



Why do we need oils & fats in our diet?



FEDIOL

The EU Vegetable Oil &
Proteinmeal Industry

Oils and fats are an important part of a balanced and healthy diet, for the following reasons:



→ **They provide essential nutrients for our body**

Several fatty acids are “essential”, as our bodies and organs (e.g. brain) must have them to maintain health, but cannot produce them. They must be provided *via* food. These fatty acids are the Omega 3 and Omega 6 fatty acids. Good sources of these essential fatty acids include vegetable oils (e.g. rapeseed oil, sunflower oil, etc.).

→ **They are a key vector for vitamin absorption**

Several vitamins are fat soluble and need fats for our bodies to be able to absorb them. This is the case for vitamin A (good vision), vitamin D (bone health), vitamin K (blood coagulation), or vitamin E (antioxidant). Oils and fats are good, natural sources of fat soluble vitamins.

→ **They help maintaining or lowering/ reducing blood cholesterol levels**

Cholesterol is a fat-like substance that our body needs. However, some types of cholesterol are “good” for health, whereas other types are “bad” for health: LDL cholesterol is “bad” cholesterol and HDL cholesterol is “good” cholesterol. The importance is to have the proper balance of LDL and HDL cholesterol.

Vegetable oils and fats do not contain cholesterol as such but can help maintain or reduce blood cholesterol levels. Indeed, it has been recognised by EFSA that replacing saturated fats with unsaturated fats in the diet lowers/reduces blood cholesterol (EU Health claim, Regulation 1226/2014). High cholesterol is a risk factor in the development of coronary heart disease.



Replacing saturated fats (SFA) can be done by using vegetable oils and fats that are rich in unsaturated fats such as rapeseed oil or sunflower oil. It can also be achieved by blending different oils or fats with different fatty acid compositions to lower the SFA and increase the polyunsaturated fats (PUFA) and mono-unsaturated fats (MUFA) content.

→ They provide energy that our body needs

Our body needs energy to function. Fats and oils are also a good source of energy. WHO recommends that maximum 30% of total energy should come from oils and fats (WHO, 2015).

What is the position of the EU food safety authority?

According to the European Food Safety Authority (EFSA, 2010), the fatty acid composition of the diet is an important determinant of cardiovascular risk, since it affects the blood lipid profile, and in particular blood cholesterol.

Saturated fatty acids increase blood total, LDL (“bad”) and HDL (“good”) cholesterol concentrations and decrease fasting triglyceride concentrations.

Mono-unsaturated fatty acids have a modest blood total and LDL cholesterol-lowering effect. They increase blood HDL cholesterol and decrease blood fasting triglycerides.

Polyunsaturated fatty acids lower blood total and LDL cholesterol and slightly increase blood HDL cholesterol.

Trans fatty acids increase blood total and LDL cholesterol concentrations and lower HDL cholesterol.



Healthy eating plate



What are the recommendations of health authorities regarding the consumption of oils and fats?

Health authorities recommend to moderate oil and fat consumption. Fat intake should not exceed 30% of the total energy intake (WHO, 2015).

Saturated fatty acid (SFA) and *trans* fatty acid (TFA) intake should be as low as possible in the context of a nutritionally adequate diet (EFSA, 2010; FAO, 2010). SFA should provide less than 10% of total energy in order to lower the risk of developing non communicable diseases such as diabetes or cardiovascular diseases (WHO, 2015).

To be noted, dietary recommendations can differ slightly from one country to another.

EFSA and WHO specifically recommend that saturated fatty acids should be replaced by unsaturated fats contained in vegetable oils (PUFA, MUFA). Vegetable oils should be preferred over animal fat based products (WHO, 2015).



What about *trans* fats?

Trans fatty acids (TFA) are formed by partial hydrogenation of fats. This occurs in the rumen of cattle and sheep or in the processing of vegetable oils and fats. EFSA recommends a TFA intake, irrespective of their origin, as low as possible in the context of a nutritionally adequate diet (EFSA, 2004). There is no reason to believe that TFA from animal origin have a different effect on human health than TFA from vegetable origin (EFSA, 2010).

Over the past 15 years, FEDIOL members have been supporting industry initiatives to reduce TFA in vegetable oils and fats, including reformulation, optimisation of refining processes and by establishing a code of good manufacturing practices. Following these numerous industry actions, low TFA vegetable oil and fat formulations are provided to consumers, enabling overall reductions in the TFA content of food products.

Consequently, the intake of TFA in the EU has decreased considerably over recent years (EFSA, 2010). More recent reported intakes in some EU Member States are close to 1 to 2 E% (EFSA, 2010). To ensure a low level of TFA across all EU Member States in the same way, FEDIOL members could support the setting of a EU 2% TFA legal limit on fat basis in products sold to the final consumers.

Can someone become obese by consuming oils and fats?

Obesity is a complex and multi-factorial issue, which includes food intake but also insufficient caloric expenditure (due to lack of physical activity), socio-economic, environmental, and genetic predispositions. Tackling obesity has to be done by addressing all these factors.

Whilst consumption of vegetable oils and fats should be moderate in the context of a healthy diet, stopping eating vegetable oils and fats is actually detrimental for your health. We, indeed, need vegetable oils and fats as part of a varied and balanced diet.

WHO recommends favouring unsaturated fatty acids (MUFA, PUFA) from vegetable oils and fats to reduce the risk of developing non communicable diseases such as diabetes or cardiovascular diseases (WHO, 2015). This can either be done with vegetable oils and fats rich in unsaturated fats such as rapeseed oil or sunflower oil. It can also be achieved by blending different oils or fats with different fatty acid compositions to lower the SFA and increase the MUFA and PUFA content. What matters is the overall fatty acid composition of the diet, and not the composition of individual ingredients/foods in the diet.

References

WHO, 2015 *Healthy diet, Fact sheet N°394, WHO, Updated January 2015.*

EFSA, 2010 *EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA); Scientific Opinion on Dietary Reference Values for fats, including saturated fatty acids, polyunsaturated fatty acids, mono-unsaturated fatty acids, trans fatty acids, and cholesterol. EFSA Journal 2010; 8(3):1461. [107 pp.]. doi:10.2903/j.efsa.2010.1461. Available online: www.efsa.europa.eu*

EFSA, 2004 *EFSA opinion of the scientific panel on dietetic products, nutrition and allergies on a request from the Commission related to the presence of trans fatty acids in foods and the effects on human health of the consumption of trans fatty acids (Request EFSA-Q-2003-022) adopted on 8 July 2004.*

FAO, 2010 *Fats and fatty acids in human nutrition: report of an expert consultation. Rome: Food and Agricultural Organization of the United Nations; 2010 (FAO Food and Nutrition Paper 91).*