

Review on Herbal Lip Balm

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ABSTRACT

Cosmetics are incredibly in demand since historical time. These days focus shifted more towards naturally derived cosmetic products. The ingredients of the synthetic source have so much adverse effects where's herbal word is a symbol of safety. Among all cosmetic products, lip balm formulations are most widely used to enhance the beauty of lips and add glamour touch to the makeup. The lip balm resists from the external temperature, variation and other factors. Lip balm is not a gender-specific product that anyone can easily use this cosmetic. The natural lip balm can be made using naturally occurring base, oil, extract, and flavouring agents. The concept behind our product is a long-lasting moisturizing herbal lip balm.

Keyword: Herbal, Herbal Lipbalm, Moisturizer, Natural Ingredients, Lip Dryness.

I. INTRODUCTION:

The skin is the body's largest organ; it covers the entire body. It serves as a protective shield against heat, light, injury, and infection.

The skin also

- 1) regulates body temperature
- 2) store water and fat
- 3) prevent water loss
- 4) prevent entry of bacteria

The type of skin is determined by genetics, although it will also be affected by other factors and can change with time based on these characteristics. There are five types of healthy skin: normal, dry, oily, combination (both oily and dry skin), and sensitive. Cosmetics play a significant role in today's lifestyle. Moreover, the current trend is going green in almost all industries, including cosmetics, to adopt a more natural way of life. The preferable choices are natural food, herbal medicines, and natural curing practices for a healthy life, and also there is much demand for organic vegetable products. The usage of herbal cosmetics has been increased to many folds in the personal care system [1]. Natural products have been used for folk medicine

purposes throughout the world for thousands of years. Many of them have pharmacological properties such as antimicrobial, anti-inflammatory, and cytostatic effects. They have been recognized as useful for human medicine. Herbal extracts are cultivated all over the world and are prime names in the horticulture sector. Cosmetics made up of herbal extracts for skin care and hair care are very popular for their reliability. Herbal cosmetic products include various formulations. The word 'herbal' indicates safety as compared to synthetic products which are having various adverse effects on human health. The primary purpose of the lip balm is to provide an occlusive layer on the lip surface to seal moisture in the lips and protect them from external exposure. A lip balm wax-like substance applied topically to the lips to moisturize and relieve chapped or dry lips, angular cheilitis, stomatitis, cold sores. The lips differ from the structure of the skin; they have 15-16 layers mainly for protection. Conversely, the top corneum layer of the lips contains about only 3-4 layers and is very thin compared with the typical facial skin. The lip skin contains few melanin cells. As a result, blood vessels appear more clearly through the skin of the lips and give a lovely pinkish color to the lips. The lip skin has no hair follicle and no sweat glands. Therefore, it does not have sweat and body oil that protect it from the outside environment.

Anatomy of lip

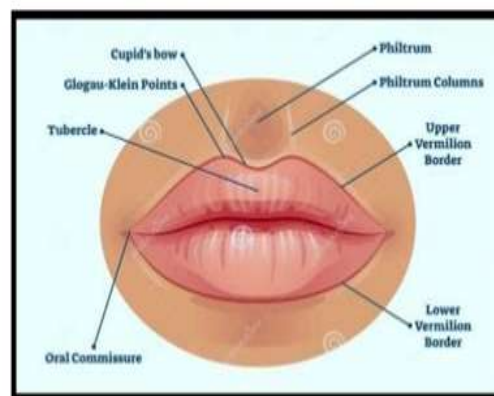


Fig:1 Anatomy of lip

The lip serve as organs of prehension, suction and speech. It is composed of the skin, superficial fascia, orbicularis muscle and the muscles inserted around it (areolar tissue and mucous membrane).the areolar tissue contain coronary vessels which completely encircle the buccal orifice near the free merging of the lips. Coronary vessels are the superior and inferior coronary arteries which arise from the facial. The superior coronary is larger than the inferior anastomoses with its fellow of the positive side and gives off small artery to the septum arteriaseptinasi

Characteristic of lip balm

- 1) resistance to temperature variation
- 2) Pleasant flavour
- 3) Smoothness during application
- 4) Innocuousness
- 5) adhesion and easy intentional removal

Application of lipbalm

- 1) Lip balms are formulations applied onto the lips to prevent drying and protect against adverse environmental factors.
- 2) Natural lip balm being a product intended for uses by both men and women
- 3) The lip balm it is necessary to balance the concentration of the main ingredient including oils and wax and other excipients
- 4) Lip balm are often eaten away by the use and hence regulators have a microscopic lookate the ingredients that go in to the lip balm

