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A Review: Herbs Used in Cosmetics

Yewale Nutan Bhagavat, Shelke Sejal, Pooja Mehetre, Mohini Chaudhari
Shraddha Kadam, Prof. Ms. Shelke D. S.
Samarth Institute of Pharmacy, Belhe, Pune, India

Abstract: *Human beings have been using herbs for different purpose like food, medicine, beautifying. The word cosmetic was derived from the Greek word "kosm tikos" meaning having the power, arrange, skill in decorating. The origin of cosmetics forms a continuous narrative throughout the history of man as they developed. The man in prehistoric times 3000 BC used colours for decoration to attract the animals that he wished to hunt and also the man survived attack from the enemy by colouring his skin and adorned his body for protection to provoke fear in an enemy (whether man or animal). The origin of cosmetics were associated with hunting, fighting, religion and superstition and later associated with medicine Herbal Cosmetics, here in after referred as Products, are formulated, using various permissible cosmetic ingredients to form the base in which one or more herbal ingredients are used to provide defined cosmetic benefits only, shall be called as "Herbal Cosmetics". The natural herbs and their products when used for their aromatic value in cosmetic preparation are termed as herbal cosmetics. The increased demand for the natural product has created new avenues in cosmeceuticals market.*

Keywords: Herbal cosmetics, skin cosmetics, tooth cosmetics, hair cosmetics

I. INTRODUCTION

The concept of beauty and cosmetics dates back to ancient mankind and civilization. Generally herbalcosmetics are also referred to as natural cosmetics. Herbal cosmetics are formulated, using different cosmetic ingredients to form the base in which one or more herbal ingredients are used to cure variousskin ailments. Plants are highly used for development of new drug products for cosmeceuticals and pharmaceutical applications. Herbal cosmetics are the products in which herbs are used in crude or extract form. Herbal Cosmetics, referred as Products, are formulated, using various permissible cosmetic ingredients to form the base in which one or more herbal ingredients are used to provide defined cosmetic benefits only, shall be called as "Herbal Cosmetics". Herbs do not produce instant cures. They offer a way to put the body in proper tune with nature. A huge number of cosmetic and toiletry formulation shave been designed and developed based upon Indian Herbs recently. Other thantraditionally documented applications, some modern trials have also been using the utility of Indian herbs in Personal Care products. The demand of herbal medicines is increasing rapidly due to their skin friendliness and lack of side effects. The best thing of the herbal cosmetics is that it is purely made by the herbs and shrubs and thus is side-effects free. The natural content in the herbs does not have any side effects on the human body; instead provide the body with nutrients and other useful minerals. The term Cosmeceuticals was first used by Raymond Reed founding member of U.S Society of Cosmetics Chemist in 1961. He actually used the word to brief the active and science based cosmetics.

Natural products: The name itself suggests that herbal cosmetics are natural and free from all the harmful synthetic chemicals which otherwise may prove to be toxic to the skin. Instead of traditional synthetic products different plant parts and plant extracts are used in these products,

e.g. aloe vera gel and coconut oil. They also consist of natural nutrients like Vitamin E that keeps skinhealthy, glowing and beautiful. For example, Aloe vera is a herbal plant species belonging to liliaceae family and is naturally and easily available. There are a rising number of consumers concerned about ingredients such as synthetic chemicals, mineral oils who demand more natural products with traceable and more natural ingredients, free from harmful chemicals and with anemphasis on the properties of botanicals.[1]

A cosmeceuticals is an ingredient with medicinal properties that manifests beneficial topical actions and provides protection against degenerative skin conditions. It encompasses cosmetic actives with therapeutic, disease-fighting, or healing properties, there by serving as a bridge between personal careproducts and pharmaceuticals. Cosmeceuticals

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affects the biological functioning of the skin (medicinal or drug like benefits) depending upon the ingredients present in them. Cosmeceuticals increases the collagen growth in the skin and reduces the harmful effects of free radicals thus maintain the structure of keratin in good condition and making the skin healthier. There are skin-care products that go beyond colouring and adorning the skin. Like cosmetics, cosmeceuticals are applied topically; they contain ingredients that influence the skin's biological function. Cosmeceuticals are meant to improve appearance by delivering nutrients necessary for healthy skin. Cosmeceuticals usually claim to reduce wrinkles and to improve tone, texture and radiance of the skin.

Herbal compounds are being used in dentistry to treat tooth discomfort, gum inflammation, and mouth sores, among other things. Dental illnesses is one of the most common disorders in the world. Dental health is linked to a higher standard of living that goes beyond the functions of the craniofacial complex. Plant-based antiseptics, antibacterial, antimicrobial, antifungal, antioxidant, antiviral, and analgesic compounds are all popular in dentistry. Dental health is one of the domains of medicine where bacterial and fungal diseases are the most common.[2]

The health of humans mainly depends on the individual's health, diet, habits, job routine, climatic conditions, and maintenance. For example, a Skin condition in winter, extreme cold damages skin as cuts, cracks, maceration and in summer due to severe heat exposure dehydrates the skin and increases melanin content which causes freckles, wrinkles, blemishes, sunburns, pigmentation, and even body pain. Skin disease is very common in all variety of age groups and this is due to microorganisms, biological toxins, etc. present in the atmosphere. Therefore, to overcome such a problem allopathy medicine is combined with the traditional method of medicine like Ayurveda, Unani, Siddha, etc. because one method of medicine is not sufficient.

The beauty of skin and hair basically depends on individual's health, diet, habits, job routine, climatic conditions and maintenance. Appearance of hair makes an important impact on total body feature. Color, length and appearance of hair make a significant difference from person to person. Pre-mature hair loss and their greying at early age have become common dermatological conditions. The etiology of hair loss is still not completely understood and also its complete medical treatment is not satisfactorily developed. For the treatment of hair loss commonly plethora of herbs are used such as hibiscus, neem, amla, methi, tulsi, brahmi, lemon, shikakai, liquorice, nutmeg, henna, reetha, liquorice root, musk root, mahabhringraj, jantamasi, chitraka, marigold, parsley, rosemary, thyme.

Herbal Drugs used in Skin Cosmeceuticals:-

The importance of beautification to the mankind has been known since the prehistoric time and the desire to look beautiful and healthy has been developing in the society. In recent times fitness, good health, looks, way of presenting oneself are being counted as one of qualities of personality. Cosmeceuticals refers to the mixture of cosmetics and pharmaceuticals. The term "cosmeceutical" was introduced by dermatologist Dr Albert Kligman in 1984 and is derived from a combination of the words cosmetic and pharmaceutical. They have both cosmetic and therapeutic (medical or drug-like) effects, and are intended to have a beneficial effect on skin health and beauty. A cosmeceuticals is an ingredient with medicinal properties that manifests beneficial topical actions and provides protection against degenerative skin conditions. It encompasses cosmetic actives with therapeutic, disease- fighting, or healing properties, there by serving as a bridge between personal care products and pharmaceuticals. Cosmeceuticals affects the biological functioning of the skin (medicinal or drug like benefits) depending upon the ingredients present in them. Cosmeceuticals increases the collagen growth in the skin and reduces the harmful effects of free radicals thus maintain the structure of keratin in good condition and making the skin healthier. There are skin□care products that go beyond colouring and adorning the skin. Like cosmetics, cosmeceuticals are applied topically; they contain ingredients that influence the skin's biological function. Cosmeceuticals are meant to improve appearance by delivering nutrients necessary for healthy skin. Cosmeceuticals usually claim to reduce wrinkles and to improve tone, texture and radiance of the skin.5

