



Review on Formulation and Evaluation of Herbal Face Pack using Orange Peel

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Abstract Because natural medicines are seen to be safer and have less adverse effects than synthetic ones, they are more widely accepted. People today require treatments for a variety of skin conditions that don't have any negative side effects. The development of safe cosmetic formulations was made possible by the use of herbal components. In the present work, we found good properties for the face pack; further optimization studies are needed to find the useful benefits of face packs on human use as cosmetic production. Herbal face packs are used to stimulate blood circulation, rejuvenate the muscles, help to maintain the elasticity of the skin, and remove dirt from skin pores. The advantage of herbal cosmetics is their non-toxic nature, which reduces the allergic reactions and time-tested usefulness of many ingredients.

Keywords Formulation, Evaluation, Herbal face, Orange peel

1. Introduction

The purpose of this work is to create and test an herbal face mask for shiny skin using natural ingredients. The Natural Face Pack contains some of the vitamins needed to keep our skin healthy and radiant. The aim of this work is to formulate and evaluate an herbal face pack for glowing skin by using natural herbal ingredients. The natural herbal ingredients such as multani mitti, turmeric, sandalwood, saffron, milk powder, rice flour, orange peel were purchased from local market in the form of dried powder. The main objective of this article is to formulate and evaluate an effective herbal face pack for glowing skin by using natural ingredients in varying concentrations, ingredients such as. Ayurvedic formulations are safer than synthetic formulation because its side effect is very low. The main purpose of Herbal face packs are to remove the dark circle, Pimples, Scars, through the increase blood circulation and maintained it and the rejuvenates the skin and remove dirt particles from the skin pores. Keywords: Skin, Herbal face pack, Formulation, Evaluation.

Since the ancient era, people are aware of the use of the plans for the essential need of the healthy and beautiful skin. Cosmetics are products that The skin of the face is the largest area of the body and act as a mirror, reflecting and individuals health. To keep the skin of the face is the largest part of the body and acts as a mirror that reflects a person's health. savebright and healthy skin needs a proper diet that contains amino acids, lipids and crustaceans. Women in ancient times time pays special attention to their appearance and treats their skin type with care.

They work to clean, beautify and improve the appearance of people.

Even today, especially in rural and mountainous areas, people often resort to natural remedies such as plant extracts for various species. Orange peel, sandalwood, aloe vera, turmeric, multani mithi etc. Herbal cosmetics for cosmetic purposes such as cosmetics.



It is designed to cleanse and beautify the skin.

The primary benefits of utilizing herbal cosmetic is that they are natural and have no negative effects on the human body. Men's skin has tough and when they don't take proper care of it, it darkens due to overexposure to sun, other pollutants and other factors. Everyone wants to have beautiful skin. Now black acne or black acne spots on scalp are very common.

Amid the troubles of youth. According to Ayurveda, skin problems are mostly due to impurities.

In Ayurveda, the herbal paste is called as "Mukha lepa" used for as facial therapy, this herbal paste smeared on face to treat acne, pimples, scars, marks and pigments. Herbal face packs are cheaper and have no side effect for getting fair skin naturally. Herbal cosmetics are the products which are used to purify and beautify the skin. The main advantages of using herbal cosmetics is that it is pure and does not have any side effect on human body.

A face pack is a soft powder that is applied on the face. These drugs are applied to the face in liquid or paste form and allowed to dry to form a film which provides a toughening, adhesive and packing effect, the skin is usually left on the skin for 10-25 minutes so that all the water evaporates and a film forms. It is compact, hard and easy to remove. Warming and firming effect when applying the mask produces the stimulating of a rejuvenated face, while the applied face pack is eventually removed skin debris and deposited dirt gets removed with it.

Good herbal face pack should provide essential nutrients to the skin in the form of a free-flowing powder that can be applied to the face for external use. To give the needed nutrients it should penetrate into the subcutaneous tissue.

Every type of skin is specific for the requirement of skin pack. Different types of packs are now available for oily, normal and dry skin types. Face packs are used to improve the skin's fairness and smoothness. It helps to get rid of wrinkles, pimples, acne and dark bags under the eyes.

