Original Article

An Overview Of Medicinal Plants Used For Anti-Aging Face Pack Formulation

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Abstract

Now a days the pharmaceutical sciences has let to huge and creative evaluation in the field of medicines and cosmetics. Various types of formulation like face packs, creams, lotion etc. are used for multiple purposes like altering appearance, creating a glowing effect and also for anti-ageing effect. In the recent times, many pharmaceutical industries are creating this substance by using both i.e., natural substances and also artificial synthesis substances in higher rate but more inclined towards producing with natural and ayurvedic substances or in simple terms with herbal medication because the demand of herbal cosmetic is growing in an alarming rate. Many natural substance and herbs which are widely available are used in different concentration and for different purposes like sandal wood, turmeric, aloe vera, nutmeg, tulsi, mushroom, papaya. Anti-ageing is now a days one of the biggest effects that every industry is targeting or focusing to achieve. Ageing is now a days one of the biggest issues faced by specially women all over the world and its onset is around when they reach the age over 40. The need for creating substances with anti-ageing effects is because the life style now a days people are maintaining is not good for them which can lead to earlier health issues like denaturation of collagen which helps in maintaining the elasticity property of the skin and the need for going to create with natural substances is because they have got least side effects and almost no toxicological effects. There are various types of pre-formulation consideration and different evaluation parameters for creating this medication or preparation. In this article, the readers will get to know about all the information which could be helpful to them and would create a sense of knowledge inside them.

Keywords: Anti-ageing, herbal preparation, cosmetic preparation, pharmaceutical facepacks.

INTRODUCTION

The use of herbal products and subsequent adoption of more natural fashion are currently trends on a global scale. People like organic meals, herbal remedies, and other natural products. Victimization by cosmetics is in high demand and have a lot of curiosity. This whole thing happened because herbal products have fewer side effects. Cosmetics with a bioactive ingredient or a medicine are known as herbal cosmetics. Botanical components have an impact on how the skin functions biologically and provide the nutrition it needs to be healthy[1].

Herbal face packs or masks are applied to the face to increase blood flow, revive the muscles, maintain the elasticity of the skin, and clean out skin pores. Herbal cosmetics have several benefits, including being non-toxic, reducing allergic reactions, and using components that have been proven effective through time. Cosmetics are items made for skin and hair care with the aim of increasing appealing traits, washing, and beautifying. Skin care is not now popular. In reality, cosmetics were used by people in every culture to beautify and protect their skin, which naturally leads us to believe that this is a basic human need. The fundamental idea of employing cosmetics to promote the characteristics of good health has not changed, even if cosmetic goods have experienced many changes in modern times[2].

The Greek term "kosm tikos" which means to have strength, order or ability in decorating, is where the English word "cosmetic" originates. As cosmetics evolved throughout human history, a consistent account of their birth emerged. In the year 3000 BC, man utilized color as decoration to entice the animals he wanted to hunt. He also used color to protect himself from competing attacks and to adorn his body to make an adversary fearful (whether man or animal). Cosmetics have a history that dates back to hunting, combat, religion, and credulity, and later to medicine[3].

The term "Herbal Cosmetics" refers to cosmetic products that contain one or more herbal substances only to give specific cosmetic benefits once a basis of other legal cosmetic ingredients has been formed[4].

Since ancient times, medicinal plants have been widely employed as active components in cosmetics and therapies, as beautifying agents, and as a treatment for skin conditions like eczema, acne, hyperpigmentation, and photoaging. These offer a mostly untapped source for the potential creation of active compounds for formulations used in cosmetics. As a

result, the demand for cosmeceuticals is rising, driven by an increased interest among consumers in chemical-free skin care. Sri Lanka is home to a wealth of high biodiversity that could be used in the beauty sector. 15 less-used plants from Sri Lanka were examined to determine their total phenolic content (TPC) and total flavonoid content, as well as their in-vitro anti-tyrosinase, anti-hyaluronidase, anti-elastase enzyme inhibitory, and anti-oxidant activities. The goal was to find new functional ingredients for skin-whitening and anti-aging preparations (TFC)[11].

Overheating during the summer leads the skin to become dehydrated, which results in wrinkles, freckles, pimples, pigmentation, and sunburns. Cracks, wounds, maceration, infections, and hair loss are all side effects of the harsh winter on the skin and hair. They could only rely on the knowledge and understanding of nature gathered in ayurveda. The ayurvedic science had used a variety of plants and herbs to create cosmetics for protection against the elements and attractiveness[5].

It is a well-known truth that alternative medical practices have always contributed significantly to the provision of healthcare around the world. These streams are made up of various medical systems, each of which has its own concepts and philosophies for promoting health, preventing disease, and diagnosing, treating, and managing disease. The World Health Organization (WHO) has defined these streams as traditional medicines in terms of health practices, approaches, knowledge, and beliefs in corporation plant, animal, and mineral-based medicines, spiritual therapies, manual techniques, and expertise, used alone or in combination to treat, diagnose, and prevent illness or maintain wellbeing[6].

The Ayurvedic Pharmacopoeia of India (API) is a legally binding document issued by the Indian government that lists the quality, strength, and purity of a number of pharmaceuticals that are produced, distributed, and sold by authorized manufacturers across the country. Compliance with the quality requirements set forth therein becomes required under the Drugs and Cosmetics Act of 1940 after a Pharmacopoeia, or an article in it, has been authorized by the body endowed with such jurisdiction (The Ayurvedic Pharmacopoeia Committee (APC)). APC is guided by the scientific body of the Pharmacopoeia Commission of Indian Medicine (PCIM), currently known as the Pharmacopoeia Commission of Indian Medicine & Homeopathy (PCIM&H), which is an apex body of the Ministry of AYUSH, Government of India[12].

These medical practices are collectively referred to as AYUSH in India, which includes Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homoeopathy. Indian Systems of Medicine (ISM) are medical systems that originated outside of India and absorbed into Indian culture. These systems are historically regarded as traditional or Indian in origin[7].

A natural product is defined as having all or almost all organically produced ingredients. Cream/ointment bases are a type of medication that are typically applied locally to the skin. Since the composition of cream must be founded on classical Ayurvedic principles, it is vital to ensure that the cream base is also secure and presumed to be natural wherever possible. For the best efficacy of herbal cosmetic, one should utilize a natural classical oil compound formulation[8].

The components found in vitamins, minerals, carotenoids, and anthocyanins, among others, that maintain skin healthy and glowing, repair DNA, delay ageing, and protect against UV skin damage are also abundant in herbal products. Due to the negative effects of skin exposure to UV radiation from sunlight, UV filters are now included in a variety of cosmeceutical products, such as moisturizing creams, anti-aging creams, aftershave products, and makeup. This is because of the benefits of phytochemicals, herbal nutrients, and minerals, among others, which had led to the formulation of UV filters such as sunscreen products[9].

