

Formulation and Evaluation of Herbal Face Pack

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Abstract

The main objective of this article is to formulate and evaluate an effective herbal face pack for glowing skin by using natural ingredients in varying concentrations, ingredients such as Hibiscus rosa sinensis, orange peel powder, nutmeg, multani mitti, turmeric, etc. Ayurvedic formulations are safer than synthetic formulation because its side effect is very low. This prepared formulation is evaluated through the some important parameters like as Organoleptic, Phytochemical, Physicochemical, and Physical Characteristics. The main purpose of Herbal face packs are to remove the dark circle, Pimples, Scars, through the increase blood circulation and maintained it and the rejuvenates the skin and remove dirt particles from the skin pores.

Now a day, human skin has become more sentient for faster aging atopic dermatitis, acne and many more skin related problem, which mainly arise due to increased pollution, allergy, microbes, etc. Acne and dull skin are the common problem arising in various people. 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.

Keywords: Herbal Face pack, skin, Natural formulation, Herbal remedies.

INTRODUCTION:

Since from the ancient period of times, people are aware of the use of plants for the healthy, glowing, and beautiful skin. Cosmetics are products used to clean, beautify, and promote attractive appearance^[1]. Cosmetics are commercially available products that are used to improve the appearance of the skin by action of cleansing, beautifying, promoting attractiveness and smoothness to the skin. From the ancient time, different herbs are used for cleansing, beautifying and manage them. 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 natural remedies like plant extracts for various cosmetics purposes like orange peel, etc. Everybody wants to get fair and charming skin. Nowadays, acne, black head, pimples, dark circle are common among youngsters and person who suffers from it.

In Ayurveda, the herbal paste is called "Mukha Lepa" used for as a facial therapy. This herbal paste smeared on face to threat acne, pimple, scars, marks, and pigments. Herbal face packs are cheaper and have no side effect for getting fair skin naturally. 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.^[2]

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 pastes 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.

Face packs are basically additives delivering some additional benefits. Different types of herbal face packs are used for different types of skin. Herbal face packs are helps to reduce wrinkles, pimples, acne and dark circles. Also increase the fairness and smoothness of skin. It also helps someone to boost their confidence. Ayurveda is the most useful and successful means for achieving this purpose. According to Ayurveda, skin problems are normally due to impurity in blood. Skin has three layers: The epidermis, the outermost layer of skin creates our skin tone. The dermis, beneath the epidermis contain tough connective tissue, hair follicle and sweat gland. The deeper hypodermis is made of fat and connective tissue. Ayurveda is the most useful and successful means for achieving this purpose.^[3]

Benefits of applying face pack:-

- Nourishes the skin, face packs supply essential nutrients to skin.
- Helps to reduce acne, pimples, scars and marks depending on its herbal ingredients.
- Usually face packs made of sandalwood and turmeric helps to reduce acne and pimples. Face packs are recommended for acne, pimples, black heads usually control the over discharge of sebum from sebaceous gland and remove the harmful bacteria inside acnes lesion.
- The scars and marks of skin can be reduced by adding fine powder of sandal and orange lentils with acne face pack.
- Face packs usually remove dead cells of skin.
- These face packs masks provides a soothing and relaxing effect on skin.
- They help to restore the lost shine and glow of skin in short span of time.
- Regular use of natural face packs brings glow to skin, improve skin texture and complication.
- The harmful effects of pollution and harsh climates can be effectively combated with judicial use of face packs.
- They help to prevent premature aging of skin.
- Formation of wrinkles, fine lines and aging of skin can be effectively controlled by using natural face packs.
- Natural face packs made the skin look young and healthy.
- 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
- Face packs usually remove dead cells of skin.
- Face Pack provides a soothing and relaxing effect on skin.
- Helps to reduce, acne, pimple, scars and marks depending on its herbal ingredients.
- It brings down irritation of the skin.
- They help to forestall untimely maturing of skin.
- Normal face packs make the skin look youthful and Solid.

