

Advance In Recent Poly-Herbal (Face Pack) Formulation, Assessment And Their Screening Potential To Acne-Prone, Dark & Dull Skin In Indian Cosmetics Field

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Abstract

The study of present research work is to be formulated and evaluate an herbal face pack for glowing skin by using natural herbal ingredients. Everybody wants to get a fair and charming skin. Now a day, acne, black heads, pimples are common among persons who suffer from it. According to Ayurveda, skin problems are normally due to impurity in blood. Herbal ingredients Such as Multani mitti, Gram Flour, Rice flour, Lemon peel Powder, Manjishta, saffron, Turmeric, Aloe Vera, Milk powder were purchased from local market in the form of dried powder. All powdered natural ingredients were sieved using #120 mesh Particle size of the powder was found to be 20 -25µm., weighed accurately and mixed geometrically for uniform formulation and then evaluated for parameters including Organoleptic, physicochemical, physical, phytochemical, irritancy along with stability examination. The dried powder of combined form had passable flow property which is suitable for a face pack. In this study it is concluded that all the formulations of face packs found to be good in physical parameters, free from skin irritations so we found good properties for face packs and further optimization studies are required on this study to find the useful benefits of face packs on human use as cosmetic product.

Keywords: Natural Cosmetics, Formulation, Evaluation, Face Pack, Glowing Skin.

INTRODUCTION

Cosmetics are defined as products used for the purpose of cleansing, beautifying, promoting attractiveness or altering one's appearance. The natural face pack contains some vitamins which are essential for health and glow of skin. The herbal face pack act by improving blood circulation in the veins of skin but the effect of facial face packs generally temporary, so for regular glow it should be used 2-3 times a week [1] In Ayurveda, the herbal paste is called as 'mukhalepa' used for as a facial therapy. This herbal paste smeared on face to treat acne, pimple, scars, marks, and pigments. Herbal face packs are cheaper and have no side effect for getting fair skin naturally. [2] Herbal cosmetics are the products which are used to purify and beautify the skin. The main advantage of using herbal cosmetics is that it is pure and does not have any side effects on human body. [3]

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 paste 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. [4] 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. [5] Skin of the face is the major part of the body, which is a mirror, reflecting the health of an individual. A balanced nutrition containing amino acids, lipids and carbohydrates are required for the skin to keep it clear, glossy, and healthy. In ancient times, women were very conscious about their beauty and took special care of their specific skin types. [6] Everybody wants to get fair and charming skin but now a day's acne, blackheads, whiteheads, pimples; dark circles are common among youngsters and persons who suffers from it. [7] Acne vulgaris is an extremely common disorder of the skin (pilosebaceous unit) that affects virtually all

individuals at least one during life. The incidence of acne most observed in teenage, but the men and women between 20-30 years of age also affected by disorder. Acne may be classified comedonal, popular, pustular, cystic, and nodular. Come odonal acne is non-inflammatory and it has two types' whiteheads and blackheads. White heads are closed come dones with microscopic opening where as blackheads are open comeodones with wider than normal opening.[8]

Advantage of applying Face Pack [9,10]

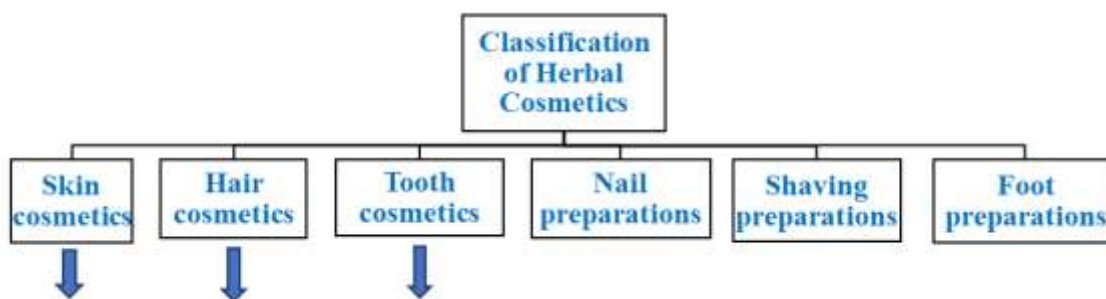
1. They help to prevent premature aging of skin.
2. Nourishes the skin Fruit face packs supply essential nutrients to skin.
3. Regular use of natural face masks bring glow to skin, improve skin texture and complexion
4. Feeds the skin Essential fruit face packs are available Vitamins for the skin.
5. Depending on its herbal ingredients, aids in reducing acne, pimples, scars, and marks.
6. Face packs typically remove skin's dead cells.
7. The skin is soothed and relaxed by these face masks.
8. They aid in quickly restoring the skin's lost radiance and glow.
9. They aid in preventing early skin ageing
10. They help to reduce, acne, pimple, scars, and marks depending on its herbal ingredients.
11. Natural face packs make the skin look young and healthy
12. Face packs usually remove dead cells of skin.
13. These face mask provide a soothing and relaxing effect on skin.
14. They help to restore the lost shine and glow of skin in short span of time.
15. The harmful effects of pollution and harsh climates can be effectively combated with judicial use of face packs.
16. Formation of wrinkles, fine lines and sagging of skin can be effectively controlled by using natural face packs.

