



Formulation And Evaluation Of Poly Herbal Fruit Face Mask By Using Natural Ingredient

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Abstract— The formulation and evaluation of a polyherbal fruit face mask using natural ingredients were conducted with the aim of creating an effective and safe skincare product. A selection of herbs and fruits known for their beneficial properties for the skin, such as aloe vera, cucumber, lemon, turmeric, papaya, and orange, was made. These ingredients were chosen based on their moisturizing, brightening, anti-inflammatory, and antioxidant effects. The face mask was formulated using a suitable base, such as clays, gels, or creams, and the herbs and fruits were prepared by washing, peeling, and cutting them into small pieces. The fruits and herbs were then blended or mashed to create a smooth paste or extract, which was mixed with the base to achieve a homogeneous mixture. The pH and consistency of the formulation were adjusted to ensure its suitability for facial application. The main objective of the work is to formulate and evaluate poly herbal fruit face mask for cosmetic purpose. Banana, Orange peel, Amla, Tomato, Strawberry and Papaya were purchased from the local market and dried, powdered, sieved through sieve no 40, mixed geometrically and packed in air tight container for further use.

Keywords :- Face mask, Banana, Papaya, Evaluation, Particle size, Propionibacterium acne

INTRODUCTION

Now a days Herbs are widely used as remedial agents because herbs are easily available at less expensive and non toxic so the people have good faith in such remedies. From the ancient time people are using herbs for cleaning, beautifying and to manage them. cosmetics are defined as the beauty products which possess desirable physiological activity such as healing, smoothing appearance, enhancing and conditioning properties. These days Acne, black head, pimples, dark circle are common among youngsters and person who suffers from it. According to Ayurveda, Skin problems are normally due to impurities in blood. Accumulated

toxins in the blood during improper food and lifestyle are causing skin related diseases. . The face masks which are mentioned in ayurveda help women to get rid

of wrinkles, dark circles, pimples and acne.

Herbal face masks increase the fairness and smoothness of skin. We can derive the maximum benefits of herbal face masks by using them according to our skin type. These face masks increase skin glow and are best ayurveda treatment to increase fairness. Face masks are one of the oldest and beautiful methods of cleansing skin. There are various kinds of face masks described in Ayurveda which have nourishing, healing, cleaning, astringent and antiseptic properties. We can prepare face mask in home with basic ingredients found in house and kitchen. Face mask is the smooth powder which is used for facial application and a good herbal face mask must supply necessary nutrients to skin and should penetrate the subcutaneous tissues to deliver the required nutrients. Different types of skin need different types of herbal face packs. Face masks used in ayurveda helps to reduce wrinkles, pimples, acne and dark circles. They also increase the fairness and smoothness of the skin . The Natural face masks 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 masks 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

Uses Of Face Mask :-

1. Nourishes the skin. Fruit face masks supply essential nutrients to skin.
2. Helps to reduce, acne, pimple, scars and marks depending on its herbal ingredients.
3. Face masks usually remove dead cells of skin.
4. These face masks provide a soothing and relaxing effect on skin.
5. They help to restore the lost shine and glow of skin in short span of time

6. Regular use of natural face masks bring glow to skin, improve skin texture and complexion.

7. The harmful effects of pollution and harsh climates can be effectively combated with judicious use of face masks.

8. They help to prevent premature aging of skin.

9. Formation of wrinkles, fine lines and sagging of skin can be effectively controlled by using natural face masks.

10. Natural face masks make the skin look young and healthy

Care Should Be Taken While Applying Face Pack:-

1. Select the face mask according to your skin type. Take opinion of natural therapist or concerned skin expert before applying face mask.

2. The face mask should not be left on face more than 15 to 20 minutes. Keeping for very long time may result in formation of wrinkles, sagging of skin and enlargement of open pores.

3. Apply face mask once in a week. Don't try to peel or scratch the dried face mask. This may harm underlying skin.

4. Spray water (which is at room temperature) on face before removing dried face mask. After removing the mask, roll an ice cube on facial skin. This helps to close open pores and tightens skin. It also tones and soothes the Skin

MATERIALS AND METHODS :-

Plant Materials :-

The materials used in the present study were purchased from local market, dried and powdered for further use. The below mentioned are the details of the plant materials used for the formulation of face mask

