



Formulation and Evaluation of Herbal Face Pack powder

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Abstract:-

The purpose of this project is to create and assess a herbal face pack that uses natural herbal ingredients to give skin radiance. Natural herbal substances in powdered form are used, including orange peel, papaya leaves, Tulsi leaves, beet root, hibiscus powder, and potato starch powder. Dark circles, acne, wrinkles, and pimples can all be prevented with Ayurvedic face packs. They even improve the smoothness and fairness of the skin. Certain vital vitamins that are necessary for the health and radiance of our skin are present in the Natural Face Packs. These substances are also showing numerous health benefits. A natural facial is less complicated. They assist us in taking care of our skin and demonstrate its value by circulating blood through the veins in our faces.

Keywords:-

Herbal formulation face pack, irritated skin, consistency, and organic components.

Introduction:-

Everyone aspires to have skin that is both fair and appealing. These days, young individuals and those who suffer from them frequently have acne, blackheads, pimples, and dark circles. Ayurveda states that blood impurities are typically the cause of skin issues. Skin-related disorders are caused by toxins that build up in the blood as a result of poor nutrition and

lifestyle choices. Ayurveda prescribes a variety of plants and medications to cleanse the blood. In Ayurveda, "Mukhalepa" is the term for the herbal paste that is applied to the face to treat acne, pimples, scars, and pigmentation. Mukhalepana" is the term for the practice of applying this herb mixture to the face. Like a facial, this beauty procedure is well-liked.



Cosmetics are designed to be applied to the human body in order to clean, beautify, decorate, promote attractiveness, and/or change the way the skin looks. Without altering the skin's natural physiological characteristics, skin cosmetics work on the epidermis, or outermost layers of the skin. To enhance the beauty of skin, these substances are regularly added in a variety of forms. Cosmetics are typically used to combat acne, prevent and lessen wrinkles, aging, and excessive oil production by the skin.

In addition to providing vital antibacterial qualities, herbal face packs nourish and moisturize the skin. The skin of the face is a vital organ that reveals a person's health. A balanced diet is therefore required to maintain clean and healthy skin because it is made up of substances like amino acids, fat, carbs, etc. One of the most elegant and traditional ways to cleanse the skin is with a face mask. Different kinds of face masks with antibacterial, cleaning, astringent, therapeutic, and nutritious qualities are described in Ayurveda. Ayurveda is a life science whose primary focus is on curing human illness and maintaining the health of healthy people.

Benefits of facepack powder: -

- Face packs help to relax and soothe the skin by eliminating dead skin cells. Depending on its herbal components, it helps to lessen acne, pimples, scars, and markings.
- Typically, face masks with tulsi and hibiscus help prevent acne and pimples.
- Facial masks that are suggested for acne, pimples, and blackheads typically reduce the sebaceous glands' excessive sebum production and get rid of dangerous microorganisms from the skin.

- When used in conjunction with an acne face pack, a fine powder of beetroot, papaya leaves, and orange peel can help minimize skin scars and markings.
- Encourage a balanced skin tone and learn how to naturally treat skin issues.
- One advantage of cosmetics made from herbs is that they are harmless.

Advantages of facepack powder

Herbal products have no unwanted side effects.

- Helps eliminate dead skin cells.
- Herbal products are affordable.
- Herbal products are generally accessible.
- It is used to make our skin shine.

Disadvantages of facepack powder

- Sometimes our skin shows signs of irritation and redness.
- Inflammation has occurred.
- Herbal cosmetics have delayed effects as compared to allopathic formulations.
- The majority of natural medications are not widely available.
- Manufacturing processes are time-consuming and complex

How to Apply a Face Pack:

Put the required amount of face pack powder in a dish and stir in some rose water. Mix thoroughly and apply to the skin of the face. Cover the patches of acne and imperfections as well. Wait 20 to 25 minutes for it to completely dry, then rinse with cold water.

Ingredient Information :-

1] Beetroot powder –

The vegetable, which is high in antioxidants, helps to delay the onset of fine lines and prevent wrinkles. High quantities of folates and antioxidants lessen the severity of wrinkle appearance. It can be accomplished by putting the beetroot paste straight to the face or by drinking beet juice. Beetroot juice is an amazing detox beverage that helps cleanse the blood and remove toxins from the body. An immediate glow is the outcome. When ingested, the juice's iron content repairs the damaged cells internally. As a result, it instantly brightens lifeless skin and enhances skin tone.



2] Orange peel: -

synonym: Narangi Chilka, Citrus Peel

Biological Source: Dried peel of the fruit of Citrus sinensis (Sweet Orange)

Family: Rutaceae

packed with antioxidants and vitamin C, it helps to lighten skin and increase the formation of collagen. Used in face packs to tighten pores, minimize acne, and manage excess oil. Improves skin tone and texture by eliminating dead skin cells and acting as a natural exfoliator. Has antibacterial and anti-inflammatory qualities that are good for skin that gets acne. Offers the skin a natural glow and aids in the reduction of dark spots and imperfections.



