



# Formulation and Evaluation of Herbal Face Pack: Review article

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## ABSTRACT:

The Aim of this work is to formulate And Evaluate An Herbal Pack for glowing skin By using Natural Herbal ingredients the Natural Herbal ingredients such as Dragon fruit, hibiscus petals Multanimitti Turmeric. Milk powder Rice flour, nutmeg, Sandalwood powder saffron orange peel, Rose water. These formulation were then put through sieve number#40, weighed accurately and mixed geometrically for uniform formulation and then evaluated for parameter including morphological Rheological, organoleptic stability study, washability, physicochemical.

Everybody wants to get a fair and charming skin. Now A Day, acne, Black heads, pimples Are Common among person who suffer from it. According to Ayurveda, skin problems are normally due to impurity in blood. Herbal face packs on used to stimulate blood circulation, Rejuvenate the muscle and help to maintain the elasticity of the shin and remove dirt from skin pores

**Keywords:** Dragon fruit, Herbal face pack, formulation, evaluation

## INTRODUCTION:

Cosmetic are defined as the products used for the Purposes of cleansing, beautifying, promoting Attractiveness or alternating the appearance. 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 . In ayurveda, the herbal paste is called as “mukhalepa” used for as a Facial therapy.<sup>[1]</sup> 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<sup>[2]</sup>. Generally an herbal face pack should provide necessary nutrients and vitamins to skin while penetrating into subcutaneous tissues and outermost layers of skin without actually altering the normal physiology of skin<sup>[3]</sup>.

The Natural face packs do contain some Vital vitamins that are required for the health and Glow of our skin. These substances also prove to Be beneficial for our skin in many ways. Natural Facial Packs are less complicated and pretty Simple to use. They help us in looking after skin And also prove its worthiness by increasing the Circulation of the

blood within the veins of the Face Effects of the facial packs are generally Temporary and for the regular glow it should be Used 2-3 times a week<sup>[4]</sup>.

### **BENIFITS 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.<sup>[5]</sup>

### **ADVANTAGES 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.<sup>[5]</sup>

### **Dragon fruit:**

Dragon fruit (*Hylocereus polyrhizus*), or pitaya, is cultivated on a large scale in regions with tropical climates, such as Central and South America as well as Malaysia, Vietnam, and Thailand in Southeast Asia. Recently, dragon fruit has emerged as a new source of food ingredi- ents, as it has a natural red-purplish color, which is a great source of colorant, yet is rich in antioxidants, fiber.Vitamin C, minerals and phytoalbumins that have high nutraceutical properties.<sup>[6]</sup>

### **TAXONOMY:**

Kingdom:Plantae

Division: Spermatophyta

Class: Dicotyledonae

Ordo: Cactales

Family: Cactaceae

Genus: Hylocereus



Species: *Hylocereus polyrhizus*, *Hylocereus undatus*, *Hylocereus megalanthus* 24.<sup>[7]</sup>

### Sample collection:

Dragon fruit (*H. polyrhizus*), cultivated in Chiang Rai, Thailand, was collected. The fruit was washed with tap water and wiped to dry. The fresh peel was separated from the ripe fruit before cutting into small pieces (2 mm). The sample was further dried at 50°C in a hot air oven and ground into powder.<sup>[8]</sup>

### Health benefits of dragon fruit:

1. High in Nutrients. Share on Interest.
2. May Help Fight Chronic Disease.
3. Loaded With Fiber.
4. Promotes a Healthy Gut.
5. Strengthens Your Immune System.
6. May Boost Low Iron Levels.
7. Good Source of Magnesium.<sup>[9]</sup>

### Dragon Face Mask Flowchart:

Fresh Dragon fruit

Cutting Dragon Fruit

Peel Out

Black seed extraction by muslin Cloth

Blender Machine

Ready Pulp

Freezing

Excipient Addition

Settling

Final Produce Dragon facial Mask

Storage<sup>[9]</sup>



### **PRECAUTIONS:**

1. The face pack is used according to your skin type.
2. Concerned to the skin expert before use of any natural therapy on face.
3. Maximum 15-20 minutes stay on face and after that wash the face and completely remove the Medicaments.
4. When you are applied face pack on face then the face should be completely dried.
5. Do not scrub vigorously.
6. Avoid applying face pack near “eye zone” because the skin around eye is very fragile.
7. The process of Removing face pack may damage skin around the eyes.<sup>[10]</sup>

