



REVIEW ON: FORMULATION OF HERBAL FACE SERUM SHEET MASK.

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ABSTRACT: Herbal face packs or masks assist to promote blood circulation, revitalize the skin, retain its suppleness, and eliminate debris from the pores. It is a commendable effort to create a herbal face mask incorporating various plant powders. Herbal cosmetics have the benefit of being non-toxic, reducing allergic responses, and many components having a long history of usage. Thus, we discovered favorable qualities of face packs in this research, and additional optimization studies are necessary to discover the practical advantages of face packs on humans when used as cosmetic products. The goal of this work is to assess the study of herbal extract finishing on face sheet masks and their qualities. These masks may be used to moisturize the skin, eliminate excess oils and pollutants, and smooth out pores. The sheet mask is made from materials such as microfibers or cellulose. As people become more conscious of the negative effects of industrialization on the environment, a movement has emerged to utilize items made with natural components. The advantages of herbal extracts in cosmetics are attempted and emphasized in this review. Natural extracts have several functions and may be used to make medicinal medicines as antioxidants. These extracts are used to make flavors for pharmaceutical products and come in a variety of forms, including solid extract, fluid extract, and powder extract. In this case, the extraction is done as a powder extract. Indian nettle leaf and red sandalwood are the botanicals that have been chosen. The steam boiling process is used to make oil from the chosen plants. Moisture content and moisture regain tests were performed on these prepared samples.

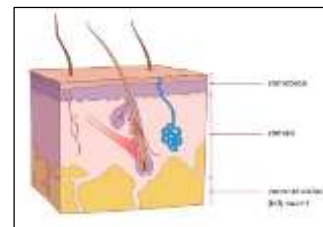
INTRODUCTION

Hospital or health care waste is generally named & popular as biomedical waste. The world health organization defines biomedical waste as, "Waste generation by health care activities & includes blood, used needles, pharmaceuticals, radioactive materials etc." The biomedical waste is also known as infectious waste or medical waste or health care waste. According to biomedical waste management & handling rules 1998 of India. Biomedical waste means any waste which is generated during the diagnosis, treatment or immunization of human being or animals or in research activities. In simple words biomedical waste is the waste generated by the medical & health institute/agencies.

Biomedical waste management defines waste management as the practices & procedures or the administration of activities that provide for the collection, source separation, storage, transportation, transfer, processing, treatment & disposal of waste. Biomedical waste management is a routine procedure of hospital administration as prescribed by law. Hospital waste, hospital acquired infection, transfusion transmitted diseases, rising incidence of hepatitis B, HIV & Other diseases, create potential threat of infection, contamination & serious health hazards to doctors, nurses, ward boys, support staff, sanitation workers, rag pickers & other health care workers. Who are regularly exposed to biomedical waste as an occupation hazards as well as general public in the surrounding area.

Anatomy of skin

The biggest external organ of your body is your skin. It acts as a barrier between the vital organs, muscles, tissues, and skeletal system of your body and the outside environment. This barrier defends you from germs, temperature changes, and chemical exposure. ⁽⁷⁾



Face skin diseases

Acne pimples

Oil, germs, dead skin cells, and debris may clog pores in the skin, causing them to become clogged. As a consequence, you can develop a pimple or a "zit." If your skin is affected by acne on a daily basis, you could have acne. Acne on the face may have a negative impact on your self-esteem and, over time, can lead to irreversible scars.



Dryness of skin

Dry skin is sometimes called the winter itch because it is more popular during the dry months of winter. Itching and flaking of the skin are common symptoms of dry skin, which may also crack, peel, and feel rough. The most afflicted regions are the lower legs, upper arms, thighs, and sides of the abdomen. One of the most frequent skin problems is eczema. Skin that is well hydrated seems lustrous, but dry skin feels tight and appears lifeless. If your facial skin is dry, it may flake or itch. Touching it might make it feel tight or even pain. Hot or cold temperatures, low humidity in the air, and soaking in hot water are all factors that contribute to this condition.



Oily Skin

Oily skin (seborrhea) is a common cosmetic condition caused by enlarged sebaceous glands producing excessive quantities of sebum, resulting in glossy, greasy skin. The major ideas of sebaceous gland anatomy and physiology are covered in this study, including sebum manufacture, storage, and release, as well as their link to skin moisture and water barrier function. The following are the primary features of oily skin: Shiny with a tendency to break out. There are less apparent creases. Pores that are visible and seem to be bigger. The skin gets oily when the sebaceous glands in the skin create too much sebum. The waxy, oily fluid that covers and moisturizes the skin is known as sebum. Sebum is necessary for the skin's health. ⁽⁸⁾

Herbal Skin Care cosmetics(for face)

Face Pack

Face sheet Mask

Sheet Mask Herbs

1.TURMERIC:- Turmeric is mostly used for skin rejuvenation. It has antibacterial, antimicrobial, and anti-inflammatory qualities, as well as delaying the appearance of wrinkles. It is the most effective blood purifier. It works to cure acne because of its antiseptic and antibacterial characteristics, which battle pimples and outbreaks and give your skin a young radiance. The sebaceous glands' oil output is likewise reduced.