While applying Face Pack following precaution should betaken

- A. Apply face pack once in a week.
- B. Select the face pack according to your skin type. Take opinion of natural therapist or concerned skin expert be for applying face pack.
- C. 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 open pores.
- D. Don't try to peel or scratch the dried face pack. This may harm underlying skin. Spray water (which is at room temperature) on face before removing dried face pack. After removing the mask, roll an ice cube on facial skin. This helps to close open pores and tightens skin. It also to new and sooths the skin.
- E. 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.
- F. 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.
- G. Spray water on face before removing dried face pack. After removing the mask roll anicecube on facial skin which helps to use open pore sand tightens skin.

Ideal Properties of Face Packs [11, 12]

1. It should be non-irritating and non-toxic.
2. It should be stable both physically and chemically.
3. It should be free from gritty particles.
4. It should have pleasant odor.
5. They should be capable of producing significant cleansing of the skin
6. They should produce a sensation of tightening of the skin after application.



- | | | |
|----------------------------|---------------|--------------|
| Cream | Shampoo | Tooth Powder |
| Scrub | Hair oil | Toothpaste |
| Lip balm | Hair Colorant | Mouthwash |
| Powder | | |
| Lotion liniments | | |
| Face pack | | |
| Deodorant & antiperspirant | | |
| Bath preparation | | |

Use of Herbal face pack

1. Softens the skin, removes the dryness as it is rich in hydrating agents as milk powder. Brightens the skin tone due to the presence of milk powder, turmeric, and saffron.
2. Cleanses the skin, due to the presence of gram flour as it clears the skin by removing the dirt particles adhered to it.
3. Clarifies the skin by fighting the problems of acne and blemishes, by the removal of excess oil from the face due to the presence of Multani mitti.
4. Contains antiseptic action to deal with the minor cuts, marks due to the presence of turmeric.

Exfoliates skin by removing the dead cells, which also prevents early aging due to the presence of Saffron.

MATERIAL AND METHOD

Fuller's Earth-

Multani mitti which helps to remove the impurities in the form of dead skin cells. It helps to make the skin radiant. It has been proven best for the irritation-prone skin. Its soothing action calms the skin, cures the inflammation caused due to elevated phlogistic agents. It is perfect for oily skin. It removes the dirt and excess of oil by acting as a perfect adsorbent. It provides fresh, radiant, and glowing skin [13].

Turmeric

Turmeric has been used in this preparation due to its blood purifying property and helps in wound healing, because of its [antiseptic](#) action. It cures the skin diseases occurring due to blood impurities. It is a very good anti-inflammatory and anti-allergic agent. The phyto constituents, mainly terpenoids present in it helps to lighten the skin tone. Haridra delays the signs of aging like wrinkles, improves skin elasticity. It cures pigmentation, uneven skin tone and dull skin [14].

Gram Flour-

Gram flour has been used extensively since the olden times for its beauty-enhancing benefits. It mainly acts as a tonic for the skin as it helps to clean and exfoliate it. Gram flour is nothing but pulse flour obtained from grinded chickpeas. It is very beneficial for skin as well as hair. It is used to decrease tanning of the skin, also reduces the oiliness of skin, thus proving as a good anti-pimple agent. It lightens the skin tone, therefore used as an instant fairness agent [15].