Advantages of lipbalm

- 1) Lip balms help to protect the natural health and beauty of the lips.
- 2) Lip balm products help to protect lips affected by cold sores, chapping and dryness.
- 3) Sun block lip balms are proved to prevent ultraviolet rays from hurting the lips.
- 4) They are not gender specific products and both men and women can use them.
- 5) The use of natural lip cosmetic to treat the appearance of the face and condition of the skin.
- 6) Help shield your lip from dry air, wind and especially cold temperature

Disadvantages of lipbalm

- 1) common ingredients used in natural lip balm
- 2) Lip balm addiction is another disadvantage usually seen with the use of them.
- 3) Natural oils have other disadvantages such as greasier, comedogenic, and less spreadability
- 4) Lip balms made of low quality ingredients can harm the lips seriously. Such lip balms may dry out the lips instead moisturizing it.
- 5) The naturally derived colors and flavours are more difficult to obtain and also have issues related to stability in the products.

Lip disorder

- 1) Swelling-An allergic reaction can make the lips swell. The reaction may be caused by sensitivity to certain foods or beverages, drugs, lipstick, or airborne irritants. When a cause can be identified and then eliminated, the lips usually return to normal. But frequently, the cause of the swelling remains a mystery. A condition called hereditary angioedema may cause recurring bouts of swelling.
- 2) Sun Damage: Sun damage may make the lips, especially the lower lip, hard and dry. Red speckles or a white filmy look signal damage that increases the chance of subsequent cancer. This type of damage can be reduced by covering the lips with a lip balm containing sunscreen or by shielding the face from the sun's harmful rays with a wide-brimmed hat
- 3) Sores: A raised area or a sore with hard edges on the lip may be form of skin cancer. Other sores may develop as symptoms of other medical conditions, such as oral herpes simplex virus infection or syphilis. Still others, such as keratoacanthoma, have no known cause
- 4) Allergic Contact Cheilitis :The most common cause of contact cheilitis includes the use of personal hygiene products such as toothpaste and mouthwash which contain numerous antibacterial agent, essential oils and preservative.
- 5) Inflammation: With inflammation of the lips (cheilitis), the corners of the mouth may become painful, irritated, red, cracked, and scaly. Cheilitis may result from a deficiency of vitamin B2 in the diet.

II. MATERIAL AND METHOD

List of Natural Ingredients

Base	Oil	Colouring agents	Flavouring agents	Antioxidant
Bees wax	Coconut oil	Beetroot	Orange	Aloe vera
White bees wax	Olive oil	Saffron	Vanilla	Green tea
Cocoa butter	Almond oil	Honey	Mango	Rosemary
Candelilla wax	Sunflower oil	Cherry	Honey	Blueberry
Olive wax	Castor oil	Carrot	Cherry	Grapeseed

1) Base

Waxes shape an critical organization of components for the manufacture of private care merchandise and ornamental cosmetics. Waxes are utilized in extraordinary industries and merchandise. They are predominately utilized in candles, however additionally discover critical programs in food, cosmetics and pharmaceutical industries as thickeners/emulsifiers. Chemically, waxes are complicated combinations of hydrocarbons and fatty acids blended with esters. Waxes are harder, much less greasy and greater brittle than fats. They are very proof against moisture, oxidization and bacteria. There are 4 classes of waxes as: (a) Animal Waxes: Beeswax, lanolin, spermaceti; (b) Plant Waxes: Carnauba, candelilla, jojoba; (c) Mineral Waxes: Ozokerite, paraffin, microcrystalline, ceresin; (d) Synthetic Waxes: Polyethylene, carbowax, acrawax, stearon. The maximum broadly used waxes for beauty merchandise are beeswax, carnauba and candelilla wax

2) Oil

The oil mixture is required to blend properly with the waxes to provide a suitable film on the applied lip skin. An ideal mixture is one which enables the product to spread easily and produces a thin film with good covering power. Sunflower or olive oil, both oils will give a great gloss to lips. Castor oil is used in many lip balms because of its good qualities, though nowadays some ether oils or solvents are being used. A refined grade castor oil is of good color and is odorless and tasteless. Castor oil is a very good plasticizing agent. An antioxidant is to be added to the castor oil against rancidification though it is not as prone to

rancidification as other vegetable oils like olive oil or almond oil. Jojoba oil is known for its skin softening properties which can prevent lips from dehydrating

