

A close-up photograph of an olive branch. The branch is covered with small, elongated, green olives and silvery-green, lanceolate leaves. The background is a soft-focus view of more olive branches and leaves, with a hint of a blue sky. The text is overlaid in the center of the image.

Oils for Winter Skincare

Oleic acid & Polyunsaturated oils

semi-occlusive

When occlusive oils combine with emollient oils, we protect the skin from damage while soothing and replenishing its lipid structure.

The oils with dominant monounsaturated fatty acids, oleic acid and palmitoleic acid, offer the skin what it produces on its own, but at a rate that slows as we age.

Also in this lesson are polyunsaturated fatty acids that provide the skin with linoleic acid, needed for the ceramide structure of the stratum corneum.

Plus, we'll cover two conjugated fatty acid oils that are especially protective.



oleic acid oils

In general, oleic acid is a great protector and emollient for the skin, providing anti-inflammatory properties and helping regenerate skin tissues.

Oleic acid is a component of cell membrane phospholipids, helping maintain membrane fluidity, influencing hormone responsiveness, eliminating pathogens, and facilitating the transport of minerals in the body.

Oleic acid is present in so many oils that it's hard to narrow them down to just a few.

Still, I have chosen five oils — olive, camellia, apricot, moringa, and avocado — for their versatility and availability.

emollient oleic

Oils used to protect the skin are members of a very large group.

I categorize oleic acid oils as emollient and semi-occlusive, as they leave a fine protective film on the skin that helps protect the tissues.

Olive, camellia, moringa, apricot, and avocado are the ones we will feature, but there are others

Almond, plum, peach

Macadamia, hazelnut, pistachio

Marula, papaya, high oleic sunflower



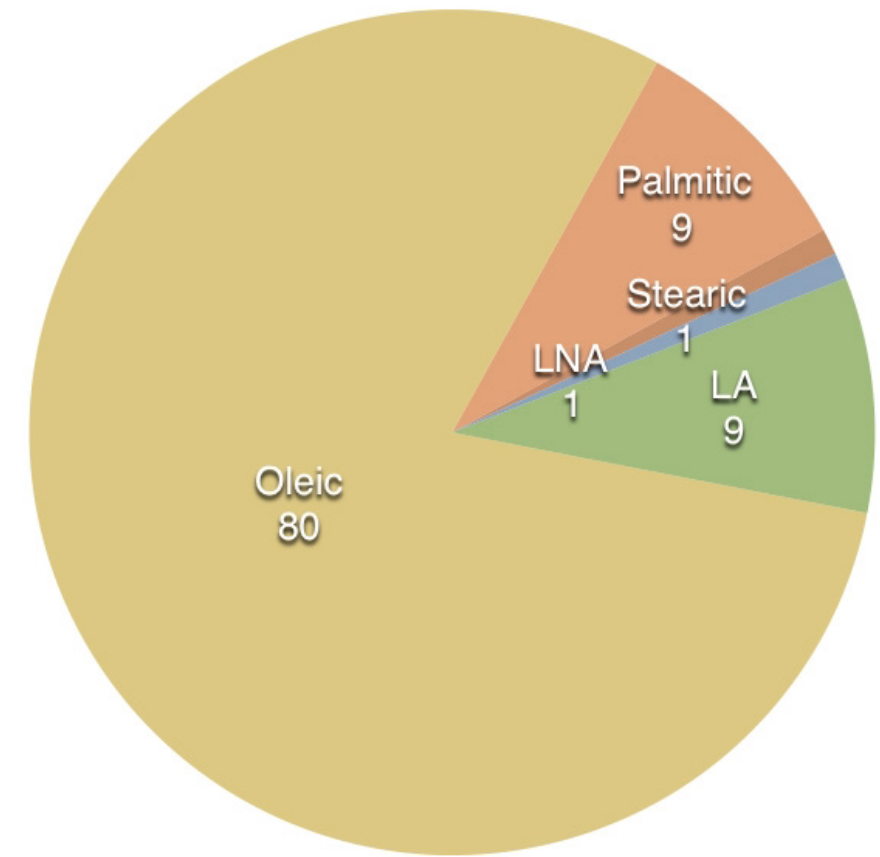
olive oil

Olive oil, the source name of oleic acid, is outstanding both on the skin and in the kitchen.

With its high oleic acid content, olive oil protects the skin with a fine lipid film, absorbing somewhat yet not fully or deeply.

High-quality virgin olive oils are rich in polyphenol compounds that nourish and protect the skin from inflammation and oxidative damage, along with squalene, an anti-inflammatory and antioxidant triterpene.

