

Formulation and Evaluation of Herbal Face Pack

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Abstract: The objective this work is to formulate and evaluate a polyherbal face pack for cosmetic purpose from herbal ingredients. Multani mitti, Gram flour, turmeric, and lodhra were procured from the local market and were dried, powdered, then passed through sieve no 100, mixed geometrically and evaluated for its organoleptic and physico-chemical, general powder, microscopical characters and chemical evaluation. The dried powder of combined form had passable flow property which is suitable for a face pack. Particle size of the powder was found to be 20 -25 μ m. The microscopical characters of dried powder of combined form were noted Herbal face packs or masks 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, reduce the allergic reactions and time tested usefulness of many ingredients. Thus in the present work, we found good properties for the 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: Face Pack, Natural, Standardization, Cosmetics

I. INTRODUCTION

Everyone aspires to have lovely, light skin. These days, young people and those who suffer from acne frequently have dark circles, pimples, black heads, and acne. Ayurveda states that blood impurities are typically the cause of skin issues. Skin-related disorders are brought on by toxins that have accumulated in the blood as a result of poor diet and lifestyle choices. Ayurveda describes a variety of herbs and remedies for blood purification. Herbs that purify blood include Manjistha, Lodhra, Chandana, Haridra, and others. The herbal paste which is applied on face to treat acne, pimple, scars, marks and pigments are known as "mukha Lepa" in ayurveda. "Mukha Lepa" is the term for the method of applying this herbal mixture to the face. Facials are a common form of this beauty therapy. "Face pack" is the term for the smooth powder that is applied to the face. A quality herbal face pack should provide the skin with the nutrients it needs. To give the necessary nutrients, it must enter the subcutaneous tissues. Various herbal face packs are required for different skin types. Ayurvedic face packs are used to assist ladies eliminate wrinkles, dark circles, acne, and pimples. Herbal face packs improve skin's smoothness and fairness. By applying herbal face

packs in accordance with our skin type, we can maximize their benefits. These face packs are the greatest ayurvedic remedy for promoting fairness and enhancing skin radiance. One of the most elegant and traditional ways to cleanse skin is with face packs. Ayurveda describes a variety of face packs with astringent, antibacterial, cleansing, healing, and nourishing qualities. We may make a face pack at home using common kitchen and household ingredients. Herbal face packs for naturally achieving fair skin are less expensive and come with no negative side effects. People have been using herbs for management, cleaning, and beauty since ancient times. Products used to clean, beautify, promote attractiveness, or change one's look are referred to as cosmetics. Skin that is smooth, glowing, and silky is achieved with homemade natural face packs and masks. The herbal paste used to cure acne on the face in Ayurveda. Smooth, glowing, and silky skin is achieved with homemade natural face packs and masks. "Mukha lepa" is the name of the herbal paste used on the face in Ayurveda to treat acne, pimples, scars, markings, and pigments.

The technique of applying a herbal mixture to the face is known as "mukha lepana." Nowadays, this treatment is commonly referred to as face. A face pack is a smooth powder that is applied to the face; a good herbal face pack should penetrate the subcutaneous tissues and provide the skin with the nutrients it needs. Different kinds of herbal face



packs are required for different skin types. Ayurvedic face packs are used to lessen dark circles, wrinkles, acne, and pimples. Additionally, they make the skin smoother and more even. Certain essential vitamins that are necessary for the well-being and luminosity of our skin are present in the natural face packs. These compounds also show numerous advantages for our skin. Natural facial packs are easier to use and less complicated. They assist us in taking care of our skin and demonstrate its value by boosting blood flow in the facial veins. The facial packs' effects are usually transient, and two to three times per week is recommended for a consistent glow. According to Ayurveda, face packs can help women get rid of acne, pimples, dark bags, and wrinkles. Herbal face packs improve skin's smoothness and fairness. By applying herbal face packs in accordance with our skin type, we can maximize their effects. The finest ayurvedic therapy to promote fairness is an ayurvedic face pack, which also makes skin glow. Face packs are useful for treating, promoting, and preventing skin issues. The following are the essential herbs used to promote skin fairness

Benefits : Tanning skin can be converted into a Detanning.



The largest organ of the body is skin which present external to the body and make us safe from light, heat etc. It is the biggest organ of the body which primarily control the body temperature and stores vitamin -D, fat and water. Skin is made of mesodermal cell and different pigments.[1,2]

It has three layers which are as.

Epidermis

Dermis

Hypodermis

Skin is the home of many microorganisms which include yeast, fungi and many microscopic organism which gives favourable environment for the growth of microorganisms.[4] It cannot eradicated by cleaning agent. For this purpose, we use beautifying cosmetics which are act on skin in light and these cause unfavourable susceptible response. Each session of use must reasonable apparel keeping in mind the end goal to encourage the dissipation of the perspiration. Various research are done that are used for the formulation and quality check of turmeric face pack for glowing skin are prepared at home using natural ingredients like turmeric, camphor, sandalwood, gram flour, almond, Tulsi, and cucumber.[3,4].