The dermis and consequently the skin are structurally supported by the extracellular matrix (ECM). Proteoglycans, which are made by the fibroblasts of the dermis, are woven together with macromolecules like collagen, elastin, and fibronectin to form the ECM. The main structural protein is collagen, which gives cells a supporting framework and gives skin its tensile strength. Elastin is essential for giving the skin elasticity because of its special elastic recoil capabilities, while hyaluronic acid, a key glycosaminoglycan (GAG), is important in hydrating the skin by retaining water and keeping the body smooth, wet, and lubricated. Enzymes like matrix-metalloproteinases (MMPs; for example, collagenase), the serine protease elastase, and the mucopolysaccharide hyaluronidase, which are closely associated to the ageing process of the skin, are continually attacking these connective tissue macromolecules. Exposure to environmental elements, especially sun radiation (UV radiation), which has a variety of effects on human skin, causes the extrinsic skin ageing process, also known as skin photoaging. UV exposure alters the connective tissue through the production of lipid peroxides, cell contents, and enzymes, which results in physical changes to the skin. Additionally, UV exposure causes significant molecular alterations, such as altered signal transduction pathways that support the development of matrix metalloproteinases, decreased procollagen synthesis, and connective tissue damage. Lipid peroxidation, mitochondrial and DNA damage, as well as protein and gene alterations, are all consequences of ROS, which function as cell signalling agents. The activation of enzymes including collagenase, elastase, and hyaluronidase is another complex molecular process that ROS can start. In light of the fact that skin ageing is a multifaceted and complicated process, tactics used to counteract the deadly consequences of photoaging should concentrate on the various processes involved in its pathogenesis[10].

HISTORY OF COSMETICS

As long as there has been civilization, cosmetics and beautifying substances have existed.
Animal fat was utilized as a moisturizer by ancient cultures to keep their skin smooth. The usage of cosmetics can be shown in archaeological finds from ancient Egypt and Greece[13].

Castor oil, beeswax, olive oil, milk, and rose water were used for skin care in ancient Egypt. The ancient Greeks also utilized cosmetics; they applied bread dipped in milk on their faces at night as an anti-aging regimen cream and used roghan-e-zaitoon (olive oil) as a moisturizer. North Africa was home to the well-documented use of kohol and henna during the Misri tib or Egyptian medical era. A specific ointment comprised of red ochre, kohl, and sycamore juice was used to treat scars and burns. At that time, substances like fresh Moringa and frankincense gum were included in wrinkle cures. A poultice consisting of carob powder and honey, or an ointment made of honey, was an alternative treatment for the same condition. To improve breath odor, Africans chewed herbs like licorice root sticks, which are still used today.

Cosmetics were frequently employed by people in positions of social authority and priests even more strictly during Cleopatra's time. In this culture, the eye was given a lot of attention because it was seen to be a doorway to the spirit, and people with attractive eyes were thought to have enormous personal strength. For eyeliner, ancient Egyptians employed mixtures of green malachite and black kohol. Alchemists and beauticians were reportedly engaged by Queen Cleopatra to improve her renowned charms. She was also said to have a large collection of cosmetic recipes.

Cosmetics were employed during the Roman medical era as well. Jalinoos/Galen, a famous Roman physician who lived from 120 to 200 AD, is credited with creating the cold cream by combining rose oil with beeswax and then adding water. This renowned formula is being used today. Women in ancient Rome lined their eyes with kohol and employed lead-based concoctions to whiten their complexion.

Since about 3000 BC, Chinese people have employed gum Arabic, gelatin, beeswax, and egg white to stain their fingernails as part of traditional Chinese medicine. The colors applied to people's nails were a reflection of their social standing. Later royals donned black or red; Chou dynasty royalty wore gold and silver. It was against the law for lower class people to have brightly colored nails. In China, females decorated with flowers. Flowers were a significant decorating element for aesthetic purposes.

The phrase "cosmetics" or "cosmetology" is not new in Unani tib. Cosmetics were also used in ancient Greece. Several cosmetic procedures where Jezebel painted her eyelashes are described in the book of Esther. These can also be found in the Greek old testaments. Olive oil, also known as roghan-e-zaitoon, was utilized as a moisturizer in ancient Greece. The women of Greece applied an anti-aging regimen lotion to their faces at night using milk and bread. Since ancient times, cosmetics have been utilized in Persia and the modern Middle East. Due to the presence of atropine, the herb Atropa belladonna became known as the "women killer" in Greek culture. Due to the pupil dilation caused by its drops, females utilized them to enhance the appearance of their eyes[14].

DEFINITION OF COSMETICS

The Drugs and Cosmetics Act defines cosmetics as items that are meant to be rubbed, poured, sprinkled, sprayed, or otherwise applied to the human body or any portion of it for cleansing, beautifying, enhancing attractiveness, or changing the appearance. The cosmetic is not covered by the drug license presumption.

According to Brockhaus, cosmetics are substances or preparations made of substances that are primarily intended for external use on the human body or in the oral cavity for cleaning and personal hygiene to change the appearance or body odor or to convey scent. This definition is taken from the German Food and Commodities Act of August 15, 1974. As a result, the definition is based initially on the product's intended application, however this is not always the case. Even if a substance is classified as a cosmetic based on its intended use, we must also consider the possibility that it could also be utilized to affect disease. On this issue, the terms "cure," "alleviation," and "prevention" are used interchangeably. Even if a substance also has a secondary cosmetic purpose, it is still a medicine if its primary use is the treatment and alleviation of disease. Even if the cosmetic benefit is only incidental, a substance qualifies as a cosmetic if its primary function is to prevent disease.

But there are always exceptions, and in this case, the distinction is irrelevant if the product is meant to change the size or shape of the body. The "main" intervention of goods with a body-shaping impact on bodily functions is the basis for this rigorous classification as a drug. When determining the function that a particular product serves, consideration is given to the product's description, labelling, advertising, and presentation, but not to its actual suitability, which is typically unknown to the average consumer[15].

DEFINITION OF HERBAL COSMETICS

Herbal cosmetics are products made with phytochemicals derived from a variety of botanical sources that alter skin processes and supply nutrients for healthy skin or hair 13. Herbal cosmetics are products made from natural herbs that

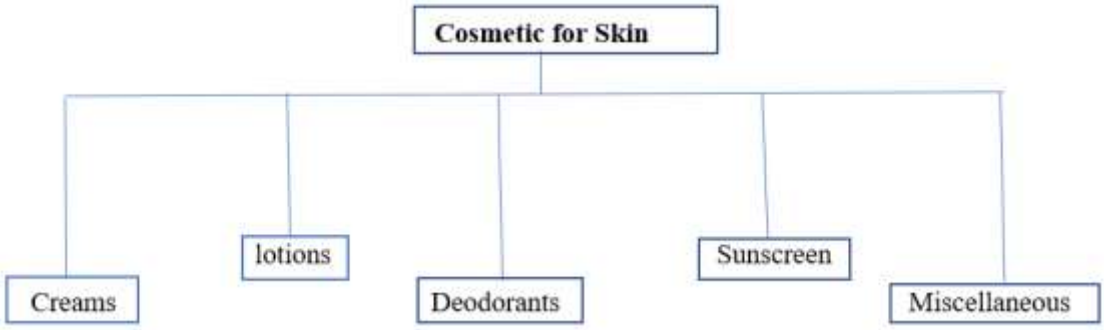
are utilized for their aromatic properties in the creation of cosmetics. The desire for natural materials and natural extracts in cosmetic preparations was sparked by the widespread notion that cosmetics with chemical bases are bad for the skin and by customers becoming more aware of the benefits of herbal products. New opportunities in the cosmeceutical business have been opened up by the rising demand for natural products. According to the Drug and Cosmetics Act, herbs and essential oils used in cosmetics cannot make any claims that they can penetrate deeper than the skin's outer layers or have any therapeutic benefits. Herbal cosmetics are subject to the same legal requirements and regulatory processes as other chemical substances used in cosmetic compositions[16].

THE REQUIREMENTS FOR THE BASIC SKIN CARE

Cleaning agent: Which clears the dirt, dead skin cells, and dust that clog skin pores. Vegetable oils including coconut, sesame, and palm oil are some of the popular cleaners.