The oil comes in many shades of green, from refined to colorless. Virgin unrefined oil will contain higher levels of unsaponifiabiles.



OLIVE OIL



camellia oils

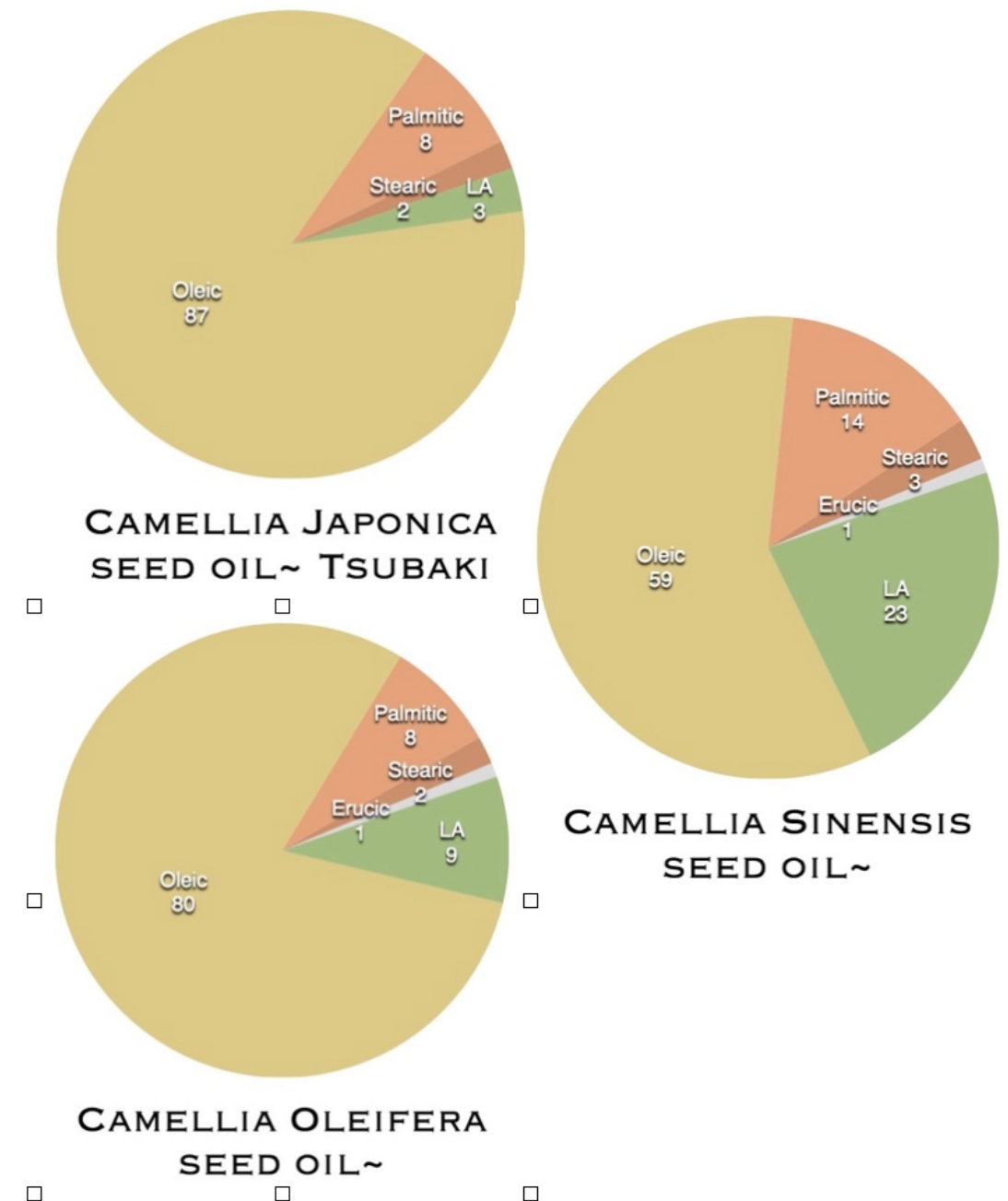
Camellia oil comes from the same plant that gives us green and black teas, with three varieties generally available in the market.

All are dominated by oleic acid, and all are considered dry oils, a term for astringency in the oil.

Dry oils feel dry rather than oily when applied to the skin and are recommended for those with oily skin or skin that needs brightening.

The tannins that make camellia oils feel dry also help stimulate circulation, tone, and firm the skin.

Choose from the three common varieties that produce lipid oils: *Camellia sinensis*, *C. japonica*, and *C. oleifera*.

