## Canada Weekly

Ottawa Canada

Volume 10, No. 14 April 7, 1982

Company produces foods with longer shelf-life, 1

Work sharing funds increased, 2

Law of the Sea Conference, 3

Somalian president visits Canada, 3

Mining incentives proposed, 3

CNCP telecommunications company growing rapidly, 4

Quebec company specializes in essential items, 4

Island declared international site, 5

Eldorado plans spending increase, 5

Job insurance for executives, 5

Canadian firm helps build British robot, 5

Library starts program for disabled, 6

Canadian skiers win at World Cup competitions, 6

Acid snow threatens Arctic, 6

Canada at computer exhibition, 6

Ontario Hydro Candus top list, 6

News of the arts — art centre, exhibit, prizes, 7

News briefs, 8

## Company produces foods with longer shelf-life

A Canadian company is developing nutritional dairy and non-dairy foods that can last more than three months without refrigeration.

Nelson's Dairy Limited of Weston, Ontario is developing the products with a longer shelf-life under a National Research Council of Canada industrial grant.

Shelf-life is one of the main complaints registered by customers when milk products are returned to the store — they go "off" in a short period of time — resulting in a financial loss to merchants and considerable inconvenience to the consumer. In addition to being able to keep products longer, extended shelf-life would eliminate the cost of refrigeration and freezing, save energy, and encourage the introduction of new dairy products.

In North America, people are used to the fresh pasteurized taste of milk beverages which must be sterilized in order to prolong shelf-life. But attempts to introduce sterilized milk, which has a slightly cooked or chalky flavour, have met with considerable resistance.

Nelson's itself had tried distribution of sterilized milk products in the Toronto area in 1968, but met with failure because of the flavour, incomplete sterility, packaging problems and the high cost of ingredients and processing. The company subsequently concentrated its efforts on producing coffee cream for institutional users.

## Problems with sterilization

To sterilize milk it must be subjected to ultra-high temperatures (at least 136 degrees Celsius) for short holding times in order to obtain a product of high bacteriological quality with little change in colour, flavour, or nutrition. But high temperatures diminish the original properties of milk giving it a cooked flavour. Coagulation, wheying off, or precipitation may also occur. Often, enzyme reactivation after sterilization and during



Development of a fortified skim milk sterilized by the ultra high temperature system with added milk proteins and vitamins, has been completed. Dairy employee Lester Dobosz measures the viscosity of the finished product.

14

External Affairs Canada Affaires extérieures Canada