Toners: Toner's aid to tighten the skin and shield it from various environmental pollutants and many of the chemicals that are present in the air. Witch hazel, geranium, sage, lemon, ivy burdock, and essential oils are a few of the herbs used as toners.

Moisturizing: Moisturizing makes the skin supple and velvety. Moisturizing results in a healthy glow and reduces the likelihood of ageing. Vegetable glycerin, sorbitol, rose water, jojoba oil, aloe vera, and iris are a few examples of herbal moisturizers[17].
Based on the type of application the formulations can be applied to skin, nail, hair, eyes.



THE BENEFITS OF HERBS MAY INCLUDE THE FOLLOWING[18]

- Improve people's physical and mental health.
- Boost each person's immune system.
- Toxin removal through detoxification.
- Help with sleeping and crashing.
- Boost stamina and mostly reduce fatigue.

ADVANTAGES OF HERBAL MEDICINE

- Herbal medicines have a long history of use and are more readily accepted and tolerated by patients.
- The only hope we have for sustaining supplies of affordable medications for the expanding global population is through the use of medicinal plants, which have a renewable source.
- Because India has a great agro-climatic, cultural, and ethnic biodiversity, the availability of medicinal plants is not a problem, particularly in emerging nations like India.
- The climate is heated during the growing and processing of therapeutic herbs and herbal products.
- Long-term and ostensibly uneventful usage of herbal remedies may attest to their efficacy and protection.
- The large arsenal of drugs acquired by contemporary medical science has been supplemented by many of the most effective medications from herbal medicine around the world, both in their raw form and as the unmixed chemicals that serve as the foundation for modern pharmaceuticals.

Skin aging

Skin ageing is particularly significant, because of its societal implications. It is visible and serves as the perfect model organ for studies on how the body ages. Both the skin and internal organs are similarly impacted by the "biological clock," which results in irreversible deterioration. However, renowned American dermatologist Nicholas Perricone writes in the opening of his book, "Wrinkled, sagging skin is not the inevitable effect of becoming older. It is an illness that you can battle. Botulinum toxin injection, microdermabrasion, filler injection, laser hair removal, and chemical peeling are the top five non-surgical cosmetic procedures, whereas liposuction, breast augmentation, eyelid surgery, nose reshaping, and breast reduction are significant cosmetic surgical procedures. The ageing process is influenced by genetic, extrinsic, and stochastic damage.

Intrinsic and extrinsic processes are the two basic causes of skin ageing. Environmental variables include sun exposure, air pollution, smoking, excessive alcohol consumption, and poor diet contribute to extrinsic ageing. Ageing intrinsically is dependent on time and genetic background. Smooth, thinning skin with prominent expression lines is one of the many manifestations of intrinsic ageing. Photo damage manifests as wrinkles, pigmented lesions, patchy hypopigmentations, and actinic keratoses in skin that has externally aged. It is crucial to use timely protection, such as chemical and physical sunscreens, and to stay out of direct sunlight. Alpha-lipoic acid, glutathione, vitamins E and C, coenzyme Q_{10}, and other antioxidants can lessen the effects of ageing. Three generations of retinoids, of which the first generation is widely regarded, are further anti-aging drugs. Exercise two or three times a week and a diet high in antioxidant-rich fruits and vegetables are advised[35].

Intrinsic aging

Time affects intrinsic ageing. Despite a robust antioxidant defense mechanism, damage caused by ROS affects cellular components like DNA, enzymes, and membranes. In addition to having a genetic basis, it is brought on by low sex hormone levels. The eukaryotic chromosome's terminal region, the telomere, has a significant function. Human telomeres become shorter with each cell division. Its upkeep is handled by telomerase, an enzyme. Telomeres appear to be the cause of lifespan. The majority of cells have a lifespan capability of 60 to 70 postnatal doublings before entering senescence, where they continue to function but are unable to divide. This process acts as the "biological clock" by facilitating end-to-end chromosomal fusions that cause karyotype disorder and apoptosis as a result. Growth factor alterations and aging-related hormone activities have an impact on skin ageing. The reduction of sex hormones like estrogen, testosterone, dehydroepiandrosterone (DHEA), and its sulphate ester is the most well-known (DHEAS). Melatonin, insulin, cortisol, thyroxine, and growth hormone are among the other hormones that also show a reduction. Additionally, increased levels of several signalling molecules, such as cytokines and chemokines, decrease, impairing a number of skin activities. Aged skin exhibits xerosis, laxity, wrinkles, slackness, and the development of benign tumors like cherry angiomas and seborrheic keratoses. These modifications are accompanied by histological characteristics. The stratum corneum and epidermal thickness, keratinocyte morphology, and their adherence are unaffected in the epidermis, although there is a noticeable drop in the number of melanocytes and Langerhans cells. The epidermal-dermal junction has undergone the most noticeable alterations, flattened the rete ridges and reduced surface contact between the epidermis and dermis. The flow of nutrients and metabolites between these two components is consequently decreased. Numerous fibroblasts and a reduction of dermal volume may be observed in the dermis. Changes in muscles, the loss of subcutaneous fat tissue, gravitational pressures, and the loss of face bone and cartilage substance are all factors that cause wrinkles. Expression lines develop as a result of repetitive tractions on the facial muscles that cause deep furrows to form over the forehead, in the space between the eyebrows, in the nasolabial folds, and around the eyes. "Sleeping lines" are caused by the skin folding repeatedly when sleeping in the same position on one side of the face[36].

Extrinsic aging

Ionizing radiation, extreme physical and mental stress, alcohol use, poor diet, overeating, environmental pollution, and UV radiation exposure are some of the variables that contribute to extrinsic ageing. UV light accounts for up to 80% of all these environmental influences. It is the most significant contributor to accelerated ageing of the skin. Both UVB (290–320 nm) and UVA (320–400 nm) are to blame, and the phenotype of photo exposed skin determines the skin changes brought on by UV radiation. Whereas the majority of UVB is absorbed, the epidermal level is where UVB mostly causes changes. Keratinocytes and melanocytes suffer DNA damage as a result. 8 to 12 hours after exposure, the affected cells start to look like sunburned cells. Over the next 12 hours, there will be a decrease in DNA production. Delayed consequences include actinic keratoses, lentigines, carcinomas, and melanomas. B as in burn or bad is a mnemonic for UVB. The epidermis and dermis are both damaged by UVA's deeper dermal penetration. Although ambient light contains 10 to 100 times more UVA than UVB, UVB has 1,000 times more powerful biological effects. The mnemonic for UVA is A as in ageing because it is widely acknowledged that UVA radiation plays a significant role in the pathophysiology of photoaging. The xeroderma pigmentosum factor (XPF), which is also present in the epidermis, and the collagen-degrading enzymes matrix metalloproteinases (MMPs) are both increased by UV light. Smoking is another environmental component that accelerates ageing. Characteristic terms include "smoker's face" or "cigarette skin," which connote greater facial wrinkling and an ashen and grey skin look. Long-term smokers often exhibit a prematurely old appearance. Skin that has become yellow and irregularly thickened is a result of UV or smoking-related elastin tissue degradation. Women on hormone replacement therapy do not experience a reduction in premature face wrinkling. The onset of facial wrinkling may also be influenced by genetic predisposition. It appears that smoking causes MMPs to become activated in a manner similar to that of those who have had a lot of sun exposure. Smoking decreases vitamin A levels and facial stratum corneum hydration, which is crucial for limiting collagen degradation[37].

