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## **Formulation and evaluation of herbal body lotion: A review**

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**Abstract**---This article is all about the requirement of standardization and the composition of herbal product in day to day life. Composition of herbal products will give ever best effect in our daily life as the composition of any single and individual product. The only motive-behind to choose the mixture of herbal product was to bring true upon the effectiveness of these formulation without any side-effects. Comparison include organoleptic and physio-chemical character such as viscosity, ph, spreadibility, moisture free body after use.

**Keywords**---herbal lotion, antibacterial, honey, turmeric, alovera, lemon, chandan.

**Introduction**

The use of turmeric dates back nearly 4000 years to the vedic culture in India, where it was used as a culinary spice and had some religious significance. It probably reached China by 700 ad<sup>[1]</sup>. It was first used as a dye, and then later for its supposed properties in folk medicine. From India, it spread to Southeast Asia along with Hinduism and Buddhism, as the yellow dye is used to color the robes of monks and priests<sup>[2]</sup>. Turmeric has also been found in Tahiti, Hawaii, and Easter Island before European contact<sup>[3]</sup>.

Regular uses of turmeric in Herbal products helps in absorbing excess serum, opening pores and detoxifying skin<sup>[4]</sup>. Turmeric removes unevenness on the skin,

reduces wrinkles and enhances the skin complexion. This moisturizing turmeric containing herbal lotion protects your skin from harmful pollution effects, smoothens the skin and gives a freshness feel to the skin. The skin is the body's largest organ, made of water, protein, fats and minerals<sup>[5]</sup>. Your skin protects your body from germs and regulates body temperature. Nerves in the skin help you feel sensations like hot and cold. Normal Skin. This skin is neither too dry nor too oily. Sensitive skin is more prone to react to stimuli to which normal skin has no reaction<sup>[6]</sup>. Dry Skin. Oily Skin. Combination Skin. Scaly Skin.

### **Nature**

As a multifaceted organ, skin provides the body with protection from infection and the environment, as well as sensory capabilities<sup>[7]</sup>. The skin is the body's largest organ and has several, diverse functions. As well as being a physical barrier, it has immune and sensory properties<sup>[8]</sup>.

### **Remedies of skin**

Coconut oil Aloe Vera, Moisturize, Sunscreen, Cleanse Avoid smoke Hydrate, Healthy diet<sup>[9]</sup>. Eg ,such as Dry skin-Dry skin can have causes that aren't due to underlying disease. Examples include dry environment, frequently washing hands, inadequate hydration, swimming in a chlorinated pool or jobs that are rough on the hands such as mechanics or farming<sup>[10]</sup>.

### **Treatment of dry skin**

#### **Self-treatment**

Using a thick moisturiser and a humidifier may help to soothe dryness. Avoiding alcohol, caffeine and tobacco may also relieve dry mouth and dry skin<sup>[11]</sup>. See a doctor if you don't improve despite your best efforts. Notice redness. Have dryness and itching that interfere with sleep<sup>[12]</sup>.

### **Role of Ingridients in the Formulation**

Lemon: Citrus lemon is also known as a lemon. It belongs to the family Rutaceae.

Kingdom	Plantae
Order	Sapindales
Family	Rutaceae
Genus	Citrus
Species	C. limon

### **Chemical Constituents**

- Water – more than 70% water
- Citric acid – 1 to 3%
- Carboxylic acid – 0.5 to 2 %

13344

### Uses of Lemon

- It have a antifungal property
- It helps in the skin lightening



(Source- solidstarts.com)

### Turmeric

Curcuma longa is also known as turmeric. It belongs to the family Zingiberaceae.

Kingdom	Plantae
Order	Zingiberales
Family	Zingiberaceae
Genus	Curcuma
Species	C. longa

### Chemical Constituents

- Cymene – 1 to 2%
- Tumeron - 5%
- Curcumin – 3 to 4%
- Demethoxycurcumin – 6%



(Source- thespruceeats.com)

### Uses of Turmeric

- Gloning skin
- Boosts healing
- Potential Risks
- May help other skin condiation

Honey:-Apis is also known as honey. It belongs to the family Apidae.

