Black Currant Seed Oil Health and Beauty Benefits

The blackcurrant (*Ribes nigrum*), also known as black currant or *cassis*, is a deciduous (trees and shrubs that seasonally shed leaves, usually in the autumn) shrub in the family *Grossulariaceae* (or *Ribes*, a genus of about 200 known species of flowering plants, most are native to the temperate regions of the Northern Hemisphere) grown for its edible berries (fruit).

The plant is now cultivated commercially and domestically for its tart, nutrient–dense berries. The berries have a tart taste and can be eaten raw or used to make flavorful jams, jellies and juices.

Today, black currant seed oil is still used for its medicinal properties and is also a popular ingredient in perfumes and cosmetics. It is known for its anti–inflammatory and antioxidant properties and is used in aromatherapy to promote relaxation and relieve stress.

Plant Origin of Black Currant

It is native to temperate parts (between the tropics and the Polar Regions) of central and northern Europe and northern Asia, where it prefers damp fertile soils.

It is winter hardy (describes the ability to survive cold growing conditions), but cold weather at flowering time during the spring may reduce the size of the crop. Bunches of small, glossy black fruit develop along the stems in the summer and can be harvested by hand or by machine.

The raw fruit is particularly rich in vitamin C and *polyphenols*. Polyphenols are a large family of naturally occurring *phenols*. They are abundant in plants and structurally diverse. Polyphenols include *phenolic acids, flavonoids, tannic acid,* and *ellagitannin,* some of which have been used historically as dyes and for tanning garments.

Blackcurrants can be eaten raw but are usually cooked in sweet or savory dishes. They are used to make jams, preserves, and syrups and are grown commercially for the juice market. The fruit is also used to make alcoholic beverages and dyes.

Description of Black Currant Plants

Ribes nigrum is a medium–sized shrub, growing to 5 by 5 feet (1.5 by 1.5 m). The leaves are alternate, simple, 1+¼ to 2 inches (3–5 cm) broad and long with five palmate (describes leaf morphology) lobes and a serrated margin. All parts of the plant are strongly aromatic.

The flowers are produced in racemes (an unbranched, indeterminate type of short floral stalks along the shoots that bear the flowers) known as "*strigs*" up to 3 inches (8 cm) long containing 10–20 flowers, each about $\frac{3}{2}$ inches (8 mm) in diameter.

Each flower has a hairy *calyx* (or *sepal*, part of the flower of angiosperms they typically function as protection for the flower when in bud, or as support for the petals when in bloom) with yellow glands, the five lobes of which are longer than the inconspicuous petals.

There are five stamens (the pollen–producing reproductive organ of a flower) surrounding the stigma and style and two fused carpels (known as the *gynoecium*, the innermost whorl of a flower consisting of pistils, a term for the parts of a flower that produce ovules and ultimately develop into the fruit and seeds).

The flowers open in succession from the base of the strig and are mostly insect pollinated, but some pollen is distributed by the wind. A pollen grain landing on a stigma will germinate and send a slender pollen tube down the style to the ovule. In seed plants, the ovule is the structure that gives rise to and

contains the female reproductive cells. It consists of three parts: the *integument*, forming its outer layer, the *nucellus*, and the female *gametophyte* in its center.

In warm weather this takes about 48 hours but in cold weather it may take a week, and by that time, the ovule may have passed the stage where it is receptive. If fewer than about 35 ovules are fertilized, the fruit may not be able to develop and will fall prematurely. Frost can damage both unopened and open flowers when the temperature falls below 28.6 °F (-1.9 °C). The flowers at the base of the strig are more protected by the foliage and are less likely to be damaged.

In midsummer the strigs of green fruit ripen to edible berries (fleshy fruit without a stone or pit, produced from a single flower containing one ovary), very dark purple in color, almost black, with glossy skins and calyxes at the apex (the calyxes being persistent), each containing many seeds. Persistence is the retention of plant organs, such as flowers, seeds, or leaves, after their normal function has been completed. An established bush can produce about 10 pounds (4.5 kg) of fruit each year.

Plants from Northern Asia are sometimes distinguished as a separate variety, *Ribes nigrum* var. *sibiricum*, of which *R. cyathiforme* is considered a synonym.

Black Currant Seed Oil

Black currant seed oil is extracted from the seeds of the berries of the black currant plant (*Ribes nigrum*) using steam distillation. The berries of the plant are rich in *polyphenols* and vitamins, as well as certain active compounds that affect neurological and cardiovascular health.

Black currant seed oil contains the highest concentrations of *gamma–linolenic acid* (GLA) and is also high in *alpha–lipoic acid* (ALA)—a precursor to omega–3 fatty acids—both of which were found in a research article published June 2005 in <u>The Journal of Nutritional Biochemistry</u> to have numerous health effects. According to <u>WebMD</u>, gamma–linolenic acid (GLA) can boost the body's immune resistance to infections and diseases.

Black currant seed oil is bright yellow and has a strong fruity aroma that has been described as sweet and tangy. Its flavor profile is similar to its aroma, with a slightly bitter taste. It is sometimes used in cooking to add flavor to dishes. Black currant seed oil has been used for centuries for its medicinal properties, rather than as a culinary ingredient, because excessive ingestion of black currant seed oil can have negative side effects.

Black currant seed oil should not be confused with black seed oil. Black currant seed oil is obtained from currants (a fruit), while black seed oil comes from black cumin seeds (an herb).

The Phytochemistry of Black Currant Seed Oil

Polyphenol phytochemicals <u>present in the fruit, seeds and leaves</u>, are being investigated for their potential biological activities. The major *anthocyanins* (also called *anthocyans*, are water–soluble vacuolar pigments that, depending on their pH, may appear red, purple, blue, or black) in blackcurrant pomace (or *marc*, is the solid remains of fruit, the skins, pulp, seeds, and stems, after pressing out the juice or oil)—*delphinidin–3–O–glucoside* (myrtillin), *delphinidin–3–O–rutinoside* (tulipanin), *cyanidin–3–O–glucoside* (chrysanthemin), and *cyanidin–3–O–rutinoside* (antirrhinin), which are retained in the juice concentrate—are among other *polyphenols*.

Black currant seed oil contains a range of compounds such as *alpha–pinene*, *camphene*, *beta–pinene*, *sabinene*, and *limonene*.

Distribution and Habitat

The blackcurrant is native to northern Europe and Asia.

Cultivation

Cultivation in Europe is thought to have started around the last decades of the 17th Century. This shrub is cultivated extensively and also grows in the wild.

Site Selection and Planting

Blackcurrants can grow well on sandy or heavy loams, or forest soils, as long as their nutrient requirements are met. They prefer damp, fertile but not waterlogged ground and are intolerant of drought. Although the bushes are winter hardy, frosts during the flowering period may adversely affect the yield and cold winds may restrict the number of flying insects visiting and pollinating the flowers.