1.ROSE :- The rose is a type of flowering shrub. Its name comes from the Latin word Rosa. The flowers of the rose grow in many different colors, from the well-known red rose or yellow rose and sometimes white or purple rose. Scientific name: Rosa damascena Higher classification: Rosoideae Rank: Genus Family: Rosaceae Kingdom: Plantae Order: Roseales Chemical Constituents: Several components were isolated from flowers, petals and hips (seed-pot) of R. damascena including terpenes, glycosides, flavonoids, and anthocyanins. This plant contains carboxylic acid,

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myrcene, vitamin C, kaempferol and quarcetin. Flowers also contain a bitter principle, tanning matter, fatty oil and organic acids. The identifiedcompounds were; β-citronellol , non adecane , geraniol, and nerol and kaempferol were the major components of the oil. Analyses of rose absolute showed that phenyl ethylalcohol,citrenellol,non adecane and geraniol ethanol , and heneicosane were the major compounds . In another study, the composition of rose was phenyl ethyl alcohol , citrenellol , nerol, and geranial. Hydrosol was also found to contain four constituents; geraniol was the major compound followed by citrenellol , phenyl ethylalcohol and nerol .The medicinal functions of Rosaceae are partly attributed to their abundance of phenolics compound. Phenolics possess a wide range of pharmacological activities, such as antioxidants, free-radical scavengers, anticancer, anti-inflammatory, antimutagenic, and anti-depressant.6

Figure no. 1:- Rose (Rosa damascene)

Pharmacological Activities: Anti-Inflammatory property: This plant has also been shown to have anti inflammatory effect. The effect of essential oil and hydroalcoholic extract of R. damascena on rat paw edema induced by carrageenan was demonstrated. Essential oil had no anti-inflammatory effect while the extract could significantly reduce edema which maybe acted by inhibiting the mediators of acute inflammation. In addition, R. damascena contains vitamin C which has antioxidant and anti- inflammatory effects. Anti-ageing property: Besides being filled with antioxidants, rose water and rose oils are also packed with vitamin A and C, which can help with aging skins. Apart from smoothing the appearance of wrinkles, these vitamins help to reduce the look of age spots on the skin
and aid with collagen production. While rose essential oil and rose water are both derived from rose petals, rose hip seed oil is actually from the small fruits that appear on the rose plants, which are a natural source of retinol. Antioxidant property: This is one of the major benefits that roses and rose water can bring to the skin. We all know that antioxidants are good for the skin, and the ones found in roses are no exception. These particular antioxidants help to strengthen skin cells, which in turn, can help regenerate skin tissues.1 On top of this, the antioxidants in roses work to neutralize free radicals, which can provide anti-aging benefits to the skin as well. Skin hydrating property: While roses are great for all skin types, it is especially great for dry skin due to its extremely moisturizing properties that can help to soothe itchiness.[7] Roses used in the form of an essential oil can also be a great way to moisturize the skin, while protecting it from moisture loss and keeping the moisture barrier strong. Even for those who do not suffer from dry skin, the hydration that roses provide can be extremely beneficial, as it helps to balance the hydration in the skin.[8]

LAVENDER:

Lavender (Lavandula) Lavandula (common name lavender) is a genus of 47 known species of flowering plants in the mint family. It is native to the Old World and is found in Cape Verde and the Canary Islands, and from Europe across to northern and eastern Africa, the Mediterranean, southwest Asia to India. Scientific name: Lavandula Higher classification: Nepetoideae Rank: Genus Family: Lamiaceae Kingdom: Plantae Order: Lamiales Chemical Constituents: Lavender (L. angustifolia) contains essential oil, anthocyanins, sugars, minerals, coumaric acid, glycolic acid, valeric acid, frolic acid, herniarin, coumarin and tannins. The content of macronutrients differs depending on Lavender variety.[9]

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Figure no.2:- Lavender (Lavandula)

Pharmacological Activities: Lavender oil for face wrinkles: Free radicals are partly responsible for fine lines and wrinkles on the face. Lavender oil is full of antioxidants, which help protect you from thefree radicals. To use lavender oil for wrinkles, use a few drops of the essential oil along with coconut oil. The mixture can be used as a moisturizer once or twice a day . Anti-acne activity: Lavender oil has proven antibacterial properties. Trusted Source, and in killing bacteria, it may prevent and heal acne. Lavender oil is non-comedogenic, meaning that it will not clog pores. It can be combined with witch hazel and used as a daily toner or with tea tree oil or argan oil as a direct treatment for pimples.

Eczema and dry skin: Eczema can show up anywhere on your body. With eczema, your skin gets dry, itchy, and scaly. It can appear mild or chronic and in multiple locations. Since lavender has antifungal properties and reduces inflammation, it can help keep eczema at bay. Lavender oil can also be used to treat psoriasis. The lavender oil helps cleanse your skin and lessen redness and irritation.To use this essential oil for eczema, mix two drops with an equal amount of tea tree oil, along with two teaspoons of coconut oil. You can use it daily. Skin lightening property: Lavender oil can aid in skin lightening since it reduces inflammation. It can reduce discoloration, including dark spots. Lavender oil helps lessen blotchiness and redness. If you have hyperpigmentation on your skin, lavender oil may be able to help with that as well.[9]

POMEGRANATE:-

Figure no. 3:- Pomegranate (Punica granatum)

The pomegranate is a fruit-bearing deciduous shrub in the family Lythraceae, subfamily Punicoideae, that grows between 5 and 10 m tall. The pomegranate was originally described throughout the Mediterranean region. Scientific name: Punica granatum Higher classification: Pomegranates Rank: Species Family: Lythraceae Kingdom: Plantae

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Order: Myrtales Chemical Constituents: Peels of the pomegranate covers around 60% of the fruit and they hold various types of ingredients including flavonoids, ellagitannins and proanthocyanidin compounds and minerals such as calcium, magnesium, phosphorus, potassium and sodium. Pomegranate fruit arils contain huge amounts of organic acids, sugars, minerals, vitamins, and poly-phenols that show antioxidant effect.Moreover, flavonoids are chief polyphenols of fruit, condensed tannins and hydrolysable tannins. Hydrolyzable tannins including ellagitannins and gallotannins consist of the common constituents present in pomegranate, and punicalagin is the major hydrolyzable tannin present in Pills also have hydroxybenzoic acids such as gallagic acid, ellagic acid and EA glycosides[10] .

