

Formulation and Evaluation of Herbal Face Pack

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Abstract: *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 powder of banana peel was prepared by Shade drying commercially, all powdered natural ingredients were sieved using #120 mesh, weighed accurately and mixed Geometrically for uniform formulation and then evaluated for parameters including morphological, physicochemical, Physical, phytochemical, irritancy along with stability examination. Thus, in the present work, we formulated a herbal face Pack which can be easily made with the easily available ingredients. After evaluation, we found good properties for the Face packs, free from skin irritation and maintained its consistency even after stability storage conditions. Results of the Study scientifically verified that herbal face pack having enough potential to give efficient glowing effect on skin. The Overall study is useful to substantiate product claims due its useful benefits on the human beings.*

Keywords: Skin, Herbal face pack, Formulation, Evaluation

I. INTRODUCTION

Since the ancient era, people are aware of the use Of plants for the essential needs of a healthy and beautiful Skin. Cosmetics are products used to clean, beautify and Promote attractive appearance. 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. Even today, People especially in rural areas, and hilly regions go for the Natural remedies like plants extracts for various cosmetics Purposes like neem, aloe vera, tulsi, orange peel, Rose etc. Herbal cosmetics are the products which are used To purify and beautify the skin. The main advantage of Using herbal cosmetic is that it is pure and does not have Any side effects on the human body. People have rough skin And when they don't take sufficient care, then the skin turns Dark due to overexposure to the sun, other pollutants etc.

In this article we have formulated herbal face pack to Whiten, lighten and brighten the skin naturally for men and Women. This face pack has natural skin lightening property And can be easily prepared at home.

Face packs with Natural constituents are rich in vital vitamins that are Essential for the health and glow of the skin. These Substances have been proven to be beneficial for skin in Many ways. Natural facial packs are easy to use. They Increase the circulation of the blood within the veins of the Face, thereby increasing the liveliness of the skin. A Good herbal face pack must supply necessary nutrients to the skin, available in the form of free- flowing powder applied facially for the external purpose. It should penetrate Deep down the subcutaneous tissues to deliver the required Nutrients. Every type of skin is specific for the requirement Of skin pack. Nowadays different types of packs are Available separately for the oily, normal and dry skin. Face Packs are used to increase the fairness and smoothness of The skin. It reduces wrinkles, pimples, acne and dark circles Of the skin.

Face packs which are recommended for oily Skin prone to acne, blackheads, usually control the rate of Sebum discharge from sebaceous glands and fight the Harmful bacteria present inside acne lesion. The leftover Marks of skin can be reduced by incorporation of fine Powders of sandalwood, rose-petals and dried orange peels.

They are non-toxic, non-allergic and non-habit Forming. They are natural in every aspect, having larger Shelf life. They have no added preservatives. They can be Easily formulated and stored over a larger span of time. Present research



article deals with the formulation and Evaluation of herbal face pack for glowing skin by using Natural materials i.e., multani mitti, turmeric, sandalwood, Saffron, milk powder, rice flour, orange peel, banana peel.

Benefits of Face Pack:

The face pack is providing the Nourishment to the skin. It helps to reduce, acne, pimple, scars and marks depending on its herbal ingredients. The neem and tulsi help to reduce acne and pimple and control the over discharge of sebum from sebaceous glands and remove the harmful bacteria inside acne lesion. The scars and marks of skin can be reduced by adding fine powder of sandal, rose water .Its help to remove the dead cells from facial skin. These are providing a soothing and relaxing effect on skin. The face pack are used regularly for glow, improve skin texture and complexion. The harmful effects of pollution and harsh climates can be reduced by the use of face pack. They help to prevent premature aging of skin. They prevent the formation of wrinkles, fine lines and sagging of skin.

Precautions:

Some precautions are useful for better skin glowing, cleaning, and nourishment.

The face pack is used according to your skin type.

Concerned to the skin expert before use of any natural therapy on face.

Maximum 15-20 minutes stay on face and after that wash the face and completely remove the medicaments.

When you are applied face pack on face then the face should be completely dried.

Do not scrub vigorously.

Avoid applying face pack near “eye zone” because the skin around eye is very fragile. The process of removing face pack may damage skin around the eyes.