A soil pH of about 6 is ideal for blackcurrants and the ground can be limed if the soil is too acidic. Planting is usually done in the autumn or winter to allow the plants to become established before growth starts in the spring, but container–grown stock can be planted at any time of year.

Two–year–old bushes are usually planted but strong one–year–old stock can also be used. Planting certified stock avoids the risk of introducing viruses (obligate intracellular parasites that do not have the molecular machinery to replicate without a host).

On a garden scale the plants can be set at intervals of 5–6 feet (1.5–1.8 m) or they can be set in rows with planting intervals of 4 feet (1.2 m) and row separations of 8 feet (2.5 m) or more. In the UK, young bushes are generally planted deeper than their initial growing level to encourage new stems to grow from the base.

Manures and Fertilizers

The blackcurrant requires a number of essential nutrients to thrive: *nitrogen* (N) provides strong plant growth and stimulates the production of flower sprigs, *phosphorus* (P) aids growth, the setting of fruit and crop yield, *potassium* (K) promotes growth of individual shoots and increases the weight of individual fruits, *calcium* (Ca) is required for cell division and enlargement and is particularly important for young plants and buds and *magnesium* (Mg), which is a constituent of *chlorophyll* (allows plants to absorb energy from light, the name is derived from the Greek words $\chi\lambda\omega\rho\delta\varsigma$, khloros and $\phi\lambda\lambdaov$, phyllon "leaf") and helps increase yields through interaction with *potassium*.

An annual spring mulch of well–rotted manure is ideal and poultry manure can also be used but needs prior composting (decomposing plant and food waste, recycling organic materials, and manure) with straw or other waste vegetable material.

Spent mushroom compost (the residual compost waste generated by the mushroom production industry) can be used but care should be taken as it often contains lime and blackcurrants prefer slightly acidic soils.

The blackcurrant is a gross feeder and benefits from additional nitrogen, and phosphatic and potash fertilizers should also be applied annually. A balanced artificial fertilizer (of synthetic origin) can be used and a 10–10–10 granular product can be spread around the bushes at the rate of 3+½–8+½ ounces (100–240 g) per plant.

Weed growth can be suppressed with an organic mulch such as sawdust, bark, mushroom compost or straw, heavy plastic topped with an organic mulch cover or landscape fabric (a textile material used to control weeds by inhibiting their exposure to sunlight).

Pruning

Blackcurrant fruit is borne primarily on one-year-old shoots. Newly planted bushes should be pruned severely, cutting all shoots back to two buds above ground level. This gives the plant a chance to get properly established before needing to put its energy into producing fruit. The general rule when pruning is to remove all weak shoots and those growing out sideways which may get weighed down when fruiting.

The remaining branches should be thinned to remove old unproductive wood and to encourage new shoots. An established bush should not be allowed to become overcrowded and should have about one third of its main branches or stems removed each year. When harvesting by machine, plants with an upright growth habit are encouraged.

Harvesting

On a garden scale, the berries should be picked when dry and ripe. Commercially, most harvesting is done mechanically by straddle harvesters. These move continually down the rows, straddling a row of bushes, shaking the branches and stripping off the fruit.

The blackcurrants are placed into half tonne (metric ton) bins and to minimize stoppage time, some machines have cross conveyors which direct the fruit into continuously moving trailers in the adjoining row.

A modern machine can pick up to fifty tonnes of blackcurrants in a day using only one operator and two tractor drivers. The bins should be stored in a cool place. Some fruit is still picked by hand for use in the fresh fruit market.

Diseases and Pests

Ribes plants are susceptible to several diseases and a number of insect pests. However, new varieties have been or are being developed to overcome some of these problems.

Reversion is a serious disease transmitted by the blackcurrant gall mite (*Cecidophyopsis ribis*, an eriophyid mite which is best known for being a plant parasite, a pest of *Ribes* species). It causes a decline in yield and is quite widespread in Europe but is rarely encountered on other continents.

Symptoms include a modification of leaf shape in summer and swollen buds ("big bud") in winter, each housing thousands of microscopic mites. As pest control has limited effectiveness, severely infected bushes should be destroyed. All new plants purchased should be certified as virus–free.

White pine blister rust (a disease caused by Cronartium ribicola, a species of rust fungus in the family Cronartiaceae). Other names include: Rouille vésiculeuse du pin blanc (French), white pine Blasenrost (German), moho ampolla del pino blanco (Spanish). White pine blister rust needs two alternate hosts to complete its life cycle. One host is plants in the genus Ribes.

On the blackcurrant, it causes the leaves to become pale and later develop tiny orange pustules and sometimes a yellow filamentous coating on some leaves. The fruit crop is little affected but the leaves fall early and growth is slowed the following year.

The other host is any of the white pines (a genus of approximately 111 extant tree and shrub species, it is currently split into two subgenera: subgenus *Pinus*, and subgenus *Strobus*), in which it causes serious disease and mortality for the North American species that have not co–evolved with the rust.

The blackcurrant was introduced by English settlers at the Massachusetts Bay Colony in 1629 and was cultivated on some scale. The plant is a disease vector (any living agent that carries and transmits an infectious pathogen such as a parasite or microbe, to another living organism), it acts as a host for *the white pine blister rust* that threatened the timber industry.

In 1911, the federal government banned the cultivation, sale, and transport of blackcurrants for much of the 20th Century in order to protect the white pine. Even after the federal ban was lifted in 1966, several U.S. states continued their own bans, some of which remain in force as of August 2021.

The effectiveness of these restrictions is questionable, since other *Ribes* species also host the disease, some are native to North America, and others such as red currants (*Ribes rubrum*, a shrub native to Western Europe, *Ribes sanguineum*, a shrub native to North America and *Searsia chirindensis*, a tree native to southern Africa) and *Ribes uva–crispa* (known as gooseberry or European gooseberry) were never banned.

American gooseberry mildew (caused by plant pathogens in the *Podosphaera* genus of fungi in the family *Erysiphaceae*) and *powdery mildew* (a fungal disease caused by ascomycete fungi in the order *Erysiphales*) can infect the leaves and shoot tips displaying white powdery spots, and botrytis (the anamorphs of *Botryotinia*, is a genus of ascomycete fungi, are included in the "imperfect fungi" genus *Botrytis*) may cause the fruit to rot in a wet season.

Currant and gooseberry *leaf spot* (*Drepanopeziza ribis*) is another disease of blackcurrants, but it is not usually a serious problem as most cultivars now have some resistance. The blackcurrant *leaf midge* can cause browning, crimping and distortion of leaves at the tips of shoots but it is seldom a serious problem.

The blackcurrant sawfly (*Nematus ribesii*, a species of sawfly in the family *Tenthredinidae*) lays its eggs on the underside of the leaves and the voracious larvae work their way along the shoots, stripping off leaf after leaf. In a serious attack, the bush can be denuded of leaves. Larvae of the currant borer drill their way along the centers of shoots, which wilt and die back.