Pharmacological Activities: Anti-microbial property: The antimicrobial effect of pomegranate and its products has been demonstrated in a large amount of research in particular, polyphenols, flavonoids, and condensed and hydrolysable tannins derived from the fruit have been referred as promising agents to treat or prevent a broad range of infections. Anti-ageing property: Being rich in antioxidants, pomegranates neutralise the effect of free radicals in our body. The anti-ageing plant compounds in the fruit also help in stimulating keratinocyte cells (skin cells) and help in cellular regeneration thereby keeping wrinkles and sagging skin at bay. For wrinkle- free, younger-looking skin try including pomegranate in your diet or use it in face packs. Skin hydrating property: Pomegranate for skin is a rich source of vitamin C, which research has proven is effective in treating dull and dry skin. When applied topically on a regular basis, it can reduce skin roughness. Also, around 82 percent of pomegranate's volume weight is water and thereby it's effective in keeping you hydrated. Anti acne activity: When bacteria found in environmental pollutants infects the oil glands of the skin, a pimple is formed. When this happens, the body sends white blood cells called neutrophils to the infected site to kill the bacteria. But the whole process causes inflammation and as a result, we notice angry and swollen zits on the skin. Pomegranate is known for its anti-inflammatory properties so when applied to the zits, it cures inflammation. Sun protective Action: Exposure to sun not only causes tanning and sunburn but can also lead to oxidative stress that causes age spots and wrinkles. The polyphenols in pomegranate are powerful antioxidants that help protect skin cells from oxidative damage.[11]

Marketed formulations of skin products:-

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Herbal Drugs used in Dental Cosmeceuticals:-

Since ancient times, humans have explored treatments for ailments in nature; more recently, herbal medicines have acquired appeal in dietary supplements, energy drinks, multivitamins, massage, and weight reduction product. These use have broadened the field of herbal medicine and also increased its credibility. These applications have widened the scope of herbal treatment while also boosting its validity. Herbal compounds are now being used in dentistry to treat tooth discomfort, gum inflammation, and mouth sores, among other things. Dental illnesses is one of the most common disorders in the world. Dental health is linked to a higher standard of living that goes beyond the functions of the craniofacial complex . Plant-based antiseptics, antibacterial, antimicrobial, antifungal, antioxidant, antiviral and analgesic compounds are all popular in dentistry. Dental health is one of the domains of medicine where bacterial and fungal diseases are the most common. Widely spread diseases like dental caries, periodontal disease, and endodontic lesions are caused by well-known bacterial and fungal pathogens: Streptococcus mutans, Streptococcus salivarius, Streptococcus sanguinis, Porfiromonasgingivalis, Prevotella intermedia, Actino bacillus actinomycetem comitans, Enterococcus faecalis, Candida albicans, etc. Preventive medicine focuses mostly on oral hygiene to reduce bacterial biofilm. Chlorhexidine, hyaluronic acid, and fluorides are the most often utilised active chemicals in mouth rinses and toothpastes. Chemical products, while helpful, may have some clinical drawbacks, such as tooth discolouration, taste changes, mouth dryness, supragingival calculus accumulation, and oral mucosal ulcers . Tooth Anatomy The anatomy of the mouth is formed throughout the early stages of embryonic development. The mouth is necessary not just for communication and as a food receptacle, but it also plays a vital role in digestion. The oral cavity, which is made up of the hard and soft palates; the mucosa, or tissues lining the upper and lower sections of the mouth as well as the tissues lining the inner cheeks; the gingiva, or gums surrounding the teeth; and the tongue, uvula, tonsils, and salivary gland openings are all part of the normal anatomy of the mouth.

Primary Teeth: The majority of babies are born with no visible teeth, as the teeth are developing beneath the gums. Between the ages of 6 months and a year, a baby's primary teeth (also known as baby teeth or first teeth) erupt (poke through the gums).

Teeth that are permanent: Primary teeth fall out, and 32 permanent teeth replace them (also called the adult teeth). This occurs between the ages of 6 and 14, when a youngster is about to enter puberty. The roots of the primary tooth it is replacing disintegrate as a permanent tooth grows beneath the gums and in the jawbone. The primary tooth then becomes loose and eventually falls out. The space will be filledby the permanent tooth.

Wisdom teeth (also known as third molars) are molars that typically emerge between the ages of 17 and 21. Disorders of the mouth While some conditions, such as cleft palate, cannot be avoided, there are methods to reduce the risk of oral cancer as well as more prevalent issues including gingivitis, pericoronitis (inflammation of the tissue surrounding the wisdom teeth), and serious periodontal disease, which can result in tooth loss. An increased risk of heart disease has been linked to poor dentalhygiene. Gingivitis and periodontal disease can be exacerbated by other medical disorders, such as diabetes. It's vital to check your mouth, tongue, and gums for any changes when you brush and floss every day, and to report any concerns to your doctor or dentist. Early detection and treatment of any issues will considerably improve your chances of avoiding complications and getting the best possible result from treatment options. Even a nasty habit like teeth grinding, which may appear to be a minor inconvenience, can become a serious problem: Constant wear on your teeth can cause tooth surface deterioration, jaw pain, and even damaged or chipped teeth. Your dentist can provide you with advice and options to help you keep your teeth healthy for the rest of your life. Some suitable dosage form likeniosomes, phytosomes, cubosomes, transdermals needles also better opportunities to increases the bioavailability and other parameter like solubility, permeability of natural plants constituents for treatment of teeth diseases.[12]

CLOVE :-

Clove is a spice obtained from the dried flower bud of the clove tree, Eugenia caryophyllata Thunb. (Syzygiumaromaticum, Eugenia aromaticum) belonging to family Myrtaceae. Dental medications havebeen made from clove oil, dried flower buds, leaves, and stem of the clove tree4,7,10,14 . Components of chemicals: Clove spices produce three essential oils: clove bud oil, clove stem oil, and clover leaf oil. Clove oil's main constituents includeeugenol, βcaryophyllene, eugenol acetate and in lesser amounts, benzyl alcohol, chavicol, acetyl salicylate and

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humulenes. Clove essential oil isolated by hydro-distillation using gas chromatography- mass spectrometry (GC-MS) analysis.

Figure no. 4:- Clove

TULSI:-

Figure no. 5:- Tulsi

Ocimum sanctum Linn (Tulsi) as an odoriferousherb. It belongs to the family Labiatae. "Tulsi" in Sanskrit means "the incomparable one" hence called as the queen of herbs. The herb helps in the treatment of various oral disorders2 . Chemical constituents: Fresh leaves and stem of Ocimum sanctum extract yielded some phenolic compounds (antioxidants) such as cirsilineol, circimaritin, isothymusin, apigenin and rosameric acid, and appreciable quantities of eugenol. The leaves of Ocimum sanctum contain 0.7% volatile oil comprising about 71% eugenol and 20% methyl eugenol. The oil also consists of carvacrol and sesquiterpine hydrocarbon caryophyllene. Two flavonoidsorientin and andvicenin from aqueous leaf extract of Ocimum sanctum have been isolated.

GARLIC:-

Figure no. 6 :- Garlic

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Garlic (Allium sativum L.) belonging to family Liliaceae use to improve dental health and to promote oral hygiene. Chemical constituents: Alliin, methiin, and S-allylcysteine are the primary compounds found in garlic. Garlic's sulphur components are converted into distinct organosulfur compounds when it is broken or crushed. Garlic enzymes convert alliin to allicin, which possesses antibacterial properties.