### **NEED OF STUDY:**

Nowadays, facial skin problems occur due To dust, stress, dirt, imbalance diet, Chemical products. So, to overcome this Problem many of the chemical product are Present in market, but some of them are not Suitable or good for human’s skin. So, they May lead to irritation, itching or result in Swell. So, to overcome this problem, we must Formulate, evaluate, and utilize the herbal Face pack made of natural ingredient.<sup>[11]</sup>

**HERBAL INGREDIENT PROFILE:****1. ORANGE PEEL:**

Botanical name :-Citrus sinesis (sweet orange)

Citrus aurantium (bitter orange)

Family: - Rutaceae

Genus: - Citrus

Active constituents: Limonene (90%), Citral (4%), Vitamin C, Pectin, Hesperidine, Aurantimaric acid, Octanal (39%), Decanal(42%), Monoterpene (91%) and contains no less than 2.5% Volatile oil.

Uses:-

- 1.Protects skin from free radical damage.
- 2.Heals dry, flaky, and itchy skin.
3. Hydrates dehydrated skin<sup>[12]</sup>.

**2. Nutmeg:**

Botanical name: - Myristicafragrans

Family: - Myristicaceae

Genus: - Myristica

Active constituents:

Nutmeg contains of 5 to 15% Volatile oil, Lignin, Stearin, Starch, Gum, Colouring matter, and 0.08% of an acid substance. The

Volatile oil contains Clemicine, Myristicin, Geraniol, Borneol, Pinene, Camphene, and Dipentene. It also contains Eugenol,

Safrol, p-Cymene and Isoeugenol in small quantity .

Uses:-

- 1.It reduces pigmentation
- 2.Treats oily skin
- 3.Nutmeg has Anti-oxidant and Anti-ageing properties<sup>[12]</sup>.

**3. Turmeric :**

Botanical name -curcuna longa

Family -Zingiberaceae

Genus-curcuma

Active constituents-Nutritional analysis showed that turmeric contains fat, calcium, phosphorous, sodium, potassium, iron, thiamine, riboflavin, niacin, ascorbicacid, carbohydrates, dietary fiber, Scie sugars, and protein (Balakrishnan



2007). Turmeric is also a good source of the w-3 fatty acid and a-linolenic acid (2.5%; Goud, Polasa, and Krishnaswamy 1993).[Google scholar]

USES: 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 nit helps to lighten the skin tone. Turmeric delays the signs of aging like wrinkles, improves skin elasticity. It Cures pigmentation, uneven skin tone and dull skin<sup>[13]</sup>

#### 4. Saffron:

Botanical name -Crocus ntae

Oder-Asparagales

Genus-Crocus

Active constitutes -Chemical composition: crocetin, crocin, picrocrocin, a-crocztin. B-crocetin, caretonoids than include lycopene, terpenic alcohol, terpenic ester, vitamins and antioxidants

Uses:

1. Antioxidant Powerhouse
2. Protecting Your Skin from Free Radicals.
3. Brightening and Lightening: Attaining a Luminous Complexion.<sup>[14]</sup>

#### 5. Sandal wood :

Botanical name -Santalum Album

Family -santalaceae

Genus-Santalum

Active constituents- Santalum album. 1,  $\alpha$ -santalol (54.2%); 2,  $\beta$ -santalol (19.2%); 3, epi- $\beta$ -santalol (5%); 4,  $\alpha$ -bergamotol (3.3%); 5,  $\alpha$ -santalene (0.5%); 6,  $\beta$ -santalene (1.1%); 7, epi- $\beta$ -santalene (0.7%); 8,  $\alpha$ -bergamotene (0.2%); and others, farnesol,  $\alpha$ -bisabolol etc.