Other insect pests include scale insects (small insects of the order *Hemiptera*, suborder *Sternorrhyncha*, have dramatically variable appearance and extreme sexual dimorphism), aphids (small sap–sucking insects and members of the superfamily *Aphidoidea*) and earwigs (insects in the order *Dermaptera*, which has about 2,000 species in 12 families, they have characteristic cerci, a pair of forcep–like pincers on their abdomen, and membranous wings folded underneath short, rarely used forewings).

Research and Cultivars

There are many cultivars of blackcurrant. "Baldwin" was the mainstay of the industry for many years but it has now largely been superseded by more productive and disease–resistant varieties. During the 20th Century in Europe, much hybridization work has been carried out in order to reduce the plant's susceptibility to disease and frost and also to increase yields. This effort centered mainly in Scotland, Poland, and New Zealand.

In Britain the <u>Scottish Crop Research Institute</u> (SCRI) was tasked with developing new varieties suitable for growing in the north of the country. They produced new cultivars that had greater cold tolerance, especially in the spring, ripened earlier and more evenly and had greater fungal disease resistance.

Frost tolerance was improved by selecting for late flowering and genetic research (molecular genetics is a branch of biology) identified genes involved in resistance to gall mite and the blackcurrant reversion virus. As of April 2011, when SCRI merged with the <u>Macaulay Land Use Institute</u> to form <u>The James</u> <u>Hutton Institute</u>.

"Ben Lomond" was the first of the "Ben" varieties and was released in 1975. This was followed by several other cultivars for the juicing industry such as "Ben Alder" and "Ben Tirran". The cultivar "Ben Hope" was released in 1998 with increased tolerance to gall mite, and in the same year, "Ben Gairn" became available. It shows resistance to the reversion virus.

For gardeners and the pick–your–own market, "Ben Sarek", "Ben Connan" and "Big Ben" were introduced and have large, sweet berries. The cultivars "Ben Connan" and "Big Ben" have gained the <u>Award of Garden Merit</u> from the <u>Royal Horticultural Society</u>.

And new varieties are being developed continually to improve frost tolerance, disease resistance, machine harvesting, fruit quality, nutritional content and fruit flavor.

Varieties producing green fruit, less strongly flavored and sweeter than typical blackcurrants, are cultivated in Finland, where they are called "green currants" (*viherherukka*). "Vertti" green currant, has berries that lack the dark color and strong aroma typical of blackcurrant.

In Poland, the <u>Research Institute of Horticulture</u> (Instytut ogrodnictwa) has done work on improving the blackcurrant with regard to disease and pest resistance, fruit quality, adaptations to local conditions and mechanical harvesting.

Researchers have crossed various varieties and introduced inter–specific genetic material from the gooseberry or European gooseberry (*Ribes grossularia*), the redcurrant (*Ribes rubrum*) and the flowering currant (*Ribes sanguineum*).

The resulting offspring were further back–crossed to *R. nigrum*. Cultivars produced include "Tisel" and "iben" in 2000 and "Ores", "Ruben" and "Tines" in 2005. Further cultivars "Polares" and "Tihope" are being tested.

Since 1991, New Zealand has become an important center for research and development, as its temperate climate is particularly suitable for cultivation of the crop. Breeding programs are concentrating on yield, large fruit size, consistency of cropping and upright habit.

In North America, there is a need for this fruit to have resistance to *white pine blister rust*. New cultivars such as "Crusader", "Coronet" and "Consort" have been developed there by crossing *R. nigrum* with *R. ussuriense* and these show resistance to the disease.

However the quality and yield of these varieties are poor as compared to non-resistant strains and only "Consort" is reliably self-fertile. Back-crossing these varieties to a parent have produced new strains such as "Titania" that have a higher yield, better disease resistance, are more tolerant of adverse weather conditions and are suitable for machine harvesting.

Two new releases from a black currant breeding program in British Columbia, Canada, "Blackcomb" and "Tahsis", were selected for their immunity to *white pine blister rust* and their frost tolerance.

The Nutritional Value of Black Currants

Black currants are nutrient–dense foods, meaning they are low in calories but contain many important nutrients. These small berries are a rich source of vitamin C, packing more than 3 times the amount of *ascorbic acid* you need into less than a one–cup serving. These berries also boast high levels of B vitamins, such as *thiamin* and *pantothenic acid*.

A <u>100–gram serving only contains 63 calories</u>, but a wealth of essential minerals, including iron, calcium, magnesium, and copper. This is in addition to the range of antioxidants, including *anthocyanins* and *flavonoids*, which provide even more health benefits.

These berries also contain measurable levels of omega–3 and omega–6 fatty acids, making them unique among fruits. Blackcurrant seed oil is rich in vitamin E and unsaturated fatty acids, including *alpha–linolenic acid* (α –*Linolenic acid*, or ALA) and *gamma–linolenic acid* (γ –*Linolenic acid*, or GLA). Both ALA and GLA have anti–inflammatory properties and are used by the body as a source of energy, to regulate blood flow, immune function, reduce inflammation and more.

3.5 oz. (100 g) of European black currants, raw		
Energy	264 kJ (63 kcal)	
Carbohydrates	15.4 g	
Fat	0.4 g	
Protein	1.4 g	
Vitamins	Quantity	% DV [⁺]
Vitamin A (beta-carotene)	229.78 IU	0.08%
Vitamin B ₁ (<i>thiamine</i>)	0.05 mg	4%
Vitamin B ₂ (<i>riboflavin</i>)	0.05 mg	4%
Vitamin B ₃ (<i>niacin</i>)	0.3 mg	2%
Vitamin B₅ (<i>pantothenic acid</i>)	0.398 mg	8%
Vitamin B ₆ (<i>pyridoxine</i>)	0.066 mg	4%
Vitamin C (ascorbic acid)	181 mg	201%
Vitamin E (alpha-tocopherol)	1 mg	7%
Minerals	Quantity	% DV⁺
Calcium (Ca)	55 mg	4%
Iron (Fe)	1.54 mg	9%
Magnesium (Mg)		
Mugnesium (Mg)	24 mg	6%
Manganese (Mn)	24 mg 0.256 mg	6% 11%
Manganese (Mn) Phosphorus (P)	24 mg 0.256 mg 59 mg	6% 11% 5%
Manganese (Mn) Phosphorus (P) Potassium (K)	24 mg 0.256 mg 59 mg 322 mg	6% 11% 5% 11%
Manganese (Mn) Phosphorus (P) Potassium (K) Sodium (Na)	24 mg 0.256 mg 59 mg 322 mg 2 mg	6% 11% 5% 11% 0%
Manganese (Mn) Phosphorus (P) Potassium (K) Sodium (Na) Zinc (Zn)	24 mg 0.256 mg 59 mg 322 mg 2 mg 0.27 mg	6% 11% 5% 11% 0% 2%
Manganese (Mn) Phosphorus (P) Potassium (K) Sodium (Na) Zinc (Zn) Copper (Cu)	24 mg 0.256 mg 59 mg 322 mg 2 mg 0.27 mg 0.09 mg	6% 11% 5% 11% 0% 2%
Manganese (Mn) Phosphorus (P) Potassium (K) Sodium (Na) Zinc (Zn) Copper (Cu) Other constituents	24 mg 0.256 mg 59 mg 322 mg 2 mg 0.27 mg 0.09 mg Quantity	6% 11% 5% 11% 0% 2%
Manganese (Mn) Phosphorus (P) Potassium (K) Sodium (Na) Zinc (Zn) Copper (Cu) Other constituents Water	24 mg 0.256 mg 59 mg 322 mg 2 mg 0.27 mg 0.09 mg Quantity 82 g	6% 11% 5% 11% 0% 2%
Manganese (Mn) Phosphorus (P) Potassium (K) Sodium (Na) Zinc (Zn) Copper (Cu) Other constituents Water Ash	24 mg 0.256 mg 59 mg 322 mg 2 mg 0.27 mg 0.09 mg Quantity 82 g 0.86 g	6% 11% 5% 11% 0% 2%

