# FEDIOL Nutrition factsheet Composition and quality of vegetable oils and fats





# Rapeseed Dil

Rapeseed oil is produced from the seeds of several species of plants of the Brassica family. Rapeseed is a bright-yellow flowering plant, cultivated mainly for its: oil-rich seed. The main growing regions are Canada China, India and the European Union.

The production of rapeseed in Europe amounted to 19,900,000 tons (Eurostat, 2018) with the main producing countries being France, Germany, Poland and the United Kingdom.

The seeds of rapeseed plants can yield up to 45% of oil, they are also an excellent source of protein for use in the animal feed industry.



	Per 100 g	Portion (% RI**)
Energy	3700 kJ/ 900 kcal	370kJ(4.4%)/ 90 kcal (4.5
Fat of which	100 g	10 g (14.3 %)
• saturates,	7.5 g	0.75 g (3.75%)
• mono-unsaturates,	64 g	-
• polyunsaturates,	28 g	-
Carbohydrate	0 g	0 g (0 %)
Sugars	0 g	0 g (0%)
Protein	0 g	0 g (0%)
Salt	0 g	0 g (0%)
Vitamin E	17 mg	1.7 (14%)

Rapeseed oil has an average content of 8.9 g omega 3 fatty acids per 100g and can bear EU health and nutrition claims as described below. Variability of the nutritional composition may occur due to geographical differences (soil, weather conditions, crop varieties, etc.)



<sup>\*</sup>On average

<sup>\*\*</sup>Reference Intake (RI) values as defined in Regulation (EU) No 1169/2011 on food information to consumers (except for vitamins for which the % refer to the NRV).

## **Nutritional characteristics**

Rapeseed oil is particularly interesting for its high monounsaturated fatty acid content (MUFA), for being a good source of polyunsaturated fatty acids (PUFA) i.e. omega-3 fatty acids and for being low in saturated fatty acids.

Rapeseed oil is also a source of vitamin E.

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Vegetable oils and fats are part of a balanced and healthy diet. They are rich in unsaturated fatty acids, are a source of essential fatty acids (from omega-3 (ALA)\* and omega-6 (LA)\*\* families, which the body cannot produce) and are high in vitamin E.

\*ALA : alpha linolenic acid \*\*LA : linoleic acid



Rapeseed oil can be consumed directly as a dressing or dip. It can also be heated and used for shallow and deep frying, baking and roasting. It is also commonly used in salad dressings, margarines and baked goods.

Rapeseed oil is also frequently used in blends of vegetable oils (sunflower, soybean, corn, etc.) to improve the fatty acid profile of the vegetable oils, mainly the omega-3 fatty acid content, and to give a better omega-3 / omega-6 fatty acid balance.

### **Nutritional and health claims**

According to Regulation (EC) No 1924/2006, food products can bear only nutrition and health claims approved by the European Commission and meeting the specific conditions of use

#### Rapeseed oil can bear the following nutrition claims:

- · High omega-3 fatty acids (at least 0.6 g alpha-linolenic acid per 100 g and per 100 kcal);
- High monounsaturated fat (at least 45% of the fatty acids present in the product derive from monounsaturated fat under the condition that monounsaturated fat provides more than 20% of energy of the product);
- **High unsaturated fat** (at least 70% of the fatty acids present in the product derive from unsaturated fat under the condition that unsaturated fat provides more than 20% of energy of the product);
- High vitamin E (contains at least twice the significant amount as defined in Regulation 1169/2011).

#### EFSA has positively assessed the following health claims:

- Replacing saturated fats in the diet with unsaturated fats contributes to the maintenance of normal blood cholesterol levels. Oleic acid is an unsaturated fat:
- Replacing saturated fats with unsaturated fats in the diet has been shown to lower/reduce blood cholesterol. High cholesterol is a risk factor in the development of coronary heart disease;
- Replacing saturated fats with unsaturated fats in the diet contributes to the maintenance of normal blood cholesterol levels [MUFA and PUFA are unsaturated fats];
- · Alpha-linolenic acid (ALA) contributes to the maintenance of normal blood cholesterol levels;
- · Linoleic acid contributes to the maintenance of normal blood cholesterol levels;
- Essential fatty acids are needed for normal growth and development of children;
- Vitamin E contributes to the protection of cells from oxidative stress.