SKIN RELATED DISORDERS- Some common skin related disorders are:

Acne (Acne Vulgaris)

According to the 2010 Global Burden of Disease Study, acne vulgaris (also known as acne) is the eighth most prevalent skin condition worldwide, with an estimated prevalence (for all ages) of 9.38%. The prevalence of acne varies across nations and age groups, with estimates ranging from 35% to nearly 100% of adolescents having acne at some point[19].

Up to 80% of adolescents experience acne vulgaris, a prevalent skin condition. Scarring and psychological distress are two major side effects of acne that last long after the active lesions have subsided. Its development troubles with body image, socializing, and sexuality might be brought on by its beginning in adolescence, which may increase the emotional and psychological difficulties faced during this time. There is evidence of psychological problems such unhappiness with one's looks, humiliation, self-consciousness, lack of confidence, and social dysfunction like avoiding or reducing social connections with peers and others of the opposite gender and having less job chances. Acne might have a negative impact on one's desire to engage in sports. Additionally, compared to controls, acne patients are observed to have higher rates of anxiety and sadness. In 6-7% of acne patients, suicidal thoughts were also detected. Although acne was once just thought of as a cosmetic condition, science has now established the psychosocial implications of the condition. According to studies, these consequences get better when acne is treated. Quality of life (QoL) issues related to acne must therefore be taken into account for the patients' overall care. We can better understand how acne affects a patient's daily life and evaluate the effectiveness of treatment by using QoL surveys. A generic health-related QoL questionnaire called the dermatological life quality index (DLQI), which asks questions about 10 distinct areas of daily living activities, was used in this investigation. Studies on the psychological effects of acne vulgaris in the Indian context are scarce. This study set out to determine how acne affected many psychological spheres of daily living[20].

Symptoms of Acne

Patients with acne frequently have comedones, papules, and pustules on their skin. Open comedones (blackheads), which are clogged follicles with apertures exposing their contents to the air, and closed comedones (white heads), which are clogged follicles without an opening, are the two main categories of comedones. Papules are raised skin lesions with a diameter of less than 1 cm, whereas pustules resemble papules but are inflammatory and filled with pus. Nodules and cysts, inflammatory, swollen lesions that are at least 5 mm in size, may be seen in people with severe acne. Patients with acne may also have other symptoms like scarring, erythema, and hyperpigmentation. The discomfort caused by acne's clinical signs may not be the only unpleasant thing that patients go through. An association between acne and employment has been suggested by a study that found considerably greater unemployment rates among acne cases compared to controls. Additionally, acne has been shown to negatively impact people's social lives, sense of self, and perceptions of their bodies, and it frequently co-occurs with psychiatric problems including despair and anxiety. A study estimated that the expense of treating acne in Germany adds up to 400 million Euros yearly. Acne is also linked to significant financial expenditures[19].

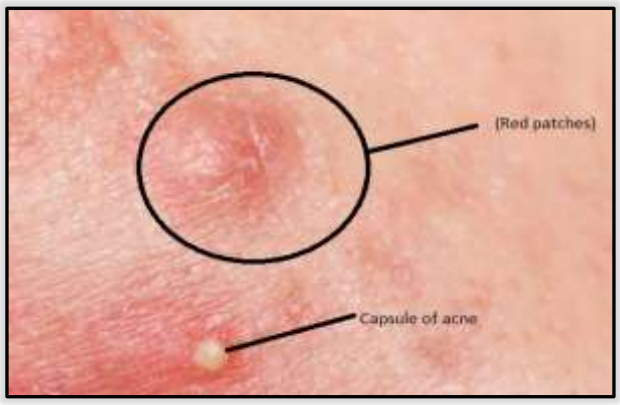


Fig: 1 (Image of skin acne)

Atopic Dermatitis (Eczema)

Atopic dermatitis is a complex and multifaceted pathophysiology that includes components of barrier failure, changes in immune responses that are cell-mediated, IgE-mediated hypersensitivity, and environmental variables. Filaggrin mutations that cause a loss of function have been linked to severe atopic dermatitis because they may cause more trans-epidermal water loss, pH changes, and dehydration. There have also been discovered additional genetic variations that may affect the skin's barrier function and give rise to an atopic dermatitis phenotype. Atopic dermatitis is thought to be caused by an imbalance of Th2 to Th1 cytokines, which can affect cell-mediated immune responses and enhance IgE-mediated hypersensitivity. Both of these factors may contribute to the onset of atopic dermatitis. The impact of pollutants like airborne formaldehyde, harsh detergents, scents, and preservatives, as well as the role of the environment in the development of atopic dermatitis, must also be considered. The harsh alkaline detergents used in some skin care products may also adversely affect the pH of the skin, resulting in alterations in enzyme activity and irritation. Innate and adaptive immune mechanisms can both be activated by environmental contaminants[21].

Eczema, commonly known as atopic dermatitis (AD), is a persistent, recurrent skin condition. In the US, it affects roughly 10.7% of children and 7.2% of adults, respectively. Early infancy is typically when AD first manifests, and the entire family may be affected. Additionally, AD is becoming more often acknowledged as a condition that frequently manifests in adulthood or starts there. As a result, AD can negatively impact patients' and their families' lives at all stages of life. This includes effects on quality of life (QoL) as well as effects on relationships, education, and employment. Because of

the high direct medical costs and lost productivity caused by AD, patients, their families, and society as a whole are severely financially burdened. The burden of AD disease is comprised of all of these factors—QoL, social, intellectual, and vocational consequences, as well as direct and indirect expenditures[22].

AD has a complex etiology. Current research on the pathophysiology of AD focuses on immune system dysregulation and skin barrier abnormalities in genetically and environmentally vulnerable individuals. Pruritus, dry skin, edema, excoriations, lichenification, and oozing are some of the signs and symptoms of AD that are brought on by the interaction of these mechanisms. Depending on the patient's age, the severity and chronicity of the disease, AD may show differently. In addition to topical anti-inflammatory drugs, phototherapy, and systemic immunomodulators, AD treatment first emphasizes the regular practice of fundamental skin care. New targeted therapy solutions are currently being developed. The treatment and prevention of AD flare-ups, as well as the preservation and restoration of the skin barrier, are the fundamental objectives of AD managements[23].

Fig: 2 (Image of Atopic Dermatitis)

Shingles (Herpes Zoster)

Varicella zoster virus (VZV), which has lain latent in the spinal and cranial sensory ganglia since first infection in childhood, reactivates to cause herpes zoster (HZ), also known as shingles. Herpes zoster causes a painful, erythematous, maculopapular rash with fluid-filled lesions that eventually crust over. Unilateral appearance and confinement to a single dermatome are distinctive characteristics that set HZ apart from other dermatological rashes. The VZV virus is reactivated to produce HZ via a number of methods. Although antiviral medication is a treatment option, HZ has numerous ocular, vascular, visceral, and neurological consequences. These issues put financial strain on patients by raising the entire cost of healthcare across the board. The main HZ consequence, postherpetic neuralgia, which affects 20% of individuals and has an estimated incidence of 0.5–1 million, is pain that lasts for more than 90 days following the onset of shingles. In North America, Europe, and Asia, the incidence of HZ ranges from 3 to 5 per 100 000, but more significantly, it appears to be rising with time. It is unknown to what this may be related. Many of the risk factors for VZV reactivation are linked to a reduction in T-cell immunity, including age and immunosuppression, although some are also linked to stress[24].

