Canola was developed in the 1970s by Canadian plant scientists. It has become a very important plant crop for Canadian farmers. Canola seeds are about 43 percent oil. This oil is low in saturated fat and is an excellent food choice for a healthy diet.

The oil from canola is used for cooking and baking at home, restaurants and in food processing plants. Canola oil also has non-food uses - for example biodiesel and bio-plastics. Canola meal, the part left over after the seeds are crushed and the oil extracted, is used for animal feed, pet food and fertilizer.

About 15.3 million acres of canola are harvested each year in the prairie provinces and in southern Ontario. After wheat, and barley, it is now Canada’s third largest grain export. Canola is the third most widely used vegetable oil in the world after soybean and palm oil.

What is Canola? And How Does it Grow?

On the farm, these plants grow to a height of one to two metres. Canola is a plant that is a member of a large family of plants called crucifers. Crucifers are easy to identify because the four yellow flower petals form the shape of a cross. The yellow flower produces seed pods that are about 5 centimetres in length. There is an average of 60 to 100 pods per plant. Each seed pod contains 20 to 30 tiny, round seeds which are 1 mm. in diameter. When it is ready to harvest, the plant changes colour from green to light yellow. These tiny seeds are crushed to extrude canola oil.

From germination to seed production, the life cycle of a canola plant takes about 3 ½ months, depending on temperature, moisture, sunlight and soil fertility.

Canola is a cool season crop. It grows particularly well on the prairies, where cool nights and hot days allow it to develop its unique fatty acid profile.

Canola belongs to a section (or genus) of the crucifer family called Brassica. As well as canola, Brassica plants include mustard, Brussels sprouts, cabbage, cauliflower, broccoli and turnip. Brassicas are a major source of food in many countries, including Canada.
Where did Canola Come From?

The name ‘Canola’ was registered as a trademark in Canada in 1970. The name comes from *Can* as in Canada and *ola* as in oil! The plant was bred by Canadian scientists, Dr. Baldur Stefansson and Dr. Keith Downey, who selected rapeseed populations when looking for a crop that would produce a healthy, edible oil product.

Prior to canola oil, most of the oil Canadians used for food purposes was imported and people wanted a home-grown edible oil.

Canola was selected from rapeseed through the knowledge and ingenuity of these prairie plant scientists. Canola is NOT rapeseed. It may look the same but it’s nutritional make-up is totally different. Canola came about only after years of hard work, research and countless field tests of new plant varieties.

Canola oil has a complement of fatty acids that make it one of the healthiest oils. Canola oil is also a source of Vitamins E and K. Canola meal is a nutritious livestock feed.

Today, Canadians consume more canola oil per person than any other country in the world. In Canada, canola oil has captured about 80 percent of the salad oil market, 60 percent of the shortening market and 45 percent of the margarine market. Other large markets for Canadian canola include Japan, the United States, Mexico and China.


canola contributes to the canadian economy

Canada’s canola industry adds **$13.8 billion in economic activity** to the Canadian economy. More than 52,000 Canadian farmers grow canola, largely as full-time farmers and in family farm businesses. They depend on canola to generate between one third and one half of their revenues. Domestically, canola generates economic activity of $1.3 billion in Ontario and Quebec (primarily in the processing sector), and $12.2 billion in western Canada. Seventy-five percent (75%) of Canadian canola is exported throughout the world, bringing back more than $2.8 million to the country’s economy.

In 2008-2009, Canada exported 15,500,000 tonnes of canola oil, 1,696,000 tonnes of canola meal and 8,999,000 tonnes of seed. In 2009, canola was Canada’s most valuable cash crop. Canada is responsible for 75% of canola oil for global trade.

Canola’s largest customer is the United States which imports 67% of Canada’s canola oil (valued at $345 million per year) and 95% of its meal (roughly worth $85 million). Our principle seed buyers are Japan and Mexico. China is emerging as a major seed buyer. Japan, Canada’s best canola seed customer, bought an average of 1.7 million tonnes of canola seed a year since 2000/01 valued at $580 million.

Canadian farmers use almost 40% of the domestically produced canola meal to feed poultry, dairy cows, cattle, horses and sheep. It is also used in aquaculture as feed for salmon, trout, and shrimp. Specialty markets include feed for rabbits, gerbils, mink, ostriches, and finches.