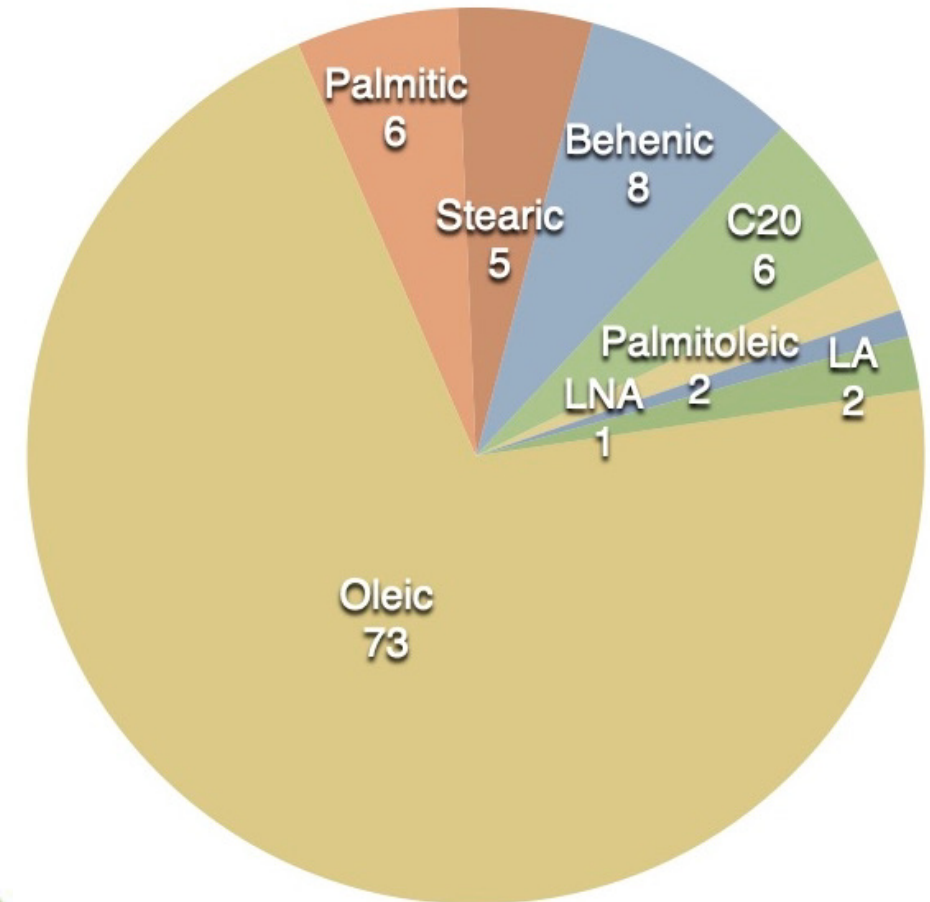


moringa

Moringa oleifera seeds produce a rich and protective oil dominated by oleic acid with a helpful small percentage of both 20+ carbon chains and palmitoleic acid.

Palmitoleic acid, a monounsaturated fatty acid produced by the skin, speeds wound healing and acts as an antimicrobial, protecting the skin in multiple ways.

A generous unsaponifiable fraction includes anti-inflammatory β -sitosterol and α -tocopherols that protect the skin from oxidative damage.