The literature makes it obvious that shingles or HZ infection affects millions of people every year on a global scale; in the US, more than 1 million new cases of HZ are reported each year. In North America, Europe, and Asia, the incidence of HZ ranges from 3 to 5 per 100 000, but more significantly, it appears to be rising with time. It is unknown to what this may be related. Many of the risk factors for VZV reactivation have been linked to a decline in T-cell immunity, including ageing and immunosuppression, although others are also connected to family history or stress. We have previously performed a meta-analysis to assess the level of risk associated with various immunosuppressive regimens in patients with rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), and inflammatory bowel disease (IBD). This time, we concentrated on combining data from all studies assessing the risk of contracting HZ infection, with the exception of those assessing the risk associated with using immunosuppressive drugs[24].

It is a viral illness brought on by the varicella-zoster virus reactivating after being dormant in the dorsal root ganglia or the sensory ganglia of the cranial nerve following an earlier varicella infection. Varicella, also referred to as chickenpox, affects kids, whereas herpes zoster affects adults or the elderly. The immune system's inability to stop the virus' latent replication is thought to be the cause of zoster. Herpes zoster incidence and immunological function are closely connected. Shingles rarely appear in those who have a high level of immunity. The infection is not benign and has numerous possible manifestations. Many individuals still experience the moderate to severe pain known as postherpetic neuralgia after herpes zoster has cleared up[25].

Fig: 3 (Image of Shingles)

Hives (Urticaria)

People often experience urticaria, sometimes referred to as hives, which is characterized by erythematous, edematous, itchy, and transitory plaques that affect the skin and mucous membranes. Acute spontaneous urticaria, chronic spontaneous urticaria, chronic inducible urticaria, and episodic chronic urticaria are the different classifications. Many things are blamed for the etiology, including infections, medications, food, psychogenic factors, and respiratory allergies, although sometimes it is idiopathic. Plaques that are red, swollen, and irritating are present clinically. Erythematous, edematous, itchy, and transitory urticarial plaques covering the skin and mucous membranes are symptoms of the disease urticaria also referred to as hives by people. It is a fairly typical thing. 8.8–20% of people in the neighborhood have an urticaria attack at least once in their lifetime. All ages and genders can experience it, however young individuals tend to experience it more frequently. Urticaria and angioedema are combined in 40–50% of patients, while just urticaria or angioedema is present in 40% and 20% of patients, respectively[26].

URTICARIA CASES ARE CLASSIFIED AS EITHER ACUTE OR CHRONIC.

Acute urticaria

The presence of spontaneous wheals or angioedema for six weeks or less is what is known as acute urticaria (AU). When hemodynamic instability, respiratory, gastrointestinal, or neurological symptoms are present in acute cases, it is crucial to rule out anaphylaxis. The most frequent causes of food intolerance when it exists include infections, drug reactions, and drug reactions. About 50% of cases involve eliciting causes, with upper respiratory infections being one of them[27].

Chronic urticaria

Chronic spontaneous urticaria and chronic inducible urticaria are two subtypes of chronic urticaria, respectively. Functional immunoglobulin G antibodies to the high-affinity immunoglobulin E receptor FcRI or to immunoglobulin A are linked to up to 30% of cases. The most often linked factors among individuals for whom an etiology is hypothesized include infections, medicines, diet, and psychological issues. Chronic inducible urticaria is distinguished by its capacity to be repeatedly and reliably provoked[27].

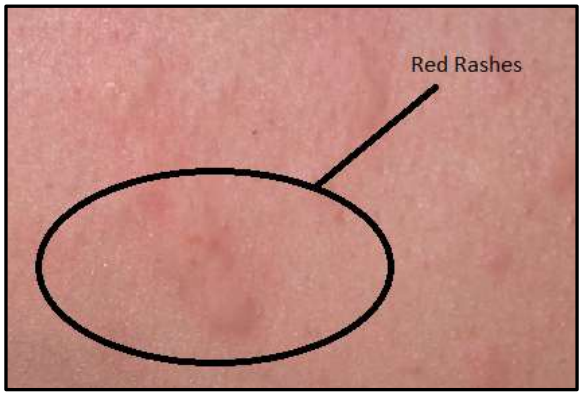


Fig: 4 (Image of Hives)

Contact Dermatitis

Increased allergen penetration, immunological dysregulation (including common cytokine pathways), and frequent use of emollients and topical medicines are all risk factors for allergic contact dermatitis in atopic dermatitis (AD) patients (ACD). Recent comprehensive evaluations have revealed that both infants and adults with AD may experience severe clinical issues related to ACD. ACD is still a significant comorbidity and probable exacerbator of AD in clinical practice, even if this is still debatable. Commonly identified in the personal care items used by AD patients include the allergens lanolin, neomycin, formaldehyde, sesquiterpene lactone mixture, Compositae mixture, and perfumes[28].

A common diagnosis caused by exposure to a chemical or chemicals in a patient's personal care products, home, or workplace is allergic contact dermatitis. The process of management and education starts after patch testing is over. Patient education is essential for the correct management and treatment of the patient once the allergens that are the cause of the symptoms have been determined. If the dermatitis is to go away, this has to happen. Comprehensive education is essential, and a number of resources are mentioned. Other factors a doctor must take into account include occupational contact dermatitis and photoallergic contact dermatitis[29].

If a patient is exposed to a "topical" allergen through a pathway other than the skin surface, they may become sensitized to it and develop systemic contact dermatitis (SCD) (i.e., ingestion, parenteral, suppository, implanted, and inhaled). Oral, anogenital, flexural, fixed, reactivation of a prior positive patch test site or flare of prior dermatitis, vasculitic lesions, vesicular hand dermatitis, or a broad dermatitis are some of the possible manifestations of dermatitis. A rare dermatologic disorder called PACD may lead to photosensitivity. In contrast to ACD, PACD is a type IV hypersensitivity reaction that necessitates sensitization and elicitation and calls for the exposure of a chemical to ultraviolet light. A photoallergen is created as a result of a chemical reaction following exposure. Ultraviolet A is predominantly the active wavelength of light in PACD. Another intriguing and difficult aspect of contact dermatitis is allergic or irritating contact dermatitis brought on by occupational exposures. It is crucial that the doctor assessing these workplace injuries is knowledgeable in both workers' compensation procedures and contact dermatitis. Critical elements of the history include the effects of personal protective equipment, vacation, and specifics of the job description and exposures. The entire process of the patient's job, from beginning to end[29].

Fig: 5 (Image of contact dermatitis)

Rosacea

A widespread, chronic skin condition affecting the face called rosacea is characterized by erythema, papules, pustules, telangiectasias, flushing, phymatous changes, and ocular symptoms. Avoiding triggers, taking care of your skin, and getting treatments that target specific traits are all part of management[30]. Rosacea is a long-lasting, inflammatory skin condition marked by phymatous changes, papules/pustules, telangiectasia, and flushing. In people with rosacea, itching, burning, or stinging are frequent secondary symptoms. Immune dysfunction, Demodex infection, and UV radiation exposure are thought to be important contributors to the pathogenesis and pathophysiology of rosacea. The four kinds of rosacea were erythematotelangiectatic, papulopustular, phymatous, and ocular in 2002. 2017 saw the recommendation of a phenotype-based approach to diagnosis and classification. Both fixed Centro facial erythema and phymatous alterations are regarded as independent rosacea diagnostic indicators. Expert consensuses and rosacea treatment guidelines have recently included a range of treatment alternatives, including topical therapies, oral therapies, light therapy, skin care, and lifestyle management. Recently, top-notch clinical trials for the treatment of rosacea have been carried out. For clinical decision-making, a systematic review including GRADE assessments on rosacea treatments has been extremely beneficial. However, as controlling rosacea continues to be difficult, therapy choices for the condition should also be increased[31].

