

Peanut oil

Peanut oil, also known as **groundnut oil** or **arachis oil**, is a vegetable oil derived from peanuts. The oil usually has a mild or neutral flavor^[1] but, if made with roasted peanuts, has a stronger peanut flavor and aroma.^{[2][3]} It is often used in American, Chinese, Indian, African and Southeast Asian cuisine, both for general cooking and in the case of roasted oil, for added flavor. Peanut oil has a high smoke point relative to many other cooking oils,^[4] so it is commonly used for frying foods.

History

Due to war shortages of other oils, the use of readily available peanut oil increased in the United States during World War II.^[6]

Production

In 2021, world production of peanut oil (reported as groundnut oil) was 4.75 million tonnes, led by China with 39% of the total (table). India was a major secondary producer.

Peanut oil production 2021, in millions of tonnes^[5]

 China	1.84
 India	0.78
 Nigeria	0.36
 Pakistan	0.26
 Myanmar	0.19
 Sudan	0.14
 United States	0.13
 World	4.75

Uses

Unrefined peanut oil is used as a flavorant for dishes akin to sesame oil. Refined peanut oil is commonly used for frying volume batches of foods like French fries and has a smoke point of 450 °F/232 °C.^[7]

Unrefined peanut oil is commonly used for cooking due to its natural flavor and nutritional benefits. It's also used in skincare products for its moisturizing properties.

Unrefined peanut oil is often used in salad dressings and marinades for its rich, nutty taste.

Biodiesel

At the 1900 Paris Exhibition, the Otto Company, at the request of the French Government, demonstrated that peanut oil could be used as a source of fuel for the diesel engine; this was one of the earliest demonstrations of biodiesel technology.^[8]

Crude peanut oil can be filtered and placed in a reaction tank with methanol and sodium hydroxide to yield methyl ester - the Biodiesel fuel.^[8]

Other uses

Peanut oil, as with other vegetable oils, can be used to make soap by the process of saponification.^[9] Peanut oil is safe for use as a massage oil.

Composition

The oil is 93% fat, composed of oleic acid, a monounsaturated fat (57% of total), linoleic acid, a polyunsaturated fat (20%), and palmitic acid, a saturated fat (16%).^[10]

Nutritional content

In a reference amount of 100 g (3.5 oz), peanut oil is a rich source of vitamin E, providing 101% of the Daily Value (table). There is no protein or carbohydrate content, and no other micronutrients in significant amounts (table).



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Nutritional value per 100 g (3.5 oz)

Properties of common cooking fats (per 100 g)

Type of fat	Total fat (g)	Saturated fat (g)	Monounsaturated fat (g)	Polyunsaturated fat (g)	Smoke point
Butter ^[12]	81	51	21	3	150 °C (302 °F) ^[13]
Canola oil ^[14]	100	6–7	62–64	24–26	205 °C (401 °F) ^{[15][16]}
Coconut oil ^[17]	99	83	6	2	177 °C (351 °F)
Corn oil ^[18]	100	13–14	27–29	52–54	230 °C (446 °F) ^[13]
Lard ^[19]	100	39	45	11	190 °C (374 °F) ^[13]
Peanut oil ^[20]	100	16	57	20	225 °C (437 °F) ^[13]
Olive oil ^[21]	100	13–19	59–74	6–16	190 °C (374 °F) ^[13]
Rice bran oil	100	25	38	37	250 °C (482 °F) ^[22]
Soybean oil ^[23]	100	15	22	57–58	257 °C (495 °F) ^[13]
Suet ^[24]	94	52	32	3	200 °C (392 °F)
Ghee ^[25]	99	62	29	4	204 °C (399 °F)
Sunflower oil ^[26]	100	10	20	66	225 °C (437 °F) ^[13]
Sunflower oil (high oleic)	100	12	84 ^[15]	4 ^[15]	
Vegetable shortening ^[27]	100	25	41	28	165 °C (329 °F) ^[13]

Energy	3,699 kJ (884 kcal)
Carbohydrates	0 g
Fat	100 g
Saturated	16 g
Monounsaturated	57 g
Polyunsaturated	20 g
Protein	0 g
Vitamins and minerals	
Other constituents	Quantity
Cholesterol	0 mg
Link to USDA database entry (https://fdc.nal.usda.gov/food-details/1750348/nutrients)	
[†] Percentages estimated using US recommendations for adults. ^[11]	

Health issues

Toxins

If quality control is neglected, peanuts that contain the mold that produces highly toxic **aflatoxin** can end up contaminating the oil derived from them.^[28]

Allergens

Those allergic to peanuts can consume highly refined peanut oil, but should avoid first-press, organic oil.^{[29][30]} Most highly refined peanut oils remove the peanut allergens and have been shown to be safe for "the vast majority of peanut-allergic individuals".^[31] However, cold-pressed peanut oils may not remove the allergens and thus could be highly dangerous to people with peanut allergy.^[32]

Since the degree of processing for any particular product is often unclear, many believe that "avoidance is prudent".^{[33][34]}

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External links

- Peanut oil (<http://www.webmd.com/vitamins-supplements/ingredientmono-483-PEANUT%20OIL.aspx?activeIngredientId=483&activeIngredientName=PEANUT%20OIL>) at WebMD

