CARRIER OILS USED IN AROMATHERAPY PART 3



Course name: AROMATHERAPY

Grade 4- Spring Semester 2023-2024

Course code: PHAR 429

Lecture 9



Carrier oils

- In aromatherapy, a carrier oil is a vegetable oil derived from the fatty portion of a plant, such as the seeds, nuts, or kernels.
- Carrier oils are used to dilute essential oils before topical application, as essential oils are highly concentrated and can be irritating or cause adverse reactions if applied directly to the skin.
- Carrier oils can also provide their nourishing benefits to the skin and hair.

ERBL 2008

Reasons and Benefits to use carrier oils in aromatherapy

- Safety: Essential oils are highly concentrated and can cause skin irritation, burns, or allergic reactions if applied directly to the skin. Diluting essential oils with carrier oils ensures they are safe for topical use.
- Slow Release: Carrier oils can slow the evaporation rate of essential oils, allowing them to be released gradually and providing sustained benefits.
- Moisturization and Nourishment: Carrier oils provide hydration and nourishment to the skin and hair, enhancing the overall therapeutic experience. Many carrier oils contain vitamins, antioxidants, and essential fatty acids that offer additional skin and hair benefits.
- Enhanced Absorption: Carrier oils help essential oils absorb more effectively into the skin, maximizing their therapeutic effects.



- Synergistic Effects: Combining different carriers and essential oils can create synergistic effects, enhancing the therapeutic experience.
- Smooth Application: Carrier oils provide a smooth and even application for aromatherapy massages, reducing friction and making the massage more comfortable.
- Enhanced Relaxation: Using carrier oils in massage can enhance relaxation and stress relief.
- Aroma Modulation: Carrier oils can help balance the scent of essential oils, creating a more pleasing and harmonious aroma for aromatherapy.
- **Cost-Effective**: Diluting essential oils with carrier oils means less essential oil is needed per application, making the practice more cost-effective.

Sweet Almond oil

Biological Source:

Almond oil is a fixed oil obtained by expression from the seeds of *Prunus amygdalus* var. *dulcis* (sweet almonds) or *P*. *amygdalus* var. *amara* (bitter almonds).

• Family: (Rosaceae)

• The oil is mainly produced in the countries like Italy, France, Syria, Spain, North Africa, and Iran.





Chemical Constituents



- Fatty Acids: Sweet almond oil is high in monounsaturated fatty acids, particularly oleic acid (around 62-86%) and linoleic acid (around 17-29%), palmitic (5%), and myristic acid (1%).
- Vitamin E: It contains a significant amount of vitamin E, a powerful antioxidant that helps protect the skin from oxidative stress.
- Other Nutrients: The oil also contains other vitamins, such as vitamin A, and small amounts of phytosterols like β -sitosterol, $\Delta 5$ -avenasterol, cholesterol, brassicasterol, and tocopherols

Uses



Aromatherapy: Sweet almond oil is commonly used as a carrier oil in aromatherapy to dilute essential oils for safe topical application.

Skin Care: It is widely used in skincare products for its moisturizing and soothing properties, suitable for all skin types, including sensitive skin.

Massage: Its smooth, lightweight texture makes it an ideal massage oil base, providing easy application and comfort.

Jojoba oil

- Jojoba oil is extracted from the seeds of the *Simmondsia chinensis* plant, commonly known as the jojoba plant. Family **Simmondsiaceae**
- Cultivated in the United States, which is its native habitat. Israel has successfully cultivated jojoba for many years due to its dry climate. In India, jojoba is grown in arid regions such as Rajasthan. Australia has become a significant producer of jojoba oil, particularly in the arid areas of Western and South Australia.
- The oil is typically extracted by cold pressing the seeds to retain its natural properties.





Chemical Constituents



Wax Ester: Jojoba oil is unique because it is technically a liquid wax, composed primarily of **long-chain wax esters similar to human sebum.** Unlike vegetable oils and animal fats, jojoba oil is not a triglyceride but a mixture of long-chain esters (97–98%) of fatty acids.

Fatty Acids: It contains fatty acids such as erucic acid, gadoleic acid, and oleic acid.

Vitamin E: The oil contains a significant amount of vitamin E, a powerful antioxidant that helps protect the skin from oxidative stress.