A transitory face erythema (flushing), along with a background of chronic Centro facial erythema, and telangiectasia are the main features of erythematotelangiectatic rosacea. Due to an overlap with the cutaneous manifestations of chronic actinic damage in fair-skinned people, the clinical definition can be hard. A varied number of tiny erythematous papules and pustules as well as a varying degree of central facial erythema characterize papulopustular rosacea. The nose is the part of the face that is most frequently affected by phymatous rosacea, which manifests as tissue hypertrophy, thickness of the skin, and sebaceous gland hyperplasia. Ocular rosacea symptoms include general complaints of dryness, gritty feelings, tearing, itching, and recurrent sties. Blepharitis, a more severe form of ocular rosacea, frequently includes conjunctival injection, lid margin telangiectasia, chalazion, or hordeolum development[32].

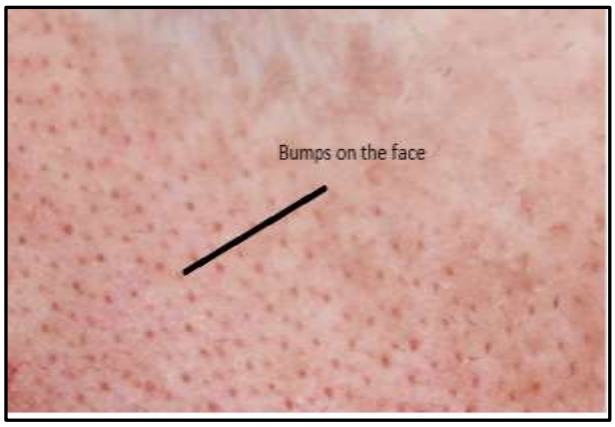


Fig: 6 (Image of Rosacea)

TREATMENT FOR SKIN PROBLEMS

For treatment of skin problem, we can use a therapy like

Phototherapy

- **Ultraviolet (UV) Therapy** - oral and topical photosensitizers such 8-methoxypsoralene (PUVA), phenylalanine (PAUVA), or khellin (KUVA), a significant body of expertise has been amassed over the past 30 years Although PUVA therapy was the first treatment for vitiligo to be proven effective, meta-analyses of observations made over the past decade revealed that only 10% of patients experienced considerable or complete repigmentation; in addition, 30% of patients experienced no improvement or even worsening[44].
- **UVB** - There is mounting evidence that UVB, whether broad- or narrow-band, is more effective than UVA at causing vitiliginous skin to repigment. After 12 months of broad-band UVB therapy, Koster and Wiskemann reported that 75% repigmentation had been attained in 8 of 14 patients[45].

Immunomodulators - Recent findings have confirmed the involvement of humoral and cell-mediated immune responses in the aetiology of vitiligo. Melanoma research has provided evidence for the significance of cell-mediated immunity in the pathogenesis of vitiligo, showing that both CD8+ and CD4+ T lymphocytes are crucial in the destruction of melanocytes[46].

Surgical Therapy - A homogeneously repigmented recipient region achieved through the transplantation of autologous melanocytes is the goal of surgical treatment for vitiligo. The use of split-thickness grafts, cultured epidermal grafts, cellular grafts, epidermal blister grafts generated by suction, and autologous transplantation of minigrafts (punch grafts) are among the surgical procedures[47]. Despite of so many treatments available still the population focuses on using the herbal formulations in various forms like herbal face packs, semisolid dosage preparations.

SOME INGREDIENT HAVING ANTI-AGEING EFFECT

Sandal Wood

Fig: 7 (Image of sandal wood)

Drug profile

Kingdom: Plantae
Order: Santalales

Family: Santalaceae
Genus: Santalum

Botanical name: Santalum album

Sandal wood is also known Genus Santalum. It is a plant species that has value both commercially and culturally that belongs to the family Santalaceae of the genus Santalum. The main component of sandalwood's commercial and cultural significance is the oil that it contains, primarily in the heartwood. You can use it to get rid of the black spots if your skin is greasy. Sandalwood has anti-ageing and anti-tanning effects. Additionally beneficial to the skin are its toning, emollient, antimicrobial, calming, and healing properties[33]. Sandalwood keeps the skin cool, fair, and healthy while protecting it from the damaging effects of environmental pollutants. Sandalwood is advantageous an ayurvedic herb with antibacterial qualities is used to treat scar removal and a variety of skin conditions[34]. The wood from a family of trees referred to as sandalwoods is processed into sandalwood powder. The tree comes in a variety of forms; hence the qualities of the various powders vary. While some sandalwood is white and some is deep red, the majority is an earthy, brown color[38].

Uses

Anti-aging: Antioxidants included in sandalwood help to stop skin sagging and the subsequent development of wrinkles. Sandalwood can also be used to stop those dreadful pimples from forming on your skin.

It gets rid of scars and relieves skin irritation.
It has both anti-aging and anti-tanning properties.

Tulsi

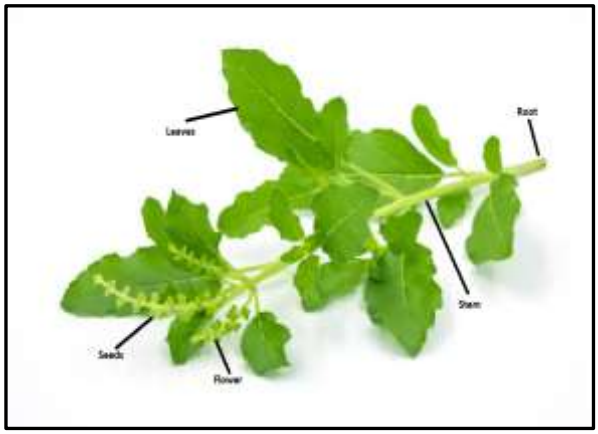


Fig: 8 (Image of Tulsi)

Drug profile

Kingdom: Plantae
Division: Magnoliphyta
Order: Lamiales
Family: Lamiaceae
Genus: Ocimum
Species: O. tenuiflorum

Botanical name: Ocimum tenuiflorum

Tulsi is one of the most widely used plant in all over the world and it is also known as “QUEEN OF PLANT” and the “MOTHER MEDICINE OF NATURE” due to its medicinal properties like: countering metabolic stress through normalization of blood glucose, blood pressure and lipid levels, and psychological stress countering through positive effect on memory and cognitive function[33]. Ocimum tenuiflorum, also referred to as holy basil, tulsi, or tulasi, is a perennial aromatic plant in the Lamiaceae family. Its original habitat is the Indian subcontinent, and it is widely farmed across the tropical regions of Southeast Asia[38].

Uses

Helps to fight with acne.
Supports ageing with good skin.
Lowers pigmentation.
Eczema-related skin disorders are soothed.
It has anti-aging properties.

Turmeric

Fig: 9 (Image of Turmeric)

Drug profile

Kingdom: Plantae
Division: Magnoliphyta
Order: Zingiberales
Family: Zingiberaceae
Genus: Curcuma
Species: C. longa

Botanical name: Curcuma longa.