- Ordinary utilization of normal facial coverings carry gleam to skin, further develop skin surface and composition.
- Regular use of natural face masks bring glow to skin, improve skin texture and complexion.
- In short Period of time they help to reduce the pores, dark circles, pigmentation.
- The scars and marks of skin can be reduced by adding multani mitti with acne face pack.
- They help to reestablish the lost sparkle and shine skin In limited capacity to focus time.^[4]

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.
- Feeds the skin. Essential fruit face packs are available. vitamins for the skin.
- Depending on its herbal ingredients, aids in reducing acne, pimples, scars, and marks.
- Face packs typically remove skin's dead cells.
- The skin is soothed and relaxed by these face masks.
- They aid in quickly restoring the skin's lost radiance and glow.
- Regular use of natural face masks improves skin texture and complexion while giving skin a glow.
- The wise application of face packs can effectively counteract the negative effects of pollution and harsh environments.
- They aid in preventing early skin ageing

DRUG & EXCIPIENT PROFILE

1.HIBISCUS:-



Figure no 1. - Hibiscus Flower.^[5]

Scientific Name:- Hibiscus rosa-sinensis, Linn

Synonyms:- china rose, Chinese hibiscus, shoe black, rose of china

Biological source:-Hibiscus is a flowering plant that belongs to the Malvaceae family, also known as mallow family. The Hibiscus flowers are large and showy, and the genus grows into herbs, shrubs or small trees. There are more than hundred species found that are used throughout the world as food and medicine.

Morphology:- Hibiscus leaves are ovate, simple and 8 to 10.5 cm long. They are spirally arranged around a long stalk. The flowers are bisexual, large and showy, grow up to 25 cm wide, stalked and arising singly from the upper leaf axils. The five free petals joined at the base may be white, yellow or red colour.

Chemical constituents:- Tannins, phlobatannins, saponins, cardiac glycosides, flavonoids, terpenoids. Taraxeryl acetate, sitosterol, campesterol, stigmasterol, ergosterol, citric, tartaric and oxalic acids. Phenolic, ascorbic acid,^[6]

Uses:-

- CNS depressant Activity
- Hypotensive Activity
- Analgesic Activity
- Anti-inflammatory Activity
- Constipation remover Activity
- Hair Growth Activity.

2. ORANGE PEEL:-



Figure no 2:- Orange Peel^[6]

Scientific Name: Citrus reticulata

Synonym: Orange cortex, Bigarade orange, Seville orange, China orange, Bitter orange peel^[7]

Biological Source:

Orange peel is consisting of fresh and dried outer part of the pericarp of citrus aurantium Linn

Morphology:-Citrus peels are comprised of two regions: the flavedo and the albedo. The flavedo consists of characteristic peel oils and pigments while the albedo is the white pithy region. Although the albedo is by far the thicker of the two layers, the critical positioning of the flavedo between the fruit and environment makes it more susceptible to damage and thus more likely to be affected by peel disorders.

Chemical constituents:- valencene, octanal, decanal, carvone, limonene oxide, and limonene

Uses:-

- skin Protects skin from free radicle damage
- Hydrates dehydrated skin
- Brings back moisture
- Works as a skin lightening agent
- Removes tan
- Loaded with Anti-ageing properties
- Promotes healthy skin glow.^[8]

3. NUTMEG:-



Figure no 3: - Nutmeg ^[9]

Scientific Name:-Myristica fragrans

Synonym:- genus myristica, nutmeg tree, myristica, yew

Biological Source:- Nutmeg is derived from the seed of Myristica fragrans, and the spice, mace, is derived from the seed coat

Morphology:- Nutmeg is the kernels consisting of outer and inner perisperm, endosperm and embryo; it has an ovoid or broadly elongated shape with a size of 2 to 3 cm length and 1.5 to 2 cm wide. The kernels are grayish brown in colour, with numerous reddish brown spots on them.