[†]Percentages estimated using <u>US recommendations</u> (the Reference Daily Intake, RDI) for adults, except for potassium, which is estimated based on expert recommendation from the <u>National</u> <u>Academies of Sciences, Engineering, and Medicine</u> (NASEM).

The History of Black Currant

Decoction from the leaves (a method of extraction by boiling herbal or plant material to dissolve the chemicals) of the leaves, bark or roots was used as a traditional remedy. Blackcurrant seed oil is an ingredient in cosmetics preparations, often in combination with vitamin E. A yellow dye can be extracted from the leaves, and the fruit pulp is a source of blue or violet dye resulting from its high content of *anthocyanins*.

During World War II, most fruits rich in vitamin C, such as oranges (the hybrid *Citrus × sinensis*), became difficult to obtain in the UK. Since blackcurrant berries are a rich source of the vitamin, and blackcurrant plants are suitable for growing in the UK climate, the British Government encouraged their cultivation and soon the yield of the nation's crop increased significantly.

From 1942 onwards, blackcurrant syrup was distributed free of charge to children under the age of two. This may have given rise to the lasting popularity of blackcurrant as a flavoring in Britain. In Britain the commercial crop is completely mechanized and about 1,400 hectares of the fruit are grown, mostly under contract to the juicing industry.

Commercially, most large–scale cultivation of blackcurrants is done in Eastern Europe for the juice and juice concentrate market. As of 2017, major cultivation efforts to improve fruit characteristics occurred in Scotland, New Zealand, and Poland.

In the 1800s, black currants were very popular in the U.S. In fact, in the 1920 census it was estimated that American farmers were growing 7,400 acres of currants and gooseberries. They became less common in the 20th Century after currant farming was banned in the early 1900s, when blackcurrants, which are a vector of *white pine blister rust*, were considered a threat to the U.S. logging industry.

The federal ban on growing currants was shifted to the jurisdictions of individual states in 1966, and was lifted in New York State in 2003 through the efforts of horticulturist and American farmer Greg Quinn. As a result, currant growing is making a comeback in New York, Vermont, Connecticut, California, and Oregon.

However, several statewide bans still exist as of August 2021. Since the Federal ban in the U.S. curtailed currant production nationally for nearly a century, the fruit remains largely unknown in the U.S. and has yet to regain its previous popularity to levels enjoyed in Europe and New Zealand.

Owing to its unique flavor and richness in *polyphenols*, dietary fiber (insoluble) and essential nutrients, awareness and popularity of blackcurrant is once again growing, with a number of consumer products entering the U.S. market.

Culinary

The fruit of blackcurrants when eaten raw has a strong, tart flavor. It can be made into jams and jellies which set readily because of the fruit's high content of pectin (a *heteropolysaccharide*) and acid. For culinary use, the fruit is usually cooked with sugar to produce a purée, which can then be passed through muslin (a cotton fabric of plain weave) to separate the juice.

The purée can be used to make blackcurrant preserves and be included in cheesecakes, yogurt, ice cream, desserts, sorbets, and many other sweet dishes. The exceptionally strong flavor can be moderated by combining it with other fruits, such as raspberries and strawberries in summer pudding (an English dessert made of sliced white bread, layered in a deep bowl with fruit and fruit juice, left to soak overnight and turned out onto a plate, was most popular from the late 19th to the early 20th centuries), or apples in crumbles and pies.

The juice can be used in syrups and cordials. Blackcurrants are a common ingredient of *rødgrød* (*rote Grütze*, or *rode Grütt*, meaning "red groats"), is a popular sweet fruit dessert dish, similar to a *kissel* (a

simple dish with the consistency of a thick gel, it can be served cold or warm), from North German and Danish cuisines. The leaves and berries can be dried and used to make <u>black currant tea</u> or tincture.

Blackcurrants are also used in savory cooking. Their astringency creates added flavor in sauces, meats and other dishes. Blackcurrants are included in some unusual combinations of foods. They can be added to tomato and mint to make a salad.

Blackcurrants may accompany roast beef, grilled lamb, duck, seafood and shellfish. Canvasback duck (the largest species of diving duck found in North America) with blackcurrants was a delicacy in 19th Century New York.

They can provide a dipping sauce at barbecues. They can be blended with mayonnaise, and used to invigorate bananas and other tropical fruits. Blackcurrants can be combined with dark chocolate or added to *mincemeat* (a mixture of chopped dried fruit, distilled spirits and spices, and either beef suet or vegetable shortening) in mince pies, traditionally served at Christmas.

Japan imports \$3.6 million of New Zealand blackcurrants for uses as dietary supplements, snacks, <u>functional food</u> (a food claimed to have an additional function by adding new ingredients or more of existing ingredients) products and as quick–frozen (IQF) produce for culinary production as jams, jellies or preserves.

Beverages

The juice forms the basis for various *squashes* (a non–alcoholic beverage with syrup used in beverage making), juice drinks and smoothies. In Britain, 95% of the blackcurrants grown are used to manufacture <u>*Ribena*</u> (a brand of fruit juice whose name is derived from *Ribes nigrum*) and similar fruit syrups and juices.

Macerated blackcurrants are also the primary ingredient in the *apéritif* (alcoholic drink normally served before a meal) *crème de cassis* (liqueur made from blackcurrants), which in turn is added to white wine to produce the French cocktails *Kir*, or to champagne (sparkling wine) to make a *Kir Royal*.

In the UK, a blackcurrant *squash* may be mixed with beer or alcoholic cider to make drinks including "cider and black", "lager and black", or "snakebite (alcoholic drink made with equal parts lager and cider) and black".