MORINGA SEED OIL



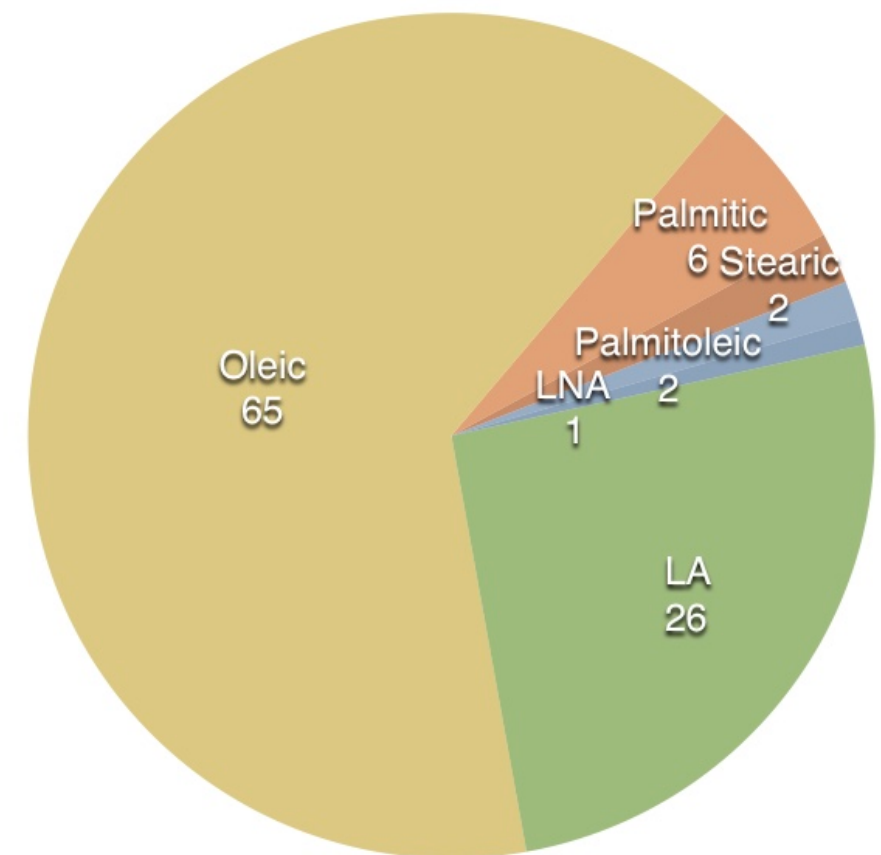
apricot kernel

Apricot kernel oil is an excellent oil from the *Rosaceae* family and is very similar to the related peach, plum, and almond oils.

Apricot kernel oil (*Prunus armeniaca*) has a similar fatty acid profile to almond and other family oils, and is a bit lighter on the skin than almond.

Palmitoleic acid (omega-7) accounts for 2% of the total, not insignificant for this beneficial but rare fatty acid. We often find apricot kernel oil in anti-aging products recommended for mature skin.

Vitamin E, squalene, and plant sterols add nourishing and protective benefits to this oil.



APRICOT KERNEL OIL

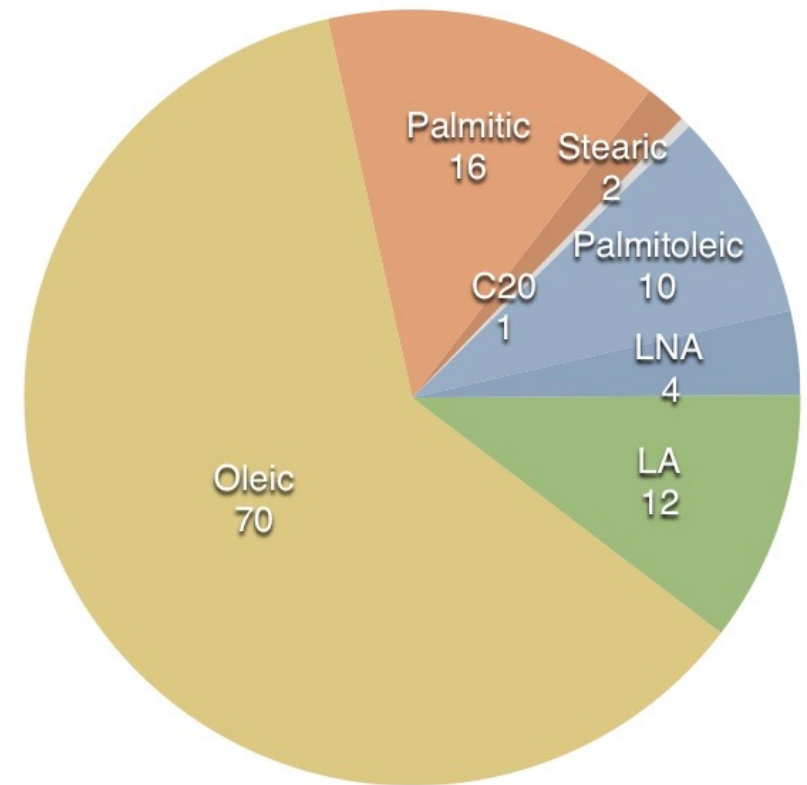


avocado

Avocado oil, *Persea gratissima*, is dominated by oleic acid and also contains a very generous 10% palmitoleic acid, a valuable fatty acid that the skin produces at 22% in the sebaceous glands.

Palmitoleic acid supports the skin's health by increasing the synthesis of elastin and collagen, proteins that support the skin's structure.

The fatty acid promotes wound healing, supplies antibacterial activity and bactericidal properties, and acts as an antimicrobial agent.



