

Research Article

## AYURVEDA FORMULATION OF HERBAL FACE PACK TO TREAT BLEMISHES

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### ABSTRACT

The main objective of this study to develop a herbal face pack for blemishes using herbal ingredients. By altering the concentrations of various ingredients ten different formulations were prepared by using sandalwood, aloe Vera, turmeric, neem, orange peel, cucumber extract, lotus petals powder and tea tree leaves powder, kaolin and calcium bentonite are used to prepare a herbal face pack. Prepare the formulations and evaluate by using different parameters such as organoleptic properties, physico-chemical parameters, stability studies, skin irritation test and microbial load. This present studies, shows good properties of the face packs, and further the optimization studies.

**Keywords:** Herbal cosmetic, Face Pack, Herbal, Ingredients, herbal Products, blemishes

### INTRODUCTION

Herbal Cosmetics are used to improve the appearance of the facial skin . Face pack will promote beauty, brightness and Freshness. From the many centuries, different herbs are used to improve the attractiveness of the face. Facial skin is the most significant part of the body. It indicates the health and as well as age of an Individual. It contains carbohydrates, afats and amino acids. In ayurveda, the herbal paste is known as “mukha lepa” used for as a facial therapy. This herbal paste applied on the facial skin to remove scars, pimple, acne, dark shades and pigments. Face packs are the smooth powder meant for applying on the face. Face mask will be helpful in tightening the skin on the face and help in avoiding the appearing of scars and dark marks. After 15 to 20 minutes the face mask can be removed with Luke warm water as it helps in smooth removal of face pack. The herbal face packs are helps to reduce wrinkles, pimples, acne, blemishes, pustules, nodules and also dark circles. It is also helps to increases the fairness and smoothness of the facial skin<sup>1,2</sup>.

These face packs are 3 types, they are:

1. Plastic masks:- This is Wax based, latex based, or vinyl based
2. Hydro-colloid masks:- This is a Gel masks
3. Argillaceous masks:- This Clay based on earth based , in this Present studies to formulate and evaluate the cosmetic herbal face pack to treat blemishes at home by using natural materials i.e., turmeric, Aloe Vera, sandalwood, orange peel, cucumber extract, tea tree

leaves powder, lotus petals powder , kaolin and calcium bentonite clay.

**Blemishes:-** Blemishes are indicates as acne , pustules , birthmarks, redness, nodules, melasma, spot, discoloration, or flaw that appears on the skin. Sometimes blemishes marks may cause skin cancer.

**Types Of Blemishes:-** There 5 types of blermishes

- i. Acne
- ii. Rash
- iii. Age spot
- iv. Birth marks
- v. Melasma

**i)Acne:** - Acne (acne vulgaris) is caused by sebum oil which is screateded by sebaceous gland, bacteria and dirt block a hair follicle on facialskin.

**Causes**

- a) Hormones
- b) Stress
- c) Certain medications
- d) Poor hygiene
- e) Wrong skin care products
- f) Sun
- g) Unhealthy
- h) Diet

**ii) Rash:** - Skin rash are characterized by turning the facial skin color and texture [3]

**Causes**

- a) Hot and humid weather
- b) Excess sun exposure
- c) Food allergies
- d) Dry skin
- e) Insect bites
- f) Medication effects
- g) Fungal or bacterial skin infection

**iii) Age Spots:** - Age spots, also known as liver spots, commonly occur in people over the age of 40.

**Causes**

- a) Sun exposure leads to pigmentation of skin
- b) The production of melanin in certain areas of the skin,
- c) Leaving harmless age spots.

**iv) Birth Marks:** - Birthmarks are abnormalities of the skin that are present when a baby is born.

There are two types of birthmarks:

- a) Vascular birthmarks are made up of blood vessels that haven't formed correctly.
- b) Pigmented birthmarks are made of a cluster of pigment cells which cause color in skin.

These are different colors, from tan to brown, gray to black, or even blue. 2

**Causes**

A birthmark is unknown.

**v) Melasma**

Melasma is caused by excess production of melanin (skin pigment). It is identified by dark patches on the skin

- a) Exposure to sun
- b) Hormonal abnormalities
- c) Birth control pills
- d) Pregnancy

**Benefits of Applying Face Pack**

- i. Nourishes the skin
- ii. It helps to reduce, acne, pimple, scars and marks.
- iii. Face packs help to remove dead cells of skin.
- iv. These face packs provide a soothing and relaxing effect on skin.
- v. Natural face masks bring glow to skin, improve skin texture and complexion.
- vi. They help to prevent premature aging of skin.