Uses-

Sandalwood has an anti-tanning and anti-aging Property. Sandalwood protects the skin against the Impact of environmental pollution and keep the skin Cool, fair and healthy. Sandalwoodhelpful Ayurvedic Herb with antimicrobial properties is used for healing Various skin problems and removes scars.<sup>[13]</sup>

#### 6. Cinnamon:

Botanical name: - Cinnamomumverum

Family: - Lauraceae

Genus: - Cinnamomum

Active constituents: Cinnamon consists of a variety of resinous compounds, including

Cinnamaldehyde, Cinnamate, Cinnamic acid, and numerous Essential oils. The spicy taste and fragrance are due to the presence Of Cinnamaldehyde and occur due to the absorption of oxygen. As cinnamon ages, it darkens in colour, improving the resinous Compounds. Various physiochemical properties of cinnamon. The presence of a wide range

of essential oils, such as Trans-Cinnamaldehyde, Cinnamyl acetate, Eugenol, L-Borneol, Caryophyllene oxide,  $\beta$ -Caryophyllene, L-Bornyl acetate, E-Nerolidol, A-Cubebene,  $\alpha$ -Terpineol, Terpinolene, and  $\alpha$ -Thujene.

Uses:-

- 1.Cinnamon has Antibacterial properties and it helps in treating pimples.
- 2.Cinnamon is a powerful Antioxidant and thus prevents signs of ageing.
3. It can make skin look plumper and more even-toned.
4. Cinnamon has Anti-inflammatory properties .<sup>[12]</sup>

### 7. MultaniMitti (Calcium bentonite):

Active constituents- Fueller's earth consists chiefly of hydrated aluminum silicates that contain metal ions such as magnesium, sodium, and calcium within their structure.

Uses-

Remove all the impurities and dead Skin cells multanimitti will help to Make you skin radiant and excellent For irritate skin, soothes the skin fresh Radiant and glowing skin.<sup>[15]</sup>

### 8. Rose Water :

Botanical Name: Rosa Damascena Mill L.

Family: Rosaceae Genus:Rosa L

Use-

Rose Water Can Help Reduce Skin Redness, Prevent Additional Swelling. And Soothe The Discomfort of Acne. <sup>[1]</sup>

### 9. Rice flour:(Oryza Savita)

Use –

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.<sup>[1]</sup>

### 10. Milk powder:

Use –

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 tan.<sup>[17]</sup>

## METHODOLOGY

All the powdered ingredients were passed through sieve, with 40 mesh size separately in order to get uniformed sized Particles, followed by weighing them accurately. Further all Powder ingredients were mixed geometrically to insure

uniform and even mixing. Quantity of each ingredient is represented in table 1. The prepared face pack was stored in an airtight container and evaluated by various evaluation parameter.<sup>[3]</sup>

Sr.no	INGREDIENTS	SCIENTIFIC NAME
1.	Dragon fruit	Selenicereus undatus
2.	Orange peel	Citrus sinensis
3.	Nutmeg	Myristica fragrans
4.	Turmeric	Curcuma longa
5.	Saffron	Crocus sativus
6.	Sandalwood powder	Santalum alba
7.	Cinnamon	Cinnamomum verum
8.	Multani mitti	Calcium bentonite
9.	Rose water	Rosa damascena mill L
10.	Rice flour	Oryza sativa
11.	Milk powder	-----

## EVALUATION PARAMETER:

1. Morphological Evaluation: It refers to the evaluation of the herbal face pack by its color, odor, appearance, texture etc. The external characters of the formulation were examined based on the method described by Siddiqui et al<sup>[17]</sup>.

2. Physicochemical evaluation: Physicochemical parameters were determined, including the determination of extractive value, ash value, pH and moisture content.<sup>[17]</sup>

3. RHEOLOGICAL EVALUATION: It gives an overall idea about the visco elastic flow behavior of the product. Physical parameters like angle of repose, tapped density, bulk density, Hausner's ratio and Carr's index were observed and calculated for the formulation.<sup>[12]</sup>

4. Organoleptic Evaluation: The organoleptic parameters include its nature, color, odor, feel and consistency which were evaluated manually for its physical properties<sup>[18]</sup>.

5. 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 40°C and were evaluated for physical parameters like color, odour, pH, consistency and feel.<sup>[19]</sup>

6. WASHABILITY: Formulation was evaluated for its ability to get washed off. Face pack was applied on the skin and then ease and extent of washing with normal tap water were checked manually.<sup>[3]</sup>

## 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. It is a very good attempt to establish the herbal face pack containing different powder of plants. 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.<sup>[20]</sup>

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