It assists in reducing stretch marks and effectively erasing wrinkles and fine lines. Skin that has accidentally been burned quickly feels better and have anti-ageing, antibacterial, anti-inflammatory, and antiseptic qualities[39]. Another historic spice known as white turmeric, or zedoary, is a rare sight in India, while conventional yellow haldi is more commonly grown. The majority of the time, ginger that looks similar has taken its place. White haldi, like yellow turmeric, is infrequently used but is thought to be healthful[38]. Due to its ability to filter blood and promote wound healing through its antiseptic properties, turmeric has been employed in this recipe. It treats skin conditions brought on by blood impurities. It is an excellent anti-allergic and anti-inflammatory agent. It helps to lighten the skin tone since it contains phytoconstituents, primarily terpenoids. Turmeric increases skin suppleness and slows the appearance of wrinkles. It treats dull skin, uneven skin tone, and pigmentation[40].

Uses

Anti-microbial, Anti-aging and Anti-inflammatory qualities.
Have Anti-allergenic qualities.
Have Anti-cancer characteristics
Have Larvicidal characteristics.
Skin-healing capabilities.

Aloe Vera

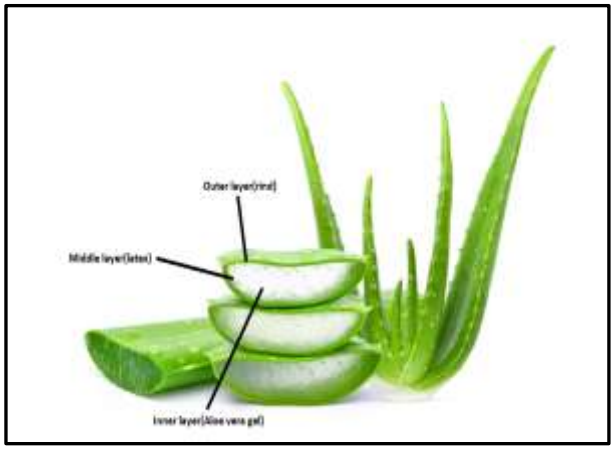


Fig: 10 (Image of Aloe Vera)

Drug profile

Kingdom: Plantae

Division: Tracheophyta
Class: Magnoliopsida
Order: Asparagales
Family: Asphodelaceae (Liliaceae)
Genus: Aloes
Species: Algae

Botanical name: Aloe barbadensis miller.

Aloe barbadensis miller is the name of the plant that produces aloe vera. It is a shrubby or arborescent, perennial, succulent, pea-green plant that is a member of the Liliaceae family. Africa, Asia, Europe, and America's dry climates are where it primarily grows. It Maintains Smooth Skin. It delays the visible indications of ageing just Perfectly. It resolves heels with Cracks and it also hydrates the Skin[39]. Aloe vera is an excellent skin moisturizer. Aloe vera moisturizes, refreshes, and maintains the skin's youthful appearance. As a result of its anti-microbial properties, aloe vera is excellent for treating acne and pimples. Numerous nutrients, including glycerin, sodium palmate, sodium carbonate, sodium palm kemelate, sorbitol, and others, can be found in aloe vera powder[41].

Uses

It has beneficial plant components in it.
It provides antimicrobial, anti-aging, and antioxidant qualities.
Eliminates constipation.
It might make skin better and keep wrinkles at bay.
Blood sugar levels are decreased.

Nutmeg

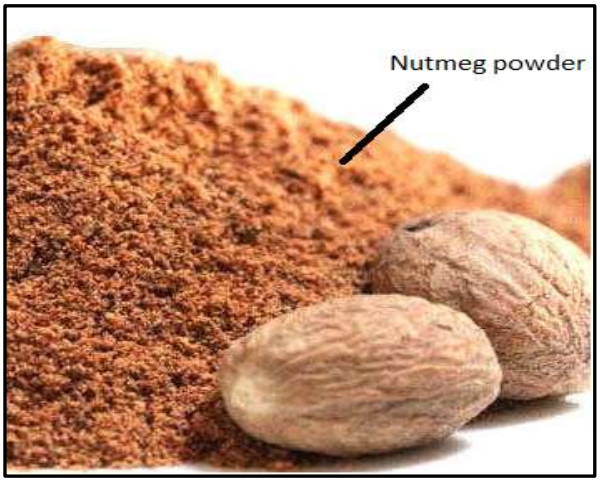


Fig 11 (Image of nutmeg powder)

Drug profile

Kingdom: Plantae
Order: Magnoliales
Family: Myristicaceae
Genus: Myristica
Species: M. fragrans

Botanical name: Myristica fragrans

The analgesic, anti-inflammatory, anti-aging, anti-septic, and anti-bacterial properties of nutmeg are well known. It assists in minimising wrinkles, fine lines, and other ageing symptoms. Additionally, it aids in minimising the appearance of acne scars[42]. In addition to 0.08% of an acidic component, nutmeg also contains 5 to 15% volatile oil, lignin, stearin, starch, gum, and colouring materials. Clemicine, Myristicin, Geraniol, Borneol, Pinene, Camphene, and Dipentene are all present in volatile oil. Additionally, it has trace amounts of isoeugenol, p-cymene, eugenol, and safrol[43].

Uses

The pigmentation is reduced.
The mild abrasive quality of nutmeg makes it a fantastic skin exfoliant. As a result, skin becomes soft and smooth.
Deals with oily skin.
Anti-oxidant and anti-aging effects are present in nutmeg. Thus, it encourages youthful skin.
Natural cleanser for toning.

Mushroom powder

Fig 12 (Image of mushroom powder)

Drug profile

Kingdom: Fungi
Division: Basidiomycota
Class: Agaricomycetes
Order: Agaricales
Family: Agaricaceae
Genus: Agaricus
Species: A. bisporus

Botanical name: Agaricaceae

A growth of fungi that often resembles a domed cap on a stalk with gills on the underside of the top. The reproductive structure that some fungus generate is a mushroom. The fruit bodies of the members of the order Agaricales, whose type genus is Agaricus and type species is the field mushroom, Agaricus campestris, are what are commonly referred to as mushrooms. However, in contemporary molecularly defined classifications, not all members of the order Agaricales produce mushroom fruit bodies, and numerous other gilled funguses, generally known as mushrooms, are found in different orders of the class Agaricomycetes. Chanterelles, for instance, are found in the Cantharellales, while false chanterelles like Gomphus, milk-cap mushrooms like Lactarius and Lactifluus, russulas, and Lentinellus, are found in the Gomphales, tough, leathery genera like Lentinus and Panus are found in the Polyporales, but Neolentinus is found in the Gloeophyllales, and the tiny pin-mushroom. Common fungi like the common fairy-ring mushroom, shiitake, enoki, oyster mushrooms, fly agarics and other Amanitas, magic mushrooms like species of Psilocybe, paddy straw mushrooms, shaggy manes, etc. are all found in the primary group of mushrooms, the Agaricales[38].

Uses

Moisturises skin.
Reduces acne.
Brightens the skin.
Has advantages against ageing.

Papaya

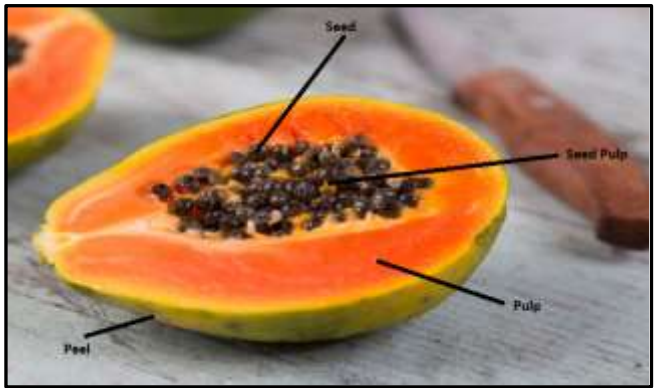


Fig: 13 (Image of Papaya)

Drug profile

Kingdom: Plantae

Order: Brassicales
Family: Caricaceae
Genus: Carica
Species: C. papaya

Botanical name: Carica papaya
Papaya is also known as Carica papaya and also called pawpaw/papaw. It belongs to the family of Caricaceae. It aids in the removal of dead skin cells and prevents hair loss. It is used for treating sore and cracked heels. It lightens the skin[39].

