

A review on Herbal Lip Balm

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Abstract

Lip balm is one of the most frequently used cosmetic items. Its primary purpose is to hydrate, soothe chapped lips, and protect them from drying out. It is widely used and comes in a variety of forms; nonetheless, it has significant drawbacks. Chemical-based lip balm, for example, has adverse effects and has a short-term hydrating effect. As a result, we develop a novel lip balm concept that not only contains herbal elements to decrease negative effects, but also maintains the moisturising effect throughout time. The concept behind our product is a long-lasting moisturising herbal lip balm containing honey, hyaluronic acid, and SPF.

Keywords—lipbalm; durable; herbal; moisturizing; hyaluronic acid.

Introduction

Cosmetics are substances or items that are applied to the body in order to enhance one's look. The use of cosmetic items is continuously growing. Key variables such as rising urbanisation, lifestyle improvements, and the trend of publishing images on social media all encourage the usage of cosmetic items. An increase in the number of working women and time spent on social media has increased people's awareness of their appearance (Bellis, 2017). The growing young population in emerging countries, combined with rising disposable money, leads to a growth in the sale of cosmetic products, especially lip cosmetics (P&S Market Research, 2018).

The Inclusion of hazardous compounds in cosmetics poses a threat to industry expansion. Consumers are increasingly concerned when it comes to selecting cosmetic items. Manufacturers compete to create cosmetics that are both safe to use and good to the environment. Because of rising demand for organic and natural lip care products, increased awareness of the need to protect the lips from overexposure to the sun, and new product innovations, Global Industry Analysts, Inc. (GIA) has launched the global market for lip care products, forecasting it to reach US\$2 billion by 2020. (Global Industry Analysts, 2015)/(Global Industry Analysts, 2015)/(Global Industry Analysts, 2015).

Lip colouring has been done since ancient times, and the use of lipsticks has grown in popularity. Shades of colour, texture, and sheen options have also evolved and expanded. Lip jelly, lip balm, and other similar products are examples. The structure of the lips differs from that of the skin. The top corneum layer of the skin has 15-16 layers in general, primarily for protection. In comparison to regular face skin, the top corneum layer of the lips comprises only 3-4 layer and is quite thin. There aren't many melanin cells in the skin of the lips. Blood vessels visible more clearly through the skin of the lips as a result, giving the lips a gorgeous pinkish tint. There are no hair follicles or sweat glands on the surface of the lips. As a result, it lacks the sweat and body oils that protect it from the elements (Kudu et al., 2015). Lip balm is one sort of lip product. Its major purpose is to keep the skin from drying out and to protect it from harmful environmental influences. Some lip balms, however, have negative side effects. Lip balms containing phenol, menthol, and other low-quality chemicals, for example, might be harmful to the lips. Lipsticks, lip balms, lip jellies, lip salves, lip gloss, and lip rouge are some of the cosmetic compositions used on the lips. These formulas give the lips a lovely colour and a glossy finish. Lip rouge is a lipstick substitute. In nature, they are almost semisolid or liquid. They can be made by mixing pigments with a base that contains the appropriate proportion of aqueous phase. This formulation is ideal for integrating pharmaceuticals encapsulated in niosome. This type of formulation's consistency makes it simple to apply with the help of a brush attached to the container's lid. It also aids in improving the active medicament's penetration through the lip membrane. The cosmetic formulation has a good aesthetic appeal and is simple to apply. The more precisely the active substance is applied to the affected location, the more successful the illness treatment becomes. When compared to the current formulation, the cosmetic formulation will be more patient-acceptable, which may improve patient compliance. The study's goal was to create a medicated lip rouge containing niosome acyclovir to treat recurrent herpes labialis. This study was an attempt to design a formulation capable of delivering a higher concentration of the medicine in the dermal tissue for effective cold sore therapy. Because the medicine is encapsulated inside a lipophilic niosomal carrier, the formulation may be able to penetrate deep into the lip membrane and release the drug at the site of action.