Benefits of herbal face pack

- Herbal face packs give skin nutrition.
- Depending on their herbal contents, herbal face packs can diminish acne, pimples, scars, and blemishes.
- Face packs typically exfoliate the skin's dead cells
- These face masks provide a calming and unwinding impact on the skin.
- They aid in quickly restoring the skin's lost radiance and glow.
- They help to prevent premature aging of skin.



- Natural face packs give the skin a youthful, healthy appearance.
- It keeps the skin's suppleness.
- Natural face masks improve the texture and tone of the skin and give it a glow when used frequently.
- The negative impacts of pollution and extreme weather can be successfully combated by using face packs sensibly.[5]

Advantage of herbal face pack

- Herbal products don't have negative side effects.
- It aids in eliminating our skin's dead cells.
- Herbal products are inexpensive.
- Products made from herbs are widely accessible.
- It is utilized to make our skin sparkle.

Disadvantage of herbal face pack

1. Sometimes our skin displays signs of irritability and redness.
2. Inflammation has taken place.
3. The effects of the face pack will develop gradually .

Ingredients used for formulation

Multani mitti

Multani mitti benefits the skin in a variety of ways, including by reducing pore size, eliminating blackheads and whiteheads, fading freckles, relieving sunburns, cleansing the skin, boosting blood circulation, improving complexion, and minimising acne and blemishes. They also give the skin a glowing appearance because they are rich in healthy nutrients. Acne may be lessened by the astringent and adsorbent qualities of multani mitti. It might accomplish this by reducing inflammation and soaking up extra sebum and oil in the afflicted areas. In general, multani mitti is regarded as secure. However, it could result in little skin irritation. This clay, which contains a variety of minerals, is frequently used in cosmetics and personal care items.[6,7]

Orange peel

Flavonoids with antioxidant activity can be found in orange peel, which is the main waste portion in the manufacture of orange juice. The key players in citrus peel extracts' alleged antioxidant action are the glycosides hesperidin and naringin. Additional phenols in orange peels, such as coniferin and chlorin, have been proven to help in radical scavenging when taken in the form of orange peel molasses. Orange peel, a citrus fruit covering, contains a variety of nutrients like vitamin C, calcium, potassium, and magnesium. It protects oppose to oxidative stress, skin dehydration, and free radical injury. Additionally, it has the ability to instantly glow and stop wrinkles, ageing, blemishes, and acne.

Neem

In Sanskrit, neem is referred to as "arista," which means "perfect, complete, and imperishable." The neem tree is known by its Sanskrit name, Arista, which means "reliever of sickness" and is therefore referred to as "Sarbarogaribarini." In India, the tree is regarded as a "village dispensary." The US National Academy of Sciences acknowledged the significance of the neem tree in a 1992 paper titled "Neem- a tree for solving world challenges. Ancient texts like the "Charak-Samhita" and the "Susruta-Samhita" highlight the many advantages of neem. It is frequently referred to as "Indian Lilic" or "Margosa," and it is a member of the tribe Melieae, subfamily Meloideae, and family Liliaceae. Neem is one of the most adaptable, diverse, and capable tropical trees.

It is encouraging to see how a traditional Indian plant remedy has developed into a number of therapeutically and commercially useful preparations and chemicals, which gives scientists considerable motivation to learn more about this medicinal plant. Exploring the chemistry of various neem sections has already been the subject of a sizable amount



of research over the past few decades. Neem and its products should be the subject of in-depth research and development for greater commercial and medical applications.[8,9].

Wheat flour

One of wheat flour's numerous advantages is that it absorbs extra skin oil, which is just one of its many advantages. Here is a simple treatment for oily skin with atta. Remove toxins, lessen tan and dark spots, and enhance the elasticity and brightness of your skin. Additionally, you will be nourishing your skin with an entirely natural substance. Numerous skin conditions are brought on by oily skin. Blackheads and dead skin cells are common skin care problems for those with oily skin. In this case, a face pack made of wheat flour might help you get rid of the issue. The wheat face mask eliminates these issues by lowering skin oil production.[9,10].

Cinnamon bark

Cinnamon is a spice obtained from the inner bark of several tree species from the genus *Cinnamomum*. Cinnamon is used mainly as an aromatic condiment and flavouring additive in a wide variety of cuisines, sweet and savoury dishes, breakfast cereals, snack foods, bagels, teas, hot chocolate and traditional foods.

Curcumin

Curcuma longa is a rhizomatous herbaceous perennial plant belongs to the family, Zingiberaceae⁵. It is native to tropical Tamil Nadu, in southeast India and needs temperature between 20 °C and 30 °C, and a considerable amount of annual rainfall to thrive.

