

FAQs for Oils and Fats

How many oils we can use for edible purpose?

FSSAI has notified the standards of edible vegetable oils namely Virgin coconut Oil, Coconut oil (naryalkatel), Cotton seed oil (binolakatel), Groundnut oil (moongh-phali-katel), Linseed oil (tilikatel), Mahua oil, Rape-seed oil (toria oil) mustard oil (sarsonkatel), Rapeseed or mustard oil - low erucic acid, Olive oil, Olive Pomace Oil, Virgin olive oil, Extra Virgin Olive Oil, Ordinary Virgin Olive Oil, Refined olive oil, Refined olive-pomace oil, Poppy seed oil, Safflower seed oil (berry katel), Safflowerseed oil (High Oleic Acid), Taramira Oil, Til Oil (Gingelly or sesame oil), Niger Seed Oil (Sargiyakatel), Soyabean oil, Maize (corn) oil, Almond oil, Water-melon seed oil, Palm oil, Palmolein, Palm kernel oil, Sun flower seed oil, Sunflowerseed oil (High Oleic Acid), Rice bran oil, Avocado Oil, Palm Stearin, Palm Kernel Stearin, Palm Kernel Olein, Palm Superolein and Blended edible vegetable oil.

Why is it necessary to consume oils and fats in our daily diet?

Oils and fats are vital for maintaining good health. Oils and fats are the most energy rich components in our diet providing approximately 9 kcals/g whereas carbohydrates and proteins provide only 4 kcal per gram. Oils and fats also provide substrates needed for making biological membranes such as phospholipids and cholesterol, vital for making the cell membranes that participates in the human metabolism. Oils and fats serve as a vehicle for fat-soluble vitamins A, D, E and K and also flavor components. Oils and fats also provide essential fatty acids (generally poly unsaturated fatty acids, PUFA) which are not synthesized by our body. Oils and fats are the precursors for the synthesis of hormones. The most important role of oils and fats in our diet is to provide desirable organoleptic properties such as flavor, aroma, and texture, mouth feel, all of which make our food palatable and provide a feeling of satiety. In addition to these attributes, some of the oils are rich in very potent minor constituents like tocopherols, tocotrienols, phytosterols, phytosteryl esters, lignans, beta carotene, polyphenols, gamma oryzanol etc., which have been identified as nutraceuticals with anti-oxidant, hypocholesterolemic activity etc.

What are visible and invisible fats?

Visible fats are edible oils, ghee butter, vansapati, margarines etc. Fats that are present as an integral component of various foods like nuts, cereals, pulses and processed foods are referred to as "invisible" fats. The small amounts of invisible fat present in various foods add up to a substantial level in our daily diet (about 15 g in rural population and 30 g among urban middle-income and high-income groups). Most animal foods provide high

amounts of invisible fat. Hence it is necessary to take into account the invisible fat intake while considering dietary intake of visible fat.

How much oil we are supposed to eat?

Most of the global health organizations recommended intake for total dietary fat (visible + invisible) in adults ranges between 20-35%total Energy intake /day. In India, the recommended dietary guideline of ICMR (2010)for the total dietary fat intake is 30%total Energy intake /day. This means that 30% of the total daily energy intake should come from dietary sources of oils and fats. For example, if an individual consumes 2000 Kcal of energy/day, then 30% of 2000 KCal i.e. 600 Kcal (equivalent to 65 g) must come from total fat (visible + invisible) intake. Hence, it is necessary to take about 30 g/day of visible fat.

What is refined vegetable oil?

Refined vegetable oil means any vegetable oil which is obtained by expression or solvent extraction of vegetable oil bearing materials, deacidified with alkali and/or physical refining and/or by miscella refining using permitted food grade solvents and/or degumming using phosphoric/citric acid and any suitable food grade enzyme, followed by bleaching with adsorbent earth and/or activated carbon or both of them and deodourised with steam. No other chemical agent shall be used. The name of the vegetable oil from which the refined oil has been manufactured shall be clearly specified on the label of the container.

Why is refining required for oils?

As per FSS (Food Products and Standards and Food Additives) Regulations, 2011, Cottonseed oil, Mahua Oil, Rice bran Oil, Kokum Fats, Mango Kernel Fats, Dhupa Fat and Phulwara Fat have to be refined before human consumption so as to remove the anti-nutritional or unsafe substances. However, refining may be done for other vegetable oils also in order to remove the odour and extend their shelf life.

Are toxic chemicals used for refining the oils? Does industry use toxic chemicals for refining the oils?

Only non-toxic chemicals are permitted for refining.FSSAI and other global agencies permit several processing aids for the refining of oils. Hence, refined oils are totally safe to use as cooking oil. Globally more than 85% of the oils consumed are refined oils.

Are refined oils safe for health?

Yes, all refined oils that conform to FSSAI standards are safe for health. Refining increases storage stability.

Are loose oils safe to use?

Loose edible oils could be adulterated. As such, consumers should not buy loose edible oils. Purchase only packed edible oils.

Can any vegetable oil be used for frying?

Oils containing high amount of saturated fatty acids such as coconut oil, palmolein etc. or high amount of mono-unsaturated fatty acid containing oils such as groundnut oil, refined ricebran oil, high oleic sunflower etc. are preferable for frying. Avoid using repeatedly heated oils for frying.

Are Vegetable Oils fortified with Vitamin A and D good for health?

Vegetable oils are good carriers for the fat soluble vitamins like A and D. Hence, preferably use edible oils fortified with vitamin A and D. Look for F+ logo.