

Formulation and Evaluation of Facial Scrub

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ABSTRACT

The main objective of present study was to prepare a polyherbal scrub incorporated into gel. The use of natural ingredients to fight against acne, wrinkle and to control secretion of oil is known as natural or herbal cosmetics. Herbal cosmeceuticals usually contain the plant parts which possess antimicrobial, antioxidant and anti-aging properties. Herbal cosmetics are the safest product to use routine with no side effects and cosmeceuticals are the product which influences the biological function of skin. In this preparation fenugreek, coffee, coconut oil, rose water, turmeric, Aloe Vera gel, amla, honey, sodium lauryl sulphate, methyl parabens, glycerine is used as active ingredients and incorporated into the gel which is prepared with Carbopol of different The main objective of present study was to prepare a polyherbal scrub incorporated into gel. The use of natural ingredients to fight against acne, wrinkle and to control secretion of oil is known as natural or herbal cosmetics.

Key words: Antiseptic, Anti-Infective, Antioxidant, Anti-aging, and humectant, etc.

I. INTRODUCTION:

The demand for herbal cosmetics is high nowadays due to its ability to act as cosmetics and drugs. Skin care products are important factor to improve the confidence in individuals. Women were thought to be the larger consumer of skin care products but in the present scenario men are equally concern about their look.[1] This concept about the beauty, look and attractiveness leads to the boom in this field. The cosmeceutical companies produce their product based on the skin texture like men require special type of products due to the roughness of their skin than women.[2]

The health of an individual is mainly represented by the skin which is the major part of the body. Lipids, amino acids, carbohydrates are the composition of skin. Skin can be affected by biological, hormonal, environmental factors. To

keep the skin healthy and glossy it should be nourished with balanced diet. Environmental factors such as UV rays, pollution, dust, climatic changes will intensify the issues related to skin. Environmental causes can be prevented from skin damage by treating with topical application of synthetic or herbal cosmetics. Cosmetic is a Greek word, which is intended to be applied on the skin to improve the beauty and health of the skin.[3] It can be used for various purposes such as cleansing, glowing, protecting, moisturizing, softening, whitening etc. Today herbal cosmetics are great in demand due to its ability to nourish the skin with all its necessity without any side effects. Different types of herbal topical application of cosmetics are in the market such as facial mask, peel off, sunscreen gel, facial scrub etc.

Facial Scrub

Cosmetics are available as various forms and each has its own role to play on the skin. Skin becomes dull, non-glowing due to various causes and these can effectively be overcome with the application of scrubs. There are two types of scrub being used on the skin such as facial scrub and body scrub. These two differ only with the ratios of oil and sugar added in each. Usage of oil is high in facial scrub due to which it is less abrasive. It removes the dead skin cell and exfoliates the skin. Scrub can be used on any type of skin. Only the essential oil used in scrub as ingredient will vary with the type of skin. Skin is classified into three types such.

Facial scrub, also known as exfoliator, is a skincare product that helps to remove dead skin cells and impurities from the skin's surface. It usually contains small particles, such as sugar, salt, or microbeads, that scrub away dead skin cells, dirt, and oil, thus unclogging pores and improving the overall texture and appearance of the skin. A facial scrub should only be used two to three times a week and should be gentle, as over-exfoliating can damage the skin.

Ideal properties of facial scrub

Gentle exfoliation: The scrub should be gentle enough to remove dead skin cells, without causing any irritation or damage to the skin.

Non-abrasiveness: The scrub should be non-abrasive, which means it should not contain any harsh particles that can cause micro-tears on the skin.

Hydrating: The scrub should contain ingredients that can help hydrate and soothe the skin, like glycerine, aloe vera or hyaluronic acid.

Natural: Natural ingredients are generally considered to be better for the skin, so look for scrubs that contain natural exfoliants like sugar or oatmeal.

pH-balanced: The scrub should be pH-balanced to the skin, which means it should not be too acidic or alkaline, as this can disrupt the skin's natural balance.

Non-comedogenic: The scrub should not contain any ingredients that can clog pores or cause breakouts.

Scented mildly: The scrub should be mildly scented or unscented, so it does not cause any irritation or allergic reactions.

Safe for all skin types: The scrub should be safe for all skin types, including sensitive, oily, or acne-prone skin.

Effective: The scrub should effectively remove dead skin cells, unclog pores, and promote healthy, glowing skin.