2. Benefits of applying face pack:

- 1) Nourishes the skin fruit face packs supply essential nutrients to skin.
- 2) Helps to reduce acne, pimples, scars and marks depending on its herbal ingredients.
- 3) Usually face packs made of sandalwood and turmeric helps to reduce acne and pimples. Face packs are recommended for acne, pimples, black heads usually control the over discharge of sebum from sebaceous gland and remove the harmful bacteria inside acnes lesion.
- 4) The scars and marks of skin can be reduced by adding fine powder of sandal and orange lentils with acne face pack.
- 5) Face packs usually remove dead cells of skin.
- 6) These face packs masks provide a soothing and relaxing effect on skin
- 7) They help to restore the lost shine and glow of skin in short span of time.
- 8) Regular use of natural face packs brings glow to skin, improve skin texture and complication.
- 9) The harmful effects of pollution and harsh climates can be effectively combated with judicious use of face packs.
- 10) They help to prevent premature aging of skin.
- 11) Formation of wrinkles, fine lines and aging of skin can be effectively controlled by using natural face packs.
- 12) Natural face packs made the skin look young and healthy

3. Material and equipments

All natural ingredients used in this study were orange peel, Multani mitti, turmeric, aloe vera, sandalwood. Purchased from local market in dry powder form and verified at Department of Botany.

3.1. Materials

It prevents the skin from free radical damage, skin hydration and oxidative stress. Also it has instant glow property prevent acne, blemishes, wrinkles and aging.





Orange peel

3.1.1.1. Scientific name: Citrus reticulata

3.1.1.2. Synonym: Sweet orange

3.1.1.3. Family: Rutaceae

3.1.1.4. Chemical constitute: Limonene (90%), Citral(4%), Vitamin C, Pectin, Hesperidine, Aurantimaricin, Aurantimaric acid, Octanol (39%), Decanal (42%), Monoterpane (91%) & contains no less than 2.5% volatile oil.

3.1.1.5. Uses:

- 1) Lighten and brighten skin.
- 2) Cells build up around the pores enhances the shadows and make the pores appear larger.
- 3) Hydrates Dehydrates skin.
- 4) Promotes healthy skin glow.

3.1.2. Sandal Wood:

Sandalwood has an anti-tanning and anti-aging property. It also helps in many ways like toning effect, emollient, antibacterial property, cooling astringent property, soothing and healing property.



Sandal Wood

3.1.2.1. Scientific name: Santalum alba

3.1.2.2. Synonym: Sandal, Indian sandalwood oil.

3.1.2.3. Family: Santalaceae.

3.1.2.4. Chemical constitute: 90% Sesquiterpenic alcohols of which 50-60% is the tricyclic alpha-santalol, beta-santalol comprises 20-25%.

3.1.2.5. Uses:

- 1) Anti-tanning property.
- 2) Anti-aging property.
- 3) Skin softening effect.
- 4) Pimple and acne treatment.



5) Clear complexation.

3.1.3. Aloe Vera:

Aloe vera is an excellent skin moisturizer. Aloe Vera nourishes the skin while moisturizing and protecting the cuticle

They always look fresh. Aloe vera has antimicrobial properties that make it effective in treating acne and pimples. aloe is a plant

Vera Powder contains many nutrients like Glycerin, Sodium Palmate, Sodium Carbonate, Sodium Pine Hymalate, Sorbitol.



Swdeshi Aloe vera Powder

3.3.1. Scientific name: Aloe barbadensis.

3.3.2. Synonym: aloe, kumari.

3.3.3. Family; Asphodelaceae.

3.3.4. Chemical constitute: Amino acid, vitamins, lipids, sterols, tannin and enzymes, phenol, saponin, antithraquinones.

3.3.5. Uses:

- 1) Moisturizing agent delivers smoothening property to the skin.
- 2) Remove dead skin cells.
- 3) Treating acene, sunburn.
- 4) Rights ageing.

3.1.4. Calcium bentonite:

Calcium bentonite helps skin by different ways like diminishing pore sizes, removing blackheads and whiteheads fading

freckles, soothing sunburns, cleansing skin, improving blood circulation, complexation, reducing acne and blemishes and gives a glowing effect to a skin as they contain healthy nutrients. Multani mitti is rich magnesium chloride.