AVOCADO OIL



polyunsaturated, twisted

Most polyunsaturated oils are light and absorb into the skin, nourishing it but not leaving enough of an occlusive protective layer for extreme weather. There are exceptions.

The exceptions are conjugated fatty acid oils like pomegranate oil, puniic acid, and manketti oil, which contains eleostearic acid.

These fatty acid types, conjugated fatty acids, give oils a viscous, thick feel, providing the skin with protection from the unusual twisted carbon chains.

They are, however, polyunsaturated with unique fatty acids that help strengthen the skin barrier and retain moisture.

As a polyunsaturated fatty acid, Linoleic acid is vital for the integrity of the skin's ceramides and barrier function.

When formulating, include some linoleic acid in your combination, so the skin can incorporate it as you focus on more occlusive oils for the extremes of winter weather.

poly, LA and CLnA

Polyunsaturated fatty acids are part of the skin's lipid structure, with linoleic acid being the largest percentage.

Linoleic acid is vital for the integrity of the skin's ceramides and barrier function and is effective when supplemented topically.

Watermelon and sesame seed oils are readily available oils with high linoleic acid content.

We'll also look at the two conjugated fatty acid oils, **pomegranate**, and **cherry kernel oil**.

Additional oils with generous linoleic acid:

- Passion fruit seed oil
- Walnut oil
- Nigella seed oil
- Hemp seed oil
- Grapeseed oil
- Cucumber seed oil



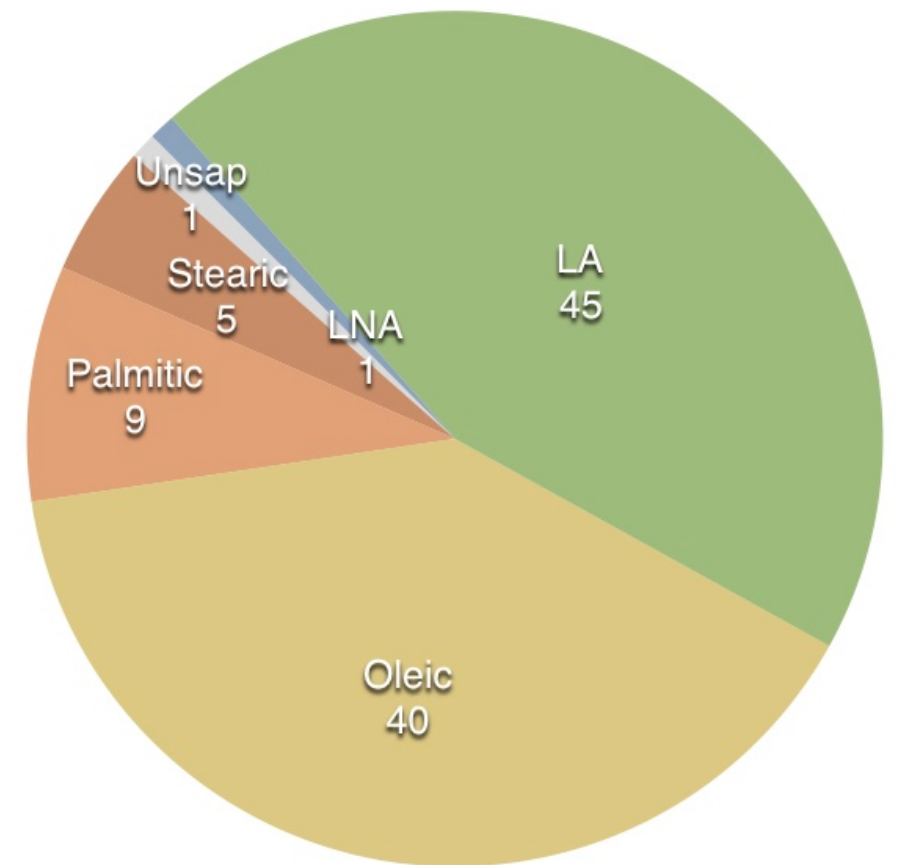
sesame

Sesame seed oil, *Sesamum indicum*, is considered one of humanity's oldest oilseeds; its use in Ayurvedic practices is an ancient tradition.

Sesame oil is high in linoleic acid and has a durable shelf life due to its unsaponifiable fraction, which is rich in polyphenol lignans, sesamol, and sesamin.

These polyphenols serve as natural preservatives and sesame-specific antioxidants, helping protect the skin and preserve its linoleic acid from oxidation.

Avoid toasted forms for skin care.



