



FORMULATION & EVALUATION OF HERBAL FACE PACK FOR ACNE & WRINKLE TREATMENT

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Abstract: The quest for healthy, glowing, and blemish-free skin has been a concern for people since ancient times. Cosmetics, products used to enhance the appearance of the skin, have played a significant role in achieving this goal. In recent years, there has been a growing interest in the use of herbal face packs as a natural and effective solution for treating acne and other skin issues. These face packs, formulated using a combination of herbal ingredients, have shown promising results in improving skin health and reducing the occurrence of acne. The Benefits of Herbal Face Packs Herbal face packs have gained popularity due to their numerous benefits for the skin. Unlike chemicalbased products, herbal face packs are considered safer and have fewer side effects. They provide nourishment to the skin and help in rejuvenating the muscles, maintaining skin elasticity, and removing dirt from skin pores. The use of herbal ingredients in these face packs ensures that they are gentle on the skin and do not cause irritation or inflammation. The herbs like neem, multani mitti, Chandan, cinnamon, tulsi, mulethi, maize starch and lemon zest are beneficial for skin problems such as acne, wrinkles, anti-aging.

Keywords: Face Pack, Natural, Herbal Cosmetics, Acne, Wrinkle

I. INTRODUCTION

As we understand the importance of harnessing the power of nature's ingredients. Our carefully crafted herbal face pack, containing powerful plant extracts such as neem, targets the root causes of acne and wrinkles, providing you with radiant and youthful skin. Acne, a common skin concern, can be both physically and emotionally distressing. Our herbal face pack works by purifying the skin, eliminating excess oil and bacteria, and reducing inflammation. Say goodbye to pesky breakouts and reclaim your confidence! Additionally, our formulation also tackles the signs of aging. Wrinkles, fine lines, and sagging skin are minimized through the potent blend of herbs, leaving your skin smoother and more toned. Restore your skin's vitality and embrace a youthful appearance. What sets our herbal face pack apart is its commitment to quality and effectiveness. Our rigorous evaluation process ensures that every ingredient is sourced with care and blended to perfection. Join the countless individuals who have experienced the incredible benefits of our herbal face pack. Discover the power of nature in achieving clear, blemish-free skin and youthful radiance. Say goodbye to acne and wrinkles with our herbal face pack, your ultimate skincare solution. Herbal cosmetics are products that enhance, clean, and encourage a beautiful appearance. Because natural medicines are safer and less likely to induce negative effects than synthetic ones, they are more widely accepted. A face pack is a mixture that is used to cure acne and other skin issues, clean the skin, and reduce excessive oil on the face. All-natural components are employed in this kind of composition. These components are derived from plants. such as plant extracts, flowers, seeds, leaves, and so forth. Using natural materials, the goal of this effort is to develop and test a herbal face mask for glowing skin. Some of

the vitamins required to maintain healthy, glowing skin are included in the Natural Face Pack. A variety of characteristics, including organoleptic structures, physicochemical parameters, stability and sensitivity testing, and microbial load, were used to test the changed structure. Physically, the correction was determined to be good; no skin irritation occurred, and it remained consistent even when conditions were reached to ensure microbiological stability [1]. Ayurvedic face packs can prevent dark circles, wrinkles, and acne. Additionally, they smooth out the skin. These substances also seem to benefit our bodies in a variety of ways. There is a slight complexity to the natural facial pockets. Because they are readily available and less expensive, herbs are used as healing agents on a large scale these days. Herbs have been utilized for cleaning, cosmetic purposes, and the treatment of numerous skin conditions since ancient times. The majority of the body is covered in skin on the face, yet some frequent skin conditions include Young people often have dark circles, black heads, pimples, and acne, which all lessen the face's natural fairness. Free radicals in the blood and environmental variables are typically the cause of skin issues, according to Ayurveda. Medicinal herbs such as Neem, Multani Mitti, Tulsi, Mulethi Powder, Lemon Zest, Cinnamon Powder, Maize Strach, and Chandan were used by ancient ladies, who were highly aware of their beauty, to heal skin issues on their faces. The purity of herbal cosmetics and their lack of adverse effects on human health are their two primary benefits [2]. In Ayurveda, the herbal face pack known as "mukhalepa" is applied to the face to cure pigmentation, scars, markings, acne, and pimples. The application of this herbal mixture to the face is referred to as "mukhalepana."