II. MATERIALS AND METHODS

Present research article deals with the formulation And evaluation of herbal face pack for glowing skin by Using natural ingredient i.e., multani mitti, turmeric, Sandalwood, saffron, milk powder, rice flour and orange Peel. They were purchased from local market in the form of Dried powder. The details of the natural ingredient used for the Formulation of herbal face pack are mentioned below.

Ingredients Of Formulation

MULTANI MITTI-



Figure 1: Multani mitti

Multani mitti helps skin by different ways like Diminishing pore sizes, removing blackheads and Whiteheads fading freckles, soothing sunburns, cleansing Skin, improving blood circulation, complexion, reducing Acne and blemishes and gives a glowing effect to a skin as They contain healthy nutrients. Multani mitti is rich Magnesium chloride. They also provide the Appearance of glowing skin because they are rich in vital Nutrients. Magnesium chloride is abundant in Multani Mitti.



TURMERIC-



Figure 2: Turmeric Powder

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 Phytoconstituents, mainly terpenoids present in it helps to Lighten the skin tone.

SANDAL WOOD-



Figure 3: Sandalwood Powder

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

SAFFRON-



FIG4: SAFFRON

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Mainly 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.

MILK POWDER-



Figure 5: Milk powder

Milk powder 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 or 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.

RICE FLOUR-



Figure 6: Rice flour

Rice flour can be applied to cure some forms of Skin ailments. In Indian subcontinent, rice water is duly Prescribed by Ayurvedic practitioners as in undigested Form. It aids the growth of useful bacteria for normal bowel Movements an effective ointment to cool off inflamed skin Surfaces.



ORANGE PEEL-



Figure 7: Orange peel powder

Orange peel is a covering of citrus fruit which Contains different nutritional source such as vitamin C, Calcium, potassium and magnesium. 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.

ROSE WATER-

Vitamins A, C, and K are abundant in rose water & are good For stimulating the body's production of collagen. Your skin Remains firmer & suppler thanks to collagen. The vitamin C In roses also lightens & brightens skin tone, decreases Hyper- pigmentation, eliminates scars, & minimizes pores. Antibacterial characteristics can be seen in rose water. As preferred in manufacture of cosmetics, they Should also have a pleasing aroma and aesthetic feel when Applied.



Fig 8 ROSE WATER METHOD OF PREPARATION-

To obtain uniformly sized particles, each of the powdered Materials was put through a sieve with a mesh size of 40 Before being precisely weighed. To ensure homogeneous And even mixing, all powder ingredients were also Combined geometrically. Below is a representation of each Ingredient's quantity. The prepared face pack was tested Using a variety of assessment criteria and kept in an airtight Container.

Table 1: Composition of Herbal face pack

Sr. No.	Constituent	Scientific name	Percentage
1	Multani mitti	Calcium bentonite	15



2	Turmeric	Curuma longa	15
3	Sandalwood	Santalum album	10
4	Saffron	Crocus sativus	05
5	Milk powder	15
6	Rice flour	Oryza sativa	20
7	Orange pill	Citrus sinensis	10
8	Rose water	Rosaceae	QS

These are the some constituent used in the formulation as given quantity. As per procedure constituents are used in specific manner to formulate a good and beneficial facepack.

PROCEDURE FOR APPLICATION OF FACE PACK-

In a clean bowl, Take few grams of powder mixture made up of milk powder ,Turmeric, Orange peel powder, rice flore, rose water, Multani mitti, and Sandalwood.

To create a smooth paste, add 3-4ml of rose Water or plain cold water. Mix well using a spoon or spatula until a smooth, paste-like consistency is achieved and add Aloe vera gel or honey if desired, and mix again.

Apply this paste all over your face, give It 10 to 15 minutes to dry.

Gently scrape pack off skin once Powder has dried, then rinse it off with cold water, Pat the face dry with a clean towel.

When gently Massaged into the skin for a few minutes, face pack also Functions as a scrub. The pack should be applied daily on wet face, Forming a paste of it in water as well as rose water with optimum thickness.

Precautions:

Perform a patch test before first use to check for allergic reactions. Avoid applying on broken or irritated skin.

Do not allow the pack to dry completely if you have dry skin (can cause excessive dryness).

METHOD OF EVALUATION-

Organoleptic Evaluation-

A number of organoleptic characteristics, including colour, Odour, look, texture, and consistency, were assessed for the Prepared face pack. The senses of touch and sensation were Used to evaluate colour, smell, and texture visually.