Anatomy of Lips:

The 5 major zones are vermilion/white roll, subvermilion, peristomal, philtral column, and commissural. The subvermilion corresponds to the dry mucosal lip, and the peristomal at the junction of dry and wet mucosal lip. The vermilion/white roll can be divided on the upper lip to include the lateral, apical cupid's bow and central filtral zones, while the vermilion lower lip is divided into medial and lateral zones. The subvermilion is divided into medial and lateral zones, and the peristomal into medial and lateral zones. Lips: The surface of the lips consists of four zones: hairy skin, vermilion rim, vermilion and oral mucosa. The normal shape of the lips varies with age and is greatly influenced by ethnicity. Vermilion: The red part of the lips.

It is covered by a specialized stratified squamous epithelium. Cinnabar Border: The border of lighter skin that separates the vermilion from the surrounding skin. Cupid's bow: the outline of the line formed by the vermilion border of the upper lip. Mouth: The opening is delimited by the upper and lower cinnabar. Corner of the mouth: The place where the lateral vermilion aspects of the upper and lower lips meet.

The upper and lower lips are known as the labium superioris oris and labium inferius oris, respectively. Both the upper and lower lips contain mucosa, vermilion, and skin surfaces. This article provides a brief overview of anatomy, neurovasculature, and musculature of the lips, as well as important surgical and clinical considerations regarding lip pathology. While considerations of the lips are often centered on the vermilion zone, the upper lip extends from the nasolabial folds to the inferior margin of the nose, and the lower lip encompasses the region between the lateral commissures and the labiomental crease of the chin. The upper and lower lips intersect at the mouth angle, referred to as the commissure. This is the point at which several muscles involved in lip movement attach.

Lateral subunits and the lower lip, 1 subunit. The cutaneous and mucosal portions of the lip meet at the vermilion that has a variable prominence called the white roll. The major zones are vermilion/white roll, subvermilion, peristomal, philtral column, and commissural. The edges of the lips are covered with reddish skin, sometimes called the vermilion border, and abundantly provided with sensitive nerve endings. The reddish skin is a transition layer between the outer, hair-bearing tissue and the inner mucous membrane. The interior surface of the lips is lined with a moist mucous membrane. In newborn infants the inner surface is much thicker, with sebaceous glands and minute projections called papillae. These structural adaptations seem to aid the process of sucking. Most of the substance of each lip is supplied by the orbicularis oris muscle, which encircles the opening. This muscle and others that radiate out into the cheeks make possible the lips' many variations in shape and expression.

The lips are pretension, suction, and speech organs. The skin, superficial fascia, orbicularis muscle, and muscles inserted around it make up this structure (areolar tissue & mucous membrane). Dry, red mucous membrane covers the lips' edges, which is continuous with the skin and contains numerous vascular papillae and touch corpuscles. Internally, the mucous membrane reflects from the upper and lower lip onto the gums, forming two superiors and inferiors' folds in the middle line.^[1-2]

Lip Disorders :**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. Nonhereditary conditions such as erythema multiforme, sunburn, cold and dry weather, or trauma may also cause the lips to swell.

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.

Discoloration:

Freckles and irregularly shaped brownish areas (melanotic macules) are common around the lips and may last for many years. These marks are not cause for concern. Multiple, small, scattered brownish black spots may be a sign of a hereditary disease called Peutz-Jeghers syndrome, in which polyps form in the stomach and intestines. Kawasaki disease, a disease of unknown cause that usually occurs in infants and children 8 years old or younger, can cause dryness and cracking of the lips and reddening of the lining of the mouth.

Sores:

A raised area or a sore with hard edges on the lip may be a 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.^[3]