In Russia, blackcurrant leaves may be used for flavoring tea or preserves, such as salted cucumbers, and berries for home winemaking. Sweetened vodka may also be infused with blackcurrant leaves making a deep greenish–yellow beverage with a tart flavor and *astringent* (the dry, puckering or numbing mouthfeel caused by the tannins in unripe fruits) taste. The berries may be infused in a similar manner.

In the Netherlands, blackcurrants are used in a carbonated soft drink named "*cassis*", not to be confused with the alcoholic *crème de cassis* liqueur. The variety by <u>Hero Group</u> (a private, consumer food manufacturer and marketing company based in Switzerland) has been made since 1938 with blackcurrant juice concentrate as well as a small quantity of fermented blackcurrant juice.

The Health Benefits of Black Currant Seed Oil

The many health benefits associated with black currants include lowering cholesterol, relieving symptoms of rheumatoid arthritis, and easing insomnia, among others. The oil from blackcurrant seeds contains many active compounds, such as vitamin C, *phenolic acids, quercetin*, and *anthocyanins*.

These provide multiple health benefits like cancer prevention, promoting heart health and treating inflammatory conditions. Black currant seed oil has also been used medicinally to treat a variety of conditions including rheumatoid arthritis, dry eyes, joint pain and high blood pressure.

In addition to its culinary uses, black currant seed oil is also used in aromatherapy. Its sweet and fruity aroma is believed to have a calming effect on the mind and body, making it a popular choice for relaxation and stress relief.

1. Boosts Collagen Production

Collagen is the main structural protein in our skin that gives it its strength and elasticity. As we age, our bodies produce less collagen leading to wrinkles, fine lines and other signs of aging. The antioxidants in black currant seed oil help fight free radical damage and promote collagen production. It is also an excellent oil for dry or mature skin.

2. Fights Free Radical Damage

Free radicals are unstable molecules in the environment that can cause cell damage and lead to chronic diseases like heart disease, heart attacks, cancer and diabetes. Black currants are an excellent source of antioxidants, containing at least <u>15 types of *anthocyanins*</u>, these help neutralize free radicals and protect our cells from damage. Black currant seed oil benefits also include protection against harmful UV rays.

The omega–3 fatty acids and GLA in black currant seed oil help to hydrate and nourish skin, while the vitamin C helps to boost collagen production. In a <u>2010 randomized, double–blind, placebo–controlled</u> <u>trial</u>, blackcurrant seed oil reduced the prevalence of atopic dermatitis (the most common type of eczema, a skin condition that causes itchy, dry and scaly rashes) in newborns.

Free radicals and antioxidants <u>play a role in normal physiological functions and human disease</u>. They can impair overall health and <u>cause numerous diseases</u>, including heart disease, cancer, diabetes, Alzheimer's among others.

3. Rich in Anthocyanins

Black currants and black currant seed oil contain a variety of different *anthocyanins*. A 2002 study in the <u>Journal of Agricultural and Food Chemistry</u> showed that they contain up to 15 unique types: the 3-O- glucosides and the 3-O-rutinosides of pelargonidin, cyanidin, peonidin, delphinidin, petunidin, and malvidin, cyanidin 3-O-arabinoside, and the 3-O-(6' - p-coumaroylglucoside)s of cyanidin and delphinidin.

Research <u>from 2007 suggests</u> that *anthocyanins* may play a role in heart health, and 2015 studies in <u>*Reviews in Endocrine and Metabolic Disorders*</u> showed that *anthocyanins* may reverse or even prevent obesity and diabetes.

In a <u>2001 comparative study</u>, the *anthocyanins* in the fruit extract of black currants inhibited virus adsorption to cells and also virus release from infected cells. In addition to black currants, other *anthocyanin*—rich foods include berries, eggplant, red cabbage and grapes. Including a good amount of these foods in your diet can have a lasting impact on your health.

4. Helps Inhibit Cancer Growth

Anthocyanins are known to possess potent anticarcinogenic properties against several cancers thus demonstrating potential for cancer prevention. A 2011 study published in the <u>Journal of Nutritional</u> <u>Biochemistry</u> revealed that black currant extract provided chemoprevention against <u>diethylnitrosamine</u>—induced (DENA) hepatocellular (liver cells) carcinogenesis in rats after 22 consecutive weeks of treatment.

In one <u>2010 test–tube study</u> conducted by the <u>Department of Pharmaceutical Sciences</u>, <u>Northeastern</u> <u>Ohio Universities Colleges of Medicine and Pharmacy</u> (NEOMED), black currant extract was able to inhibit the growth of liver cancer cells by counteracting the imbalance of oxidative and antioxidative factors in the living systems.

One <u>2015 study in Japan</u> found that black currant extract showed potential phytoestrogenic effects in breast cancer and human endometrial cancer cell lines that over–express estrogen receptor alpha, as well as in immature female rats.

Another 2016 study in Japan published in the *Journal of Medicinal Food* showed that black currant extract may also be effective in inducing apoptosis (cell death) in various cancer cells.

5. Protects Against Pathogens

In addition to its antioxidant properties, black currants also possess antimicrobial properties. A 2012 study by the Department of Microbiology, Fukushima Medical University School of Medicine, Fukushima, Japan published in *Microbiology and Immunology* highlighted that a 1% concentration of black currant extract was able to block the growth of several strains of viruses associated with oral, nasopharyngeal and upper respiratory infectious diseases—respiratory syncytial virus (RSV), influenza, adenovirus, herpes simplex virus type 1, *Haemophilus influenzae, Streptococcus pneumoniae* and *Streptococcus mutans*. A 10% concentration of the extract was able to inhibit adsorption on the cell surface.

Another <u>2003 study</u> from the Department of Microbiology at <u>Asahikawa Medical College</u> in Japan demonstrated that treating strains of influenza with a concentration of black currant the extract inhibited the virus release from the infected cells.

A <u>2010 research study</u> has found that black currant seed oil, especially in combination with broccoli sprouts, may be effective against *H. pylori*, a type of bacteria that can increase the risk of non–cardia gastric cancer developing in infected humans.

6. Relieves Arthritis Pain

If you feel pain and stiffness in your body or have trouble moving around, <u>you might have arthritis</u>. Most kinds of arthritis cause pain and swelling in your joints. Over time, a swollen joint can become severely damaged.

In a <u>1994 randomized, double-blind, placebo controlled, 24-week trial</u> in patients with rheumatoid arthritis. The GLA and ALA in black currant seed oil helped suppress inflammation and joint tissue injury. The treatment resulted in reduction in signs and symptoms of disease activity in patients. Black currant seed oil doesn't only work as a potent anti-inflammatory agent but also as a strong analgesic.

A <u>1993 study</u> showed a reduction in the secretion of inflammatory cytokines in subjects given black currant seed oil. Blackcurrant seed oil is a source of polyunsaturated fatty acids. These fatty acids play a major role in animal metabolism because of their functions in such processes as cell membrane structure, cholesterol transport and metabolism.

