

# Natures Nuance: Formulating Herbal Lip Balm for Optimal Care

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**Abstract-Cosmetics are the substance used to alter the appearance or fragrances of the human body. Nowadays the demands for herbal cosmetics in the world market are growing and are inevitable gifts of nature. There is a wide range of herbal cosmetic products to satisfy the need of women. In contrast to synthetic ones, herbal cosmetics are safe for human health. Herbal formulations like herbal lip balms, herbal lipsticks, herbal creams, herbal shampoos, and herbal paste have always attracted considerable attention because of their good activity and comparatively lesser side-effects with synthetic materials. Herbal Cosmetics are defined as the beauty products which possess desirable physiological activity such as enhancing, soothing appearance, healing, conditioning properties because of herbal ingredients. Along all cosmetic products, Natural lip balms preparation is most widely used to increases the beauty of lips and add glamour touch and shine to the beauty. Lip balms provide a natural way to promote healthy and moisturized lips. Current cosmetic lip products are based on use of toxic chemical ingredients with various adverse effect. That is why it leads to study natural ingredients used to production of natural lip.**

**Keywords: lip balm, natural ingredients, spreadability.**

## 1. INTRODUCTION

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 is prime name in horticulture sector. Cosmetics made up of herbal extracts for skin care and hair-care are very popular for their reliability Herbal cosmetic products include Cosmetic plays a significant role in today's life style. Moreover, current trend is going green in almost all industries including cosmetics to adopt more natural way of life. The preferable choice are natural food, herbal medicines and natural curing practices for healthy life and also there is much demand for the organic vegetable products. The usage of herbal cosmetics has been

increased to many folds in personal care system Natural products have been used for folk medicine purposes throughout the world for thousands of years. Many of them have pharmacological properties various formulations. The word herbal indicates safety as compared to synthetic products which are having various adverse effects on human health Colouring lips is the ancient practice to enhance the beauty of lips and to give glamour touch to the face make up. For this the choice for shades of colour, textures, lustres have been changed and became wider. This can be observed from the lip jelly, lip balm, lipstick marketed I hundreds of sheds of colours to satisfy the demand This work was intended for extensive study of natural lip balm. This was based on the comprehensive literature search of natural lip balm, significance of natural excipients along formulation and evaluation of lip balm. These products are evaluated for organoleptic properties like colour, odour, spread ability, pH, melting point, skin irritation and product consistency The colour of a product also provides an indication of product quality and freshness.

Natural colours are however, less toxic compared to synthetic colours<sup>[1]</sup>. 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 noisome. 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 in emulsion, 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 noisome 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<sup>[2]</sup>.

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 other factors and can change with time based on these characteristics there are five type of healthy skin normal, dry, oily, combination, (both oily and dry skin) and sensitive. Cosmetic plays a significant role in today's life style. Moreover, current trend is going green in almost all industries including cosmetics to adopt more natural way of life. The preferable choices are natural food, herbal medicines and natural curing practices for healthy life and also there is much demand for the organic vegetable products. The usage of herbal cosmetics has been increased to many folds in personal care system<sup>[3]</sup>.

#### ADVANTAGES OF LIPBALM

- Using a lip balm can help preserve the lip's natural health and attractiveness. Lip balm with sunblock have been shown to shield lips from UV radiation.
- Men and women alike can utilize these goods, as they are not gender-specific. Lip balm.
- Products aid in preventing dryness, chapping, and cold sores on the lips.
- The product should not cause friction or dryness when it comes into contact with the skin. It also feels renewed and refreshed, and it helps with lip-related symptoms like cold, flu, and allergies.
- Sunscreen lip balm has been shown to block UV damage to the lips.

- The use of natural lip cosmetics to treat skin appearances and condition.
- Lip balms help to protect the natural health and beauty of the lips.
- Lip balm products help to protect lips affected by cold sores, chapping and dryness.
- Sun block lip balms are proved to prevent ultraviolet rays from hurting the lips.
- Helps shield your lip from dry air, wind and especially cold temperature.
- The use of natural lip cosmetic to treat the appearance of the face and condition of the skin.

#### DISADVANTAGES OF LIP BALM

- Common ingredients used in natural lip balm.
- Lip balm addiction is another disadvantage usually seen with the use of them.
- Natural oils have another disadvantage such as greasier, comedogenic, and less spread ability.
- Lip balms made of low-quality ingredients can harm the lips seriously. Such lip balms may dry out the lips instead moisturizing it.
- derived colors and flavors are more difficult to obtain and also have issues related to stability in the product.
- Lip balm with inferior components have the potential to causes severe lip damage. Lips that use these balms great parched.
- Addiction to lip balms is another common side effects associate with their use. In contrast.
- Homemade lip balms typically disappear off the lips more quickly than those created in a lab. Therefore, you must frequently reapply.

#### APPLICATIONS

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, Blister, 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<sup>[4]</sup>

Ideal characteristics of herbal lip balm

1. It is smooth and easy to apply.
2. It is non-irritant and non-toxic.
3. It's have required plasticity, different odour, colour, texture and packaging etc.
4. It is stable in shelf-life time and it is free from bloom and sweating during storage of Lip balm
5. It should be free from contamination.
6. It should be free from gritty particles.
7. It should be long lasting.
8. It should not melt or harden within a reasonable variation of climatic temperature.