Formulation Table

Table no 1: Formulation of face pack

Sr.no.	Name of Ingredients	FORMULATION-1	FORMULATION-2	FORMULATION-3
1	Multani Mitti	2 gm	5gm	8 gm
2	neem	0.5gm	1 gm	1.5gm
3	Gram flour	0.7gm	1 gm	2 gm
4	Cinnamon	0.5gm	0.5gm	1 gm
5	Orange peel	1 gm	1gm	2 gm
6	Turmeric powder	0.3gm	0.5gm	0.5gm

PRECAUTION :

1. Select the face pack according to your skin type. Consult a skin specialist or a natural therapist before applying a face pack.
2. The face pack should be applied to the face for no more than 15 to 20 minutes. Keeping for an extended period of time might lead to wrinkles, drooping skin, and an increase in open pores.
3. Apply a face pack once a week. Don't try to peel or scratch the face pack that has dried. This may cause damage to the skin beneath.
4. Mist the skin with room-temperature water before removing the dried face pack. After removing the mask, wash your face with cold water. This helps to tighten the skin and seal open pores. It soothes and firms the skin as well.
5. Steer clear of forceful face cleaning. The effect could be pimples and dark spots. Avoid using heat after using a face pack.
6. Avoid the "eye zone" with your face mask. The skin surrounding the eyes is quite thin. The skin surrounding your eyes may get damaged if you remove the face pack. [11].



Evaluation of face pack

Morphological Evaluation

It has to do with the manual evaluation of the herbal face pack's physical attributes (color, texture, appearance, smell, etc.). [12,13]

Physical Evaluation

The size of the particles was measured using the sieve method. Angle of repose, tapped density, and bulk density were used in the funnel method to evaluate the dry powder flow properties of the mixed powder. [14, 15]

Physiochemical Evaluation

Particle size and other physicochemical characteristics, including pH, were measured. [16].

Irritancy Test

Mark a 1-square-centimeter area on the dorsal surface of the left side. The region was prepped with a certain quantity of face packs, and the application time was noted.

For up to 24 hours, irritability, erythema, and edema were evaluated and reported when they appeared. [17,18].

Stability Test

Stability testing of the developed formulation was carried out by storing it at different temperatures for a month. Physical attributes including color, odor, pH, consistency, and feel were assessed in the packed glass vials of formulation as they were kept at various temperatures, including room temperature and 40°C. [1,19,20].

II. RESULT

Morphological Evaluation

A herbal face pack's morphological assessment is displayed in the table. The formulation had a pale green hue. Cosmetic formulations benefit greatly from the created formulations' agreeable and palatable flavor. The smoothness and texture fulfilled the needs of the cosmetic formulation.

Appearance	Powder
colour	Slightly green
odour	Pleasant
Texture	Fine

Physical Evaluation

The table displays the findings of an evaluation of the herbal face pack's physical characteristics. Data from rheology confirmed the herbal face pack's flow (powder) properties. Its character was found to be free-flowing and non-sticky.

Tapped Density	0.7407gm/ml
Bulk Density	0.5714gm/ml
Angle of Repose	40.82
Haunsner's Ratio	1.2962
Carr's Index	22.85%

Physiochemical Evaluation

Tests were conducted on the herbal face pack's physical-chemical characteristics. It was discovered that the mixture had a rather neutral pH. Particle sizes in the range of formulations were discovered to be 25 μ m.

PH	7.4
Particle Size	25 μ m



Irritancy Test

The results of the irritancy test are shown in the table below. The product showed no edoema, redness, or irritation during irritancy tests. It is safe to use this mixture on the skin.

Irritation	No
Edema	No
Swelling	No
Redness	No

Stability Test

Table presented the stability results. At the specified stability parameters, no change in color, smell, texture, or smoothness was observed. According to stability studies, at room temperature.

Colour	No Change
PH	No Change
Odour	No Change
Texture	No Change

III. CONCLUSION

The capacity of herbal face packs to successfully give skin a glowing appearance has been found. Given its positive effects on people, the entire study is crucial to substantiate product claims. Because they are safer and less likely to have adverse effects than synthetic ones, the components of natural medicines are more widely accepted. The global market is seeing an increase in demand for herbal formulations. Herbal face packs are used to promote blood flow, maintain skin suppleness, revitalize muscles, and unclog pores. Using only natural herbal components, we sincerely tried to make a herbal face pack. The herbal face pack was successfully formulated using natural ingredients known for their beneficial effects on the skin, such as Multani mitti, neem, turmeric, sandalwood, and orange peel. The formulation was evaluated for various parameters including appearance, pH, consistency, washability, skin irritation, and stability. The results indicated that the face pack was physically stable, skin-friendly, and easy to use, with no adverse reactions observed during patch testing. The natural ingredients synergistically worked to cleanse the skin, control oil secretion, and improve overall skin texture and tone. This study highlights the potential of herbal ingredients in developing effective and safe cosmetic products. Hence, the formulated herbal face pack can be considered a safe, cost-effective, and eco-friendly alternative to synthetic skincare products, catering to the growing demand for herbal cosmetics.

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