Canada expects to boost its canola production by another 15% by 2015.
Cooking with Canola

Canola is a versatile oil which can be used in baking, sautéing, frying, marinating and salad dressings.

Salad dressings - Canola oil has a light taste and colour, stays liquid in the fridge (making it free-running) and blends well with herbs and spices.

Baking - Using canola oil in baking results in a soft, moist texture. It can be used to grease baking pans and can be used to replace high saturated or \textit{trans} fats as an ingredient. (see chart) Canola oil does not impart a distinctive flavour to baked products.

Deep-Frying - Canola oil has a high smoke point. Even after a long frying time, canola oil forms a minimal amount of \textit{trans} fats. It doesn’t transfer food flavours.

Marinades - The oil in a marinade helps to moisturize the food while the acid (vinegar or lemon juice, etc.) helps to tenderize it. Canola oil’s mild flavour allows the flavours of the food and the other marinade ingredients to prevail. Staying liquid while refrigerated allows the canola marinade to be drained off easily. It stays liquid in the fridge which facilitates the marinating process.

How to Store - Store canola oil in a cool, dark place. Under these conditions, it will keep up to one year if tightly sealed. Storing canola oil in a warm, light intensive place can speed up oxidation which causes the oil to turn rancid.

Why Use Non-Hydrogenated Canola Margarine?

- It is recommended as a heart healthy choice.
- It has cholesterol-lowering effects.
- It contains Vitamins A and E.
- It contains essential fatty acids.
- It has less \textit{trans} and saturated fats.

Vegetable Oil Comes From...

Some food products labelled “vegetable oil” may contain canola oil. “Vegetable oil” on a label allows a food manufacturer to substitute or combine oils without having to change the product label. This is not always the healthiest choice as there is no guarantee of the oil’s fatty acid composition.
Put Good Fat in your Diet!

Some people think that all fat is bad. In truth, fat is an important part of the diet, providing the greatest output of energy per gram of any food. In addition, fats help keep us warm, and regulate the immune system. They contain essential fat-soluble vitamins and fatty acids and improve the flavour of food.

However, there is general agreement among health professionals that the type of fat consumed is as important as the total amount eaten. That’s why it’s important to choose healthier unsaturated fats, like canola oil. Eating too much and the wrong kinds of fats – saturated and trans – cause an imbalance, raising the bad LDL cholesterol and lowering the good HDL cholesterol, which can increase blood pressure, narrowing of the arteries (atherosclerosis), heart attack and stroke. Canada’s Food Guide recommends that you include a small amount – 30-45 mL (2-3 Tablespoons) of unsaturated fat each day.

Canola oil is one of the healthiest vegetable oils available to consumers. It is the lowest in saturated fat, which raises bad LDL cholesterol and has been linked to increased risk of heart disease. It is high in monounsaturated fat which may reduce the risk of coronary heart disease by lowering bad LDL cholesterol in the blood and helping control blood glucose. And, it is high in Omega-3 fat as well as a source of Omega-6 fat – which must both be consumed in your diet.

Canola oil contains no trans fats and is cholesterol free. It is high in Vitamin E which protects against oxidative damage and may protect against cancer and heart disease. Canola oil is also a source of Vitamin K which is important to blood clotting and bone metabolism. Fats, like canola oil aid in the absorption of the fat-soluble vitamins A, D, E and K.

FOOD PRODUCTS FROM CANOLA OIL:
- High stability frying oil
- Margarine
- Salad oil
- Cooking spray
- Shortening
- Liquid shortening
- Mayonnaise
- Sandwich spread
- Coffee whitener
- Creamer
- Cookies
- Crackers
- Cake mixes
- Bread
- Snack foods

NON-FOOD PRODUCTS:
- Cosmetics - lip gloss, creams, shampoo, soap, lipstick, massage oils
- Biodiesel
- Dust depressants
- De-icer for airplanes
- Printing ink
- Suntan oil
- Antistatic for paper and plastic wrap
- Biodegradable greases
- Bioplastics
- Industrial lubricants

FROM CANOLA MEAL:
- Protein isolates for human food
- Livestock feed
- Poultry feed
- Pet food
- Fish food
- Fertilizer