In a <u>1992 clinical trial</u> conducted by the Department of Bioscience & Biotechnology, <u>University of</u> <u>Strathclyde</u> in Glasgow, blackcurrant seed oil was administered to patients with rheumatoid arthritis there appeared to be a reduction in the levels of cytokines released from the patients' monocytes.

7. Potent Anti–Inflammatory Properties

GLA is an excellent remedy for inflammatory conditions like rheumatoid arthritis, osteoarthritis, and even asthma. It also has amazing benefits for brain physiology and blood sugar. Black currant seed oil is rich in <u>antioxidants</u>, <u>vitamins</u>, <u>and minerals</u> that help to boost the immune system, improve digestion, and reduce inflammation. The oil is also used to relieve symptoms of respiratory conditions such as

asthma and bronchitis. GLA is also beneficial for the endocrine system, especially for women. It can <u>improve joint health and reduce inflammation</u>. It can even treat a sore throat.

8. Reduces the Severity of PMS Symptoms

Millions of women—as many as 80%—develop some degree of <u>premenstrual syndrome</u> (PMS). PMS describes the physical and emotional symptoms that occur in a pattern as women near menstruation each month. Another 2%–5% of women experience additional symptoms known as premenstrual dysphoric disorder (PMDD).

Some double–blind, crossover, placebo–controlled studies demonstrated significant positive results when using supplements containing GLA. Black currant seed oil contains gamma linoleic acid, which raises prostaglandin levels.

9. Helps Improve Heart Health

Over 600,000 people die from heart disease each year in the U.S. alone, according to a report from the <u>Centers for Disease Control and Prevention</u> (CDC).

Black currant juices and extracts have been shown to be beneficial in the prevention of blood clots. Black currant is high GLA and in potassium as well, which can help lower your blood pressure. The GLA also helps cells in your heart resist damage and <u>slows down platelet clumping</u> in your blood vessels.

According to a <u>2016 research study published in the *Journal of Life Science*</u>. The fresh juice of black currant, which has concentrated *polyphenol* and *flavonoid*, showed strong radical scavenging activities and reducing power. In the anticoagulation assay it showed significant inhibitory activities against thrombin, prothrombin and coagulation factors. Furthermore, the antiplatelet activities of black currant extract were stronger than that of aspirin.

A <u>1996 4–week baseline period clinical trial</u> of 27 borderline hypertensive male subjects conducted in the Department of Nutrition and Dietetics, <u>King's College London</u>, <u>University of London</u> in the UK showed that the GLA in black currant seed oil inhibited blood pressure reactivity by over 40%.

The <u>Mayo Clinic</u> defines *ischemic arrhythmia* as a heart condition characterized by irregular or abnormal heart beating that can weaken cardiovascular system health and even be fatal. *Cardiac arrhythmia* frequently develops as a consequence of reduced blood flow to the heart.

A <u>1994 study</u> by the Cardiac Research Unit, CSIRO Division of Human Nutrition, Glenthorne Laboratories in South Australia published in the *Nutrition Research Journal* found that black currant seed oil could help stabilize the heartbeat and prevent *cardiac arrhythmia*.

Previous studies in this laboratory have already demonstrated the effectiveness of the relatively small amount of dietary polyunsaturated fatty acids in canola oil in reducing the susceptibility to *ischaemic arrhythmia* in aging rats. Black currant seed oil contains less *linoleic acid* (LA) and more ALA than evening primrose oil or sunflower seed oil providing an enhanced benefit to the cardiovascular system.

10. Strengthens the Immune System

The *anthocyanins* in black currants are anti–inflammatory compounds that offer protection against oxidation and free radical damage. They also help eliminate microbes and pathogens from the body.

Dietary <u>supplementation with *eicosapentaenoic acid*</u> (EPA), which is a polyunsaturated fatty acid, was shown to protect the skin both at the macroscopic and cellular levels, despite an increase in oxidative stress. Black currant seed oil, rich in both GLA and ALA, has been shown to modulate membrane lipid composition and *eicosanoid* production.

In a <u>1999 randomized, double-blind, placebo-controlled study</u> published in the *American Journal of Clinical Nutrition*, conducted to examine the effect of black currant seed oil supplementation on the immune response of 40 elderly healthy individuals. Black currant seed oil showed a moderate immune-enhancing effect attributable to its ability to reduce prostaglandin production.

In a <u>2005 study</u>, the fruit juice of black currant was found to contain a *polysaccharide*—rich substance with macrophage—stimulating activity. It retarded the growth of the solid tumor carcinoma—bearing mice.

Just one cup of raw black currants can provide triple the amount of vitamin C needed for one day. Vitamin C protects cells against reactive oxygen species (ROS) generated during the respiratory burst and in the inflammatory response.

A <u>2006 review of studies</u> show that vitamin C can shorten the duration of respiratory tract infections, including the common cold. Furthermore, vitamin C reduces the incidence and improves the outcome of pneumonia, malaria, and diarrhea infections.

One <u>2004 review of studies</u> from the Department of Public Health at the <u>University of Helsinki</u> in Finland comprised 12 studies and found that vitamin C supplementation cut common cold incidence by 45%–91% and slashed the incidence of pneumonia by 80%–100%.

In a <u>2003 review of studies</u>, showed that vitamin C, acting as an antioxidant helped prevent damage to tissues caused by harmful free radicals and may even reduce the risk of cancer, heart disease and stroke.

11. Can Resolve Pneumonia

Pneumonia is <u>an infection that inflames one or both lungs</u>. The lungs may fill with fluid, causing cough with phlegm, fever, chills, and difficulty breathing. A variety of organisms, including bacteria, viruses and fungi, can cause pneumonia. *Streptococcus pneumonia* is the <u>bacterial strain known to cause</u> most cases of pneumonia.

The CDC explains that the <u>flu is a contagious respiratory illness</u> caused by influenza viruses. Aside from the recommended yearly flu shot, you can also fight the flu with natural remedies like black currant seed oil.

A <u>2011 study</u> identified a large number of compounds in an extract of black currant showing high antioxidant activity. They contained high amounts of *phenolic acids*, *flavonoids*, and *carotenoids*, all of which can speed up the healing process from flu.

12. Lowers Blood Pressure

High blood pressure, if left untreated, can <u>lead to heart problems, stroke, kidney ailments, and</u> <u>dementia</u>. A <u>2001 review of studies</u> showed that oils containing higher content of GLA showed a significant reduction in blood pressure levels.

In a <u>1993 comparative study</u> by the <u>Department of Physiological Nursing at the University of California</u> in San Francisco significant reductions in blood pressure were obtained in spontaneously hypertensive rats maintained on diets enriched with oils high in GLA content.

13. Lowers Cholesterol

Excessively <u>high glucose or cholesterol levels in the blood</u> can put you at risk of several life–threatening diseases, including <u>heart attack, stroke, and diabetes</u>.