Kingdom	Animalia
Order	Hymenoptera
Family	Apidae
Genus	Apis



(Source –sciencefocus.com)

Chemical Composition:

- Glucose – 2 to 3%
- Sucrose – 4 to 5%
- Lactose – 1 to 3%
- Fructose – 2 to 3%

Uses:

- Great moisturizer
- Scalp clenser
- Antibacteria

### Alovera

The botanical name of Aloe vera is Aloe barbadensis miller. It belongs to Asphodelaceae (Liliaceae) family.

Scientific classificationedit

Kingdom:Plantae

Clade:Tracheophytes

Order:Asparagales

Family:

Asphodelaceae

13346

Subfamily:Asphodeloideae

Genus: Aloe



(source-primenewsghana.com)

### Uses of Alovera

1. Helps to moisturize the skin. ...
2. Boosts healing of wounds. ...
3. Fights skin-ageing. ...
4. Reduces infection and acne. ...
5. Lightens blemishes on the face.

Sandalwood: Red sandalwood is also known as chandan

Kingdom:Plantae

Clade:Eudicots

Clade:Rosids

Order:Fabales

Family:Fabaceae

Subfamily:Faboideae

Genus:Pterocarpus

Species:P. santalinus



(Source- m.indianmart.com)

### Use of red sandalwood

It is primarily used for skin care and beauty purposes.

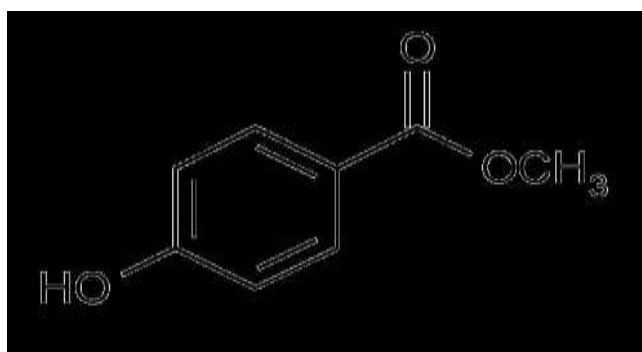
It is very effective in treating blemishes, rashes and acne.

It also helps in the removal of tan and dullness because of its cooling properties

Methyl Paraben: - One of the parabens, is a preservative with the chemical formula  $\text{CH}_3$ . It is the methyl ester of p-hydroxybenzoic acid [13].



(Source- m.indianmart.com)



(Source- dreamstime.com)

### Conclusion

Herbal ingredients are not only efficacious in treating skin dryness as compared to synthetic ones but also capable of substituting synthetic bases to some extent. It is up to the cosmetologist to motivate and encourage the development and use of truly herbal cosmetics. It is very easy to use on our body surface area and is very smoothly absorbed. It has fewer side effects [depend upon the nature of the skin] in the body surface area. As herbal formulations are in great demand to meet the needs of the developing global market, the main thing is that the herbal ingredients showed significant different activities.

### References

1. Manisha Yogesh Sonalkar, Sachin Annasaheb Nitave. Formulation and evaluation of polyherbal cosmetic cream. *World J Pharm Pharm Sci* 2016;5:772-9.
2. T Reynolds, AC Dweck. Aloe vera leaf gel: a review update. *J Ethno Pharmacol* 1999;68:3-37.