1. Emblica officinalis (Amla) :-

The fiber in amla berries helps the body regulate bowel movements and may help to relieve symptoms from conditions like irritable bowel syndrome. High levels of vitamin C in Amla berries helps your body absorb other nutrients, so they may be helpful if you take iron and other mineral supplements. Emblica officinalis belonging to the family Euphorbiaceae holds the reputation of a very good skincare herb. Used externally and internally, it helps to gain glow of the skin and aids to remove pimples, Produce Colling Effect and Hydrating Effect, also the herb reported as anti bacterial, anti microbial, anti fungal and anti aging agent. Phyllanthus emblica, also known as emblic, emblic myrobalan, myrobalan, Indian gooseberry, Malacca tree, or amla, from the Sanskrit amalaki, is a deciduous tree of the family Phyllanthaceae

Scientific Classification Of Emblica Officinalis (Amla)

Scientific name: Phyllanthus emblica

Family: Phyllanthaceae

Higher classification: Leaf flower

Order: Malpighiales

Kingdom: Plantae

Rank: Species

Promising Benefits of Amla

1) Promotes immune function. Amla juice is a great source of vitamin C, which is a watersoluble vitamin that acts as an antioxidant

2) Enhances liver health

3) Supports healthy digestion.

4) Promotes heart health.

5) May increase hair growth.

6) Improves kidney health

B) Musa paradisiaca (Banana) :- banana is an elongated, edible fruit – botanically a berry – produced by several kinds of large herbaceous flowering plants in the genus Musa. In some countries, bananas used for cooking may be called "plantains", distinguishing them from dessert bananas Musa paradisiaca belonging to the family Musaceae is the most available fruit used externally and internally it help to smoothen the skin, lighten the skin. It has the property of Exfoliation and is used as Sun Burn Aid. also this herb perform anti bacterial, Anti-Acne and anti aging properties. Musa is one of two or three genera in the family Musaceae. The genus includes flowering plants producing edible bananas and plantains. Around 70 species of Musa are known, with a broad variety of uses

Scientific Classification Of Officinalis (Banana):-

Scientific name: Musa

Higher classification: Bananas

Kingdom: Plantae

Family: Musaceae

Order: Zingiberales

Rank: GenuFlavonoids,

Benefits of bananas :-

1) Bananas are respectable sources of vitamin C

2) Manganese in bananas is good for your skin

3) Potassium in bananas is good for your heart health and blood pressure

4) Bananas can aid digestion and help beat gastrointestinal issues

5) Bananas give you energy – minus the fats and cholesterol

C) Citrus aurantium (Orange) orange is a fruit of various citrus species in the family Rutaceae; it primarily refers to Citrus x sinensis, which is also called sweet orange, to distinguish it from the related Citrus x aurantium, referred to as bitter orange.

Citrus aurantium belonging to the family Rutaceae acts as a natural bleach, It has instant glow property, prevent acne, blemishes, wrinkles and aging. It shows anti bacterial, anti fungal and antioxidant properties.

Oranges are round, orange-colored citrus fruits that grow on trees. They originally came from China, but today these nutritious powerhouses are grown in warm climates around the world.

Scientific Classification Of (Orange):-

Scientific name: Citrus X sinensis
 Family: Rutaceae
 Kingdom: Plantae
 Order: Sapindales
 Higher classification: Citrus
 Rank: Species

Types of Oranges :-

There are many different varieties of oranges. Some are sweet, and some are sour. Common types include:

- 1) Navel
- 2) Mandarin
- 3) Cara Cara
- 4) Blood oranges
- 5) Valencia
- 6) Seville
- 7) Jaffa

Every type of orange has more than 100% of your recommended daily amount of vitamin C. That's more than any other citrus fruit. All you have to do to get this key vitamin is peel and eat.

Nutrition in Oranges :-

One medium-sized orange has:

- 1) 60 calories
- 2) No fat or sodium
- 3) 3 grams of fiber
- 4) 12 grams of sugar
- 5) 1 gram of protein
- 6) 14 micrograms of vitamin A
- 7) 70 milligrams of vitamin C
- 8) 6% of your daily recommended amount of calcium
- 9) 237 milligrams of potassium
- 10) 15.4 grams of carbohydrates

D) Carica papaya (Papaya) :-

papaya, papaw, or pawpaw is the plant species Carica papaya, one of the 21 accepted species in the genus Carica of the family Caricaceae. It was first domesticated in Mesoamerica Carica papaya belonging to the family Caricaceae works as a good bleaching agent. Experts suggest that papaya can help in removing dead worn-out skin cells and replace it with healthy new cells, thereby lightening the color of our skin. It also Prevent pimples, blemishes, wrinkles and pre mature aging of skin. It protects skin from ultraviolet radiation. The papaya, papaw, or pawpaw is the plant Carica papaya, one of the 22 accepted species in the genus Carica of the family Caricaceae. Its origin is in the tropics of the Americas, perhaps from Central America and southern Mexico.