An effective herbal face pack should provide the skin with the essential nutrients and leave the face glowing. It is known as a facial and is a form of beauty therapy. Since some herbal face packs are not appropriate for a particular type of skin, several types of herbal face packs are needed for different sorts of skin disorders. The nutrients required for the skin's cell division are supplied by the face packs, which also improve blood flow in the facial veins.[3]The smooth powder used for face application is called a face pack. The skin is given a tightening, strengthening, and cleansing effect by applying these preparations, which are applied to the face as liquids or pastes and then left to dry and set to create film. Typically, they are applied to the skin for 20 to 25 minutes in order to completely evaporate the water; this causes the ensuing film to constrict, harden, and remove easily. In addition to removing oil and debris from the skin, the colloidal and adsorption clays utilized in these preparations provide a stimulating sensation of a renewed face through their warming and tightening impact. Skin fragments and accumulated dirt are eliminated along with the applied face pack when it is finally removed. One of the most elegant and traditional ways to cleanse skin is using a face pack. Ayurveda describes a variety of face packs with cleansing, astringent, antibacterial, nourishing, and healing qualities. With simple components from the kitchen and house, we may make a face pack at home.[4].Herbal face masks are a less expensive and safe option for naturally achieving fair skin. Herbs have been used by mankind for management, cleansing, and aesthetic purposes since ancient times. The products used for washing, beautifying, and promoting are referred to as cosmetics. Products used to clean, beautify, promote attractiveness, or change one's look are referred to as cosmetics. Natural face masks and packs created at home reveal velvety, bright skin.[5]

People have known for ages that plants can be used to provide the basic requirements for clear, beautiful skin. The goods used to maintain, enhance, and encourage a desirable appearance are called cosmetics. The majority of the body, including the skin on the face, serves as a mirror reflecting each person's overall health. To maintain bright, shiny, and healthy skin, one must eat a balanced diet rich in carbohydrates, lipids, and amino acids. Women used to take particular care of their unique skin types and were highly aware of their beauty. Herbal cosmetics are skin-beautifying and purifying products. The primary benefit of utilizing herbal cosmetics is their purity and lack of adverse effects on human health. Men's skin is rough and can develop dark from overexposure to the sun, other pollutants, etc. if proper care is not taken. For both men and women, we have created a handmade face pack in this post that will naturally lighten, brighten, and whiten skin. This face pack is simple to make at home and contains natural skin-lightening effects. Natural face masks are high in key vitamins that are necessary for skin health and radiance. Numerous benefits for skin have been demonstrated for these compounds.[6]

Utilizing natural face packs is simple. They make the blood flow more freely through the facial veins, which makes the skin appear more vibrant. An effective herbal face pack should provide the skin with the essential nutrients, which can be placed externally on the face as a loose powder. To supply the necessary nutrients, it should penetrate deeply into the subcutaneous tissues. Every skin type has different needs when it comes to skin packs.[1]

These days, there are distinct kinds of packs available for dry, normal, and oily skin. Face packs are applied to the skin to improve its smoothness and fairness. It lessens dark circles, wrinkles, acne, and breakouts on the skin. Face packs, advised for oily skin prone to blackheads and acne, often reduce the rate at which sebum is released from sebaceous glands and combat the germs that cause acne lesions. The skin's remaining marks can be lessened by mixing in finely ground Multani mitti, dried lemon zest, and Chandan powder. Due to its many advantages over chemical-based face packs, herbal face packs are increasingly widely used. They don't cause allergies, aren't harmful, and don't create habits. They have longer shelf life and are natural in every way. There are no extra preservatives in them. They are simple to prepare and keep for an extended amount of time. The creation and description of a cosmetic herbal face pack composed of natural ingredients are the topics of this research paper. An excellent herbal face pack should be a loose powder that can be applied externally to the face and gives the skin the vital nutrients it needs. It must pierce the subcutaneous tissue in order to deliver the necessary nutrition. Each skin type is unique to the needs of the skin pack. There are now various pack types for dry, normal, and oily skin types. The smoothness and freshness of the skin are enhanced with face packs. It aids in the removal of dark circles under the eyes, wrinkles, and zits.[7] Cosmetics are meant to be applied to the human body in order to cleanse, beautify, decorate, encourage attractiveness, and/or change the way skin looks. Skin cosmetics work on the skin's outermost layers, or epidermis, without altering the skin's natural physiological characteristics. These substances are frequently used in different kinds or forms to enhance the appearance of the skin. Cosmetics are typically used to prevent and lessen wrinkles, fine lines, and aging, to treat acne, and to regulate the skin's excessive oil production. The use of cosmetic items has expanded dramatically in recent times due to consumers' greater concern on appearance. Nonetheless, if overuse of artificial cosmetic ingredients is negatively impacting human skin, then said advantages Because they can affect the body less or not at all and enhance it with nutrients and other beneficial minerals, plant-based herbal cosmetics are becoming more and more popular. The use of natural plant and animal extracts as active components in cosmetics is the foundation of the phrase "herbal cosmetics."