MISWAK:-

Figure no. 7:- Miswak

The Miswak is obtained from tee of Salvadora persicabelongs to the family Salvadoraceae. The roots, twigs, and stems of this plant have been utilized for oral hygiene and small S. persica sticks have been utilized as toothpicks. Chemical constituents: Miswak contains b-sitosterol and m-anisic acid ; chlorides, salvadourea, and gypsum; organic compounds, such as pyrrolidine, pyrrole, and piperidine derivatives; glycosides, such as salvadoside and salvadoraside; and flavonoids, including kaempferol, quercetin, quercetin rutin, and a quercetin glucoside.[12-13]

Marketed formulation of Dental products :-

Herbal Drugs used in Dermal Cosmeceuticals:-

Today in the modern world every human being has become very conscious about their health. This has made humans adopt an ancient lifestyle which has lead to the use of herbs and other natural ingredients in day-to-day life. People prefer herbal medicines, natural food, and natural curing practices for a healthy life. The use of vegetables and fruits grown by organic farming has increased. There is also a craze for using herbal cosmetics nowadays and this is because of the disadvantages of synthetic-based products, synthetic chemicals, chemical dyes, and their derived products which has caused human health hazards with several side-effects leading to numerous diseases and has also lead to an

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increased level of environmental pollution which has disturbed our ecosystem. Through the advertisement of cosmetic products, there is an increase in awareness among the people for healthy and better-quality lifestyles. Thus, by seeing the increased demand of herbal based products most of the cosmeceutical company has to shift their market from synthetic based to herbal-based products. The health of humansmainly depends on the individual's health, diet, habits, job routine, climatic conditions, and maintenance. For example, a Skin condition in winter, extreme cold damages skin as cuts, cracks, maceration and in summer due to severe heat exposure dehydrates the skin and increases melanin content which causes freckles, wrinkles, blemishes, sunburns, pigmentation, and even body pain. Skin disease is very common in all variety of age groups and this is due to microorganisms, biological toxins, etc. present in the atmosphere. Therefore, to overcome such a problem allopathy medicine is combined with the traditional method of medicine like Ayurveda, Unani, Siddha, etc. because one method of medicine is not sufficient. Under this we are going to observe two Herbal Drugs i.e., Aloe and Turmeric.[14]

ALOE VERA:

Figure no. 8:- Aloe vera

Aloe vera is a species of Aloe that is particularly popular for its medicinal properties. The name Aloe vera derives from the Arabic word “Alloeh” meaning shining bitter substance, while Vera in Latin means true. 2000 years ago, the Greek scientists regarded Aloe vera as the universal panacea. The Egyptians called Aloe “the plant of immortality.” Today, the Aloe vera plant has been used for various purposes in dermatology. Botanical name: Aloe barbadensis miller, Aloe aborescens Miller Synonyms: Curacao aloe, Indian aloe, ghikawar; ghritakumari; gwar-patha; kumara. Chinese aloe laloi, first aid plant. Family: Liliaceae Biological sources: Aloe is the dried juice collected by incision, from the basesof the leaves of various species of Aloe. Geographical source: Aloes are indigenous to East and South Africa, but have been introduced into the West Indies and into tropical countries, and will even flourishin the countries bordering on the Mediterranean. There are over 550 species of aloe grown around the world. However, only two species are grown today commercially, with Aloe barbadensis Miller and Aloe aborescens Miller being the most popular Scientific classification: • Kingdom: Plantae • Order: Asparagales • Division: Spermatophyta • Subdivision: Angiospermae • Class: Monocotyledoneae • Family: Liliaceae • Genus: Aloe • Species: Barbadesis Mill. Cultivation and Collection: It is an evergreen perennial growing to 0.8 m by 1 m at a slow rate. The plant prefers light (sandy) and medium (loamy) soils, requires well-drained soil and can grow in nutritionally poor soil. The plant prefers acid, neutral and basic (alkaline) soils. It cannot grow in the shade. It requires dry or moist soil and can tolerate drought. They are xerophytic plant. It can be propagated by seeds. Seeds are sown in the spring in a warm green house. The seed usually germinates in 1–6 months at 16°C. The seedlings are transferred to the pots containing well-drained soil. They are allowed to grow in sunny part for at least their first two winters. The offsets will be available, usually in spring. The plants produce offsets quite freely and they can be divided at any time of the year as long as it is warm enough to encourage fresh root growth to allow reestablishment of the plants. Young offsets are planted in the soil after the rainy season in rows situated at a distance of 60 cm. In the second-year leaves are collected by the natives by protecting their hands because of the spiny nature of leaves. The leaves are cut near thebase, kept inside of kerosene tins and taken them to a central place for the preparation of aloe. Juice of aloe is present in parenchymatous cells of pericycle that are

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mucilage cells. In a single incision mucilage cells exert pressure on pericycle cells and the entire juice from the leaves is drained out.

TURMERIC:

Figure no.9:- Turmeric

Drug Name: Haridra Scientific Name: Curcuma longa Synonyms: Turmeric, Haldi, Curcuma, Indian saffron, etc. Family: Zingiberaceae Biological Source: Turmeric consists of dried, as well as, fresh rhizomes of the plant known as Curcuma longa Linn. (C. domestica). It contains not less than 1.5% of . Geographical Source: Turmeric is mainly cultivated in India, China i.e., in the southern tropical region. It requires a temperature of about 20°C to 30°C and a considerable amount of annual rainfall. India is considered to be large production of turmeric it almost produces 90% of the world's turmeric. Andhra Pradesh and Tamil Nadu together contribute 70% of Indian production. Majortially Curcuma is a genus for near about 70 species of rhizomatous herbs which are distributed in South East Asia. Commercially C. amada, C. angustifolia, C. aromatica, C. caesia, C. zedoaria and C. longa are important Scientific Classification: o Kingdom: Plantae o Division: Magnoliophyta o Class: Liopsida o Subclass: Zingiberidae o Order: Zingiberales o Family: Zingiberaceae o Genus: Curcuma o Species: Longa o Scientific name: Curcuma longa. Cultivation and Collection: C. longa is the main species of commerce and is cultivated for its rhizomes in India. The plant is grown for 7-9 months after which the rhizomes are harvested, cooked, dried, and processed for powder, oleoresin, and curcumin. The extraction of powder is carried out by using solvent, water, or both. Genetic modification has been attempted and five high-yielding varieties have been developed. High-yielding curcumin varieties have been evolved through tissue culture techniques; clonal propagation has been successfully developed in the case of C. longa.[14-15]

Marketed formulations of Dermal Products

Herbal Drugs used in Hair Cosmeceuticals:-

Herbal cosmetics are the preparations, which represent cosmetics associated with active bioactive ingredients or pharmaceuticals. The use of phytochemicals from a variety of botanicals have dual function, (i) they serve as cosmetics for the care of body and its parts and (ii) the botanical ingredients present influence biological functions of skin and