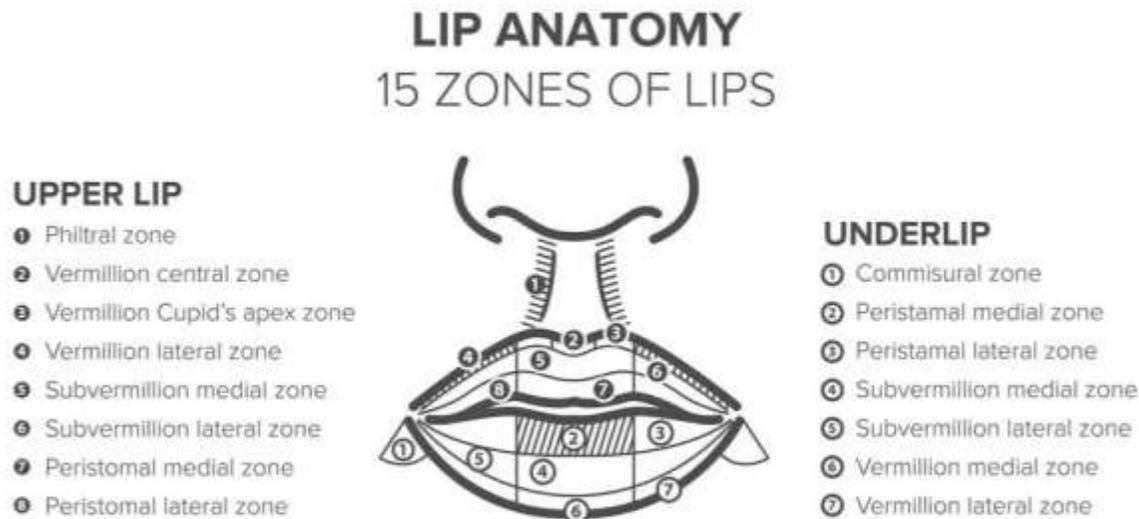


Fig: Anatomy of Lips^[4]

Lip Balm:

Lip balms are moisturizers that are applied to the lips to keep them from drying out and to protect them from the elements. Although analogies to lipstick apply because it is a cosmetic form akin to lip balm, the cosmetic literature has minimal data on this sort of formulation (stick form). This resemblance extends to organoleptic and stability needs such as temperature resistance, agreeable taste, innocuousness, smoothness during application, adhesion, and purposeful removal ease (DE Navarre, 1975; Gouvea, 2007). Lip balm and lip gloss are not interchangeable, with the former being a product that may be used by both men and women.

Fatty acids, such as waxes, oils, and butters, are the key constituents of lipstick, providing consistency and acting as emollients. Castor oil, beeswax, carnauba wax, candelilla wax, paraffin, and cocoa butter are some of the most common.

However, there are a few key distinctions between lipstick and lip balm, particularly in terms of functionality: lipstick is intended to colour the lips, whereas lip balm protects them. Furthermore, lipstick formulations are more complex than lip balm formulations due to the increasing number of components.

To make lip balms, the concentration of the key ingredients, such as butters, oils, and waxes, must be balanced such that the final product has a fusion point of 65 to 75 degrees Celsius (Gouvea, 1993, Bonadeo, 1982). The formulation will have varying qualities depending on the proportions of wax, oils, and colors. A high percentage of wax and pigment can be used to create a long-lasting product, while the inverse can result in a smoother lipstick or lip balm (Cunningham, 1996).

The chemicals in a lip balm formulation can have an adverse effect on softening and rupture points, which are two separate features. Two formulations with the same fusion point but different consistencies can exist. To correct these problems, the formulator may have to put in a lot of effort. In order for the formulation to have appropriate fusion, softening, and rupture points, a balance between the constituents must be reached.

Application of Lip Balm:

Lip balms are formulations applied onto the lips to prevent drying and protect against adverse environmental factors. Numerous lip balms of chemical origin are currently available in the market from companies like the body shop, Nivea, Himalaya, Blistex, etc. The cosmetic literature reports limited data on this type of formulation, although references related to lipstick apply because it is a cosmetic form similar to lip balm. This similarity extends to include organoleptic and stability requirements such as resistance to temperature variations, pleasant taste, innocuousness, smoothness during application, adherence and easy intentional removal. Lip balm should not be considered equivalent to the lip gloss, with the former being a product intended for use by both men and women.^[6-8-9]



Fig: Lip Balm^[5]

Advantages of Lip Balm:

1. Lip balms help to protect the natural health and beauty of the lips.
2. Sun block lip balms are proved to prevent ultraviolet rays from hurting the lips.
3. They are not genderspecific products and both men and women can use them.
4. Lip balm products help to protect lips affected by cold sores, chapping and dryness.
5. Contact of the product with the skin will not cause a sensation of friction or dryness, and should allow the forming of a homogeneous layer over the lips in order to protect the labial mucous susceptible to environmental factors such as UV radiation, dryness and pollution.
6. It refreshed, renewed and also addresses lip-related symptoms resulting from colds, flu and allergies.
7. The use of natural lip cosmetic to treat the appearance of the face and condition of the skin^[8-10-11-12-13-14]