These agents promote sustainable living by placing greater emphasis on the usage of plant-based green components. Phytochemicals or phytoconstituents derived from natural sources have been utilized as active ingredients in topical treatments since ancient times. These bioactive phytoconstituents are expected to have beneficial qualities such as antioxidant, anti-inflammatory, antibacterial, anti-aging, anticarcinogenic, and UV-protective activity when utilized to make topical treatments. One of the most prevalent skin ailments, dry and damaged skin is characterized by scaling, itching, and breaking of the skin. A busy and unhealthy lifestyle, aging, the use of pharmaceuticals, UV ray damage from the sun, excessive screen time, excessive water loss from the skin (dehydration), and other things are the causes. Using a range of skin care preparations, such as moisturizers, creams, lotions, face packs, scrubs, oils, serums, etc., can help treat this kind of skin condition.[8]

A face pack is a smooth-textured, fine powder or paste that is applied to the skin of the face in a thin layer and left to dry for a few minutes to leave behind a film that is easily removed with water. Regular use of a face pack has several benefits, including exfoliation, removal of dry and dead skin, calming, cooling, moisturizing, and nourishing properties, as well as, depending on the formulation, skin tightening and strengthening properties. Additionally, it aids in cleaning the skin of oil and debris without actually changing how the skin normally functions physiologically. The ultimate purpose of using cosmetic preparations is to renew the skin, which is achieved through all of these effects. Herbal face packs are utilized for different skin types based on requirements, type, and use. Natural active elements found in herbal face packs help minimize wrinkles, dark circles, redness, and acne. Along with providing skin-nourishing and calming benefits, these preparations might also aid in improving fairness.

In general, a herbal face pack should penetrate the skin's outer layers and subcutaneous tissues, supplying the skin with the essential vitamins and nutrients without actually changing the skin's natural physiology. Depending on the intended properties, face packs can be prepared with a variety of substances based on different skin types. For instance, a variety of oils and butters, such as coconut oil, jojoba oil, almond oil, shea butter, cocoa butter, etc., can be used to make a nutritious and moisturizing face pack. Vitamins such as C, D, and E can be applied topically to provide the skin with the essential vitamins. Furthermore, ingredients that have been shown to be good for skin are also employed.[9]

1.1Acne

Acne is a common skin condition where the pores of your skin clog. Pore blockages produce blackheads, whiteheads, and other types of pimples. Pimples are pus-filled, sometimes painful, bumps on your skin. The medical term for acne is “acne vulgaris”.

Everyone typically experiences acne at some point in their lives. Although acne can happen in adulthood, it's most common among teenagers and young adults going through hormonal changes. Acne in adulthood is more common in women and those who were designated female at birth (AFAB). If there is a genetic history of acne in your family, you may be more susceptible to acquiring acne.

Acne is not unique to you, so know that. Among skin conditions, acne is the most frequent. Of those between the ages of 11 and 30, 80% are predicted to experience minor acne. Acne is most commonly found on the face, forehead, chest, shoulders, and upper back. Your entire body is covered in oil glands. The most oil glands are found in areas where acne is most common.



Fig.1. Acne

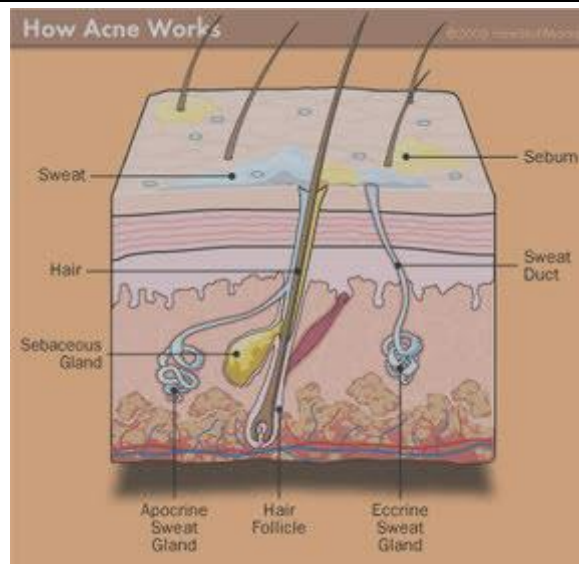


Fig.2. Skin

1.2 Types of Acne:

- Fungal acne (Pityrosporum folliculitis): often known as fungal acne, is a condition where yeast accumulates in the hair follicles. These may feel irritated and scratchy.
- Cystic acne: This type of acne results in nodules and deep, pus-filled lesions. These might leave scars.
- Hormonal acne: Adults with hormonal acne are afflicted by an excess of sebum that clogs their pores.
- Nodular acne: This severe type of acne results in tender, nodular lumps under the skin's surface as well as pimples on the skin's surface.

