

Formulation and Evaluation of Polyherbal Facepack

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Abstract: *The objective of this work is to formulate and evaluate a cosmetic herbal face pack for glowing skin by using natural ingredients. With the varying concentrations, four different formulations containing ingredients such as multani mitti, turmeric, aloe vera, sandal wood, orange peel, neem and nutmeg; were prepared named as F1 to F4. All prepared formulations were evaluated by different parameters like organoleptic properties and physico-chemical parameters and stability along with irritancy test and microbial load. Among all formulation, F2 was found to be good in physical parameters, free from skin irritation and maintained its consistency even after stability storage conditions and also having microbiological stability. The latter are used to color and decorate the body or for contouring to create a more healthy-looking or attractive impression. Everybody wants to get fair and charming skin. Now a day, Acne, black head, pimples, dark circle are common among youngsters and person who suffers from it. Cosmetics are commercially available products that are used to improve the appearance of the skin by action of cleansing, beautifying, promoting attractiveness. From the ancient time, different herbs are used for cleaning, beautifying and to manage them. Face skin is the major part of the body, which indicates the health of an individual. It consists of materials such as amino acids, lipids and carbohydrates etc. So that a balanced nutrition is required for the skin to keep it clear glossy and healthy.*

Keywords: Face Pack, Cosmetics, Natural, Formulation, Evaluation

I. INTRODUCTION

Cosmetics are used to protect the skin and to provide safety and comfort, but their main purpose is as a beauty product to make the face and skin attractive. There are base makeup products and decorative makeup products; the former formulations are used to hide imperfections such as stains and wrinkles, to adjust skin tone, and to add firmness or translucence to make the skin look beautiful. The latter are used to color and decorate the body or for contouring to create a more healthy-looking or attractive impression. Everybody wants to get fair and charming skin. Now a day, Acne, black head, pimples, dark circle are common among youngsters and person who suffers from it. Cosmetics are commercially available products that are used to improve the appearance of the skin by action of cleansing, beautifying, promoting attractiveness. From the ancient time, different herbs are used for cleaning, beautifying and to manage them. Face skin is the major part of the body, which indicates the health of an individual. It consists of materials such as amino acids, lipids and carbohydrates etc. So that a balanced nutrition is required for the skin to keep it clear glossy and healthy.

1.1. Ayurvedic Concept of Skin

Ayurveda, the science of life, was elucidated in India over 6,000 years ago. It was the first record of scientific medicine in the history of the world. The word "Ayurveda" literally means knowledge (Veda) of life (Ayu). The aim of Ayurveda, therefore, is to improve the quality of life and increase the life span (longevity). Over 600 plants are described in original Ayurvedic compendia like Charaka and Sushruta Samhita. In these texts, plants are classified into groups based on their effects. In Ayurveda, Charaka has described twak (skin) in six layers named as udakadara (bahyatwak), astrikdhara, Sidhma (dermatitis) and Kilas Kushta (leucoderma), Dadru Kushta (ringworm), Alaji (boil) and Vidradhi (abscess). Sushruta has described the seven layers of skin as avabhasini, lohita, shweta, tamra, vedini, rohini and mamsadhara. When this layer is in balance, the skin looks young and supple (soft to touch radiant look). According to Ayurveda, Twak (skin) is a Matruja Avyaya i.e., derived from mother or having maternal origin. It is the mirror of an individual's health. Ayurvedic concepts of skin diseases are based on the tridoshas i.e., Vata, Pitta and Kapha. Imbalance

in any one dosha leads to various types of skin i.e., Vata skin, Pitta skin, Kapha skin and Combination skin

- Vata skin: - Is dry, thin, fine pored, delicate and cool to touch. It easily gets dehydrated, and is very vulnerable to the influence of dry weather. It tends to develop wrinkles earlier than the other skin types.
- Pitta skin: - Is fair, soft, warm and medium thickness. It tends to be more prone to freckles and moles than the other skin types. It is photosensitive and has least tolerance to sun and is most likely to accumulate sun damage over the years.
- Kapha skin: - Is thick, oily, soft and cool to touch; tends to develop wrinkles much later in life than Vata or Pitta type but because of its thickness and oiliness, is more prone to accumulate ama (toxins) under the skin. It has dull complexion, enlarged pores, excessive oil, blackheads, and pimples, moist types of eczema and water retention.
- Combination skin: - Is combination of two types of skin; Vata-Pitta skin which is both dry and sensitive, Kapha-Pitta skin is oily and sensitive and Vata-Kapha skin is generally dry with some oily zones.