Disadvantages of Lipbalm :

1. Lip balms made of low-quality ingredients can harm the lips seriously. Such lip balms may dry out the lips instead moisturizing it.
2. Lip balm addiction is another disadvantage usually seen with the use of them.
3. Compared to commercially-prepared lip balms, homemade lip balms tend to stay on the lips for a shorter duration of time. Thus, need to reapply often.
4. Some companies manufacture lip balms considering only the beauty aspect, ignoring the health benefits and soft character of the skin. Such products will gradually damage the natural color, softness and glow of the lips.
5. The naturally derived colors and flavours are more difficult to obtain and also have issues related to stability in the products.
6. Natural oils have other disadvantages such as greasier, comedogenic, and less spreadability. [8-10-11-12-13-14]

Materials :

Table No.1- List of Natural Ingredients

Base	Oils	Colouring Agent	Flavouring Agent
Cocca butter	Coconut oil	Beetroot	Strawberry
Beeswax	Olive oil	Pomegranate	Honey
Shea wax	Almond oil	Marigold	Orange
Shea Butter	Vitamin E oil	Tomato	Kesar
White bees wax	Peanut oil	Jabul	Raspberry
Yellow bees wax	Tea tree oil	Watermelon	Vanilla
Carnuba wax	Glycerine	Honey	Mangoe
Candelilla wax	Castor oil	Saffron	Rose oil
Mango butter	Jojoba oil	Turmeric	Sandalwood
Avocado butter	Corn oil	Capsicum	Jasmin
Olive oil	Arachis oil	Cherry	Cherry
Jojoba wax	Lemon oil	Orange	Apple
Olive butter	Avocado oil	Strawberry	Lemon
Sweat almond butter	Sesame oil	Mango	Apricot
Sweat almond wax	Sunflower oil	Carrot	Rosemary
Raspberry butter	Grape seed oil	Lemon	Pineapple

Flavoring agent:-

To hide the four basic taste sensations, flavor's or flavouring agents are frequently required. Flavors is a multisensory experience involving taste, touch, smell, sight, and sound, all of which are influenced by a mixture of physiochemical and physiological processes. Many artificial or imitation flavour's have been created as technology in the flavors industry has advanced. It's more of an art than a science to create a suitable flavour . Flavorants are chosen based on the drug's flavors profile, or other substances may be required. The following Table 3 depicts the masking flavors in relation to various tastes. Lip balm flavors should not contain any ingredients that are irritating or harmful. These should have a pleasant flavour and be able to hide the base's greasy odours. Flavoring chemicals are necessary to hide the odors of the fatty or wax basis while also imparting a pleasing flavour. They're usually employed at a concentration of 2-4 percent of the final product. The flavour of the lip balm should be steady and suitable with the other ingredients. The flavors should not be so strong that they clash or overshadow other flavor's that may be utilised with the lip balm at the same time. Perfumes with a fruity scent have also been recommended. It's also possible to use something edible. Apricot, strawberry, raspberry, cherry, honey, and other flavors are common. Honey has the ability to act as a natural preservative for food. Product intended for use by both men and women^[11-12-13-16]

Colouring Agents:

Colorants or coloring agents are mainly used to impart a one of a kind looks to the Cosmetic products. Color has been utilized in cosmetics on the grounds that early times. Basically, a desire to buy a beauty product is controlled with the aid of using 3 senses particularly sight, contact and smell. As such, shadeation is a critical aspect of beauty formulations. The satiation is imparted to the lips in ways; (a) By staining the pores and skin with an answer of dyestuff which can penetrate the outer layer of the lip pores and skin, (b) By masking the lips with a coloured layer which serves to hide any pores and skin roughness and supply a clean look. The first requirement is met with the aid of using soluble dyes and the second is met is insoluble dyes and pigments which make the movie greater or much less opaque. Modern lip balms comprise both to achieve the blended effect. The colours must be from the listing of licensed dyes beneathneath the medicine and cosmetics act. The naturally going on colours. From extraordinary plant and fruit resets are indexed in Table quantity 2. The colorant derived from herbal supply must be secure with no physiological activity. It must be a precise chemical compound due to the fact then most effective its coloring electricity will be reliable; its assay will be practicable and easier. Its tinctorial (coloring) electricity must be high enough so that most effective small portions could be enough for use. Colorants must be unaffected with the aid of using light, tropical Temperatures, hydrolysis and micro-organisms and therefore they must be strong on storage. Colorants should not affected by oxidizing or reducing agents and pH changes and also should not interferes with the tests and assays. Water soluble colorants are equally desirable with oil-soluble and spirit-soluble colors. 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 *Cross Sativuslinne*. 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^[10-11-12-16-17-18-19]