Chemical constituents:- myristicin, myristic acid, safrole, terpinene, elemicin, sabinene, eugenol, lignin compound

Uses:-

- Reduces Pigmentation
- Anti-inflammatory properties will help reduce the sight of pimples
- The stimulating properties will certainly wake up dead skin cells and help those no-so- fine lines around your mouth fade.
- Nutmeg is known to have curative properties that heal scars caused by everything from acne to sun spots.
- Regulates blood pressure.
- Anti-fungal Activity
- Anti-depressant.
- Anti-ageing
- Skin moisturizer
- Reduce Hyperpigmentation
- Exfoliate your skin
- Treats oily skin. ^[10,11,12]

4. Multani Mitti: -



Figure no 4: Multani Mitti

Scientific Name: Fuller's Earth

Synonym:- fullerd earth, multani mitti,

Biological Source:- The place of origin of Multani mitti is Multan is Pakistan; thus it is called as multani mitti and has been imported to India for many years. It resembles clay in appearance but is much more skin-friendly. It's high in minerals and water, and it comes in various colours, including brown and green

Morphology:- Multani Mitti is immensely helpful for those who have oily skin type. Even with a single application you will notice that the excess sebum from your skin surface is absorbed. It also prevents clogging the pores which clears acne and helps in getting a soft and smooth skin.

Chemical constituents:- hydrated aluminum silicates and is rich in magnesium chloride and calcium bentonite

Uses: -

- Boost Circulation
- Controls & Regularises oil production
- Cleanses skin & scalp
- Shrinks pores
- Reduce blackheads & whiteheads
- Tightening Skin
- Reduce Dark Spot
- Anti-acne Property
- Anti-inflammatory^[13]

5. Turmeric Powder:-



Figure no 5:-turmeric powder

Scientific Name:- Curcuma longa

Synonym:- haldi, curcuma, curcuma domestica valetton,

Biological Source:- Turmeric is a product of Curcuma longa, a rhizomatous herbaceous perennial plant belonging to the ginger family Zingiberaceae, which is native to tropical South Asia. As many as 133 species of Curcuma have been identified worldwide

Morphology:- Turmeric is a perennial herbaceous plant that reaches up to 1 m (3 ft 3 in) tall. It has highly branched, yellow to orange, cylindrical, aromatic rhizomes. The leaves are alternate and arranged in two rows. They are divided into leaf sheath, petiole, and leaf blade.

Chemical constituents:-Curcumin, curcuminoid, bisdemethoxycurcumin, curcumol, curcumenol, piperine

Uses:

- Brightens skin
- Acne
- Stretch marks
- Wounds

- Delays premature ageing
- Treats acne
- Calms inflammation
- Lightens hyperpigmentation
- Moisturise
- Acne scarring
- Aging
- Turmeric for hyperpigmentation
- Wrinkle treatment
- Natural skin brightener

MATERIAL & EQUIPMENTS:

EQUIPMENTS: -

- Hot Air Oven
- Digital PH meter
- Muffle furnace

Instruments:-

- Petri dish
- Beaker
- Stirrer
- sieve

Materials:-

- Hibiscus rosa sinesis
- Orange peel powder
- Nutmeg
- Multani mitti
- Turmeric
- Rose water

Experimental work :-

Table 1: Formulation of face pack

Sr.No	Name of Ingredients	F1	F2	F3	F4	F5
1.	Hibiscus Rosa Sinesis	3.2 gm	2.4 gm	3.0 gm	3.3 gm	2.9 gm
2.	Orange Peel Powder	3.2 gm	3.6 gm	3.0 gm	3.0 gm	3.5 gm
3.	Nutmeg	1.0 gm	0.42 gm	1.5 gm	1.0 gm	0.9 gm
4.	Multani Mitti	2.6 gm	3.66 gm	2.6 gm	2.7 gm	2.7 gm
5	Turmeric Powder	0.9 gm	1.3 gm	1.5 gm	1.0 gm	0.5 gm
6	Rose water	q.s	q.s	q.s	q.s	q.s



Figure no 6: Formulation of Face Pack

Method of Preparation: -

Five different formulations were prepared with varying concentrations of all ingredients named as F1 to F5. Concentration of each ingredient was mentioned in Table 1. The accurate quantity of ingredients was weighed and ground into fine powder. Then all the ingredients were mixed uniformly. Then the prepared face pack was stored in an air tight container for evaluation of various parameter.