Saffron-

Mainly saffron consists of dried stigmas and upper parts of styles of plant known as *Crocus sativus* belonging to the family Iridaceae. It is rich in carotenoid glycosides, mainly containing terpenoids. It lightens the skin tone and provides fair and glowing skin [16]

Manjistha

Manjistha holds the reputation of a very good skincare herb. Used externally and internally, it helps one to gain luster and glow (of the skin) and aids to remove pimples, freckles and discoloration. Its paste should be applied in various skin disorders like itching, black spots on the face, pimples, leucoderma etc. According to Charaka, Manjisthaisvarnya (improving the complexion), jvarahara (febrifuge) and visaghna (detoxifier).


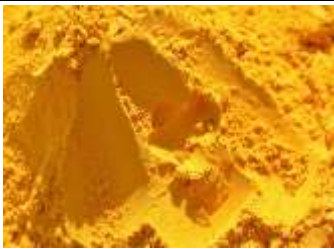


Orange Peels





Orange peels contains Limonene (90%), Citral (4%), Vitamin C, Pectin, Hesperidine, Aurantimaric acid, Octanal (39%), Decanal (42%), Monoterpene (91%) and contains no less than 2.5% Volatile oil⁹. Protects skin from free radical damage. Heals dry, flaky, and itchy skin. Hydrates dehydrated skin. Brings back moisture. Prevents oxidative stress in skin cells, for youthful, glowing skin. Helps in renewing worn-out cells. Works as a skin lightening agent. Removes tan. Loaded with Anti-ageing properties. Promotes healthy skin glow. [17]

Milk Powder

It is very beneficial for skin, as it provides nourishment for dry, rough skin for the longer duration. Milk cream either in the form of powdered raw milk as such provides a brilliant shine to skin. This is beneficial in hydrating the face deeply and makes skin youthful, lustrous, and flawless. It bleaches the skin to remove dark spots, pigmentation, acne etc. This pack also removes blackheads, whiteheads, and other skin imperfections naturally. This facial pack helps in fading suntan [18].

Composition of Herbal Face pack

Sr.no	Herbal ingredients	Medicinal use	Image
1	Fuller's Earth		
2	Turmeric	Anti-Bacterial, Anti-septic, improves skin colour	
3	Gram flour	Tan removal, anti-Bacterial, reduces redness and irritation, treat acne, removes dark spots.	
4	Saffron	Soothing agent, improve complexion and skin tone, Treats dry skin, removes suntan, treat acne	

5	Manjistha	Anti-inflammatory, improve skin complexion.	
6	Orange Peels	Improves fairness, Antibacterial, soothesunburn,remove suntan,Exfoliatesskin,FightAcne.Andreduceshyperpigmentation	
7	Milk powder	Itisverybeneficialforskin,asitprovidesnourishmentfordry,roughskinforthelongerduration	
8	Aloe Vera	Antiseptic, Antioxidant, soothing effect to skin. Moisturizing Agent.	

Formulation of Herbal face pack.

Sr.No	Constituents	Scientific Name	Family Name	Percentage
1.	Gram Flour	Cicerarietinum	Fabaceae	15
2.	Fuller's Earth	<i>Calcium bentonite</i>	-----	10
3.	Milk powder	-----	-----	10
4.	LemonPeelPowder	Citruslimon	Rutaceae	15
5.	Manjishta	Rubiacordifolia	Rubiaceous	10
6.	Saffron	Crocussativus	Iridaceae	10
7.	Turmeric	<i>Curcuma longa</i>	Zingiberaceae	10
8.	Aloe Vera	<i>Aloebarbadensis</i>	Liliaceae	10

Step1: Using digital scales, all the necessary herbal powders for the face pack preparation was precisely weighed separately balance.

Step2: Involved transferring the herbal medications, such as Fuller's Earth, Lemon peel and Gram Flour to Milk powder and pestle and pulverizing them.

Step3: To create consistent, fine combination, herbal medications including Manjishta, and Saffron, Turmeric were triturated in a separate mortar and pestle.

Step4: To create a homogeneous medicine powder for a face pack a previously created mixture of herbal powders was added to a mixture off in powders and triturated.