Oil:

Oils and fats are differing in their physical forms; generally the latter are solid at room temperature. Both fats and oils are chemically glycerol esters composed of glycerol and fatty acids and are also called as triglycerides. Fatty acids can be saturated or unsaturated, thereby determining the stability and property of the oil. Oils with a high degree of saturated fatty acids (lauric, myristic, palmitic and stearic acids) include coconut oil, cottonseed oil, and palm oil. Oils with a high degree of unsaturated fatty acids (oleic, arachidonic, linoleic acid) are canola oil, olive oil, corn oil, almond oil, safflower oil, castor oil and avocado oil. Saturated oils are more stable and do not become rancid as quickly as unsaturated oils. However, unsaturated oils are smoother, more precious, less greasy, and better absorbed by the skin. Natural butters like shea butter, avocado butter or cocoa butter are not true butters but natural fats. In general, natural butters are excellent emollients and thickeners and dependent on the type may have various additional properties (e.g. Antioxidant & and soothing properties in shea and avocado butter due to phenolic compounds). 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 balm because of its good qualities, though now days some other 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. While wolfberry seed oil is renowned for its moisturizing and skin conditioning properties. Rosehip oil is excellent for maintaining then natural moisture balance in skin. Vitamin E is a well-known antioxidant that plays an essential role in the lip balm base. Peppermint essential oil energizes and

Taste	Masking Flavour
Salt	Butterscotch, maple
Bitter	Bitter Wild cherry, walnut, chocolate-mint, licorice
Sweat	Fruit, berry, vanilla
Acid	Citrus

revitalizes skin. Cinnamon essential oil is an excellent antioxidant. Lavender essential oil is soothing and nourishing to skin. And grapefruit essential oil is light and refreshing for dry lips. Almond oil is pale yellow oil with slight characteristic odour. It consists of glycerides chiefly of oleic acid with smaller amounts of other acids namely, linoleic, meristic and palmitic. It has emollient properties.

Beeswax:

Beeswax is used as an emollient and thickener to Achieve lip balm consistency. The wax is insoluble in Water but can be dissolved in organic solvents, such as Acetone, chloroform, and benzene. It can be obtained straight from a bee farm or bought from another Company in a form of solid pellets. Beeswax is chosen in a form of solid pellets from PT Sumber Berlian Kimia and delivered from Jakarta, Indonesia. One Package of this product contains 1 kg of beeswax, and the required amount is 4 kg of beeswax per day.

Table No.2- List of Flavour Taste

Candelilla wax

Candelilla wax is used to create hardness and serve as an occlusive agent that creates a barrier to trap water and prevent it from evaporating. The wax consists of 20%–29% wax ester, 12%–14% alcohol and sterol, 49%–50% Hydrocarbon, 7%–9% free fatty acids, 2%–3% humidity, And 1% minerals. The physical and chemical properties of wax may vary depending on the age of a candelilla plant and the year when it was extracted. Wax is insoluble in water but can be dissolved in organic solvents, such as Acetone, chloroform, and benzene. Candelilla wax is Chosen in a form of solid pellets bought from PT Sumber Berlian Kimia and delivered from Jakarta, Indonesia. One Package of this product contains 1 kg of candelilla wax to fulfill the specification; that is, the company needs 6 kg of Candelilla wax per day.

Hyaluronic acid

Hyaluronic acid and sodium hyaluronate are used as strong humectants that can absorb water from the air to hydrate the lips. It is sold in a powder form that can be dissolved in water. Hyaluronic acid is chosen to be bought from PT Cortico Mulia Sejahtera and delivered from South Jakarta, Indonesia. One package of this product contains 1 kg of hyaluronic acid and sodium Hyaluronate. The process needs 0.5 kg of hyaluronic acid and sodium hyaluronate per day.