**MATERIALS AND METHODS**

All the natural materials used in the present study such as turmeric, Aloe Vera, sandalwood, orange peel, neem, cucumber extract, lotus petals powder kaolin and calcium bentonite<sup>3</sup>

**Orange peel powder:-**

- Orange (Citrus sinensis) is a citrus fruit it contains various nutritional sources like vitamin C, calcium, potassium and magnesium.
- It helps to prevent the skin from free radical damage, skin hydration and oxidative stress and also instant glow.
- It helps to reduce dark spots, blemishes, wrinkles and aging.

**Neem powder: -**

- Neem (Azadirachta Indica) has anti- fungal and anti- bacterial properties, rich in Vitamin C and also in sensitive or oily skin.
- It also helps in treating other skin problems such as blackheads, pigmentation, dullness and pre mature ageing.
- It is also having anti-inflammatory, antiseptic and highly beneficial for oily and acne prone skin.
- An anti-acne effect is due to anti-microbial, anti-inflammatory and anti-oxidant activities of various chemical constituents

**Sandalwood powder: -**

- Sandal wood (Santalum Alba) powder helps in fighting against acne-causing bacteria, exfoliation of the skin, soothes sunburn.
- It also helps to removes suntan and also reduces signs of ageing such as dry skin and wrinkles.
- It helps to remove the dark spot on the facial skin.
- It also helps to maintain the skin tone, emollient, antibacterial property, and cooling, astringent property, soothing and healing property.

**Lotus petals powder<sup>4</sup>:-**

- Lotus petals powder helps for skin nourishment.
- It contains skin balancing property.
- It helps balance sebum production in the body.
- In oily skins, it prevents clogged pores, acne and blackheads.
- Lotus petals powder extract is useful as a skin whitening and anti-wrinkle agent.
- It inhibits the enzymes which is responsible for the formation of melanin and wrinkles
- Lotus makes for an effective exfoliate, and gentle on sensitive skin.

**Aloe Vera: -**

- Aloe Vera (Aloe barbadensis) has cooling properties anti-inflammatory, sunburn or burnt skin
- .It has great moisturizer intended for a facial skin.
- It rejuvenates skin, hydrates and feels fresh and cool after applying to the facial skin.
- It is also having anti-microbial property and removes acne and pimples.
- It contains several nutrients such as glycerin, sodium palmate, sodium carbonate, sodium palm kemelate, sorbitol, etc.

**Turmeric powder: -**

- Turmeric (Curcuma longa) having the potential to reduce swelling (inflammation) and irritation.
- It has other skin conditions to rejuvenate the skin.
- It delays the aging like wrinkles and also possesses properties such as antibacterial, antiseptic and anti-inflammatory.
- It has effective in treatment of acne due to its antiseptic and antibacterial properties which fights against the pimples and breakouts
- It also helps to reduce the oil secretion by the sebaceous glands

**Cucumber extract:-**

- Cucumber contains anti- inflammation on the skin effortlessly and hydrates the skin.
- It helps to lighten the skin and relieves excessive oil and clogged pores.
- The presence of manganese and potassium in cucumber helps to tightening the skin.

**Liquorice<sup>5</sup>:-**

- Liquorice root extract compound is known as glycyrrhizin [2].
- It is also contains anti-inflammatory and antimicrobial properties.
- It is used to treat skin problems like eczema [4] and acne [5].
- It is rich source in antioxidants, also lightening the facial skin. and anti-aging benefits

**Tea tree leaves powder:-**

- It is used to treat skin problems such as spots, pimples and dryness of the facial skin.
- It is a popular for treating acne it is having anti-inflammatory and antimicrobial properties.
- It' reduces redness, swelling, inflammation, and also gives soothing effect.
- It helps to prevent and reduce acne scars, leaving with smooth, clear skin and also remove the blemishes.

- Kaolin clay is helps to absorbing excess oils or sebum from the skin's surface and gently exfoliates the skin.
- It is more effective in removing pore-clogging contaminants like dust, dirt and dead skin.
- Kaolin helps to cleanse the deeply clean pores and removes impurities and gently exfoliating the skin.
- It helps to minimizing the appearance of pores and revealing brighter skin.

