calorie butter would be expected to retail at a price relatively lower than conventional butter and premium margarines and this would be an attraction to butter users. It is important to note here that modification of milk fat is done to improve the low-temperature spreadability of butter by elevating the level of linoleic acid which, for good spreading characteristics, should not exceed 20 per cent. This preserves the unique nutritional quality of milk fat, the biological properties of which are an intimate part of the human diet from birth."

Concludes Dr. D.B. Emmons of Agriculture Canada, liaison officer for the project: "In my view, IRAP has been highly successful in its aim of developing a high degree of innovative technology in this Canadian company. In the few years of IRAP support, Gay Lea has developed from a virtually one-man quality control department to a separate division (the Technology Division) of the company, and has become one of Canada's foremost research and development laboratories in the dairy and food industries." □

Joan Powers Rickerd