3] Hibiscus: -

Including pollution, stress, and an unhealthy lifestyle. One natural source of alpha hydroxy acids (AHAs) is hibiscus. This improves the texture of your skin while exfoliating it and reducing blackheads and hyperpigmentation. However, hibiscus powder's antioxidants also aid in lowering skin inflammation brought on by acne and another skin issues.

Anthocyanins and polyphenols (quercetin and protocatechuic acid) are the active ingredients in hibiscus. Hibiscus flowers' phenolic components help shield skin from the damaging effects of free radicals and lessen oxidative stress brought on by UV radiation, as well as other elements.



4] Papaya leaves:-

It has been cultivated for centuries for its taste and numerous health benefits.

Role of Papaya leaves: - Papaya leaves is a natural and effective ingredient for skincare, offering multiple benefits like exfoliation, hydration, brightening, and anti-aging. Regular use of herbal face packs can help achieve glowing, healthy, and rejuvenated skin.



5] Tulsi :-

Ocimum sanctum L. Tulsi is regarded as a "elixir of life" and is also referred to as "The Queen of Herbs" and "Mother Medicine of Nature." Tulsi is a fragrant shrub belonging to the Lamiaceae family of basils. The herb's description: The ovate, petiole-adorned, green or purple tulsi leaves can grow up to 5 cm in length. The taste of tulsi leaves is bitter and peppery. Antioxidants, flavonoids, alkaloids, glycosides, saponins, and tannins are all abundant in it.



6] Potato starch :-

Solanum tuberosum, a starchy root vegetable belonging to the Solanaceae family, is the potato. The herb's description: The potato is round, elliptical, and cylindrical, with a diameter of up to 4 cm. Their colors include white, yellow, and russet. The starch that is derived from potatoes is known as potato starch. When the starch dries out, it becomes light and powdery, like flour. The components of potato starch granules include amylose and amylopectin. Uses: It is typically utilized in blends when its thickening properties are needed and in canned soup.



Formulation table :-

Serial number	Ingredients	Quantity
1	Orange peel	8g
2	Papaya leaves	7g
3	Beetroot	5g
4	Potato starch powder	10g
5	Hibiscus powder	5g
6	Tulsi leaves powder	5g

Method of preparation :-

To obtain uniformly sized particles, each powdered ingredient was independently run through a 40 grit screen before being precisely weighed. Additionally, to ensure even and consistent mixing, all powder elements were combined geometrically. Table 1 shows the quantity of each ingredient. The created face pack was assessed using a number of evaluation criteria and kept in an airtight container.

Evaluation Parameters :-

A] Angle of Repose:

The required amount of sample was allowed to drop down from the funnel mounted at the height of 6 cm, the height and radius of the heap was recorded for further calculations. Angle of repose (θ) can be calculated by using following formula:

$$\text{Angle of repose } (\theta) = \tan^{-1} h/r$$

Where, θ – Angle of repose

h – Height of the heap r-Radius of the base.

B] Tapped density:

It is measured by transferring a known quantity (10 gm) of powder sample into a graduated cylinder. The initial volume of sample in measuring cylinder was recorded and it was placed on tapped density determining apparatus to give subsequent tapping to the measuring cylinder containing sample continuously for a period of 10-15 min. Tapped density was determined as ratio of Mass.

C] Irritancy test:

On the dorsal surface of the left hand, mark a 1 sq. Cm area. Definite volumes of prepared face packs were applied to the designated region and time was measured. Edema, erythema, and irritation were monitored for up to 24 hours at regular intervals and reported.



D] Bulk Density:

It is calculated by the ratio of given mass of powder and its bulk volume. Determined by transferring 25 gm of accurately weighed amount of powder sample to the graduated cylinder.

Bulk density(ρ_b) = M/V Where,

ρ_b – Bulk density

M – Weight of powder V – Volume of powder



E] Particle size: -

Particle size is a parameter that influences a number of characteristics, such as grittiness and spread ability. The particle size was measured using the I.P. Standard sieves and mechanical shaking for ten minutes.

Sr no	Parameter tested	P1	P2	P3
1	Colour	Cream colour	Cream colour	Cream colour
2	Odour	Pleasant	Pleasant	Pleasant
3	Texture	Fine	Fine	Fine
4	Nature	Powder	Powder	Powder
5	Angle of repose	42.27	43.60	42.92
6	Bulk density	0.32g/ml	0.31g/ml	0.31g/ml
7	Tap density	0.37g/ml	0.35g/ml	0,38g/ml
8	Irritancy test	Nil	Nil	Nil

Result : -

Three herbal face pack formulations with varied compositions were created, assessed, and their various qualities and traits examined.

Serial no.	parameter	P2
1	Colour	Cream colour
2	Odour	Pleasant
3	Texture	Fine
4	Nature	Powder
5	Angle of repose	43.60
6	Bulk density	0.3
7	Tap density	0.3
8	Irritancy test	Nil

Conclusion :-

India is among the nations with the greatest abundance of Ayurvedic plants. However, as a result of globalization and marketing, many of us have shifted to foreign cosmetics, but in recent years, many customers have noticed their negative effects. Herbal face packs powder are therefore always better than other cosmetics, which have a lot of negative effects and can cause cancer if used for an extended period of time.

Due to their safety and lack of adverse effects, natural remedies are more often used than synthetic ones.

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