Uses
Yummy & Packed with Nutrients.
Has powerful antiaging and antioxidant effects.
Possesses anti-cancer properties.
Might Enhance Heart Health.
Helps to prevent skin damage.

BENEFITS OF APPLYING FACE PACK[48]
Nourishes the skin. Fruit face packs give skin the nourishment it needs.
Based on its herbal elements, helps to reduce acne, pimples, scars, and blemishes.
Typically, face packs eliminate the skin's dead cells.
The skin is soothed and relaxed by these face masks.
In a short amount of time, they help in restoring the skin's lost brightness and glow.
Natural face masks improve skin texture and tone and give skin a glow when used frequently.
Face packs should be used wisely to combat the damaging effects of pollutants and severe temperatures.
They help in preventing early skin ageing.
The development of wrinkles, fine lines, and skin sagging can be successfully prevented by utilizing natural face packs.
Natural face masks give the skin a glowing, youthful appearance.

PRECAUTIONS TO BE TAKEN WHILE APPLYING FACE PACK[49]
Choose the face pack based on the type of skin you have. Before using a face pack, get the advice of a natural therapist or a skin expert.

Not more than 15 to 20 minutes should be spent with the face pack on the face. Keeping for a very long time may cause the skin to droop, the development of wrinkles, and the growth of open pores.
Apply a face pack once every week.

Avoid attempting to scratch or peel off the dried face pack. This could injure the skin underneath. Spray room-temperature water on your skin before removing the dried face mask. Roll an ice cube on the skin of your face after removing the mask. This helps to tighten skin and seal pores that are open. Additionally, it calms and tones the skin.
Don't scrub your face too hard. Dark patches and pimples may appear as a result.

When you have used a face pack, avoid heat.
Do not apply a face pack close to the "eye zone." The skin around the eyes is extremely thin. The delicate skin around the eyes could be harmed during the face pack removal process.

PREPARATION OF HERBAL FACE PACK
To create a stable cosmetic formulation, the base must be prepared before the active components are added. The compatibility of the active components affects a product's stability and efficacy. Various base formulations were made using ingredients[38].

PROCEDURE
Gather all the herbal components, such as sandalwood, turmeric, tulsi, aloe vera, nutmeg, mushroom, papaya, dry them and then ground them individually. For the creation of the face pack, each herbal powder component was weighed separately. With the aid of a mortar and pestle, all of these ingredients were combined to create a consistent mixture. To achieve uniform size, pass each ingredient powder through sieve no. 40. After that, it was kept in an airtight container[38].

EVALUATION OF FACE PACK
Organoleptic Evaluation
It is being, effecting, or relating to qualities (such as taste, colour, odour, and feel) of a substance (such as a food or drug) that stimulates the sense organs.

Physical Evaluation
The microscope approach was used to measure the particle size. By measuring bulk density, tapped density, and angle of repose using funnel methods, the flow property of the dried powder in mixed form was assessed.

Physicochemical Evaluation
An incinerator was used to measure the ash content, a pH meter was used to determine the pH, and loss on drying was also measured.

Rheological features
Rheology is the science of measurement of deformation. Virtually all materials deform in response to an imposed stress and the materials present in the eye range from liquid-like soft-solid behaviour.

Irritancy test
Mark a 1-square-centimeter area on the left dorsal surface. A specific amount of prepared face packs was applied to the designated region, and the application time was recorded. Irritation, erythema, and edema were monitored for up to 24 hours and reported if present.

Stability studies
By keeping the created formulation at various temperatures for a month, stability testing was done on it. The packed glass vials of the formulation were examined for physical characteristics such color, odor, pH, consistency, and feel after being stored at various temperatures, including room temperature, 350°C, and 400°C.

Shinoda test
A few drops of strong hydrochloric acid (HCL) were added to the ethanolic extract. The magnesium turnings were then added to the solution, and the development of a pink red color was watched.

REVIEW OF LITERATURE
1. **Nagre et.al (2022),** state that the use of herbal products and subsequent adoption of more natural fashion are currently trends on a global scale. People like organic meals, herbal remedies, and other natural products.
2. **Kurele et.al (2015),** state that people like natural superfood, herbal cures, and the Ayush System of Medicine, which includes Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homoeopathy.
3. **Naidoo et.al (2022),** state that consumers are more focusing on buying cosmetic items that support emotional and mental well-being, which are referred to as self-care products, as the idea of beauty shifts from glamour to youthfulness and healthy lives.
4. **Rokade et.al (2017),** state that almost everyone has acne vulgaris, a very common skin condition, at least once in their lifetime. In teenage acne is most common, the illness also affects many men and women in their 20s and 30s.
5. **Kumar et.al (2021),** state that herbs are easily available and inexpensive, herbs are frequently used as therapeutic agents. Herbs have been used for cleaning, beautifying, and treating numerous skin conditions since ancient times.
6. **Maske et.al (2019),** state that the largest portion of the body that functions as a mirror, reflecting one's health, is the skin on the face. For the skin to remain clear, shiny, and healthy, it needs a balanced diet that includes amino acids, lipids, and carbs.
7. **Bhutkar et.al (2019),** state that in ayurveda, "Mukha lepa" refers to the herbal paste used to cure acne, pimples, scars, markings, and pigmentation on the face. "Mukha lepana" refers to the application of this herbal concoction to the face.
8. **Cohen et.al (2014),** state that the ayurvedic plant is beneficial for skin and medicinal plant are also beneficial for skin which almost have no side effect.
9. **Pal et.al (2017),** state that for preparation of face pack we can use drying, grinding, mixing methods.
10. **Saudagar et.al (2018),** state that the Greek term "kosm tikos," which means to have strength, order, or ability in decorating, is where the English word "cosmetic" originates. Cosmetics have a history that originate from hunting, fighting, religion, and credulity, and later to medicine.

CONCLUSION
After reading this article, the readers can conclude that there are various types of skin related issues that are faced by people worldwide. Ageing is one of those faced by both men and women different types of pharmaceutical industries across all over the world are creating medications to solve this issue by creating anti-ageing products like creams, lotions and face pack. Face packs are one of those pharmaceutical cosmetic preparations which are made up of both natural substances and artificially synthesized substances but selection of natural substances is preferred by maximum industries because they have got such awful preparations which are beneficial to the skin as well as contains almost no adverse effects. The maximum ingredients used in preparing the herbal face pack has got many advantages and therapeutics properties like antibacterial, antiacne, antimicrobial activities. For creating a specific herbal face pack there are many types of preformation considerations and different evaluation parameters and that produce the substance should pass all of the day tests and parameters to get completely ready to use. There are lot of inventions needs to be done in the field of

phytomedicines for preparations of herbal face packs as these preparation can benefit all age groups with diverse skin problems. Many developed countries are dependent on herbal preparations made from nanotechnology. Many reputed derma company are using the extracts of medicinal plants to avail their therapeutic effect. This research will help the scientist to explore the development of such face pack which contains some unique phyto constituents.

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