Uses



- **Moisturization:** Jojoba oil deeply hydrates the skin and can help balance oil production, making it beneficial for both dry and oily skin types.
- Anti-inflammatory: It has soothing effects on the skin, helping to reduce redness and irritation.
- Healing: Jojoba oil can promote the healing of minor cuts, abrasions, and skin conditions such as eczema.
- Anti-aging: Its antioxidant properties help protect the skin from signs of aging.
- Antioxidant, anti-acne and antipsoriasis, antifungal, antipyretic, analgesic, antimicrobial, are the other uses

Coconut oil

- Coconut oil is the oil expressed from the dried solid part of the **endosperm** of coconut, *Cocos nucifera* L.,
- Family: Arecaceae (Palm family, Palmae)
- Large quantity of oil is produced in India, Sri Lanka Malaysia, South Africa, China, Indonesia, and other countries.





Chemical Constituents:



- Coconut obtained from the hard, dried endocarp consists of a mixture of triglycerides of saturated fatty acids.
- The oil contains about 95% of saturated fatty acids with 8 and 10 carbon atoms.
- It shows the presence of Caprylic acid, 2%;
- Capric acid, 50–80%;
- Lauric acid, 3%; and
- Myristic acid about 1%.



Uses

- Aromatherapy: Coconut oil serves as a carrier oil for diluting essential oils for topical use.
- Moisturizing: Coconut oil provides deep hydration for skin and hair.
- Antimicrobial: Its high lauric acid content gives it natural antimicrobial properties.
- Antioxidant: Coconut oil contains antioxidants that help protect the skin from oxidative stress.
- Weight Management: When used in moderation, coconut oil may aid in weight management by boosting metabolism.

14

Avocado Oil

•Biological Source: Derived from the flesh of the avocado fruit (*Persea americana*).

•Main Chemical Constituents: High in oleic acid (a monounsaturated fatty acid), as well as palmitic and linoleic acids. Also contains vitamins A, D, and E.

•Uses: Avocado oil is known for its moisturizing and antiinflammatory properties, making it beneficial for skin and hair care. It can also be used for cooking and baking due to its high smoke point.





Argan Oil

Biological Source: Extracted from the kernels of the argan tree (*Argania spinosa*), native to Morocco. Family: Sapotaceae
Main Chemical Constituents: Rich in oleic and linoleic acids, vitamin E, and antioxidants.

•Uses: Argan oil is highly regarded for its nourishing effects on the skin and hair. It is also used in culinary applications as a flavorful finishing oil.





Olive Oil

Biological Source: Derived from the fruit (olives) of the olive tree (*Olea europaea*). **Family : Oleaceae**

Main Chemical Constituents: High in oleic acid and contains small amounts of linoleic acid and palmitic acid. Also rich in polyphenols and vitamin E.

Uses: Olive oil is widely used for cooking, dressing salads, and as a finishing oil. It is also used in skincare products for its moisturizing and antioxidant properties.





Apricot Kernel Oil

Biological Source: Extracted from the kernels of the apricot fruit (*Prunus armeniaca*). Rosaceae

- Main Chemical Constituents: Contains oleic and linoleic acids, as well as vitamin E.
- Uses: Apricot kernel oil is light and easily absorbed, making it ideal for skincare and massage. It is also used in hair care for its conditioning properties.





Rosehip Oil

Biological Source: Extracted from the seeds of the rosehip fruit, typically from the Rosa canina or Rosa rubiginosa species. Rosaceae Main Chemical Constituents: Rich in linoleic and linolenic acids, as well as vitamins A and C, and antioxidants.

Uses: Rosehip oil is known for its regenerative properties and is used in skincare for antiaging, brightening, and healing. It can also help improve skin tone and texture.

Rosehip is the part of the rose flower just below the petals that contains the rose plant seeds. Rosehip is often considered a good source of vitamin C





ERBIL 2008

References

- Evans, W. C. (2009). Trease and Evans' Pharmacognosy. Elsevier Health Sciences.
- Price S, Price L. Aromatherapy for health professionals. 4th Edn., London: Churchill Livingstone; 2011.
- Lis-Balchin M. Aromatherapy Science: A guide for healthcare professionals. London: Pharmaceutical Press; 2006



Thank You