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provide nutrients necessary for the healthy skin or hair. In general, botanicals provide different vitamins, antioxidants, various oils, essential oils, dyes, tannins, alkaloids, carbohydrates, proteins, terpenoids and other bioactive. Hair complexion, colour andstyle play an important role in people's physical appearance Hair care preparations are applied topicallyto the scalp and hair. These contain ingredients which either clean, condition or nourish the hair or prevent dandruff formation. The following are the various hair care preparations. Detergents: Eg: soap nut, shikekai, reetha. Conditioners: Eg: henna, amla, hibiscus, rosemary, tea. Nourishers: Eg: brahmi, bringraj, eggs, coconut oil, sesame oil. Hair colorants: Eg: henna. Hair growth promoters: Eg: brahmi, amla, hibiscus, coconut oil, sesame oil. Anti-dandruff: Eg: soap nut, shikakai, lemon, thyme, aloevera. The hair oils used for dressings and nourishing the hairs and grace to appearance of hairs. This preparations is generally used to increase the growth of hair and remains healthy. E.g Arnica, shikakai. Herbal Cosmetics Skin Care Skin Cleansers Moisturizers Nourishers Antiseptics Soothing Agents Sunscreens Antiwrinkle & Anti-aging Anti-acne Hair Care Detergents Conditioners Nourishers Hair Colourants Hair Growth Promoters Anti-dandruff Others Colours Perfumes Talcum Powders Oral care products. Hair lotion Hair lotion has a stimulating effect upon the hair follicles. They are generally perfumed with oil of rosemary and others essence as it possess a good stimulating property.[16] These are preparations which are used for the coloring of the hairs. They enhances the attractiveness of gray hair. They are applied externally on the hair with help of brush. E.g Lawsonia alba Lam. Shampoo Shampoo is preparation of surfactant in suitable form liquid, solid or powder, which when used under the condition specified will remove surface grease, dirt and skin debris from the hair shaft and scalp without affecting adversely the hair, scalp or health of the user. E.g: Accacia concinna DC.

HENNA:-

Figure no.10:- Henna

Synonyms Egyptian privet, Lawsonia – alba Biological Source Henna Consists of fresh or dried leaves of the plant Lawsonia - inermis Lam. Family Lythraceae. Henna is indigenous to Africa and is largely cultivated in Egypt, Sudan, Caribbean islands, Florida, India and China. Macroscopic Characters Colour - Greenish brown Odour - Characteristic Taste - Bitter and astringent The active constituent of the leaf is lawsone (0.5 - 1.0 %). Other constituents are 5 - 10 per cent gallic acid, white resin, sugars and tannin and xanthones are the other contents of the leaves. Lawsone, the main colouring constituent is said to be a degradation product of primary glycoside hennoside A, B and C. Uses Improves scalp health Henna helps improve and maintain scalp health with its cooling and antimicrobial properties. It helps soothe aggravated and itchy scalp. Conditions your hair While henna by itself helps remove excess grease and dirt iron scalp, when combined with hydrating ingredients like egg, it helps condition hair. Using a henna hair pack to condition hair can leave it feeling smooth and silky. This is because henna helps seal the hair cuticle so that it can retain moisture. Repairs damage and strengthens hair Henna is extremely nourishing which helps repair damage in the hair shaft. It also improves hair elasticity and strength which keeps hair from breaking off. Balances pH and oil production Henna is one of the best ingredients which can be used for oily hair. It helps calm down overzealous sebaceous glands thereby controlling oil production. It also helps restore pH of the scalp toits natural acid alkaline level. This helps strengthen the hair follicles. Promotes hair growth and curbshair loss Henna's benefits for the scalp assist in improving follicle health. This, in turn, curbs hair fall and boosts the rate at which hair grows. The powder form of this ingredient can also be used to create an essential oil that nourishes and promotes hair growth. All of these benefits make henna an excellent hair care ingredient. It can help prevent dandruff Henna helps remove excess grease and dirt

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from your scalp, including dandruff. Using mehendi regularly on hair not only cures dandruff problems, it also prevents them from coming back. It can control scalp itchiness Henna has natural antifungal and antimicrobial properties that work to cool and soothe your scalp, controlling scalp itchiness in the process. It is a natural hair dye One of its most obvious uses, henna makes a fabulous hair dye. Not only is it a great natural alternative to the otherwise chemical options available readily in the markets,it is also healthier for your hair and cost effective for your wallet. Henna has affinity to the keratin in the mildly acidic environment (pH=5.5). The principle coloring compound of henna is "lawsone," a red-orange colored compound. It is proposed to be used as a non-oxidizing hair coloring agent at a maximum concentration of 1.5% in the cosmetic product. It can help repair split ends Dry and damaged hair is prone to split ends, which is why just cutting them off is not enough. You have to break the vicious cycle that causes split ends in the first place, and using henna is a great way to dothis. Henna deeply conditions and nourishes hair, taking care of dry hair problem, and consecutively, split ends issue. It can make your hair thick and lustrous The tannin present in henna actually binds with the hair to make it stronger, and does not even penetrate the hair cortex, ensuring minimum damage. This ensures thicker, lustrous hair with each application. Side Effects and Precautions for Using Henna It is crucial to ensure that the henna you are using is 100% organic. This is because most henna powders available on the market include harsh chemicals, such as PPD (Paraphenylenediamine), to improve the color results. These chemicals can cause the following problems. Paraphenylenediamine is an allergen that can cause adverse reactions upon contact with skin. You may not have a reaction from the first couple of uses, but the more your skin comes in contact with the chemical, the more likely you are to have an allergic reaction. The chemicals added to henna powders can also be extremely drying. They may end up over-processing your hair, causing it to become rough, dry, and unmanageable. This can lead to issues like breakage, bad hair texture, and extremely unmanageable hair. If henna comes in contact with your eyes, it can cause redness, irritation, watery eyes, and itching.If this happens to you, rinse your eyes with cold water immediately. If problems persist, visit an eye specialist as soon as possible. Therefore it is better to do a patch test before using henna to prevent reactions like rashes and hives.[17]

AMLA:-

Figure no.11:- Amla

Synonyms Emblica, Indian goose berry, Amalki Biological Source This consists of dried, as well as fresh fruits of the plant Emblica officinalis Gaerth Phylanthus emblica Linn. belonging to family Euphorbiaceae. It contains not less than 1.0 per cent w/w of gallic acid calculated on dry basis. It is a small or medium size tree found in all deciduous forests of India. It is also found in Sri Lanka and Myanmar. The leaves are feathery with small oblong pinnately arranged leaflets. The tree is characteristic greenish-grey with smooth bark. Macroscopic Characters Colour - The green colour changes to light yellow or brick red at maturity. Odour - Odourless. Taste - The taste of Amla is sore and astringent. Size - The average size of an Amla is between 1.5 and 2.5 cm in diameter. Shape - The fruits are depressed, globular. Extra Features Fruits are fleshy obscurely 4 lobed with 6-trygonus seeds. They are very hard and smooth in appearance. Chemical Constituents Amla fruit is a rich natural source of vitamin C (Ascorbic acid) and contains 600 - 750 mg per 100 g of the fresh pulp. Furthermore, fruits also contain about 0.5 per cent fat, phyllemblin and 5 per cent. Amla fruit are also rich in mineral matters like phosphorus, iron and calcium. It contains appreciable amount of pectin. The fresh