1.2 Herbal Face Pack

In ayurveda, the herbal paste is called as “mukha lepa” used for as a facial therapy. This herbal paste smeared on face to treat acne, pimple, scars, marks and pigments. Face pack is the smooth powder which is used for facial application. These preparations are applied on the face in the form of liquid or pastes and allowed to dry and set to form film giving tightening, strengthening and cleansing effect to the skin. They are usually left on the skin for ten to twenty-five minutes to allow all the water to evaporate, the resulting film thus contracts and hardens and can easily be removed. The warmth and tightening effect produced by application of face pack produces the stimulating sensation of a rejuvenated face, while the colloidal and adsorption clays used in these preparations remove the dirt and grease from the skin of the face. When the applied face pack is eventually removed skin debris and deposited dirt gets removed with it. Face packs are basically additives delivering some additional benefits. Different types of herbal face packs are used for different types of skin. Herbal face packs are helps to reduce wrinkles, pimples, acne and dark circles. Also increase the fairness and smoothness of skin. It also helps someone to boost their confidence. Ayurveda is the most useful and successful means for achieving this purpose.

These packs are available in various types and forms and broadly classified into the following categories:

1. Plastic masks: Wax based, latex based, or vinyl based
2. Hydrocolloid masks: Gel masks (ready to use)
3. Argillaceous masks: Clay based or earth based (ready to use or dry powder) Present research article deals with the formulation and evaluation of cosmetic herbal face pack for glowing skin at home by using natural materials i.e., multani mitti, turmeric, Aloe vera, sandalwood, orange peel, neem, coffee and rosewater.

1.3. Benefits of Applying Face Pack

1. Nourishes the skin. As provide essential nutrients to skin.
2. Helps to reduce, acne, pimple, scars and marks from the skin .
3. Face packs usually remove dead cells of skin.
4. These face masks provide a soothing and relaxing effect on skin.
5. They help to restore the lost shine and glow of skin in short span of time.
6. Regular use of natural face masks bring glow to skin, improve skin texture and complexion.
7. The harmful effects of pollution and harsh climates can be effectively combated with judicious use of face packs.
8. They help to prevent premature aging of skin.
9. Formation of wrinkles, fine lines and sagging of skin can be effectively controlled by using natural face packs.
10. Natural face packs make the skin look young and healthy.

1.4 Ingredients and their Medicinal Uses

Plant Name	Figure	Medicinal Use
fuller's earth (multani mitti) <i>Calcium Bentonite</i> <i>Euphorbiaceae</i>	 <p>Fig no. : 1 Multani mitti</p>	Removes excess sebum and oil, cleanses skin by removing dirt and impurities. Evens out skin tone and brightens complexion, treats tanning, sunburn, skinrashes and infections.
Coffee <i>Coffea Arabica</i> <i>Rubiaceae</i>	 <p>Fig no. :- 2 Coffee powder</p>	Cellulite reduction. Calming effects., Anti-aging benefits ,Vitamin B-3 for skin cancer,Reduced inflammation. , Acne treatment, Dark circles,After-sun care.
Sandal wood powder <i>Santalum album L.</i> <i>Santalaceae</i>	 <p>Fig no. :- 3 Sandal wood powder</p>	Anti-tanning property. Anti- aging Property. Skin softening effect, Pimple and Acne treatment, Clear Complexion.
Turmeric Powder <i>Curcuma longa L.</i> <i>Zingiberaceae</i>	 <p>Fig no.:- 4 Turmeric</p>	Antibacterial. antifungal, also adds glow to the skin
Neem leaves <i>Azadirachta indicaA.Juss.</i> , <i>Meliaceae</i>	 <p>Fig no.:- 5 Neem Powder</p>	Antibacterial, antifungal,anti septic

<p>Orange peel powder <i>Citrus reticulata</i></p> <p>Rutaceae</p>	 <p>Fig no. :- 6 Orange peel powder</p>	<p>Anti-Allergenic. Anti Inflammatory. cleansing your skin and fighting acne, hydrate and moisturize your skin.</p>
<p>Aloevera powder <i>Aloe barbadensis</i></p> <p>Asphodelaceae</p>	 <p>Fig no. :- 7 Alovera</p>	<p>Anti-inflammatory, Anti-microbial property protects the skin from the damaging effects of radiation therapy, cooling effect on rashes or sunburns.</p>
<p>Rose water <i>Rosa canina L</i></p> <p>Rosaceae</p>	 <p>Fig no. :- 8 Rose water</p>	<p>Rose water is rich with Anti bacterial potential. It also have good amount of antioxidants. Helpful to get a radiant and glowing skin</p>

Table no. 1: Material (Ingredients.)

II. METHOD OF PREPARATION

Formulation Composition

Table 2: Formulation Table

Sr. No.	Name of Ingredients	Scientific name	Taken Quantity (For 50 gm)	Given Quantity (for 50 gm)
1	Multani mitti (Fuller's earth)	<i>Calcium Bentonite</i>	15	12
2	Coffee	<i>Coffea Arabica</i>	10	12
3	Sandal Wood	<i>Santalum album L.</i>	7	5
4	Turmeric	<i>Curcuma longa L.,</i>	5	4
5	Neem	<i>Azadirachta indica A.Juss.,</i>	3	4
6	Orange Peel	<i>Citrus reticulata</i>	5	6
7	Aloe Vera	<i>Aloe barbadensis</i>	5	7
8	Rose Water	<i>Rosa canina L</i>	Q.S	Q.S.