A <u>2005 article in *The Journal of Nutritional Biochemistry*</u>, showed that in some studies serum levels of LDL cholesterol were lower after black currant seed oil compared to fish oil.

In <u>one 1989 study</u>, Guinea pigs were fed a diet containing 10% black currant seed oil. The fatty acid composition of liver triglycerides showed significant increases of GLA, whereas the levels of *arachidonic acid* (AA) remained relatively stable.

14. Kidney Health

<u>Gout</u> is a common type of arthritis that <u>produces burning pain, inflammation and stiffness</u>. It usually begins on the big toe. It can make it difficult for you to walk and move around and may hamper your daily activities. One possible cause of this condition is <u>monosodium urate crystals</u> accumulating in the joints and soft tissues and produce an inflammatory response.

The causes of elevated urate in the blood (*hyperuricemia*) and the inflammatory response is well known, but less is known about the processes leading to the formation and growth of these crystals. *Uric acid*, the final product of metabolism, is a weak acid that combines with *sodium ions* to form *monosodium urate crystals*.

A <u>1994 study</u> where rats were fed a diet enriched in black currant seed oil suggests that it can significantly suppress inflammation in both the cells and fluid. This effect was attributed to the GLA and ALA in black currant seed oil.

15. Helps Treat a Herpes Outbreak Infection

The World Health Organization (WHO) explains that the herpes simplex virus comes in two types:

- a. the first is herpes simplex virus type 1 (HSV-1), also known as oral herpes or cold sores
- b. the second is *herpes simplex virus type 2* (HSV–2), a sexually transmitted virus that results in genital herpes

Over 3 billion people are infected with oral herpes each year, while genital herpes affects more than 417 million, according to the WHO. Symptoms can vary, causing fever blisters on or around the mouth in some people and painful, itchy genital sores in others.

Coupled with traditional treatments and other natural remedies like <u>L-lysine and zinc</u>, black currant may be a useful addition to the diet to help prevent herpes outbreaks. A <u>2003 study in Japan</u> published in *Phytotherapy Research* showed that black currant extract stopped the herpes virus from adhering to cells and prevented the spread of the virus.

16. Skin Health

Black currant seed oil is commonly used in skincare products because it has high levels of omega–3 fatty acids. It has anti–inflammatory properties that can help soothe irritated skin, making it a great ingredient for people with sensitive or acne–prone skin. A <u>2007 veterinary study</u> showed black currant seed oil was the most effective treatment for dogs with *atopic dermatitis* (a genetically–predisposed chronic, inflammatory and allergic skin disease).

This oil contains *thymoquinone*, a phytochemical that helps decrease inflammation of the skin, while <u>its</u> <u>antioxidant properties</u> minimize the signs of aging and promote collagen production. It also contains *lauric acid*, a fatty acid that can decrease microbial infections of the skin.

Black currant seed oil is quickly and easily absorbed by the skin, which makes it a powerful and effective moisturizer. The omega–3 fatty acids and GLA helps to strengthen the skin's barrier function, which can help prevent moisture loss, keep the skin hydrated. They also help to <u>repair damaged skin cells and</u> <u>promote cell regeneration</u>, while the vitamin C helps fight free radical damage.

17. Eases the Symptoms of Eczema and Psoriasis

Eczema and psoriasis (*dermatitis* or *atopic dermatitis*) are chronic skin conditions that are characterized by very dry, itchy or scaly inflamed skin. The anti–inflammatory properties of black currant seed oil skin benefits can help to <u>soothe eczema and psoriasis</u> flare–ups and restore the natural barrier function of the skin. Up to 20% of infants and 3% of adults suffer from eczema in the U.S., reports <u>WebMD</u>.

In a <u>2010 randomized, double-blind, placebo-controlled trial</u>, Finnish scientists assessed the efficacy of black currant seed oil as a preventive measure for eczema in newborns. In this study, 313 pregnant mothers were given either black currant seed oil or a placebo from the 8th-16th weeks of pregnancy to when they stopped breastfeeding their newborns. This regimen was followed by supplementation directly to the infants until two years of age.

It was reported that the babies whose parents took in the black currant seed oil supplement were at a lower risk of eczema than their counterparts in spite the fact that these babies were predisposed to this condition as their parents also have eczema.

18. Helps Treat Acne

The vitamin C in black currant seed oil helps to <u>boost collagen production</u>, while the GLA content helps reduce inflammation. The vitamins A in black currant seed oil can also help to reduce the appearance of dark marks and scars from acne.

Applying this oil (diluted in a carrier oil) topically to the face is one of the best ways to <u>reduce</u> <u>inflammation caused by acne</u>. Dabbing the oil mixture onto the inflamed patches of the skin will speed up healing and eliminate any underlying bacterial infections.

19. Hair Health

In a 2015 6-month, randomized, comparative study, 120 healthy female subjects supplemented their diets with specific omega-3, omega-6 and antioxidants. A large majority of supplemented subjects reported a reduction in hair loss (89.9%), as well as an improvement in hair thickness (86.1%) and hair fullness (87.3%).

The anti–inflammatory properties of black currant seed oil can also help soothe an itchy, dry scalp. The ALA in black currant seed oil help to hydrate and nourish the scalp, while the GLA helps to reduce inflammation, which can lead to hair loss. Black currant seed oil can be applied directly to the scalp or added to shampoos and conditioners for best results.

20. Eye Health

In a <u>2003 randomized clinical trial</u> by the Department of Neurosciences, Ophthalmology and Genetics at the <u>University of Genoa</u> in Italy, 26 patients with dry eye disease (*keratoconjunctivitis sicca*) were selected to evaluate the efficacy and anti–inflammatory activity of systemic LA and GLA, which decrease chronic inflammation in rheumatoid arthritis, on the ocular surface of patients with dry eye disease.

The subjects were randomly divided into two groups of 13 patients each. The study group received tablets containing LA and GLA and used artificial tears; the control group received a tear substitute and a placebo tablet. Statistically significant changes in symptoms occurred in the study group compared with controls. Therapy with LA and GLA and tear substitutes reduced ocular surface inflammation and improved dry eye symptoms.

In this 2013 placebo–controlled, double–masked, crossover study in Japan, published in the Journal of Ocular Pharmacology and Therapeutics, the effects of oral administration of black currant anthocyanins on intraocular pressure in both healthy subjects and patients with glaucoma were observed. Glaucoma

is a group of eye diseases that can cause blurred and distorted vision and may even lead to blindness. This is typically a result of damage to the optic nerve, the nerve that connects the eyes to the brain.

There was a significant decrease in intraocular pressure in healthy subjects, which was not observed in the placebo group. There was a decreases in intraocular pressure in the glaucoma patients. In addition, changes of visual–field mean deviation deterioration were significantly less in glaucoma patients.