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fruits contain about 75 per cent moisture. The fruits are dehydrated and stored. It is found that vitamin content of dried fruits is not lost considerably. It may be due to the presence of tannins, which retards oxidation of vitamin C.[18]

Marketed formulations of hair Products:-

HERBAL EXCIPIENTS

Excipients are defined as 'the substance used as a medium for giving a medicament. The specific application of natural polysaccharide polymers in pharmaceutical formulations include to aid in the processing of the drug delivery system during its manufacture, protect, support or enhance stability, bioavailability or patient acceptability, assist in product identification, or enhance any other attribute of the overall safety, effectiveness or delivery of the drug during storage or use. Several pharmaceutical excipients of plant origin, like starch, agar, alginates, carrageen an ,guar gum, xanthan gum, gelatin, pectin, acacia, tragacanth, and cellulose find applications in the pharmaceutical industry as binding agents, disintegrates, sustaining agents, protective's, colloids, thickening agents, gelling agents, bases in suppositories, stabilizers, and coating materials.[19]

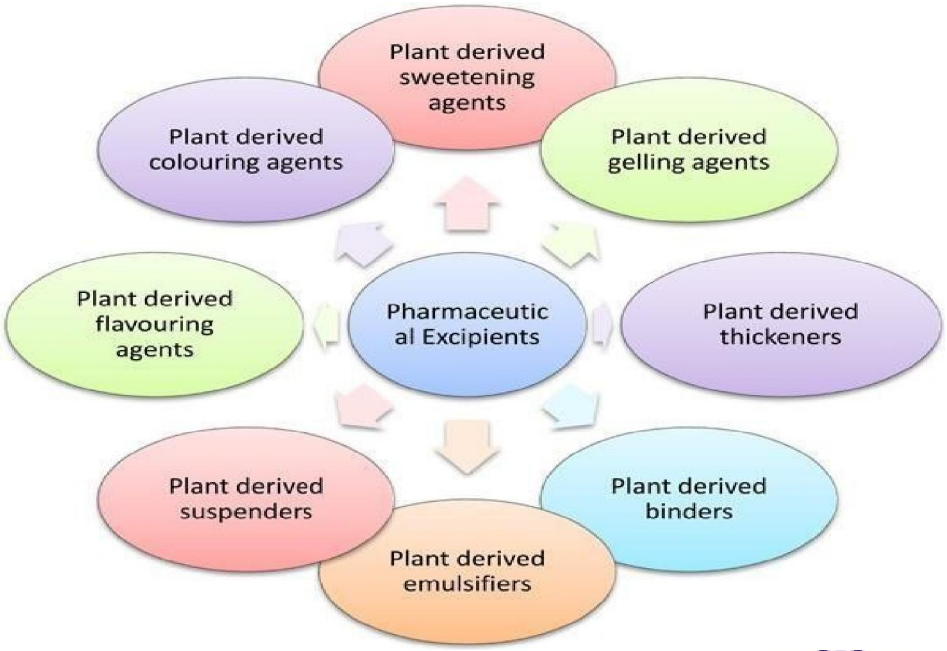

Figure no.12:- Pharmaceutical excipients

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Advantages of Herbal Excipients:-

Biodegradable: Naturally occurring polymers produced by all living organisms. Theyshow no adverse effects on the environment or human being.

Biocompatible and non-toxic: Chemically, nearly all of these plant materials are carbohydrates in nature and composed of repeating monosaccharide units. Hence they arenon-toxic.

Economic: They are cheaper and their production cost is less than synthetic material.

Safe and devoid of side effects: They are from a natural source and hence, safe and without side effects.

Easy availability: In many countries, they are produced due to their application in many industries.[19-20]

CLASSIFICATION OF EXCIPIENTS:

Excipients are commonly classified according to their application and function in the drug products: Herbal Sweetners, Binders, diluents, Disintegrants, Colorants, Viscosity builders, Perfumery agents and flavoring agents.[21]

Herbal sweetners:

Stevia: It is a very popular low-calorie sweetener. It's extracted from the leaves of a plant called *Stevia rebaudiana*. Several sweet compounds are found in stevia leaves. The main ones are stevioside and rebaudioside A. Both are hundreds of times sweeter than sugar, gram for gram. Therefore, stevia is very sweet buth as virtually no calories. Additionally, a few human-based studies suggest stevia has health benefits. Stevia can lower high blood pressure in people with hypertension by 6–14%. However, it has no effect on blood pressure that is normal or only mildly elevated. Stevia has also been shown to lower blood sugar levels in people with diabetes

Erythritol: It is another low-calorie sweetener. It's a sugar alcohol found naturally in certain fruits. However, powdered erythritol available for purchase is most likely madevia an industrial process. It contains 0.24 calories per gram, or about 6% of the calories in an equal amount of sugar, with 70% of the sweetness. Erythritol doesn't spike blood sugar or insulin levels and has no effect on blood lipids like cholesterol or triglycerides. It's absorbed into the body from the intestine but eventually excreted from the kidneys unchanged.[22]

Glycyrrhiza glabra: Liquorice roots, which are wrinkled and brown on the outside and yellow on the inside, contain glycyrrhizin, a compound that is 50 to 150 times as sweet as cane ssugar.

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Thaumatin : The Thaumatins are a family of very sweet proteins present in the fruits of the tropical plant Thaumatococcus danielli (marantaceae) a bushy plant. Thaumatin elicits a very sweet taste that is rated to be 2000 to 10000 times sweeter than sucrose, depending on purity and concentration. Thaumatin I and II are soluble in water and dilute alcohol. Thaumatin is effective at masking bitter notes often associated with pharmaceuticals or vitamins.[21]

2. Natural Binding agents:

A binding agent (or binder) is a substance that holds or draws other materials together mechanically chemically or as an adhesive, to form a cohesive whole.

Pectin: Pectins are non-starch, linear polysaccharides extracted from the plant cell walls. In the food industry, folic acid incorporated microcapsules were prepared using alginate and combinations of alginate and pectin polymers so as to improve stability of folic acid. The blended alginate and pectin polymer matrix increased the folic acid encapsulation efficiency and reduced leakage from the capsules as compared to those made with alginate alone; they showed higher folic acid retention after freeze drying and storage.

Guar gum: Guar gum comes from the endosperm of the seed of the legume plant Cyamopsis tetragono lobus. Refined guar splits are obtained when the fine layer of fibrous material, which forms the husk, is removed and separated from the endosperm halves by polishing. Strong acids cause hydrolysis and loss of viscosity, and alkalies in strong concentration also tend to reduce viscosity. It is in soluble in most hydrocarbon solvents.

Khaya gum: Khaya gum is a polysaccharide obtained from the incised trunk of the tree Khaya grandifoliola (family Meliaceae).24 The fact that the gum is naturally available, inexpensive and non-toxic has also fostered the interest in developing the gum for pharmaceutical use. Further work has also shown its potential as a directly compressible matrix system in the formulation of 61 controlled release tablet. Different starches like rice, maize, corn wheat are also used a natural binding agents. They are added to the tablet formation to increase inter-particulate bonding strength in the tablets. The binder is added either in dry mix or mix in granulating liquid and form matrix with fillers and drug embedded in it.

