Groundnut Oil vs. Other Edible Oils – The Healthier Choice

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Vegetable oils are derived from various parts of the plant and are utilized in a variety of culinary techniques, including frying, baking, and sautéing. Indians use a range of edible oils for cooking, including mustard, groundnut, palm, coconut, rice bran, sesame, sunflower, corn, cotton seed and soybean oil etc. Among the most popular oils for cooking in India include palm oil, soybean oil, sunflower oil, mustard oil, and groundnut oil. These oils are frequently utilized throughout the nation as per local tastes for specific kinds of oils. The Indian government adopted a variety of regulations to control the cooking oil industry and boost the country's output. Import levies, trade restrictions, subsidies, and incentives are all aimed at to make the country self-reliant. Also, the Food Safety and Standards Authority of India (FSSAI) is the regulatory organization in charge of ensuring the safety and quality of edible oils in India.

Groundnut oil: Groundnut oil, derived from groundnut kernels, has a high smoke point of (450°F), making it ideal for frying. Groundnut oil in its cold pressed form has been shown to be high in monounsaturated fats, making it a heart-healthy option. It also helps in lowering LDL (bad cholesterol) levels in the serum, protecting people against heart disease and stroke.

Soybean oil: The soybean oil exhibits high smoking point (450oF) when compared to other available cooking oils; which renders it an excellent choice for high-temperature cooking processes such as roasting, baking, frying, and sautéing because it can endure extremes of heat without degrading down. It also offers a unique flavor that, when used for preparing food, enhances the taste of other meals.

Sesame oil: Sesame oil, also referred to as til oil, is frequently employed as an oil for cooking, but it is also utilized in Ayurveda, cosmetic and skin care products, and has a variety of other beneficial effects on health. Sesame oil is manufactured from raw sesame seeds; it exhibits an earthy and nutty flavor with a high smoke point of 410oF.

Mustard oil: Mustard oil is derived from mustard seeds. The oil contains an intense flavor, pungent odor, and a high smoking point (400oF), making it ideal for sautéing and stir-frying veggies. It is thought to be healthier than other refined oils, and its entirely natural process of production contributes to its appeal in the food sector. Black mustard, brown mustard, and white mustard are the three types of mustard plants from which the oil is extracted. It is having regional preference in India for its distinct pungency.

Coconut oil: Coconut oil (or coconut fat) is an edible oil sourced from the flesh of the coconut palm fruit. Below approximately 25 °C (77 °F), coconut oil is a white solid fat, while at elevated temperatures, it becomes a clear, thin liquid oil. Raw types possess a unique coconut scent. Coconut oil serves as a cooking oil and is utilized in industrial processes for producing cosmetics and detergents. The smoky point of coconut oil is (350o F).

Sunflower oil: Sunflower oil is frequently utilized in cooking as a frying oil and in cosmetic products as a moisturizer. Sunflower oil mainly consists of linoleic acid, a type of polyunsaturated fat, and oleic acid, a kind of monounsaturated fat. The refined oil has a bland flavor profile. The oil is rich in vitamin E.

Table 1: Oil quality (100 g): Fatty acid (Saturated, monounsaturated & polyunsaturated), cholesterol and energy content

Oils	Fatty acids, total saturated (g)	Fatty acids, total monounsaturated (g)	Fatty acids, total polyunsaturated (g)	Fatty acids, Total unsaturated (g)	Cholesterol (g)	Energy (Kcal)
Groundnut oil	16.20	57.10	19.90	77.0	0.00	900
Soybean oil	14.90	22.10	57.60	79.7	0.00	900
Sesame oil	14.20	39.70	41.70	81.4	0.00	884
Rape seed oil	6.61	62.60	25.30	87.9	0.00	900
Coconut oil	82.50	6.31	1.70	8.01	0.00	895
Sunflower oil	8.99	63.40	20.7	84.1	0.00	900

Table 2: Bioactive components and minerals in different types of oils (100 g)

Oils	Vitamin E (mg)	Vitamin D (mg)	Vitamin K (µg)	Choline, total (mg)	Iron (mg)	Zinc (mg)	Smoke point (°F)
Groundnut oil	15.23	0	4.3	0.1	0.03	0.01	450
Soybean oil	12.2	0	183.9	0.2	0.05	0.01	450
Sesame oil	1.4	0	13.6	0.2	0	0	410
Rape seed oil	17.3	0	71.3	0.2	0	0	400
Coconut oil	0.11	0	0.6	0.3	0.05	0.02	350
Sunflower oil	68.48	0	6.9	0.2	0	0	450

Why we should go for groundnut oil?

- ✓ One of the primary justifications for using groundnut oil as frying oil is its high smoke point. Food may cook quickly at high temperatures, producing a crispy crust with minimal oil absorption.
- ✓ Refined groundnut oil has no smell, whereas crude groundnut oil has a nutty scent. The flavour of the prepared items is therefore unaffected.
- ✓ When using groundnut oil for frying, there is very little formation of off-flavour or odour.
- ✓ Because of its comparatively greater saturated fatty acid content, groundnut oil is more stable than numerous other common cooking oils. Therefore, groundnut oil resembles improved resistance to prolonged high-temperature exposure, reducing the generation of detrimental oxidised products.

Fig 1: Benefits of groundnut oil with high oleic acid

According to previous oil year data groundnut is at fourth position and has 8% availability/consumption just followed after soybean (19%), mustard (15%) and sunflower (12%). In this case, it is significant that, the import of soybean and sunflower has been done for 31.33 and 32.7 lakh tones respectively whereas groundnut oil consumption was contributed by sole production in India.

Hence, it can be concluded that there is a huge potentiality in near future that production and consumption of groundnut oil may be increased in better way and successfully.

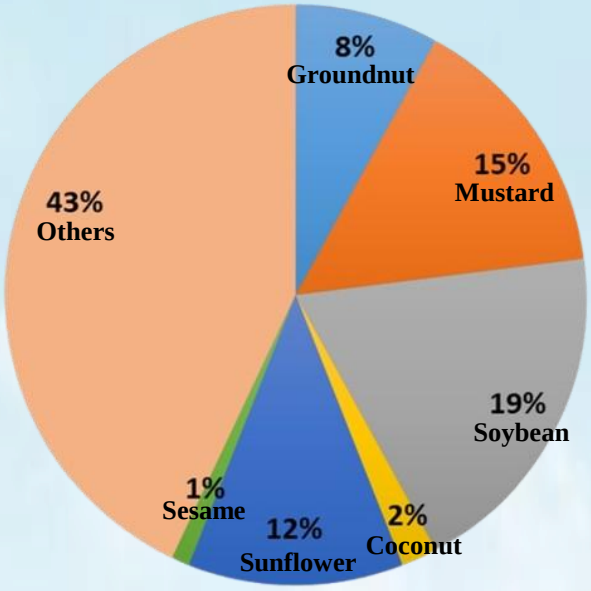

Fig 2: Consumption pattern of Edible Oils in 2023-24.

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