Eco-friendly: The scrub should be eco-friendly, with packaging made from recycled materials or using biodegradable materials.

As an AI language model, I do not have preferences or beliefs, but I can provide the following information:

Material and method of facial scrub

Function of facial scrub:

Facial scrub is a skincare product that is designed to exfoliate the skin. It typically contains small particles, such as sugar or microbeads, that help to remove dead skin cells and other impurities from the surface of the skin. Regular use of a facial scrub can help to unclog pores, promote cell turnover, and leave the skin looking brighter and smoother. However, it is important to use a facial scrub gently and avoid over-exfoliating, as this can cause irritation and damage to the skin. Additionally, those with sensitive skin should use a facial scrub with caution and as recommended by a dermatologist.

1.Sunflower seeds-

Sunflower seeds can be used as a gentle exfoliant in facial scrubs due to their slightly abrasive texture. They can help to remove dead skin cells and impurities, leaving the skin smoother and brighter. In addition, sunflower seeds contain Vitamin E, which is a natural antioxidant that can help to protect the skin from damage caused by free radicals. They also have anti-inflammatory properties that can help to calm irritated or inflamed skin. Overall, including sunflower seeds in a facial scrub can help to promote healthier, more radiant skin.

Being rich in nutrients and antioxidants, it is widely used for medicinal and cosmetic purposes and is found to be effective against acne, eczema, inflammation, general redness and irritation of the skin. Some of the benefits of sunflower oil for the skin. As the seeds of the sun-worshipping sunflower, they also help to promote glowing, youthful skin. They're rich in vitamin E, your body's main fat-soluble antioxidant. Further benefits of sunflower seeds for a youthful complexion include its high levels of magnesium.

2. Coffee-

Coffee is often used in facial scrub formulations as it has several benefits for the skin. Firstly, the caffeine in coffee has natural anti-inflammatory properties that can help to reduce puffiness and redness. Secondly, coffee grounds act as a gentle exfoliant, helping to remove dead skin cells and impurities from the surface of the skin. This can help to improve the texture and tone of the skin. Additionally, coffee contains antioxidants that can help to protect the skin from damage caused by free radicals, which are harmful molecules in the environment that can contribute to premature aging. Overall, the use of coffee in facial scrubs can help to leave the skin soft, smooth, and refreshed.

4.Orange peel -

Orange peel is a common ingredient in facial scrubs due to its numerous benefits for the skin. Orange peel contains high amounts of vitamin C, which is essential for collagen production in the skin. Collagen is a protein that keeps the skin firm and youthful-looking, so using products that contain vitamin C can help to improve the appearance of fine lines and wrinkles. In addition, orange peel contains natural oils that can help to moisturize the skin, leaving it feeling soft and smooth. The peel also contains natural alpha-

hydroxy acids (AHAs) that can help to exfoliate the skin by removing dead skin cells, which can help to brighten and even out skin tone. Overall, the use of orange peel in facial scrubs can help to improve the overall health and appearance of the skin.

5. Rice flower-

Scrubs because of its exfoliating and brightening properties. Rice flour has a gentle abrasive texture that can help to remove dead skin cells and unclog pores, making it an excellent ingredient for exfoliating scrubs. Additionally, rice flour contains natural enzymes that can help to remove excess oil and dirt from the skin, leaving it feeling clean and refreshed.

Rice flour also contains natural anti-inflammatory properties that can help to soothe irritated or inflamed skin, making it an ideal ingredient for those with sensitive skin. It is also high in antioxidants, which can help to protect the skin against environmental stressors such as pollution and UV rays.

Overall, the use of rice flour in facial scrubs can help to improve skin texture, tone, and overall health, making it a popular ingredient in many skincare products.

6. Gram flour

(Cicer arietinum) Gram flour face mask is good for acne-prone skin and can help to lighten any acne scars. It can also be applied all over the

body to remove dark spots caused by the sun and will leave your skin feeling brighter.

6. Turmeric

(Curcuma longa) Turmeric is mainly used to rejuvenate the skin. It delays the signs of aging like wrinkles and also possesses other properties like antibacterial, antiseptic and anti-inflammatory. It is best source of blood purifier. It is effective in treatment of acne due to its antiseptic and antibacterial properties that fight pimples and breakouts to provide a youthful glow to your skin. It also reduces the oil secretion by the sebaceous glands. [8,9]

7. Activated charcoal

(Charcoal Mora) Activated charcoal draws bacteria, poisons, chemicals, dirt and other micro-particles to the surface of skin, helping you to achieve flawless complexion and fight acne. Charcoal is not metabolized, adsorbed, or absorbed by the body, but it can be used to treat some poisonous bites and disinfect some wounds.