3) Colouring Agent :

colour have been used in cosmetics, since time immemorial, by human being basically the desire to buy a cosmetic product is controlled by their senses namely sight touch and smell so colour is one of the most important ingredients of cosmetic formulation. The most important characteristic of colorants is compatibility with other ingredients and medicament. It should be free from objectionable taste and odour and must be readily available and inexpensive. The examples of natural colorants are obtained from beet root, saffron, turmeric, etc. Saffron is dried stigma of flowers of the plant *Crocus sativus* L. It is a perennial plant and is grown in Kashmir in India. It is also cultivated in Spain, France, Greece and Iran. The principle coloring agent in saffron is crocin. Crocin is yellow powder, a glycoside in nature and easily soluble in water

4) Antioxidant:

Many cosmetics that are marketed nowadays often contain antioxidant as the active ingredients. It is known that oxidation reaction could produce free radicals. Which can start chain reaction that will damage skin cells. Increasing the number of free radicals could initiate the wrinkling, photoaging, drying of the skin. It is well known that plants can produce natural antioxidant compounds that could control the oxidative stress caused by sunlight and oxygen. The cosmetic formulation usually contain various combination of

plant extract aloe vera, green tea, rosemary ,grape seed, blueberry.

5) Flavouring Agent:

Flavours or flavouring agent are usually required to mask the four basic taste sensations. Flavour refers to a mixed sensation of taste, touch, smell, sight and sound, all of which involve a combination of physiochemical and physiological actions that influence the perception of substances. Flavours used in lip balm should not contain any ingredient which may be irritating or toxic. These should have good taste and should be able to mask fatty odour of the base flavouring agents are an essential component to mask the odour of the fatty or wax base as well as to impart an attractive flavor. The flavours should not be very strong as to clash with or overpower other flavors that may be used concurrently with the lip balm. Perfumes of the fruit flavor type have been advocated as well. Also something edible can be used the The commonly used flavours are apricot, strawberry, cherry, honey. Honey has the capacity to serve as a natural food preservative

Bees Wax:



Fig:2BeesWax

Synonyms: ceraalba,ceraflava.

Biological Source -Bees wax is the purified wax obtained from honey comb of Hive Bee, *Apis Mellifera*, Linn

Family-Apidai

Chemical Constituents -Beeswax contains myricin, which is melissyl palmitate; melting point 64°C , free cerotic acid ($\text{C}_{26}\text{H}_{52}\text{O}_2$), myricyl alcohol ($\text{C}_{30}\text{H}_{61}\text{OH}$) is liberated when myricyl palmitate is saponified. Melissic acid, some unsaturated acids of the oleic series, ceryl alcohol, and 12 to 13% higher hydrocarbons are present.

Uses-Beeswax is used in the preparation of ointment, plaster and polishes

AloeVera:



Fig:2AloeVera

Synonyms-Aloe,Mussabar,AloeForex.

Biological Source—It consist of dried and fresh mucilage of AloeVera

Family-Asphodelaceae,Liliaceae

Chemical Constituents-

-it contains anthraquinones like rhein ,aloin,emodin,mineral and mucilage. chemically mucilage is a polysaccharide consisting of salts of poly uronic acid.

Uses –

- 1) It help to improve flexibility
- 2) It is usually applied with carminative.
- 3)It also reduces eczema.
- 4)It also help to reduce ageing and wrinkles.

Beet Root:



Fig:3BeetRoot

Synonyms -sugar beet, chukandar ,spinach beet.

Biological sources -It consist of fresh beta vulgarise .

Family -chenopodiaceae.

Chemical Constituents -red betalain, beta xanthines, kaempferol glycoside,betain.

Uses -1)May help balance energy intake.

2)Reduce tan.

Olive Oil



Fig:4Olive Oil

Synonyms Oleum olivae, Sweet oil, Salad oil.

Biological sources -olive oil is a fixed oil obtained by expression from pericarp of the ripe fruits of Olea europoea..

Family -Oleaceae

Chemical Constituents -Glycerides of oleic acid, Palmitic acid, stearic acid, linoleic acid and arachidic acid.

Uses -1)It help preventing stroke.

2)It helps in curing acute pancreatitis.

3)It help to strengthening bone.

Honey :



Fig:5Honey

Synonyms-madhu,madh,mel,purifiedhoney

Biological Source -Honey is a viscid and sweet secretion stored in the honey comb by variousspecies of bees, such as Apis mellifera, Apis dorsata, Apis florea, Apis indica and other species of Apis

Family-Apidae.