Olive oil

Olive oil functions as an emollient that softens the skin and serves as a source of antioxidants, which promotes collagen production. This oil is obtained by pressing olive fruits, thus producing olive oil. The oil in the pulp is also extracted with the help of a solvent. Olive oil is bought from CV Mawar herbal and delivered from Bekasi, Indonesia. It is sold in a liquid form with the name —olive oil pomacel to differentiate between oil used for industrial purposes and extra virgin olive oil for consumption. One package of this product contains 5 L of olive oil, and the amount bought is 14 kg of olive oil per day.

Jojoba oil

Jojoba oil is a mixture of long-chain unsaturated fatty ester, which is structurally different from triglycerides. It is extracted from jojoba seeds (*Simmondsia chinensis*), and its color varies from golden to transparent. Its shelf life is longer than that of some oils because jojoba oil does not contain triglycerides. Thus, the tendency of jojoba oil to become oxidized and rancid decreases. Jojoba oil is bought from PT Sumber Berlian Kimia and delivered from Jakarta, Indonesia. It is sold in a liquid form in a container. One package of this product contains 5 L of jojoba oil. The amount needed is two packages of jojoba oil per day containing a total of 10 L.

Honey

Honey functions as a natural humectant and emollient, serves as a source of vitamins B1 and B6 (nourishment), stimulates new skin cell formation (softening lips), elicits an anti-inflammatory effect on chapped lips, protects the lips from the damaging effect of free radicals, exhibits antibacterial and antiseptic properties to prevent bacterial infection, and provides relief to symptoms of chapped lips because of its vitamin C content. Raw honey is obtained by pressing beehives and then purifying it into pure honey.

Methods ^[22]

Pomegranate Lip Balm

Ingredients: ¼ cup pomegranate seeds, 1 teaspoon coconut oil Place the pomegranate seeds in a small bowl and squeeze out the juice with a spoon or mortar. Add the melted coconut oil to the juice, pour into a small container and chill.

Beet Lip Balm

Ingredients: ½ cup grated beetroot, 1 teaspoon ghee Strain the juice from the grated beetroot using a cheesecloth. Mix the ghee with the beetroot juice and store in the fridge.

Cinnamon Lip Balm

Ingredients: 2-3 drops of cinnamon oil and 1 teaspoon of cocoa butter

Mix the cinnamon oil and cocoa butter well and chill. Use like a regular lip balm.

Strawberry Lip Balm

Ingredients: 1 fully ripe strawberry, 3 teaspoons coconut oil. Puree the strawberry into a smooth paste and add coconut oil. Mix well and store in the refrigerator.

Vitamin E Lip Balm

Ingredients: 3 vitamin E capsules, 2 tablespoons coconut oil, 1 tablespoon grated cocoa butter, 1 tablespoon green tea leaves (crushed), 3 drops essential oil (rose, lavender, vanilla) – Optional. Over very low heat, melt the coconut oil in a small bowl and add green tea leaves, stirring well. Leave to stand, then strain the oil through cheesecloth into a bowl. Now melt the cocoa butter in a pan and add to the sifted coconut oil. Add the vitamin E oil (by piercing the capsules) and essential oil and stir well. Keep the mixture in the fridge for at least 3 hours.

Physicochemical analysis of lip balm

Texture

The sample of formulated lip balm was placed in the base of the AMETEK Brookfield CT-3 Texture Analyzer. A cylindrical probe (TA39) was attached to the load cell as it is the most suitable probe for cosmetic products (Cosmetics Industrial Applications | Food Technology Corporation, 2019). The probe was then lowered a few millimeters above the sample to center the lip balm sample below the cylinder probe. Hardness values were recorded for all formulated lip balm samples.

Colour

The colour analysis of the lip balms was evaluated with the Chromameter CR-400 from Konica Minolta. This chromameter has three indicators that contribute to the lightness (L*), redness (a*) and yellowness (b*) of the analyzed sample. According to these three indicators, all beet-based lip balms are more prone to redness, which corresponds to an a* value.