3. Priyanka Sharma, Amit C Kharkwal, Harsha Kharkwal, MZ Abdin, Ajit Varma. A review on the pharmacological properties of Aloe Vera. *Int J Pharm Sci Rev Res* 2014;29:31-7.
4. Sharma Pankaj, Tomar Lokeshwar, Bachwani Mukesh, Bansal Vishnu. Review on neem (*Azadirachta indica*): thousand problems one solution. *Int Res J Pharm* 2011;2:97-102.
5. KP Sampath Kumar, Debjit Bhowmik, Biswajit, Chiranjib, Pankaj, KK Tripathi Margret Chandira. Traditional Indian herbal plants Tulsi and its medical importance: a review. *Res Rev: J Pharmacogn Phytochem* 2010;2:103-8.
6. Renisheya Joy Jeba Malar T, Johnson M, Nancy Beaulah S, Laju RS, Anupriya G, Renola Joy Jeba Ethal T. Anti-bacterial & anti-fungal activity of aloe Vera gel extract. *Int J Biomed Adv Res* 2012; 3:184-7
7. Kalpesh Chhotalal Ashara. Importance of trituration technique on preparation and evaluation of cold cream. *Inventi Rapid Pharm Tech* 2013;1-2:2012.
8. Sk Uddandu Saheb, Aduri Prakash Reddy, K Rajitha, B Sravani, B Vanitha. Formulation and evaluation of cream from naturally containing plant extracts. *World J Pharm Pharm Sci* 2018;7:851-62.
9. Bhakti Mali, Sumedh N Moharil, Vaibhav Mhasal, Mahesh B Narkhede. Drug-excipient interaction study of Tramadol HCL with polymers. *World J Pharm Res* 2017;6:848-61.
10. Almond oil [online], Available from: <http://www.dermaxime.com/almondoil.htm>
11. Plants Database. United States Department of Agriculture [online]. Natural Resources Conservation Service. Available at: <http://plants.usda.gov/java/namesearch>. Accessed, 2006.
12. Mortensen, A.; Skibsted, L.H. Relative stability of carotenoid radical cations and homologue tocopheroxyl radicals: A real time kinetic study of antioxidant hierarchy. *J Agric Food Chem* 45(2); 261-266, 1997.
13. Frison S, Sporns P. Variation in the flavonol glycoside composition of almond seedcoats as determined by maldi-tof mass spectrometry. *J Agric Food Chem* . 50:6818-6822, 2002.
14. Wijeratne SS, Abou-Zaid MM, Shahidi F. Antioxidant polyphenols in almond and its coproducts. *J Agric Food Chem* .54(3); 312-318, 2006.
15. Sang S, Lapsley K, Rosen RT, Ho CT. New prenylated benzoic acid and other constituents from almond hulls (*Prunus amygdalus* Batsch). *J Agric Food Chem* .50(2);607-609, 2002.
16. Dicenta F, Martinez-Gomez P, Grane N, et al. Relationship between cyanogenic compounds in kernels, leaves, and roots of sweet and bitter kernelled almonds. *J Agric Food Chem* . 50(4); 2149-2152, 2002.
17. Almond oil cosmetic uses [online], Available from: [http://www.ehow.com/list\\_5745044\\_beauty-benefits-almond-oil.html](http://www.ehow.com/list_5745044_beauty-benefits-almond-oil.html)
18. Benefits of almond oil as moisturizer [online], Available from : [http://www.ehow.com/facts\\_6177371\\_benefits-using-almond-oilmoisturizer\\_.html](http://www.ehow.com/facts_6177371_benefits-using-almond-oilmoisturizer_.html)
19. Benefits of almond oil [online], Available from: [http://www.indiaparenting.com/health/324\\_3379/benefits-of-almond-oil.html](http://www.indiaparenting.com/health/324_3379/benefits-of-almond-oil.html)

20. Uses of Jojoba oil [online], Available from: <http://www.buzzle.com/articles/usesof-jojoba-oil-jojoba-oil-benefits.html>
21. Jojoba oil [online], Available from: <http://www.jojobaoil.in/index.html>
22. Steven J. Phillips, Patricia Wentworth Comus. A Natural History of the Sonoran Desert. University of California Press. 256–257:2012