What is Jojoba oil?

Jojoba (pronounced ho-HO-ba) is a botanical extract of the seed of the Jojoba tree (Simmondsia chinensis). What’s interesting about it is that it isn’t actually oil, but rather what they call a wax ester.

Why do we care?

Because out of all of the compounds in nature, this wax ester is the most similar to human skin oil (sebum). It is theorized that applying Jojoba to the skin can “trick” the skin into thinking it is producing enough oil, thus balancing oil production. The bottom line for us is that Jojoba oil is non-comedogenic so we can use it without fear.

Jojoba Oils as Natural remedies

Jojoba oil is a mixture of wax esters, 36 to 46 carbon atoms in length. Each molecule consists of a fatty acid and a fatty alcohol joined by an ester bond. 98% of the fatty acid molecules are unsaturated at the 9th carbon-carbon bond (omega-9)

The approximate percentages of fatty acids in Jojoba oil are as follows:

<table>
<thead>
<tr>
<th>Fatty Acid</th>
<th>Min</th>
<th>Max</th>
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<tbody>
<tr>
<td>Eicosenoic</td>
<td>66%</td>
<td>71%</td>
</tr>
<tr>
<td>Docosenoic</td>
<td>14%</td>
<td>20%</td>
</tr>
<tr>
<td>Oleic</td>
<td>10%</td>
<td>13%</td>
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General use of Jojoba oil

The Bacterial Action:

• The immune system seems actively involved in reaction to bacterial and auto-immune antigens.

• It might be speculated that form Streptococci infect epithelium of the salivary gland, stimulate formation of antibodies fix complement and cause cytolysis.

• The disease may be further complicated by an auto-immune reaction to released antigens (L) from epithelium tissues.

• Alternatively an auto-immune reaction to oral epithelium might serve as predisposing factor to fertilize the soil for an L-Streptococcal infection & resultant necrosis and ulcer formation.

Antimicrobial Effect:

• Zanial et Al 1994 reported an antimicrobial action of Jojoba oil.

• This action play a role in controlling RAU which might have a relation to cell mediated immunity against Streptococcus 2A & oral mucous which is significantly increased in relation to exacerbation of RAU.

Antimicrobial Effect:

• The molecular structure of Jojoba oil showed that it is a fat acid ester of decylalcohol and discosanol alcohols. Due to the Jojoba structure properties it is used for skin care especially:
  - Skin dehydration.
  - Skin inflammation.
  - Controlling Psoriasis & Acne.
  - Transdermal patches for drug.
  - Base for topical ointment.
Jojoba Oils
The complete natural remedies

- It decreases its hydrolysis in the GIT since large amount unhydrolyzed oil were excreted.
- Thus, Jojoba oil has been suggested to be used as dietic oil since it will not be metabolized by the human body; the fat-splitting enzymes & lipase is found to be unable to hydrolyze the oil.

Anti-inflammatory Effect:
- A recent study has revealed that Jojoba has anti-inflammatory properties since Jojoba contains a natural anti-inflammatory called myristic acid and it is useful in formulations used for arthritis and rheumatism.

The Extracted Jojoba Oil Is Effectively Used In The Treatment Of The Following

Dermal Diseases:
- It has been effectively used with salicylic acid in the treatment of psoriasis, dandruff, acne and fish skin disease.
- It has been effectively used with zinc oxide in the treatment of napkin dermatitis, skin rash, allergic dermatitis and monilial infection.
- It has been effectively used with the treatment of insect bites and the treatment of fungal infect in toes.
- It is effective in protecting skin from non-infective allergic materials such as liquid washing soap.
- It has been effectively used in treatment of mange, treating first degree burns and sun burns as well as protecting skin from hazards of ultraviolet rays during sun-tanning.
- It is also elective as a first aid for wounds and treating inflammatory wounds and enhancing healing by primary intention.
- It is effective in the treatment of bedsores.

- It has been used in assisting treatment of alopecia areata and rogenetica.
- It has been used to eliminate hair lice. It has been effectively used in treatment of Herpes simplex labialis (cold sores).
- It has also been effectively used in healing diabetic wounds especially diabetic foot.

Treatment of Gingivostomatitis and Toothache:
- The extracted Jojoba oil has been effectively used with lidocaine in the treatment of recurrent aphthous ulceration.
- It has been used in toothpaste to treat gingivitis and improve the circulation of gingiva.
- It has been effectively used with zinc oxide in temporary filling.
- It has also been effectively used in the treatment of the dry socket as a side effect of chemotherapy and radiotherapy.