Procedure

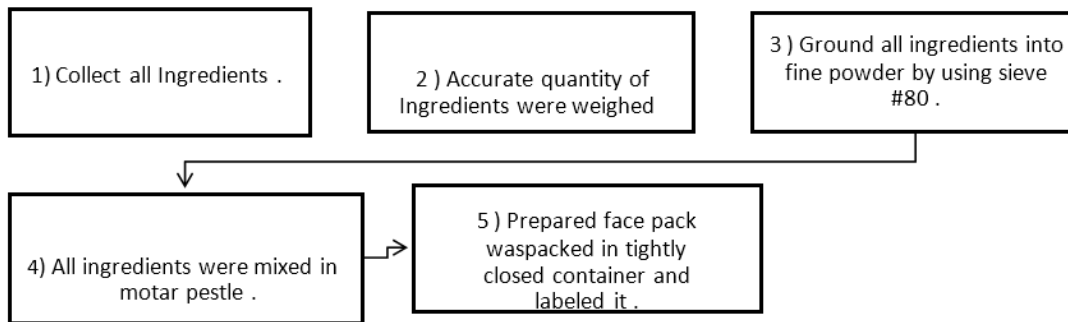


Fig 9.1. Mixing of ingredients



Fig 9.2. Facepack



Fig 9.3. Container

Phytochemical Evaluations

Sr. no.	Test	Test name	Procedure	Observations
1.	Carbohydrate	Barfoed's test	Barfoed's reagent + 2-3 ml of extract	Brick-Red precipitate .
2.	Alkaloid	Mayer's Test	2-3 ml of extract + few drops of Mayer's reagent.	Formation of precipitate .
3.	Glycoside	Legal's test	2-3 ml of extract + 1ml pyridine + 1 ml nitroprusside	Red color develops .
4.	Tannins	5% FeCl ₃ solution	2-4 ml of extract + 5% FeCl ₃ solution	Blue color develops .
5.	Volatile oil	Sudan III	2-4 ml of extract + alcoholic solution of Sudan III	Red color develops .

Table 3: Phytochemical tests

III. APPLICATION AND PRECAUTION

3.1 Application of Face Pack on Skin

Take prepared face pack powder in a bowl as per the requirement and add rose water to mix. Mixwell and apply over the facial skin. Cover the acne and blemishes spots too. Kept as it is for complete drying for 20 to 25 min and then wash with cold water.



Fig 10 Application of face pack on skin

3.2 Precautions to be Taken While Applying Face Pack–

1. The face pack should not be left on face more than 15 to 20 minutes. Keeping for very long time may result in formation of wrinkles, sagging of skin and enlargement of openpores.
2. Apply face pack once in a week. Don't try to peel or scratch the dried face pack. This may harm underlying skin.
3. Spray water (which is at room temperature) on face before removing dried face pack.
4. After removing the mask, roll an ice cube on facial skin. This helps to close open pore and tightens skin. It also tones and soothes the skin.
5. Do not scrub face vigorously. This may result in eruption of pimples and dark spots. Stay away from heat when you have applied face pack.
6. Avoid applying face pack near "eye zone". The skin around eye is very delicate. the process of removing face pack may damage skin around eyes.

IV. CONCLUSION

- Natural remedies are more acceptable in the belief that they are safer with fewer side effects than the synthetic ones.
- Herbal formulations have growing demand in the world market.
- Herbal face packs are considered as sustaining and productive way to advance the appearance of skin.
- Herbal face packs or masks are used to stimulate blood circulation, rejuvenates those muscles and help to maintain the elasticity of the skin and remove dirt from skin pores.
- Thus, in the present work, it is a very good attempt to formulate the herbal face pack containing naturally available ingredients like Multani mitti, turmeric, aloe vera, sandalwood, orange peel, neem, coffee, rosewater.
- In this prepared face pack coffee multani mitti and aloe vera are main ingredient.
- This prepared formulation of face pack is morphologically yellowish in colour pleasant in odour, smooth in appearance and fine in texture.
- This prepared formulation is stable at 40 °C, This passed the stability test.
- The flow property of this face pack is fair because angle of repose, Carr's index and Hausner's ratio are in standard limits.
- In this face pack glycoside, carbohydrates and volatile oil are present.
- pH is neutral so it suits all skin types.
- All evaluation tests like morphological, rheological, stability studies, washability, physicochemical, phytochemical evaluation test result are in limits.

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