Biological source: Turmeric is an outcome of *Curcuma longa*, a rhizomatous herbaceous perennial plant belonging to the ginger family *Zingiberaceae*, which is native to tropical South Asia. *Curcuma* has been detected in 133 different species all over the globe. ⁽⁹⁾

Chemical constituents: Turmeric contains yellow colouring matter called as curcuminoids (5%) and essential oil (6%). Curcumin I (60%) is the main component of the coloring matter, with tiny amounts of curcumin III, curcumin II, and dihydrocurcumin also present. Zingiberene (25 percent), -phellandrene, sabinene, turmerone, arturmerone, borneol, and cineole are among the mono- and sesquiterpenes found in the volatile oil. The essential oil's choleric effect is due to -tolylmethyl carbinol. - and -pinene, camphene, limonene, terpinene, terpinolene, caryophyllene, linalool,



isoborneol, camphor, eugenol, curdione, curzerene, curlone, AR-curcumins, -curcumin, -curcumin, -curcumin, -curcumin, -curcumin, -cur - and turmerones, as well as curzerenone

2. ROSE WATER: Rose water helps to restore your skin's pH balance. Rose water cleans your skin by removing grease and debris. Spritz rose water over your face and neck, then gently massage it in for 3 to 4 minutes. Then, with cold water, cleanse your face. Roses are rich in vitamins, antioxidants, and minerals, and their oil is excellent for treating dry skin. It's also astringent, making it an effective anti-acne prevents redness, and anti-inflammatory mediator.

Biological origin: A rose, or the flower it bears, is a woody perpetual flowering plant of the Rosaceae family belonging to the genus *Rosa*. There are around 300 species and tens of thousands of cultivars to choose from. ⁽¹⁰⁾

Components of chemicals: Citronellol, geraniol, linalool, phenyl ethyl alcohol, farnesol, limonene, p-cymene, camphene, -caryophyllene, neral, citronellal acetate, geranyl acetate, neryl acetate, eugenol, methyl eugenol, rose oxide are the most prevalent⁽¹¹⁾

3. LAVENDER: Lavender oil kills germs, which may help to prevent and treat acne outbreaks. It unclogs pores and soothes inflammation when applied to the skin. After washing your face, dilute lavender oil with coconut oil or another carrier oil and apply it to your skin. ⁽¹²⁾

Biological origin: *Lavandula* (common name lavender) is a genus of flowering plants in the Lamiaceae family that includes 47 species.

It is widespread in Cape Verde and the Canary Islands, as well as across Europe, northern and eastern Africa, the Mediterranean, southwest Asia, and India⁽¹³⁾

Components of chemicals Lavender has been used in the cosmetics, pharmaceutical, and perfumes industries for centuries. The amounts of the primary chemical ingredients Linalool, Linalyl acetate, and Camphor influence the quality of Lavender Essential Oil. ⁽¹⁴⁾



4. BASIL:

Basil's antibacterial and anti-inflammatory properties aid in the management of acne and pimple outbreaks. The anti-itch chemicals camphene and thymol found in basil leaves help to reduce skin irritations, itching, and infections. Basil has natural oils and antioxidants, making it an excellent cure for naturally bright skin ⁽²¹⁾.

Biological source:

Basil (*Ocimum basilicum*), often known as big basil, is a Lamiaceae family culinary plant (mints). Basil is a tropical plant that grows naturally in Central Africa and Southeast Asia. It is a delicate plant that is utilized in cuisines all over the globe.