Rheological Evaluation-

Evaluation of the powder's properties was required. A Number of physical metrics, including angle of repose, bulk Density, tapped density & hausner's ratio, were used to Evaluate sample.

Washability-

It was determined how easily a formulation could be wiped Off. After applying a face pack, the skin was carefully Examined to see how easily and thoroughly it could be Washed with regular tap water.

Physicochemical evaluation-

Physicochemical parameters were determined, Including the determination of extractive value, ash value, pH and moisture content.

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.

Phytochemical evaluation-

The aqueous extract of the herbal face pack was Evaluated for the presence of different phytoconstituents as Per the standard procedures.



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, edema, was checked if any for regular Intervals up to 24 hrs and reported.

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 40C and were evaluated for physical Parameters like color, odour, pH, consistency and feel.

III. RESULT AND DISCUSSION

Following evaluation parameters were performed To ensure superiority of prepared face pack.

Morphological Evaluation-

Herbal face pack was evaluated for morphological Parameters showed in the Table 2. The colour of Formulation was pale yellow. The odour of prepared Formulations was pleasant and good acceptable which is Desirable to cosmetic formulations. Texture and smoothness Was acceptable as per requirement of cosmetic Formulations.

Table 2: Morphological Evaluation

Sr.no	Parameter	Observation
1.	Color	Pale yellow
2.	Odour	Pleasant
3.	Appearance	Smooth, fine
4.	Texture	fine
5.	Smoothness	Smooth

Physicochemical Evaluation

Herbal face pack was evaluated for Physicochemical parameters showed in the Table 3. The pH of formulation was found close to neutral. The ash content and moisture content was within limit. The Particle size of formulations was found in the range OF $24.3 \pm 2.5 \mu\text{m}$.

Table 3: Physicochemical Evaluation

Sr no.	Parameter	Observation
1.	pH	6.92
2.	Ash content	89 ± 0.352
3.	Particle size (μm)	24.3 ± 2.5

herbal face pack was evaluated for phytochemical Parameters showed in the Table 4. It was found to be a presence of phytoconstituents Such as carbohydrates, alkaloids, glycosides, tannins and Volatile oil which act as good nourisher for the skin.

Table 4: Phytochemical evaluation

Sr.no.	Phytoconstituents	Observation
1.	Carbohydrates	+
2.	Alkaloids	+
3.	Glycosides	+
4.	Tannins	+
5.	Volatile oil	+

Physical Evaluation (powder property)-

Herbal face pack was evaluated for physical Parameters (powder property) showed in the Rheological findings justified the flow (powder) properties Of the herbal face pack.

It was found to be a free-flowing And non-sticky in nature.



Table 5: Evaluation of flow properties

Sr.no	Parameter	Observation
1.	Tapped density	1.428gm/ml
2.	Bulk density	1.08gm/ml
3.	Angle of repose	32.610

Irritancy Test-

The results of irritancy test were shown in Table 6. The formulation showed absence of irritation, redness And swelling during irritancy studies. This formulation have Safe to use on skin.

Table 6: Irritancy Test

Sr.no	Parameter	Observation
1.	Irritation	No
2.	Redness	No
3.	Swelling	No

Stability Studies-

The results of stability were shown in Table 7. No Change in color, odour, texture and smoothness was Observed at mentioned conditions of stability except pH. The stability studies showed a slight change in pH of Formulation at 40°C.

Table 7: Stability Test

Sr.no.	Parameter	Room temperature	40°C
1.	Color	No change	No change
2.	Odour	No change	No change
3.	PH	6.92 ± 0.12	6.87 ± 0.13
4.	Texture	Fine	Fine
5.	Smoothness	Smooth	Smooth

IV. CONCLUSION

Because natural medicines are thought to be safer and have less adverse effects than synthetic ones, they are more widely accepted. The demand for herbal formulations is rising on the global market. Herbal face packs serve to retain the flexibility of the skin, improve blood circulation, revitalize the muscles, and clear impurities from pores. We have made a good effort to create a herbal face pack using natural herbal components including rice flour, milk powder, turmeric, sandal wood, saffron, orange peel, and banana peel. We evaluated the face packs and discovered that they had good qualities, were not irritating to the skin, and were consistent even after stability storage conditions.

Research has shown that a herbal face pack has the capacity to effectively brighten skin. Because of the product's beneficial effects on people, the entire study is helpful in supporting product claims.

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