Scientific Classification Of (Papaya):-

Scientific name: Carica papaya
 Family: Caricaceae
 Order: Brassicales
 Higher classification: Papaya
 Kingdom: Plantae
 Rank: Species

Benefits Of Skin :-

The enzymes papain and chymopapain in papaya can decrease inflammation. The proteindissolving papain can be found in many exfoliating products. These products help reduce acne by removing dead skin cells that can clog pores. Papain can also remove damaged keratin that can build up on the skin and form small bumps. A 2017 study Trusted Source suggested that papain is a viable treatment for scarring. Papaya is also rich in vitamin A. Although it's believed that vitamin A might play a role in the development and treatment of acne, the impact of diet on acne remains unclear. Retinol, a topical form of vitamin A, can help treat and prevent inflammatory acne lesions

E) Fragaria vesca (Strawberry) :-

belonging to the family Rosaceae possess a high antioxidant capacity, It shows protective effect on skin cells against UVA induced damage. It reduce acne, wrinkles and has the anti aging, anti oxidant and skin whitening properties. The garden strawberry is a widely grown hybrid species of the genus Fragaria, collectively known as the strawberries, which are cultivated worldwide for their fruit. The fruit is widely appreciated for its characteristic aroma, bright red color, juicy texture, and sweetness. The garden strawberry (or simply strawberry; *Fragaria × ananassa*) is a widely grown hybrid species of the genus *Fragaria*, collectively known as the strawberries, which are cultivated worldwide for

their fruit. The fruit is widely appreciated for its characteristic aroma, bright red color, juicy texture, and sweetness. It is consumed in large quantities, either fresh or in such prepared foods as jam, juice, pies, ice cream, milkshakes, and chocolates. Artificial strawberry flavorings and aromas are also widely used in products such as candy, soap, lip gloss, perfume, and many others.

Scientific Classification Of (Strawberry):-

Kingdom : Plantae
Clade : Tracheophytes
Clade : Angiosperms
Clade : Eudicots
Clade : Rosids
Order : Rosales
Family : Rosaceae
Genus : Fragaria
Species: F.x ananassa

F) Lycopersicon esculatum (Tomato) :-

Lycopersicon was a genus in the flowering plant family Solanaceae (the nightshades and relatives). It contained about 13 species in the tomato group of nightshades. First removed from the genus Solanum by Philip Miller in 1754, its removal leaves the latter genus paraphyletic, so modern botanists generally accept the names in Solanum. The name Lycopersicon (from Greek *λυκοπέρικον* meaning "wolf peach") is still used by gardeners, farmers, and seed companies. Collectively, the species in this group apart from the common cultivated plant are called.

Lycopersicon esculatum belonging to the family Solanaceae used a bleaching agent. Herb also acts as anti oxidant, antiseptic and anti aging agent. It cures acne and moisturizing effect, works as a repellent substances and reduce black heads. Slightly acidic in nature, tomatoes contain high contents of potassium and vitamin C; this transforms the dullest of skins and restores glow to the skin. Tomatoes also have lycopene, which is an antioxidant that helps fight free radicals in the body Reduces Open Pores-Tomatoes help reduce open pores and blackheads The tomato is the edible berry of the plant Solanum lycopersicum, commonly known as a tomato plant. The species originated in western South America and Central America..

Scientific Classification Of (Tomato):- Kingdom :

Plantae
Clade : Tracheophytes
Clade : Angiosperms
Clade : Eudicots
Clade : Asterids
Order : Solanales
Family : Solanaceae
Genus : Solanum S
pecies : S. lycopersicum

Benefits of tomato on skin :

- May help protect against skin cancer
- May reduce risk of sunburns
- May promote wound healing
- May soothe skin inflammation
- May stimulate collagen production
- May help remove dead skin cells
- May have anti-aging properties
- May help fight cellular damage

CONCLUSION:-

Herbal formulations are more acceptable in the belief that they are safer with fewer side effects than the synthetic ones. Herbs have growing demand in the world market. It is a very good attempt to establish the poly herbal fruit face mask containing different powders for the face masks on human use as cosmetic product. Formulation showed good antimicrobial activity when compared to clindamycin and the results of formulation was very nearer compared to standard drug which clearly indicates that the prepared formulation is best suits for skin as cosmetic

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