SESAME SEED OIL

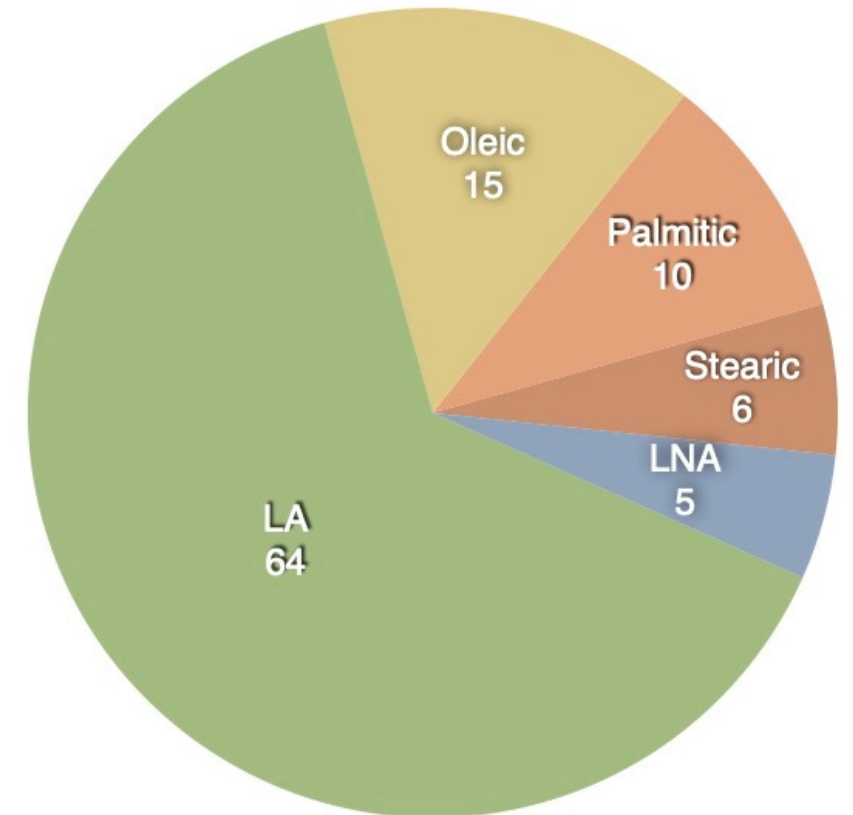


watermelon

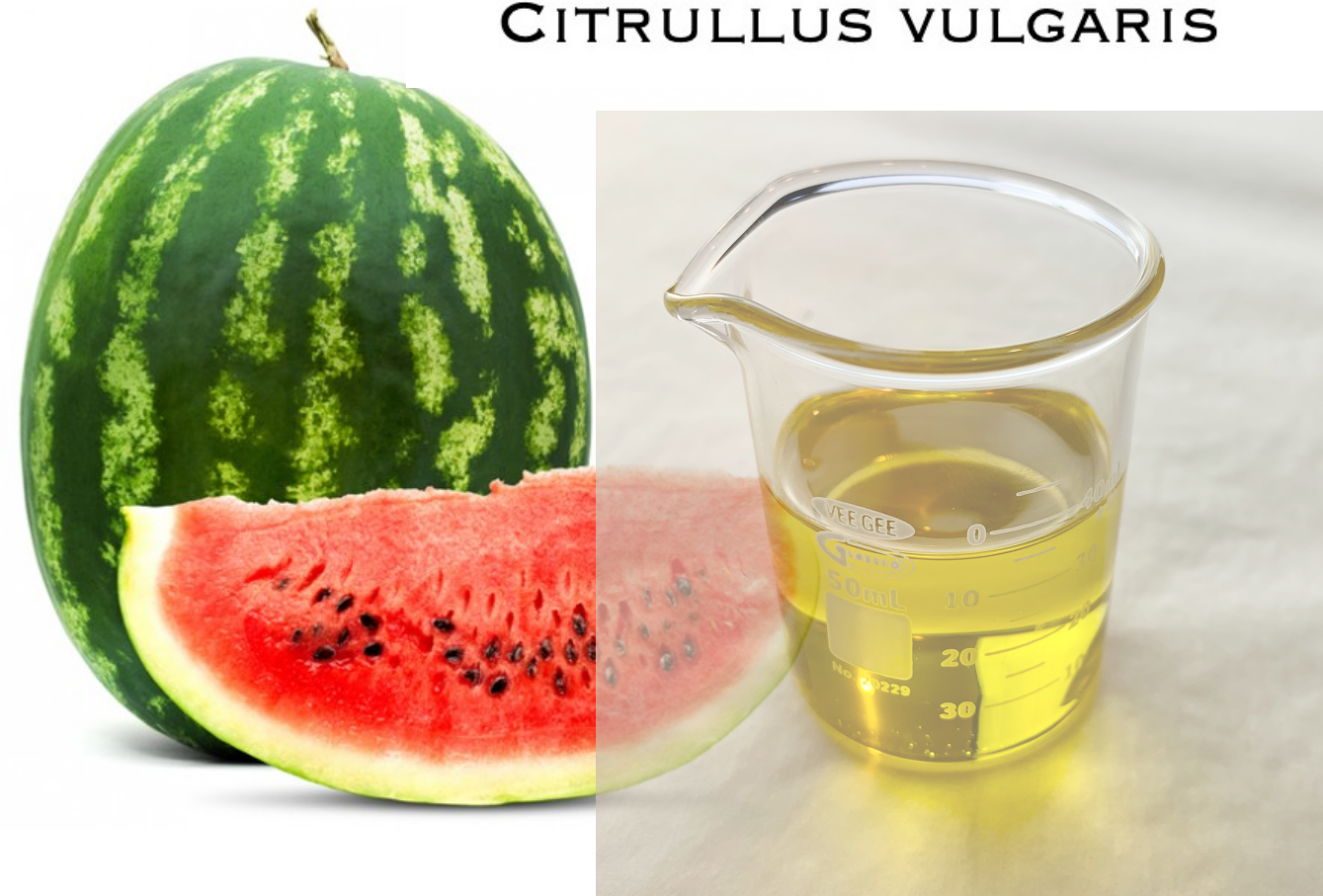
Watermelon seed oil, *Citrullus vulgaris*, is the African desert's descendant of Kalahari or Ootanga melon oil, an oil in use since ancient times.