Chemical Constituents -The average composition of honey is as follows: noMoisture 14–24%,Dextrose23–36%,Levulose(Fructose)30–47%,Sucrose0.4–6%,DextrinandGums0–7%andAsh0.1–0.8%. Besides, it is found to contain small amounts of essential oil, beeswax, pollen grains, formic acid, acetic acid, succinic acid, maltose, dextrin, colouring pigments, vitamins and anadmixture of enzymes.

Uses- 1)It is used in treating burns and wonds.

2) It is used in natural cough syrup.

3) It is help to improve digestion.

Method of preparation:

Weight accurately all the required ingredient as per table . in a clean evaporating dish, take bees wax firstly and melt it on a water bath and stirring till it melts completely then colouring agent. dissolved in oil and add to the mixture of melted wax. add antioxidant agent finally add flavouring agent and continuously stirred to get a homogenised mixture . The mixture should be stirred vigorously until a smooth emulsion form. Then, this mixture could be poured into clean and lubricated moulds and allow them to cool to achieve contraction of the waxes to facilitate easy removal of the balm.

Evaluation parameter of lipbalm:

Melting point : For melting point, the sample of lip balm was taken in a glass capillary whose one end was sealed by flame. The capillary containing drug was dipped in liquid paraffin inside the melting point apparatus which was equipped with magnetic stirring facility. Melting was determined visually and melting point was reported.

Organoleptic properties : The lip balm was studied for the basic organoleptic characters such as colour, odour, taste and appearance.

Test of spreadability : The test of spreadability is carried out by applying the product at room temperature repeatedly on the glass slide to visually observe the uniformity in the formation of the protective layer and it is observed that wheather the

stick fragmented, broke or deformed during the application. For this test following criteria were established by analyst:

G - Good: uniform, perfect application, no fragmentation, without deformation of lip balm.

I – Intermediate: uniform, leaves few fragmentation, appropriate application, few deformation of lip balm.

B- Not uniform, leaves many fragments, inappropriate application, intence deformation of the lip balm.

PH:The melting temperature and PH of lip balm are also commonly evaluate by capillary method and PH meter respectively .

III. CONCLUSION:

Due to tremendous demands of beauty enhancing products cosmetics industry is flourishing. This work has reviewed the current status of natural lip balm products. This also studied all aspects of natural lip balm including natural ingredients, formulation methods, evaluation and applications. Hence it can be concluded that the extensive literature study has been performed on the natural lip balm products and shown wide scope for such products in future

REFERENCES:

- [1]. V.P. Kapoor, Herbal cosmetics for skin and hair care, Natural Product Radiance. 4 (2005) 306-314.
- [2]. B. J.Kukreja, V. Dodwad, Herbal mouthwashes-A gift of nature, International Journal of Pharma and Bio Sciences. 3 (2012) 46-52.
- [3]. Rushikesh M sankpal, Shrutika R. Kadam,et.al International Journal of Advanced Reserch inScience Communication and Science Vollume 2,Issue 1,June2022
- [4]. A.R. Fernandes, M.F. Dario, C.A.S.O. Pinto, T.M. Kaneko, A.R. Baby, M.V.R. Velasco, Stability evaluation of organic Lip Balm, Braz. J. Pharm. Sci. 2 (2013) 49.
- [5]. R.G. Harry, J.B. Wilkinson, Harry's Cosmeticology, six ed. Leonard Hill books and Intertext publisher, London, 1973.
- [6]. S.A. Sahar, M. Soltan, M.E.M. Shehata, The effects of using color foods of children on immunity properties and liver, kidney on rats, Food and Nutrition Sciences. 3 (2012) 897-904.
- [7]. Fisher AA. Reactions of the mucous membrane to contactants. Clin Dermatol. 1987; 5:123-136.
- [8]. Lip Disorders Lip and Tongue Disorders Merck Manual Home Edition.mht http://www.merckmanuals.com/home/mouth_and_dental_disorders/lip_and_tongue_disorders/lip_disorders.html (assessed on 30 November 2014)
- [9]. C.K.Kokate,S.B.Gokhale,Pharmacognoocy-II.
- [10]. B.N. Basha, K. Prakasam, D. Goli, Formulation and evaluation of gel containing fluconazole-antifungal agent, International Journal of Drug Development and Research, 3 (2011) 4.
- [11]. Sharma PP, cosmetics- Formulation, manufacturing and quality control, Edn 5. Vandana publications, Delhi, 2008, 297-313.
- [12]. H. I. N. Nasution, "Formulation of Lip Balm using Combination of Palm Kernel Oil (PKO) and Red Palm Oil (RPO) as Lip Moisturizer," Final project, Universitas Sumatera Utara, 2018.