Step5: SieveNo.44 was used to filter the particles.[19]

Evaluation of face pack

Organoleptic Evaluation

It refers to the evaluation of the herbal face pack by its colour, odour, appearance, texture etc. The external characters of the formulation were examined based on the described method.[20]

S.No	Organoleptic Evaluation	Result
1.	Colour	Yellowish brown Colour
2.	Odour	Pleasant
3.	Appearance	Smooth, fine
4.	Texture	fine
5.	Smoothness	smooth

Physico chemical evaluation

Physicochemical parameters were determined, including the determination of extractive value, ash value, pH, and moisture content.[21]

Sr.No	Evaluation of physicochemical	Result
1.	pH	6.92
2.	Loss on Drying	2.9
3.	Ash value	89 ±0.352
4.	Particle size(µm)	24.3±2.5

Physical evaluation

The particle size was tested by microscopy method. The flow property of the dried powder of combined form was evaluated by performing Angle of Repose by funnel method, bulk density and tapped density by Tapping Method.[22]

Sr.No.	Physical Evaluation	Result
1	Tapped density	1.315gm/ml
2	Bulk density	1.08gm/ml
3	Angle of repose	31.610
4	Hausner 's ratio	1.212
5	Carr's index	21.83%

Phyto chemical evaluation-

The aqueous extract of the herbal face pack was evaluated for the presence of different phyto constituents as per the standard procedures.[23]

Sr.No	Evaluation Of Phyto constituents	Result
1.	Glycosides	(+)
2.	Tannins	(+)
3.	Carbohydrates	(+)
4.	Alkaloids	(+)
5.	Volatile oil	(+)

Irritancy test

Mark an area (1sq.cm) on the left-hand dorsal surface. Definite quantities of prepared face packs were applied to the specified area and time was noted. Irritancy, erythematic, oedema, was checked if any for regular intervals up to 24hrs. and reported. [24].

Sr.No.	Observation	Result
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a.	Irritation	Not found
b.	Redness	Not found
c.	Swelling	Not found

Stability studies

Stability testing of prepared formulation was conducted by storing at different temperature conditions for the period of one month. The packed glass vials of formulation stored at different temperature conditions like, room temperature and were evaluated for physical parameters like colour, odour, pH, consistency and feel.[25]

Sr.No	Observation on room temperature	Result
a.	Colour	No change
b.	Odour	No change
c.	Texture	Fine
d.	PH	6.91±0.11
e.	Smoothness	Smooth

CONCLUSION

Herbs play a significant role, especially in modern pharmaceutical preparations, when the damaging effects of food processing and overmedication have assumed alarming proportions. They are now being increasingly cosmetics as well as alternative medicines. The growing interest in herbs is a part of the movements towards change in life styles. This movement is based on the belief that plants have a vast potential for their use as curative medicines. The knowledge of medicinal plants used by the people of seems to be well-known in its culture and tradition. In the present study, we identified many plants used by people to cure dermatological disorders and as cosmetics. Some of the plants were found to have dual use, both as curative and cosmetic. Quality control tests must be safe for longer periods of time. An herbal face pack is used to rejuvenate the muscles, maintain the elasticity of the skin, remove adhered dirt particles and improve the blood circulation. The benefit so for herbal based cosmetics are their non toxic nature. It nourishes the facial skin. This face pack supplies vital nourishment to the skin. It helps in the elimination of acne, pimple, scars, and marks. Face pack exfoliates skin and provides a soothing, calming and cooling effect on the skin. They restore the natural glow of skin in the optimum time period. Frequent uses of natural face packs improve skintexture and complexion. Pollution and harsh climates badly affect the skin and these effects can be countered by theregular usage of face packs. They help to retain the elasticity of skin cells, thereby controlling premature aging of the skin. Wrinkles, fine lines, and loosening of skin can be effectively controlled by using natural face. In this work, we found excellent properties of the face packs and further studies are needed to be performed to ascertain more useful benefits of face packs as cosmetics. Natural remedies are accepted nowadays with open hands as they are safer with fewer side effects than the chemical-based products. Herbal formulations are required in large amounts to fulfil the needs of the growing world market. It is an effective attempt to formulate the herbal face pack containing different powders of different plants with multiple therapeutic benefits.

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