True to the group of gourd or melon oils, in the *Cucurbitaceae* family, the fatty acid profile is high in linoleic acid, followed by oleic acid.

Nourishing and repairing, the oil is anti-inflammatory and traditionally used on troubled skin to help dissolve excess natural oils, keeping the skin clear and fresh.



WATERMELON SEED OIL
CITRULLUS VULGARIS



CLA, or conjugated linoleic acid, is a family of isomers of linoleic acid produced in animal fats.

When produced in plants, conjugated fatty acids, CLA, become CLnA, which are unusual and complicated fatty acids. Yet they can be very beneficial for the skin.

These fatty acids are highly polyunsaturated with three double bonds, but the shape of the fatty acid causes it to twist.

This twisting action gives the oil's fatty acids a thick, viscous feel, almost as though saturated fatty acids were causing it.

These are uncommon but highly valuable for the skin. We can look at two oils of this type.

CLnA



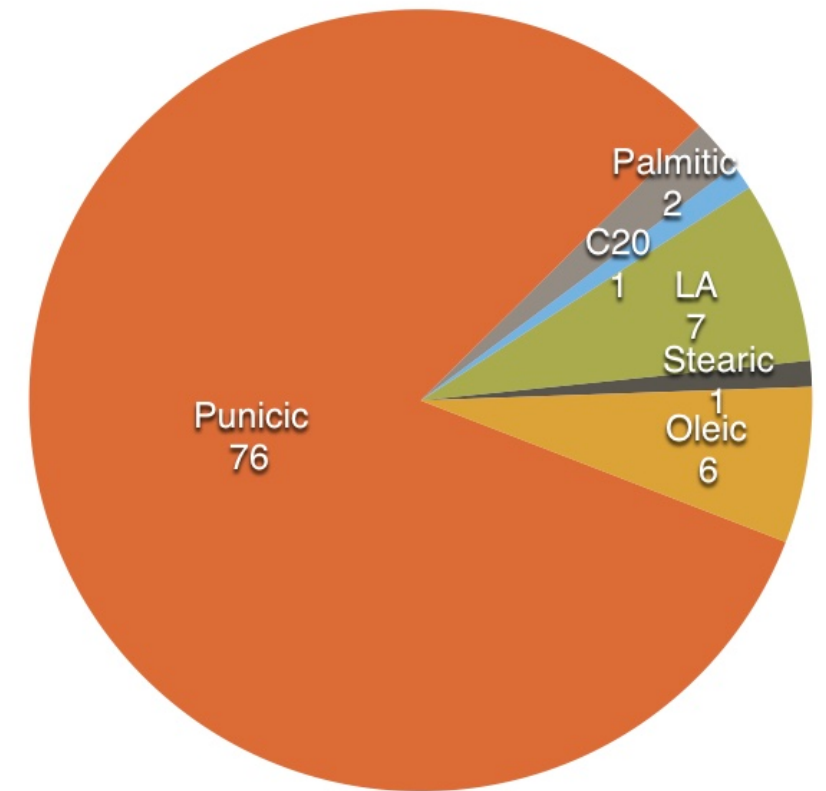
pomegranate

Pomegranate oil is unusual because it contains a fatty acid named after the plant, *Punica granatum*.