3.4.1. Scientific name: Fuller's Earth.

3.4.2. Synonym: Multani mitti.

3.4.3. Chemical constitute: Silica, iron oxide, lime, magnesia and water.

3.4.4. Uses:

- 1) Fight acene and pimples.
- 2) Removes excess sebum and oil, deep cleanses skin removing dirt, sweat and impurities.
- 3) Evens out skin tone and brightens complexion.
- 4) Treats tanning and pigmentation.

3.1.5. Turmeric:

Turmeric is mainly used to rejuvenates the skin. It delays the signs of aging like wrinkles and also possesses other properties like antibacterial, antiseptic and anti-inflammatory. It is best sources of blood purifier. It is effective in treatment of acene due to its antiseptic and antibacterial properties that fight pimples and breakouts to provide a youthful glow to your skin. It also reduce the oil secretion by the sebaceous gland.



3.5.1. Scientific name: Curcuma longa

3.5.2. Synonym: Turmeric root, wid curcuma.

3.5.3. Family: Zingiberaceae.

3.5.4. Chemical constitute: Curcumin I, Curmumin II, III, dihydrocurcumin, 3-6% polyphenolic compounds, curcuminoid's, Demethoxy curcumin and bisdemethoxycurcumin.

3.5.5. Uses:

- 1) Antibacterial activity.
- 2) Antifungal activity.
- 3) Also adds glow to the skin.

4. Equipment's and Materials:

4.1. Equipments:

Sr. No.	Equipments
1	Mortar pestle
2	Hot air oven
3	Sieve no.100
4	Weighing balance
5	Spatula

4.2. Materials:

Sr. No.	Ingredient	Quantity
1	Orange peel	15%
2	Sandalwood	15%



3	Aloe Vera	15%
4	Calcium bentonite	15%
5	Turmeric	15%

5. Method of preparation:

All plant components are dry and ground into a fine powder using a mill to reduce size. Weigh it all. The herbal powder needed to prepare the fruit mask was accurately weighed individually using a digital scale. The quantity and composition are indicated in the composition of the herbal package or mask.

5.1. Mixing: All these fine ingredients were mixed thoroughly by mixer to form a homogenous fine powder.

5.2. Sieving: Then this fine powder was passed through sieve no. 100, to get the sufficient quantity of fine powder.

5.3. Collection & Storage: The powder mixture was collected and store in a suitable plastic container and used for evaluation parameters.

6. Procedure of face pack application:

First of all, take the prepared face powder in a bowl and add rose water to it. If it is high

Step 2: Work with your face. Also covers dirt and makeup. Enter in front of your face.

Let dry completely in 10 to 20 minutes. The third step is to wash your face with cold water.

7. Formula:

Sr.no	Ingredient	Quantity Given	Quantity taken	Use
1	Orange peel	50 gm	25gm	Cells build up around the pores enhances the shadows & make the pores appear larger. Lighten & brighten skin.
2	Sandalwood	30gm	15gm	Anti – tanning property, anti – aging property, Skin softening effect, pimples & acene treatment. Clear complexion.
3	Aloe Vera	2.0ml	1.0ml	Moisturizing agent delivers smoothening property to skin.
4	Multani mitti	8.5gm	4.3gm	Fights acene and pimple removes excess sebum and oil, deep cleanses skin removes dirt, sweat and impurities
5	Turmeric	9.5gm	4.8gm	Antibacterial, antifungal, also adds glow to the skin.

8. Formulation:

Raw materials were collected on the market and at home. Natural Ingredients Dried, Powdered and Sifted. Accurate and mixed weighing using #44 mesh. Facepack (F1) was developed to evaluate various parameters. Store in an airtight container.

Ingredients	(F1)
Orange peel	2.5
Sandalwood	2.5
Aloe Vera	2.5
Turmeric	2.5
Calcium bentonite	2.5





9. Evaluation:

Following evaluation parameters were preferred to ensure superiority of prepared face pack.