Herbal diluents:Natural diluents include starches, hydrolyzed starches, and partially pre gelatinized starches. Common diluents include anhydrous lactose, lactose monohydrate, and sugar alcohols such as sorbitol, xylitol and mannitol. Diluents provide better tablet properties such as improved cohesion or to promote flow.26

Classification of diluents:

Diluents are classified on the basis of chemical nature and solubility. Organic materials Carbohydrates and modified carbohydrates are the major examples .i.e. lactose, starch and pre□gelatinized starch, sucrose, mannitol, sorbitol, powdered and micro crystalline cellulose.

Methyl-cellulose:

Methylcellulose is the organic material used as a diluent in the pharmaceutical Formulation.

It is the cellulose derivative. On the long term use as a diluent in the pharmaceutical formulation it causes the various side effects .Mostly it causes the abdominal fullness, difficulty swallowing, nausea, rectalbleeding, stomachpain, and vomiting.

Dicalcium phosphate: Dicalcium phosphate (DCP) is a combination of positively charged particles of calcium and negatively charged particles of hydrogen phosphate which is inter change able with the phosphate in the body. Long term use of DCP results in upset in the balance of phosphates and other chemicals in the body. According to the material safety data sheet, the powdered form of DCP may irritate skin. Prolonged skin contact may lead to dry or chapped skin.28

2. Binders:

Excipients are also known as additives, which are used with active pharmaceutical ingredients to convert in to a pharmaceutical dosage form for suitable administration. As name indicates, Binders are the excipient which is use to bind or hold all ingredients used in formulation of the dosage form. Binders are mixed in formulation to convey plasticity or to increase the bonding strength between the particles in formulation. The griping of ingredients in tablets and granules is very important which is enhanced by binders. They ensure that the formulations are manufactured

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according to required physical strength and quantity. Binders are used either in a solution or in a dry form depending on the ingredients in the formulation & the method of preparation of dosage form.29 Generally, binders are used in solid or semi-solid formulations. Examples of dosage form in which binders are used are as follow: Tablets, Pills, Pallets, Granules, and Pastes etc.

3. Viscosity builders:

These are substances, which added to mixture, to increase its viscosity without substantially modifying its other properties, such as taste. They increase stability. It is desirable to increase the viscosity of dosage form to provide or to improve palatability or pour ability.30

4. Flavoring agents:

Flavors are the mixed sensation of taste, touch, smell & sight. Nowadays, many artificial flavors are manufactured with the help of technology in flavoring industries. Many pharmaceutical industries use flavors in many formulations like: cough syrups, sedatives, anti-malarial and anti-biotic. Flavors are used as taste masking agents which hides the unpleasant taste or order of dosage form.31 A flavor enhances the likelihood of medicine and make the more compatible for patient's administration. Due to the use of flavors in dosage form children take medicines without any problem. Flavoring agents may be artificial or natural. Artificial flavoring agents are synthesized in laboratories while natural flavoring agents are extracted from plants. Sweetening agents also separated from plants and also manufactured synthetically. Examples of dosage form in which flavoring agents are used are as follow: Tablets, Pills, Pallets, Capsules, Pastes, Syrups, Emulsions, Suspensions, Mouth washes etc. Examples of flavoring agent are Black pepper, Cardamom, Fennel, Ginger, Peppermint, Nutmeg and saffron.32

5.Coloring agents:

Coloring agents comes under the category of organoleptic agents. Coloring agents are widely used in pharmaceuticals, cosmetics and food industries. Coloring agents promotes the appearance in pharmaceutical formulations. If any dosage form has unacceptable color, the consumers avoid the dosage form for administration. Coloring agents give the attractiveness to the dosage form. Coloring agents are also used for differentiate of dosage form or for easy identification of dosage forms. Due to the use of coloring agents in dosage forms psychologically patients are attracted towards the dosage forms. Coloring agents are also used as dyes and widely used in cosmetics industries. All coloring agents used in pharmaceutical industries is approved or certified by FDA. Example of dosage forms in which coloring agents are used:-Tablets, Pills, Pallets, Capsules, Pastes, Ointments, Syrups, Emulsions, Suspensions etc.33

Perfumery agents:

An active ingredient is a compound which imparts the aroma to the perfume compositions or enhances the aroma of an existing perfume compostion. Perfumary agents includes Musk, sandal wood oil, Rose oil, Jasmine oil, benzoin, Turpentine and Levender oil.31

HERBAL FORMULATIONS

Herbal formulations means a dosage form consisting of one or more herbs or processed herbs in specified quantities to provide specific nutritional, cosmetic benefits meant for use to diagnose, treat, mitigate diseases of human beings or animals, alter the structure or physiology of human beings or animals.34

Herbal syrup:

Syrup is a concentrated mixture of sugar in purified water. The oral use of liquid pharmaceutical has generally been justified on the basis of ease of administration to those individuals who have difficulties in swallowing solid dosage forms. Ayurvedic herbal cough syrup comprising goodness of herbs such as Tulsi, Liquorice, Ginger, Vasaka which has been reported to provide effective relief in cough without causing adverse effects like those associated with the use of antihistamines. Combination of these herbs with honey is intended to provide additive benefit in relieving symptoms of acute non- productive cough.37

Preparation of Herbal Syrup: An herbal syrup is prepared by combining a concentrated decoction with either honey or sugar, and sometimes alcohol. The base of sucha syrup is a strong herbal decoction. Mixing a decoction with honey or sugar helps to thicken and preserve the decoction. This increases the shelf life of the decoction and often creates a soothing application that benefits situations such as sore throat, cough, dry irritated tissues, and digestive issues. The added sweetener can also help to increase the palatability of some herbs. Many folks, including children, find syrups to

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be delicious. The basic proportions you want to use are 2 parts herbal decoction to 1 part honey or sugar. This is called a 2:1 ratio. This means that if you start with your herbs added to 4 cups of water and simmer down the liquid to2 cups of decoction ,then you will want to add 1 cup of honey or sugar to create and adequately preserve your syrup. Some herbalists like to use a 1:1 ratio of decoction to honey/sugar while others find a 1:1 ratio To result in a syrup that is too sweet. The increased amount of honey/sugar relative to decoction in a1:1ratio will be better preserved and hence last longer.

Herbal Tablets:

Tablets may be defined as the solid unit dosage form of medicament or medicaments with suitable excipients and prepared either by molding or by compression. It comprises a mixture of active substances and excipients usually in powder form, pressed or compacted from a powder into a solid dose. The excipients can include diluents, binders, glidants and lubricants to ensure efficient tableting.40 Disintegrants to promote tablet break-up in the digestive tract; sweeteners or flavours to enhance taste; and pigments to make the tablets visually attractive or aid in visual identification of an unknown tablet.37 A polymer coating is often applied to make the tablet smoother and easier to swallow, to control the release rate of the active ingredient, to make it more resistant to the environment (extending its shelf life), or to enhance the tablet's appearance.