Chemical constituents:

Methyl cinnamate (70.1%), linalool (17.5%), elemene (2.6%), and camphor were determined to be the most common components (1.52 percent). According to the findings, this plant may be of the methyl cinnamate and linalool chemotypes. In vitro cytotoxicity testing was performed on the human cervical cancer cell line (HeLa), human laryngeal epithelial carcinoma cell line (HEp-2) and NIH 3T3 mice embryonic fibroblasts using a methylthiazole tetrazolium assay. The IC(50) values were 90.5 and 96.3 g mL(-1), respectively, indicating that basil oil possesses a high level of cytotoxicity. ⁽²²⁾



5. GREEN TEA:

It helps to prevent skin cancer. Green tea includes polyphenols and six distinct forms of catechins, the most potent of which are epigallocatechin gallate (EGCG) and epicatechin gallate (ECG). Prevents premature aging. Reduces inflammation and redness. Acne is treated using this product. Skin is moisturized ⁽¹⁸⁾

Biological source:

Green tea is made from the *Camellia sinensis* plant. Although black tea, green tea, and oolong tea are all produced from the same plant, they are processed differently. Polyphenols are included in green tea extract ⁽¹⁹⁾

Chemical constituents:

Green tea's chemical makeup is complex: proteins (15-20% dry weight), with enzymes accounting for a significant portion; amino acids (1-4%), including theanine, glutamic acid, tryptophan, glycine, serine, aspartic acid, tyrosine, valine, leucine, threonine, arginine, and lysine ⁽²⁰⁾

**6. SANDAL WOOD:**

It's anti-aging and anti-tanning. It also benefits the skin in a variety of ways, including as toning, emollients, antibacterial qualities, and cooling astringents.

Biological source:

The heartwood of the stems and roots of *Santalum album* Linn. an evergreen little tree in the Santalaceae family, is used to make sandalwood. ⁽²³⁾

Chemical constituents:

The primary ingredients of sandalwood oil are santalol, and santenone. It has been discovered that it increases the quantity of acid-soluble sulfhydryl groups in glutathione S-transferase, improving its activity. ⁽²⁴⁾

**7.ALOE VERA:**

Aloe barbadensis miller is the botanical name for aloe. Aloe vera's biological source is the dried latex of its leaves. Other names for it include curacao aloe, cape aloe, and socotrine aloe. It belongs to the Liliaceae family.

**Biological sources**

Aloe barbadensis miller is the scientific name for the plant. The dried latex of aloe leaves is the biological source of the plant. Curacao aloe, cape aloe, and socotrine aloe are some of the other names for the plant. The Liliaceae family includes it.

Chemical constituents

Proteins, lipids, amino acids, vitamins, enzymes, inorganic chemicals, and tiny organic molecules have been found in the aloe parenchyma tissue or pulp, in addition to the various carbohydrates. ⁽¹⁵⁾

8. CINNAMON:

It's antimicrobial; therefore it's a blessing for acne sufferers. It's a potent antioxidant that helps to reduce the onset of age-related symptoms. It might give your skin a plumper, more even toned appearance. It works as an anti-inflammatory. ⁽¹⁶⁾

Biological source:

Cinnamon is made out of dried bark stripped of its outer cork and underlying parenchyma from the shoots of *Cinnamomum zeylanicum* Nees cut stumps. ⁽¹⁷⁾

9. MULTANI MITTI:

Multani mitti benefits skin in a variety of ways, including shrinking pores, eliminating blackheads and whiteheads, easing sunburns, washing skin, boosting blood circulation, complexion, reducing acne, and providing a radiant effect due to the nutritious elements it contains. Magnesium chloride is abundant in Multani mitti.

**FACE SERUM SHEET MASK**

These days, a sheet mask is a sort of cosmetic essential that is formed like a face and saturated with necessary nutrition-packed serums. These masks, which include holes for the eyes and nostrils, are custom-made to suit your face properly, ensuring that the concentrated serum covers and enhances every inch of your skin. ⁽²⁵⁾ Sheet masks are face-shaped sheet fabrics that have been soaked in a nutrient-rich fluid known as serum. The sheet is made up of various materials such as papers, fibers, and gels. Masking sheet

Sheet masks aim: Hydrating, balancing, moisturizing and brightening your skin



What are Sheet Masks Made of?

They're constructed of thick, flexible paper, cellulose, or a variety of textiles including microfibers, cotton wool, coconut pulp, and so on. Sheet masks for dry skin are also constructed of materials such as synthetic fibers, which are incredibly absorbent and can easily contain large quantities of water. The hydrogel is the most recent substance to be utilized in sheet masks.

How Do You Use Sheet Masks?

Sheet masks are perhaps one of the most straightforward skin-care treatments. Apply the pre-punctured holes sheet to a clean face, leave it on for 20-30 minutes as indicated on the instructions, peel it off, and enjoy the supple, moisturized skin. These sheets are generally proportioned to accommodate all facial structures and should be applied starting at the brow and gently patting your way down on your face. It is suggested that you use them 2-3 times a week, depending on your skin type.

Easy to put on and easy on the pocket

They are quite simple to apply and remove; you just apply it, retain it, and remove it without having to clean up afterward, like you would with a standard mask. In comparison to pricey salon hydration treatments, they are also a cost-efficient but effective alternative for skin hydration.

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