9.1. Organoleptic evaluation:

The organoleptic parameters include its nature, color, odor, feel and consistency which were evaluated manually for its nature, odor, feel and consistency which were evaluated manually for its physical properties.

9.2. Irritancy test:

Mark an area of 1sq.cm on the left hand dorsal surface. A definite quantity of prepared face packs was applied to the specified area and time was noted. Irritancy, erythema, edema was checked if any for regular intervals up to 24 hrs and reported.

9.3. Stability studies:

Stability testing of prepared formulation was conducted for batch B3 by storing at different temperature conditions for the period of one month. The packed glass vials of formulation stored at different temperature conditions viz. room temperature, 35degree C and were evaluation for physical parameters like color, odor, PH, consistency and feel.

9.4. Determination of moisture content:

Weigh about 1.5gm of the powdered drug into a weighed flat and thin porcelain dish. Dry in the oven at 100 degree C at 105 degree C, until two consecutive weights do not differ by more than 0.5 mg cool in desiccators and weigh. The loss in weight is usually recorded as moisture.

9.5. Determination of rheological properties of the prepared pack:

Physical parameters like untapped (Bulk) density, tapped density, angle of repose, Hausner's ratio and Carr's index were observed and calculated for the formulation. Bulk density refers to the adjustment of particles and granules to pack themselves collectively. The Hausner's ratio is calculated as D/D' where D is the tapped density and D' the bulk density, Carr's index helps to measure powder flow from bulk density.

9.6. Angle of repose:

It is defined as the maximum angle in between the surface of pile of powder to the horizontal flow.

9.7. Bulk density flow:

Density is the ratio between the given mass of a powder and its bulk volume. Required amount of the powder is dried and filled in a 50 ml measuring cylinder up to 50 ml mark. Then the cylinder is dropped onto a hard wood surface from a height of 1 inch at 2 second intervals. The volume of the powder is measured. Then the powder is weighed. This is reported to get average values. The bulk density is calculated by using the below given formula.
$$\text{Bulk density} = \frac{\text{Volume}}{\text{mass}}$$



9.8. Tapped density:

Tapped density is an increased bulk density attained after mechanically tapping a container containing the powder volume or mass the measuring cylinder or vessel is mechanically tapped for 1 min and volume or mass reading are taken until little further volume or mass change was observed. It was expressed in gram per cubic centimeter (g/cm^3).

9.9. Phytochemical screening:

The aqueous extract of the herbal face pack was evaluated for the presences of different phytoconstituents as per the standard procedure.

10. Result

The different formulations of face pack was prepared and evaluated for physical parameters. The flow property parameters showed free flowing properties. The color of formulations were different due to variation in composition of content.

Various models of face masks were fabricated and their physical dimensions were analysed. flow characteristics The parameters define the free flow characteristics. Pigments change color due to volatile substances Satisfied The consistency of the prepared formulation was found to be acceptable which is desirable as a cosmetic formulation. particle size were in the range of 20 to 30 μm . The pH of all the formulations is close to the neutral range, i.e. within the chart shows a range of 6 to 7. The ash content and moisture content were within the limits and compared as per the chart. The stability studies showed a slight change in PH of formulation which was stored at 40 degree C and no change were observed at room temperature and at 35 °C.

11. Conclusion

Natural remedies are more acceptable in the belief that they are safer with fewer side effects than the synthetic ones. In the present scenario, people need to cure for various skin problems without side effects. Herbal ingredients opened the way to formulation cosmetics without any harmful effects. Herbal face packs are considered as sustaining and productive way to appearance of skin. Thus, in the present work it is very good attempt to formulate the herbal face packs containing naturally available ingredients like Multani mitti, Turmeric, Aloe Vera, sandalwood and orange peel. Herbal face packs are used to stimulate blood circulation rejuvenates the muscles and help to maintain the elasticity of the skin and remove dirt from skin pores the advantage of herbal cosmetics is their non – toxic nature reduces the allergic reactions and time tested usefulness of may ingredients thus in the present work we found good properties for the face pack and in future further optimization studies are required on this study to find the useful benefits of face packs on human use as cosmetic production.

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