**Calcium bentonite clay:-**

- Calcium bentonite clay is also popular ingredient uses in skincare products.
- Apply a lotion or cream with bentonite clay.
- It helps to create a barrier between the skin.
- It is also uses in skincare products adhere skin

**Methods of preparation<sup>6</sup>:-**

- Prepare a required amount of face pack powder in a bowl then add water or rose water to make a fine mass or paste.
- Then add water or rose water to mix it well and apply over the facial skin. Cover the acne and blemishes spots.
- Keep for complete drying for 10 to 15 min and then wash the face with cold water.

| S.NO | Ingredients        | Quantity taken |
|------|--------------------|----------------|
| 1    | Orange peel powder | 1gm            |
| 2    | Neem powder        | 0.5 gm         |
| 3    | Sandalwood powder  | 0.5 gm         |
| 4    | Aloevera gel       | 1gm            |
| 5    | Cucumber extract   | 1gm            |
| 6    | Turmeric powder    | 0.5 gm         |
| 7    | Lotus petal powder | 2gm            |
| 8    | Tea leaves powder  | 0.5 gm         |
| 9    | Kaolin             | 2gm            |
| 10   | Calcium bentonite  | 2gm            |
| 11   | Water              | Qs             |

**EVALUATIONS OF FORMULATIONS<sup>7,8</sup>**

The prepared face masks will be evaluated for organoleptic properties, physical evaluation and physicochemical evaluation.

Organoleptic Evaluation:-

Manual evaluation will be performed to evaluate color, odor and texture of the face mask.<sup>17</sup>

Physical Evaluation: - Microscopy method was performed to evaluate the particle size. Angle of Repose by funnel method, bulk density and tapped density will be determined to ensure the free flow properties

Physicochemical Evaluation: - Ash content was performed by using incinerator, pH was found by using pH meter and loss on drying was also performed.

Irritancy test:-

Irritancy test was performed on the left hand dorsal surface. Definite quantities of prepared face packs were applied to the specified area and time was noted. Irritancy, erythema, edema, was checked if any for regular intervals up to 24 hrs and reported.19

Stability studies: -. The formulation was stored at different temperature conditions viz., Room temperature, and 35 °C and 40°C and were evaluated for physical parameters like Color, Odor, pH, Consistency and feel. 20

Determination of Microbial Load

The formulation was evaluated for the occurrence of microbial contamination and for the presence of gram negative pathogens such as E. coli, Salmonella and Pseudomonas

## CONCLUSION

In this present studies, many skin problems are cured without any side effects. Herbal ingredients are use to formulate cosmetics without any harmful effect. Herbal face packs are appearance of skin. It is a very good attempt to formulate the herbal face pack contains such as naturally ingredients such as Lotus petal powder, cucumber extract, turmeric, aloe Vera, sandal wood , tea tree leaves powder, orange peel powder, kaolin and calcium bentonite. In this present studies, many skin problems are cured without any side effects. Herbal ingredients are use to formulate cosmetics without any harmful effect. Herbal face packs help to remove the spots, dirt, and skin debris and also cleanse and beautify the facial skin. The prepared formulation was physico-chemically and microbiologically stable,

## REFERENCES

1. Okereke JN, Udebuani AC, Ezeji EU, Obasi KO, Nnoli MC. Possible Health Implications Associated with Cosmetics: A Review, *Sci J Public Health* 2015; 3(5-1): 58-63.
2. Mary P. Lupo. Antioxidants and Vitamins in Cosmetics. *Clin Dermatol* 2001; 19: 467-473.
3. Sowmya KV, Darsika CX, Grace F, Shanmuganathan S. Formulation & Evaluation of Poly-herbal Face wash gel. *World J Pharm Sci* 2015; 4(6): 585-588.
4. Himaja N, Ashok kumar A, Bhart kumar B. Preparation and Evaluation of Poly Herbal Fruit Face Mask. *J Res Pharm Sci* 2015; 2(11): 07-13
5. Koli DS, Mane AN, Kumbhar VM, Shaha KS. Formulation & Evaluation of Herbal Anti-Acne Face Wash. *World J Pharm Sci* 2016; 5(6):2001-2007.

6. Yamini K, Onesimus T. Preparation and Evaluation of Herbal Anti-Acne Gel. *Int J Pharm Bio Sci* 2013; 4(2): 956- 960.)

7. Naresh G, Swetha P, Shilpa G. Formulation and Evaluation of Face Pack Containing Oats and Other Natural Ingredients. *Int J Chem Pharm Sci* 2013; 1(1): 28-34.

8. Nemade CT, Baste N. Formulation and evaluation of a herbal facial scrub. *World J Pharm Res* 2014; 3(3): 4367-4371.