The *anthocyanins* in black currant are possible factors preventing damage to the optic nerve caused by glaucoma. The *anthocyanins* <u>decreased blood levels of *endothelin*–1</u> (a type of hormone that is thought to contribute to the development of glaucoma) and *nitric oxide*.

Another <u>2012 two-year, randomized, placebo-controlled study</u> conducted in Japan by the Department of Ophthalmology at <u>Sapporo Medical University School of Medicine</u> in Sapporo, Japan, examined the effect of black currant *anthocyanins* on the progression of open-angle glaucoma in 38 patients treated with anti-glaucoma drops.

A statistically significant difference was observed between the treatment groups in changes in visual field deviation. Ocular blood flows increased in comparison with placebo patients.

21. Aromatherapy

Black currant seed oil has also been found to have a positive impact on mental health. Its aroma has been shown to have a calming effect on the mind, reducing stress and anxiety. It can also help improve focus and concentration, making it useful for people with ADD or ADHD.

Therapeutic Uses of Black Currant Seed Oil

Black currants can definitely be considered a superfood. Black currants, their oil and extract support the immune system, kidneys, heart, skin, hair, and the body's inflammatory response. Black currants' vitamin content provides the body with powerful antioxidants to combat free radical damage. Black currants may be available in some grocery stores as well as online. Beware black currants differ from "Zante" currants, which are dried black Corinth grapes.

Black currants also contain seeds, from which black currant seed oil is extracted. Positive effects can be achieved through both the topical and oral use of black currant seed oil. For its cardiovascular and immune system benefits, it is best to ingest black currant seed oil. It is also best ingested to improve inflammatory conditions and eye.

Blackcurrant supplements come in pearl form, or you can just add a few droppers to water or a beverage. It's beneficial to combine black currant seed oil with foods rich in omega–3 fatty acids like fish oil, chia seeds or egg yolks, in order to get both omega–3 and omega–6 fatty acids.

- 1. Add 2–3 drops of black currant seed oil to a diffuser to promote relaxation.
- 2. Add 2–3 drops of black currant seed oil to a carrier oil and apply topically to treat skin or hair problems.
- 3. For eczema, dilute about 5 drops of black currant seed oil in a carrier oil (argan, coconut or jojoba), rub it between your hands to warm it up and apply to affected areas. Repeat as needed.
- Add 2–3 drops of black currant seed oil to food dishes to add flavor and nutritional value. Alternatively, eat black currant berries either raw or cooked in both sweet and savory dishes. Check out our recipes for a <u>black currant and lavender pie</u>, a <u>black currant chia nourish shake</u> and <u>black currant jam</u>.
- 5. Add 2–3 drops of black currant seed oil to a warm bath for a relaxing and therapeutic soak.
- 6. Brew black currant berries into black currant tea.

The best way to reap the benefits of black currant seed oil is to apply it directly to your skin or hair. You can also add a few drops to your favorite skin care products or conditioner.

Proper Dosage of Black Currant Seed Oil

Frequently found in capsule form online and in various health food stores, black currant seed oil is a good source of GLA, a type of <u>omega-6 essential fatty acid</u>, and is taken to promote healthy skin and hair. It is typically sold in 1 to 8-ounce bottles or in 500 to 1500-milligram pills.

Look for a capsule that contains at least 45 milligrams of GLA with minimal added ingredients, and take 500 milligrams twice daily for no more than 2 months, since there is little to no research on extended, regular use of black currant seed oil. In supplement form, consume 2,000 to 5,000 milligrams per day.

Black Currant Seed Oil Precautions

Black currant seed oil is available as a 100% pure oil in some health food stores and online. Black currant seed oil can be inhaled directly from the bottle, diffused at home for a warming aroma, taken internally in small doses (always read product direction labels carefully) and applied topically.

When buying black currant seed oil, especially for internal use, be sure to purchase a high–quality, 100 percent pure–grade product that's made by a trustworthy and reputable company. Because of its potent medicinal properties, you'll want to use the best product you can find.

When applied topically, black currant seed oil can be a strong irritant in high doses and should not be applied to skin before it is diluted into a carrier oil (like sweet almond or jojoba). Coconut oil is also a good choice, either fractionated coconut oil or virgin coconut oil.

A safe dilution ratio for black currant seed oil is 1–2 drops per teaspoon of carrier oil, especially when applying the oil to sensitive skin. In any form, black currant seed oil should never be used on broken or damaged skin. Do not apply directly to open wounds. Never use black currant seed oil in eyes or in mucous membranes. Avoid prolonged use, prolonged use may cause skin irritation or an allergic reaction.

Drug Interactions

If you are currently taking any medications or have any ongoing health issues, speak with your doctor before eating black currants or using black currant seed oil. Also speak with your doctor first before using this oil topically or internally if you are pregnant or nursing.

Those who are taking *phenothiazines*, a class of anti–psychotic medications, should not ingest black currants or black currant seed oil as it may increase the risk of seizure.

Additionally, black currants and black currant seed oil have antiplatelet and anticoagulant properties, which <u>may slow blood clotting</u>. If you have a bleeding disorder or are taking a medication for blood clotting, such as Warfarin, consult with your physician first before ingesting black currants or black currant seed oil. Do not ingest black currants or black currant seed oil prior to surgery as it may increase bleeding risk.

Contraindications

Excess consumption of black currants or black currant seed oil may also cause side effects in some individuals, including complications of pregnancy, gastrointestinal distress, bleeding problems, inflammation, gas, headaches and diarrhea. Always consult with a healthcare professional before eating black currants or using black currant seed oil if you're taking medications or have preexisting health conditions.

Drinking black currant tea in excess can result in a number of side effects, such as the following: complications of pregnancy, difficulty sleeping, gastrointestinal problems and potential bleeding disorders.

Although uncommon, black currant seed oil may cause an allergic reaction in women who are pregnant or breastfeeding, or people who have a sensitivity to *salicylate*, a compound that occurs naturally in some plants. If you experience symptoms like rashes, hives or swelling after eating black currants or using black currant seed oil, discontinue use immediately.

Black currant seed oil may be used safely by pregnant or breastfeeding women strictly for aromatherapy in a diffuser, with a recommended dose of no more than 4 drops with a little water and only for 15 minutes at a time with very long breaks in between.

Use essential oils with extreme caution on children, do not use black currant seed oil on children. Some brands clearly label their essential oils "KidSafe" on the bottle if it can be used on children ages 2–10.

When applying black currant seed oil topically (on your skin), always perform a 24-hour skin patch test first using 1–2 drops, <u>read how for further details</u>. Wear gloves if handling this essential oil in its pure form as direct contact may cause *allergic dermatitis* (an allergic reaction of the skin). Only use black currant seed oil in diluted form.

Black currant seed oil can have a long shelf life if stored properly in tightly–sealed dark glass containers. Keep in a cool and dry place, such as a dresser drawer or kitchen cabinet. Keep away from extreme heat and cold temperatures. Keep out of the reach of children and pets.