8. Multani Mitti (Calcium bentonite) Multani mitti helps skin by different ways like pore sizes, removing blackheads and whiteheads fading freckles, soothing sunburns, cleansing skin, improving blood circulation, complexion, reducing acne and blemishes and gives a glowing effect to a skin as they contain healthy nutrients. Multani Miti is rich magnesium chloride.

Formulation of facial scrub

Table 1: Different formulation of face pack

Ingredients	Role	F1 gm	F2 gm	F3 gm
Sunflower seeds	Photo protective	5	10	15
Coffee powder	Smoothing skin	0.25	0.25	0.25
Orange peels	Vitamine -C	0.5	0.5	0.5
Rice flour	Skin whitening agent	1.25	1.25	1.25
Turmeric powder	Anti inflammatory	1	2	3
Gram flour	Remove dark spot	1.25	1.28	1.25
Charcoal	Remove black heads	1.15	1.15	1.25
Multani mitti	Remove black dirt	0.5	0.5	0.5
Honey	---	-	-	-

Rose	---	-	-	Q s.
Milk	---	-	Q s.	-
Butter milk	---	Q s.	-	-

Preparation of facial scrub-

The powdered ingredients were mixed and sieved using #40 mesh weighed accurately and mixed geometrically for uniform mixing. This was then stored in an air tight container for evaluation.



Fig- scrub

Evaluation parameter of facial scrub-

There are mainly three types-

Parameter -

1.Organolaptic evaluation-

- Nature - Powder
- Colour - Dark green
- Teste - Characteristic
- Texture - Fine
- Odour - Pleasant

2. Physiochemical evaluation-

- P H - 6
- Total ash - 0.6% w/w
- Moisture content- 4% w/w

3.General powder characteristics-

- Tabbed density- 18 gm/ cc
- Bulk density - 25 gm /cc
- Angel of repose- 50.19
- Grittiness - No gritty particle

II. RESULT AND DISCUSSION

By the studying all Evaluation Parameter like Organoleptic, Physicochemical & General powder Characteristic of Poly herbal Face Scrub was developed.

The face pack is beneficial, economical & passed all evaluation Parameter. This scrub mainly contains the sunflower seeds provides rich source of selenium, another powerful antioxidant nutrient, which assists vitamin E and repairs your DNA. The scrub contains copper, which helps to produce the melanin that gives your skin its unique pigment. Sunflower seeds are an excellent source of vitamin E and a very good source of copper and vitamin B1. In addition, sunflower seeds are a good source of manganese, selenium, phosphorus, magnesium, vitamin B6, folate and niacin. The dosage of vit. E (Alpha Tocopherol) and topical use in skin care products is mostly used at conc. of 5% or less. By regular topical application of alpha Tocopherol of less than 0.2% leads to significant increased levels of vit. E in the stratum corneum of human skin and protects against lipid peroxidation in vivo.[16] Therefore, topical formulations containing alpha tocopherol at concentration ranging from 0.1% to 1% are likely to be effective skin care measures to enhance antioxidant protection of the skin barrier.

III. CONCLUSION:

In the present work, we found good properties for the Face Scrub on human Skin as cosmetic products. Skin is outermost organ of the body, which frequently and directly exposed to a pro-oxidative environment including UV radiations, drugs and air pollutants. Vitamin E is an essential nutrient that is receiving growing attention in the skin care industry because of its antioxidant properties. Sunflower seed oil is a good source of essential fatty acids such as linoleic, oleic, palmitic, and stearic acids which encourage the formation of collagen and elastin, thus making your skin soft and smooth. This Face scrub comes in use of stimulation of blood circulation, Reduction in Dark circle, Acne & Scars.

By performing and studying various formulations we came to know that rose water and butter milk gives the best result but we have chosen rose water. Because rose water has its fragrance as compare to butter milk.

In the prepared, 5gm of sunflower seed contains 1.75mg i.e 11% of vit. E which is sufficient to enhance antioxidant protection of the skin barrier.

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