Tablet Evaluation:-

Before a tablet is released out into the market it has to pass a few quality checks, which is mandatory. Evaluation of tablet includes the assessment of tablets physical, chemical and biological properties. To studies them the following test are formulated: Appearance, Size and Shape, Organoleptic properties, Uniformity of thickness, Hardness, Friability, Determination of pH, Specific gravity, Stability testing.38

PHYTOSOMES

Phytosomes are also known as herbosomes, are recently added herbal formulations that are better absorbed than extracts. Phytosomes are prepared through the attachment of individual ingredients of herbal extracts to phosphatidyl-choline, resulting in a formulation having higher solubility and hence better absorption leading to promoted pharmacokinetic and pharmacodynamic properties compared to the conventional herbal extracts. Various popular herbal extracts including Ginkgo biloba, grape seed, hawthorn, green tea, and ginseng have been incorporated in phytosomes. The active components of these herbal extracts were successfully bound to phosphatidyl choline. Phytosomes, also known as phospholipid complexes, are well-known delivery systems that are closely related to liposomes in terms of their structure and configuration.43 Phytosomes have a higher capacity for nutraceutical compounds to be added to them, as they have a quite stable, chemically bound structure. Plant extracts can bind quite easily to phosphatidyl cholines due to the presence of terpenoids and flavonoids. As delivery systems, phytosomes have proved to be superior to liposomes. The chemical bonding ensures the stability of phytosomes, enhances the encapsulation efficiency and stability of bioactives, generally at a stoichiometric molar ratio of 1:1 or 1:2 (phospholipids: phytochemicals) Phytosomes were found to improve solubility, permeability rate and bioavailability of active compoundsin various casesandinhibitordelayphysicalandchemicaldegradationandcouldbeimplementedwithoutg enerating any toxic effects. The choline head of the phosphatidyl choline molecule binds to these compounds while the fat-soluble phosphatidyl portion comprising the body and tail envelops the choline-bound material. The phytosome process also intensifies the action of herbal compounds by improving absorption, increasing biological activity, and enhancing delivery to the target tissue.44 Figure no.14:-

Liposome

Methods of Preparation: For the preparation of Phytosomes the phyto constituents like bioflavonoids, flavolignan and poly phenolic compounds reacting drop by drop by the solution of natural or synthetic phospholipids like Phosphatidy choline with vigorous stirring. Phytosomes of ginsenoside, puerarin and kushenin are prepared in this manner. Another example is the Curcumin phospholipids complexes which can be prepared when the ethanol solution of the hydro-alcoholic extract of turmeric rhizomes adding the phospholipids, under reflux and with stirring. Phytosomes which are

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prepared by the non solvent, freeze drying, spray drying or vacuum drying are called the prepared complex phytosome.[45]

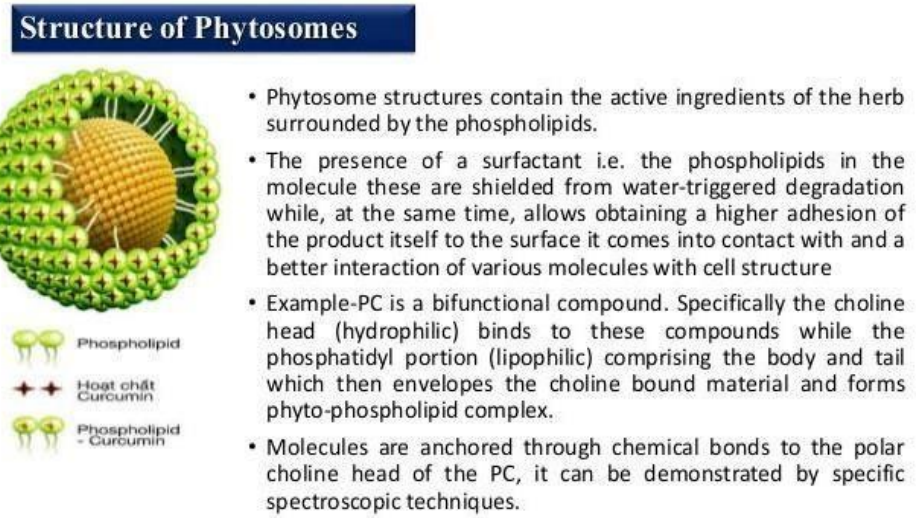

Figure no.15:- About Structure of phytosome

Advantages of Phytosomes:-

Improve the absorption of lipid insoluble polar phyto constituents, enhance the bioavailability.

Appreciable drug entrapment which becomes very beneficial.

Reduce the dose due to increased absorption.

Phosphatidyl choline shows synergistic effect because it is a hepato protactive also.

Phytosomes are more stable because of the chemical bondingbetween the phyto constituents and carrier i.e. phophatidy lcholine.

Effective in cosmetics.[46]

II. CONCLUSION

The current review highlights the importance of herbal skin cosmeceuticals, the herbs used in them and their advantages over the synthetic counterparts. Current scenario shows that herbal skin cosmeceuticals have been marked up in personal care system and there is a great requirement for herbal cosmetics in daily life. The chemical formulation of all these skin cosmeceuticals include addition of various natural additives with parts of herbs as a major constituent. Herbal Cosmeceuticals are very safe,effiecient,cost effective and do not produce any toxicity and adverse reactions compared to marketed cosmetics. But there is need to do more Research and Development in the field of herbal skin cosmeceuticals to conduct adequate safety testing as per regulatory rules and requirements. Cosmeceuticals are skin-care products that provide both cosmetics and drugs. In this serum and herbal hydrogel of aloe Vera was used. The fresh aloe Vera gel from the inner central part (parenchyma) of the leaf often has a very good action in acne, pimples, eczema and other skin problems, burns due to heat, sun exposure and in treatment of radiation dermatitis. Aloe Vera contains number of vitamins and minerals that have a strong moisturizing capacity and anti-aging effects to maintain healthy- and freshlooking skin. The gel stimulates cell growth and as such enhances the restoring of damaged skin. So, this aloe vera and bee venom serum and aloe vera herbal hydrogel can be used treat skin related problems. In the reviewed formulations we have seen that the Turmeric extract was used as active ingredient for preparation of Herbal Turmeric Cream. Both the cream shows good and satisfying evaluation parameters in its study. The Appearance of both the cream formulations was yellowish in color and was homogenous in nature. Also there was some difference in Formulation 1 and Formulation 2 Evaluation parameters like pH was 6.7 and 6.4 respectively, Viscosity was 27025cp and 6825cp respectively, spread ability was 0.57gm/sec and 12.78gm/sec respectively. The Reviewed article mainly

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determines that The Herbal Turmeric cream shows good antiseptic activity and can be used for beauty purpose and thus, is also free from harmful reactions like we observe in most of the synthetic cream

It can be concluded that using herbal dentifrice as a supplement to daily dental care can help people with gingivitis decrease plaque and inflammation. The main benefits of adopting herbal medication are its accessibility, cost-effectiveness, extended duration, and minimal toxicity. If used in greater doses, the drawbacks of utilizing herbal medicine such as clove oil are designed to cause major difficulties such as pharyngitis, vomiting, cytotoxicity, kidney failures, liver damage, convulsions, difficulty breathing, and others. As a result, preclinical and clinical research are required to determine biocompatibility and safety before herbal medication may be definitively prescribed for oral use. Many people does not know about the herbs which are used in dental health. This article provides the information about the herbal medicinal plants that can be used dental health.

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