- All the ingredients (Hibiscus Flower, Orange peel, Nutmeg, Fuller's Earth) were weighed accurately
- And then mix all the powders geometrically for uniform formulation
- Add Rose Water into the mix powder.
- Then here we see the amazing and effective prepared face pack.
- Then apply it into your tanned skin and wash your face after 15-20 minutes.^[14]

Table 2: Composition of herbal face pack

Sr.No	Constituents	Scientific Name	Uses	Quantity (gm)
1.	Hibiscus Flower	Hibiscus Rosa Sinesis	Skin whitening	3.2 gm
2.	Orange Peel Powder	Citrus Sinesis or Citrus aurantium	Hydrate and moisturize skin	3 gm
3.	Nutmeg	Myristica fragrans	Treats acne	0.50 gm
4.	Multani Mitti	Fuller's Earth	Reduce oiliness	3.3 gm
5.	Turmeric powder	Curcuma longa	Reduces dark circle	1 gm
6.	Rose water	-	Acts as toner	Q.S

METHOD OF EVALUATION:-

Following evaluation parameters were performed to ensure quality and stability of prepared face pack.

1. Organoleptic Evaluation:-

The organoleptic parameters include its nature, colour, odour, feel and consistency which were evaluated manually for its physical properties. Results are shown in table 3

3. Physicochemical Evaluation:-

PH was found by using PH paper.

3. Irritancy Test:-

Mark an area (1 Sq.cm) on the left-hand dorsal surface. Definite quantities of prepared face pack were applied to the specified area and time was noted. Irritancy and Edema was checked and reported.^[15]

4. Stability Studies:-

Stability testing of prepared formulation was conducted for formulation by storing at different temperature conditions. The formulation stored at different temperature as room temperature 35 and 40 degree Celsius and in the Hot Air Oven at different temperature. It is evaluated for physical parameters like colour, odour, PH, and consistency.

RESULT AND DISCUSSION:-

The following evaluation parameters were performed to ensure superiority of prepared face pack.

1. Organoleptic Evaluation:-

Herbal face pack was evaluated for organoleptic parameters showed in the Table. The colour of prepared formulation was brown. The odour of prepared formulation was pleasant and good acceptable which is desirable to cosmetic formulations.^[16]

Table 3: Organoleptic Evaluation:-

Sr.No	Parameter	Observation
1.	Colour	Brown
2.	Odour	Pleasant
3.	Appearance	Smooth, Fine
4.	Texture	Fine
5.	Smoothness	Smooth

2. Physicochemical Evaluation:-

PH was found by using PH paper and digital PH meter

Table 4: Physicochemical Evaluation:-

Sr.No	Parameter	Observation
1.	PH	6.92

3. Irritancy Test: -Mark an area (1 Sq.cm) on the left-hand dorsal surface. Definite quantities of prepared face pack were applied to the specified area and time was noted. Irritancy and Edema was checked and reported.

Table 5: Irritancy Test: -

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

4. Stability Studies: -

Stability testing of prepared formulation was conducted by storing at different temperature conditions for the period of one month and were evaluated for physical parameters like colour, odour, PH, consistency and feel

CONCLUSION:

Herbal face packs are used to muscle rejuvenation, skin suppleness, the removal of dirt from skin pores and promote blood circulation.

Herbal face pack cosmetics have several benefits such as, nontoxic and reduces allergic reactions. This face pack is economical, useful, in addition satisfied all the characterization criteria.

After testing, we discovered that the face packs had good characteristics, were free of skin irritation, and kept their consistency even after being stored in stable setting.

Also, it can provide effective bright, health, and crystal-clear skin. Because of its beneficial effects on humans, the total study is important in supporting evidence product claims..

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