1.3 Causes & Symptoms of Acne:

Acne is caused by clogged pores or hair follicles. A hair strand is stored in each of your hair follicles, which are tiny tubes. Your hair follicles are the exit points for many glands. A clog happens when there's too much material inside your hair follicle. You can get clogged pores with:

- Sebum: An oleaginous material that acts as a barrier to shield your skin.
- Bacteria: Your skin is naturally home to a small number of bacteria. A high level of germs might clog your pores.
- Dead skin cells: In order to create space for new cells to grow, your skin cells shed often. Dead skin cells might become lodged in your hair follicles when your skin releases them.

❖ Symptoms:

- Pus-filled bumps called papules, or pimples (pustules).
- Papules: Tiny, discoloured pimples that are typically darker than your normal skin tone, ranging from red to purple.
- Blackheads: A black plug that clogs pores.
- Whiteheads: Whiteheads that clog pores.
- Nodules: Painful, large bumps beneath the skin.
- Cysts: Ugly, pus-filled tumours under your skin that hurt.[10]

1.4 Wrinkles:

Creases, folds, or ridges in the skin are called wrinkles. As people age and lose elasticity in their skin, they naturally manifest. Keeping out of the sun can help you avoid wrinkles. Additionally, some therapies could lessen their appearance.

Additionally, areas of the body including the face, neck, backs of hands, and arms that are exposed to the most sun light are more likely to develop wrinkles.



Fig. 3. Types of Wrinkles

1.5 Causes of Wrinkles








An inevitable aspect of aging is the development of wrinkles. People's skin grows thinner, drier, and less elastic as they age, making it less equipped to fend off injury. This causes the skin to become wrinkled, creased, and lined.


Expressions on the face, such as frowning, squinting, or smiling, cause fine lines and wrinkles to appear early in life. As the person ages, these lines become more profound. A person's skin bounces back when they are young. Age-related changes in the skin's elasticity make it harder for the skin to bounce back, leaving permanent grooves.

Wrinkles can form due to a variety of circumstances, such as:

- exposure to the sun,
- smoking
- dehydration
- certain medications
- genetic and environmental variables
- Wrinkles are more likely to appear if you spend time outside, sunbathe, or use tanning salons where ultraviolet (UV) radiation is present.[11]

Some Natural Herbs as Anti Acne & Anti Wrinkles:

S.No	Ingredients	Scientific name	Chemical Constitute	Image
1.	Multani Mitti	<u><i>Calcium bentonite</i></u>	Hydrated Aluminium, Silicates, Magnesium Chloride	
2.	Neem Powder	<u><i>Azadirachta indica</i></u>	Nimbidol, Nimbin, Nimbidin	
3.	Cinnamon powder	<u><i>Cinnamomum verum</i></u>	Cinnamate, Cinnamic Acid	
4.	Chandan	<u><i>Santalum album</i></u>	Sesquiterpenic Alcohol, Tricyclic α - saltalol	
5.	Tulsi Powder	<u><i>Ocimum sanctum</i></u>	Linalol, Eugenol	
6.	Mulethi	<u><i>Glycyrrhiza glabra</i></u>	Flavoids, Saponins, Amino Acids	
7.	Lemon zest	<u><i>Citrus limon</i></u>	Limonene, Sabinene, Linalool	

8.	Maize Starch	<u><i>Zea mays</i></u>	Amylose, Amylopectin	
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Conclusion:

People today have several skin conditions, which require side-effect-free treatments. The formulation of cosmetics using herbs has fewer negative effects and no hazardous effects. Treating skin issues with natural therapies is the greatest option because they are more palatable than synthetic ones. The herbal face pack is intended to address skin conditions. such as dark circles, wrinkles, acne, and pimples. Additionally, it is used to maintain the skin's suppleness, revitalize the muscles, and enhance blood circulation. Including multanimitti, neem powder, mulethi powder, lemon zest, chandan powder, cinnamon powder, tulsi powder, and maize starch, it is the ideal blend of natural components.

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