PH

This study, the Model HI-2211-01 pH meter was used to measure the pH of all formulated lip balms. The pH meter was calibrated with a buffer solution before proceeding to measure the pH of the lip balm. The value of the lip balm sample was measured and recorded. It was concluded that the prepared lip balm at room temperature (25.0 ± 3.0 °C) and in the refrigerator (4 ± 2.0 °C). The average melting point was 69°C. The average pH was 7.2, which corresponds to a nearly neutral pH.

Production Technology:

Production technology for lip balms includes the following stages: [7]

- Raw material is checked for its quality (cosmetic products must comply with the strict safety standards)
- Ingredients are dosed, melted, mixed (this stage involves special equipment and facilities)
- This mixture is treated in a vacuum (this is the stage when the bubbles are removed from the lipstick)
- The mixture is crystallized (it takes about 48 hours)
- The mixture is melted
- The mixture is shaped (it is cut into pieces which are shaped as required)
- It is packaged (the lipstick is packed into a casing).^[21]

Notable brands

- Burt's Bees
- Blistex
- Carmex

- ChapStick
- Labello
- Lip Smacker
- Lypsyl
- EOS. ^[21]

Conclusion:

Our product has the following advantages. It is an exclusively patented product. Contains a combination of a humectant, an emollient and an occlusive humectant to lock lips in moisture. By the government Can be used by both men and women. It has additional functions such as nutrition, scar healing and sun protection. Our product concept is a long-lasting moisturizing herbal lip balm with honey, hyaluronic acid and SPF. Our product has a positive impact on consumers' lips because it is made from 100% botanical ingredients that contain a combination of emollients, humectants and occlusive agents to prolong the duration of our lip balm's moisturizing benefits.

References:

1. <https://www.ncbi.nlm.nih.gov/books/NBK507900/>
2. <https://www.britannica.com/science/lips>
3. 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).
4. <https://images.app.goo.gl/RRqFa283k5Pt5R247>
5. <https://images.app.goo.gl/VMihd5kBeZOpqkbt9>
6. M.G. Denavarre, The chemistry and manufacture of cosmetics, Second ed., Continental Press: Orlando, USA, 1975, 3, pp. 699.
7. P. L. Kole, H. R. Jadhav, P. Thakurdesai, A. N. Nagappa, Cosmetic products of herbal extracts, Natural Product Radiance. 4 (2005) 4.
8. 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.
9. S. Deshmukh, M. Chavan, M. Sutar, S. Singh, Preparation and evaluation of natural lipsticks from bixa orellana seeds, Int J Pharm Bio Sci. 4 (2013) 139-144.
10. R.G. Harry, J.B. Wilkinson, Harry's Cosmeticology, six ed. Leonard Hill books and Intertext publisher, London, 1973.
11. P.P. Sharma, Cosmetics- Formulation, manufacturing and quality control, fourth ed. Vandana Publications Pvt. Ltd., India, 2008.
12. B.M. Mittal, R.N. Saha, A Handbook of cosmetics, first ed., Vallabh Prakashan: New Delhi, India, 2000.
13. M.A. Mundo, O.I. Padilla-Zakour, R.W. Worobo, Growth inhibition of foodborne pathogens and food spoilage organisms by select raw honeys, International Journal of Food Microbiology, 97 (2004) 1-8.
14. 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.
15. Mahony, Effect of color on odour, flavor and acceptance properties of food and beverages, M.Tech Thesis, B.S., Chapman University, 2001.
16. A.V. Sharma, P.V. Sharma, Flavouring agents in pharmaceutical formulations. Ancient Science of Life. 8 (1988) 38-40.
17. 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.
18. M.S. Balsam, E. Sagarin, Cosmetics science and technology, second ed., Wiley Interscience Publication, NY, USA, 2008, 1, pp. 365.
19. K.V. Allam, G.P. Kumar, Colorants the cosmetics for the pharmaceutical dosage forms, Int. Jou. of Pharmacy and Pharm. Sci., 3 (2011) 13-21.
20. <https://zenodo.org/record/2659543/files/190405.pdf?download=1>
21. https://en.m.wikipedia.org/wiki/Lip_balm.
22. <https://www.firstpost.com/health/5-easy-to-make-lip-balms-using-natural-ingredients-from-your-kitchen-7872521.html> .