Rheumatic Pain and Arthritis:
The Jojoba Oil is effective in treating and relieving pains of polyarthritis, rheumatic pains, arthralgia, and spondylitis.
- It is effective in enhancing the effect of physiotherapy and supporting body to regain its physical ability in addition to eliminating the stress and cramps.

Inflammation of the Ear
- It has been effective in treatment of otitis externa and otitis media.

Treatment of Eye Diseases:
- It has been effectively used in treatment of thrombosis.
**General Surgery:**

Jojoba has been effectively used as suppositories in the treatment of acute and chronic anal fissure and anal fistula, as well as the treatment of prostatitis, Hemorrhoids (at 2 ND. degree) and Early stages of Varicose Vein.

**Gynecology of Obstetrics:**

It has been effectively used as a vaginal suppository in treatment of vaginitis, used in relieving the pain accompanied with dysmenorrhea, and used in the treatment of nipple crakes and improve its healing.

**SEDICO ‘Jojoba Containing Products**

**Jogel**

*Jojoba oil + Lidocaine hydrochloride*

**Properties:**

Jogel contains two active ingredients, Jojoba oil & Lidocaine.

Jojoba is extracted from ground or crushed seeds of Simmondsia chinensis, Jojoba oil posses’ antinflamatory and antimicrobial properties.

Thus it has powerful effects on the inflammation of the gums and the mucous membranes of the mouth. Jojoba oil markedly reduces the lesion size of ulcers with obvious resolution of any edema or erythema.

Lidocaine is a local anesthetic that alleviates pain.

Clinical trials of Jogel have proved the powerful and rapid effects of the product in various cases of inflammation and ulceration of the buccal cavity.

**Indications:**

Jogel is a gel preparation useful for the treatment of:

- Inflammation of the gum and mucous membranes of the mouth, due to various etiologies especially after prolonged use of antibiotics.
- Aphthous ulcer

**Contraindication:**

Any known hypersensitivity to any components of the product.

**Side effects:**

Jogel gel is well tolerated and no adverse effects or reactions have been reported.

**Dosage:**

For adults and children apply the gel ½ cm not more on the affected area of the gum or mucous membrane of the mouth and gently rub the affected area.

**Jobacure Suppositories**

*(Jojoba oil 20%)*

**Properties:**

Jojoba oil is extracted from ground or crushed seeds of Simmondsia chinensis. Chemically Jojoba oil is a liquid wax. It possesses anti-inflammatory & anti-microbial properties.

**Indications:**

Jobacure suppositories are indicated as anti-inflammatory to alleviate ailments of the rectal mucosa as for e.g. in fissures.

**Side Effects:**

Not reported.
Rasha Ointment
(Jojoba oil + Zinc oxide)

Properties:
Jojoba oil is a natural product used since ancient times as a potent skin protector.
Jojoba oils are characterized by having 50% of its content as unsaponifiables, whereas all other vegetable oils contain around 2-3% only.

Researches showed that unsaponified applied to the skin increase the dermal state of elastin.
Elastin is known to be responsible for skin luster, elasticity and integrity.

Jojoba oil also proves to have antioxidant, anti-inflammatory, & antimicrobial effects.

It is neutrally pH balanced and reveals beneficial effects for dry and damaged skin.

In addition zinc oxide included in Rasha ointment, when applied to the skin acts as a mild astringent & possesses soothing and protective properties when used in eczema. Clinical studies have shown the powerful and rapid effects of Rasha ointment inn healing napkin dermatitis.

Indications:
- Skin sores
- Insect bites
- Skin rash and allergic conditions
- Napkin dermatitis in infants and neonates
- As a skin protector to dry and damaged skin

Sorana Ointment
(Jojoba oil + Salicylic acid)

Properties:
Sorana ointment contains Jojoba oil which is obtained from seeds of simmondsia chinensis.

It is non-irritant and non-sensitizer to skin.

Physical and chemical applications on the skin for the treatment of various dermatological conditions.

Sorana ointment is absorbed by the skin without irritating effects.

Indications:
It is used topically for the treatment of:
- Acne
- Psoriasis
- Dandruff
- Seborrhoeic dermatitis
- Ichthyoids
- In the treatment of fungal infections such as Tinea

Dosage & route of administration & duration:
Spreading the ointment by gentle massage on the infected skin area.

Well, almost everyone knows that Jojoba oil has many uses in a wide variety of industries. It could be very difficult to mention all the possible uses but it is being used as a cosmetic, it is an effective cleanser, conditioner, moisturizer, and softener for the skin and hair. In most cases- it is applied directly to the skin to soften the skin, to reduce wrinkles and stretch marks, to lighten and help heal scars, and to promote healthy scalp and hair.