Punicic acid, a CLnA-conjugated fatty acid, makes up 76% of pomegranate seed oil.

The conjugated and cis-trans structures of the fatty acid cause it to twist, bending one way and then the other.

This twisting structure gives the oil a full, rich, and protective feel. Its heavier texture creates an occlusive film with the benefits of pomegranate.



POMEGRANATE SEED OIL



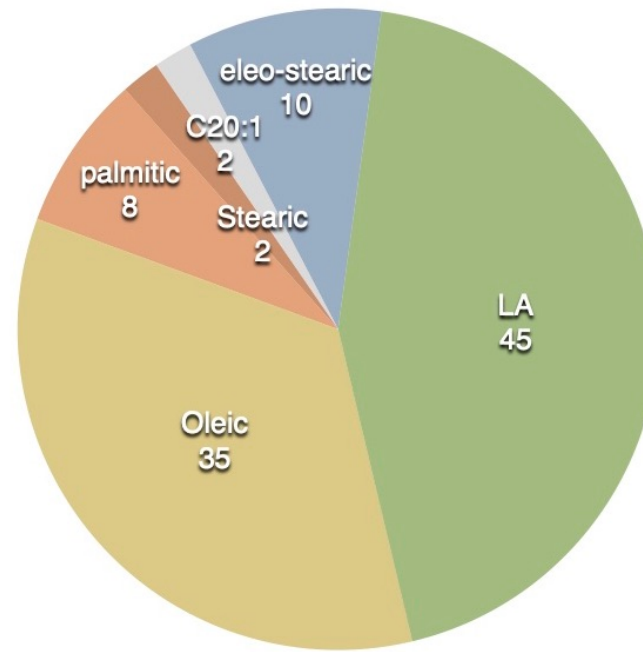
cherry kernel oil

Cherry kernel oil *Prunus avium*, and *Prunus Mahaleb*, with the western name St. Lucie cherry oil, contain eleo-stearic acid in different ranges of the fatty acid..

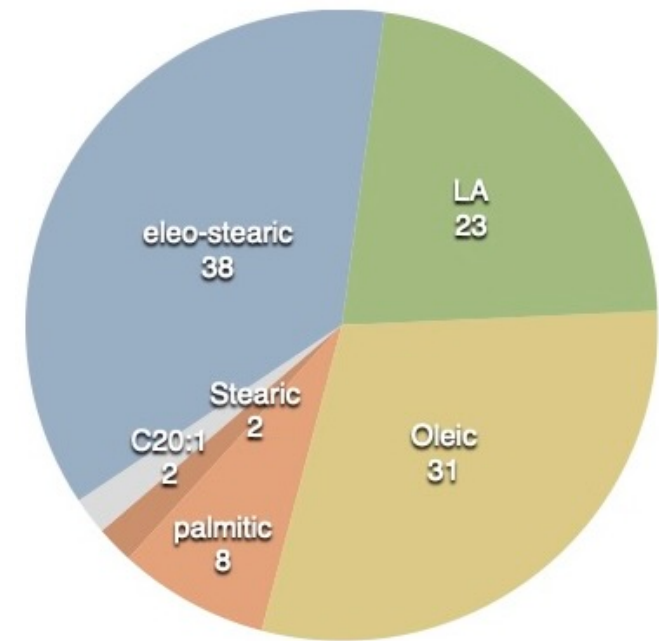
Eleo-stearic acid is similar to punicic acid of pomegranate, CLnA, C18:3.

Cherry kernel oils are rich in carotenoids and vitamin E, tocopherols, and tocotrienols, all of which are highly protective against oxidation.

Cherry oils help to improve skin elasticity while encouraging the regeneration of skin cells. Its soothing properties help tame inflammation and irritation.



CHERRY KERNEL
SEED OIL



MAHLAB ST. LUCIE
CHERRY SEED OIL



in our next lesson...

In our next lesson, we will combine oils, demonstrating how to formulate protective oil combinations for weather extremes.

Having a strong occlusive oil presence, combined with emollient and nourishing oils with antioxidant properties, can help prevent skin damage caused by severe weather.

All of these oils are generally available but can be substituted with other similar options.



