Canadian agricultural scientists originally developed canola and its high-quality oil from rapeseed. This feat of genetic engineering has led to a $1-billion industry. (Photo courtesy of Communications Branch, Agriculture Canada)

because of their high protein yield and resistance to disease. Today, these two strains occupy approximately 90 per cent of the Canadian land seeded to canola.

A versatile food product

Canola oil is a high-quality, exceptionally clear vegetable oil that can be used as salad or cooking oil, as shortening, or as margarine. Liquid canola oil is an ideal salad oil, having light colour, bland flavour, and delicate aroma. The oil has an excellent shelf life, flows easily when refrigerated, and helps emulsify or blend ingredients when mixed with other foods.

In frying, liquid canola oil drains off readily and leaves foods 5 to 10 per cent lower in calories than those fried in melted shortening. Canola oil doesn't smoke under normal frying temperatures or transfer flavours from one food to another, making it re-usable if strained after each use. As a shortening, solid canola oil can be creamed and cut into flour easily, resulting in light cakes with moist, fine texture, and tender, flaky pastry. And as a soft margarine, it spreads so smoothly that it will go twice as far as the same amount of hard margarine or butter.

Canola's versatility and nutritional benefits have made it popular throughout Canada. The oil captures 75 per cent of Canada's liquid edible-oil market, and 54 per cent of the total edible-oil market. And canola's meal, the residual crushed canola seed used in cattle rations, accounts for 37 per cent of the Canadian meal market.

World's largest canola exporter

Today, canola is a $1 billion industry, and next to wheat is Canada's most important crop. Canada is the world's top supplier of canola, with exports accounting for half of the 3 million t produced each year. In fact, Canada annually exports five times more canola seed — 1.5 million t versus 300 000 t — than all the European Economic Community countries combined.

That export figure may rise in the wake of the U.S. Food and Drug Administration's 1985 decision to approve canola oil for general use in food in that country. In July 1986, Procter & Gamble, the American food giant, reformulated its Puritan brand of vegetable oil to contain 100 per cent canola oil. Previously, Puritan was an 80:20 mixture of soybean and sunflower oil. "Puritan has always been marketed as a vegetable oil for people who are interested in reducing their serum cholesterol," said Procter & Gamble spokesman Don Tassone. "Canola provides an optimum blend of the different health attributes in an oil."

To satisfy world demand, Canadian canola production has increased 300 per cent in the past 10 years. As well, companies such as Allelix Inc. of Toronto, Ontario, are active in the effort to develop and commercialize hybrid canola varieties through biotechnological means. Canadian scientists, meanwhile, are continuing to research and develop canola breeds in an effort to improve quality, increase yields, and further contribute towards an industry they helped create.