#### THE ANATOMY OF LIPS:

Lip anatomy consists of a number of structures that affect both the function and appearance of the lip. Here is a brief summary of the lips structure:

**Skin:** The outer layer of the lips is skin, just like the rest of the body. Lip skin, on the other hand, is more delicate and thinner. The visible line dividing the vermilion-coloured portion of the lips from the surrounding skin is known as the vermilion border.

**Vermilion zone:** The reddish region of the lips is known as the vermilion zone. It is crimson in colour because it has more blood vessels than normal. The red part of the lips. It is covered by a specialized stratified squamous epithelium.

**Philtrum:** A vertical groove or indentation in the middle of the top lip that continues from the base is known as a philtrum. **Cupid's:** The cupid's bow is the double curve or V-shaped area in the middle of the top lip.

**Oral mucosa:** The inner surface of the lips is protected by a thin, moist layer of tissue called the oral mucosa. It is separate from the outer skin and aids in maintaining the moisture of the lips. To keep the lips moisturized and to facilitate speech and eating, lips include small glands called labia.

**Nerve ending:** One of the many muscles that make up the lips and are in charge of their movement and expression is the orbicularis orris, which surrounds the mouth and facilitates smiling and puckering. Lips are extremely sensitive to touch, warmth, and pain due to their high density of nerve endings<sup>[5]</sup>. **CIS conium border:** The border of the lighter skin separates the vermilion from the surrounding skin.

**Mouth:** The opening is limited by the upper and lower cinnabar<sup>[6]</sup>.

### 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
Cocco butter	Almond oil	Honey	Mango	Rosemary
Candelilla wax	Sunflower oil	Cherry	Honey	Blueberry
Olive wax	Castor oil	Carrot	Cherry	Grapeseed

#### Base

Waxes shape and critical organization of components for the manufacture of private care merchandise and ornamental cosmetics. Waxes are reutilized 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<sup>[7]</sup>.

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, Acra wax, stearin. 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 balm because of its good qualities, though nowadays some other oils or solvents are being used. A refined grade castor oil is of good colour and is odourless 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 oils known for its skin – softening properties which can prevent lips from dehydrating

## 3) Colouring Agent

colours have been used in cosmetics, since time immemorial, by human beings. 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 the dried stigma of flowers of the plant *Crocus semivolvatus*. It is a perennial plant and is grown in Kashmir in India. It is also cultivated in Spain, France, Greece and Iran. The principal colouring agent in saffron is crocin. Crocin is a yellow powder, a glycoside in nature and easily soluble in water

## 4) Antioxidant:

Many cosmetics that are marketed nowadays often contain antioxidants as the active ingredients. It is known that oxidation reactions could produce free radicals. Which can start a 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 contains various combinations of plant extracts: aloe vera, green tea, rosemary, grape seed, blueberry.

## 5) Flavouring Agent:

Flavours or flavouring agents 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 the 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 flavour. The flavours should not be very strong as to clash with or overpower other flavours that may be used concurrently with the lip balm. Perfumes of the fruit flavour type have been advocated as well. Also, something edible can be used. Commonly used flavours are apricot, strawberry, cherry, honey. Honey has the capacity to serve as a natural food preservative

## Bees wax

Bees wax is incredibly moisturising, has a lovely scent, and may shield the lips against UV rays that harm them. A natural emulsifier is beeswax. Beeswax includes just a little of substances with antibiotics, according to study. This is especially beneficial for people who have lips that are very dry and cracked. These anti-bacterial medications can lessen the discomfort of the inflammation that follows an infection. Oxidation found in abundance in beets root boosts the suppleness of the epidermis and leaves lips feel smooth and soft.<sup>[8]</sup>



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Synonyms: clearable, cerulean.

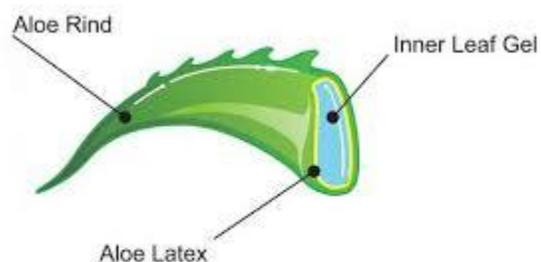
Biological Source -Bees wax is the purified wax obtained from honey comb of Hive Bee, *Apis Mellifera*, Linn

Family-Apidae

Chemical Constituents -Beeswax contains myriocin, which is Melissia palmitate; melting point 64°C, free cerotic acid ( $C_{26}H_{52}O_2$ ), amiricyl alcohol ( $C_{30}H_{61}OH$ ) is liberated when myriocin palmitate is saponified. Melissia acid, some unsaturated acids of the oleic series, curly alcohol, and 12 to 13% higher hydrocarbons are present.

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

### ALOEVERA



Synonyms-Aloe, Muss bar, Aloe Forex.

Biological Source-It consist of dried and fresh mucilage of Aloe Vera

Family-Asphodelus, Liliaceae

Chemical Constituents- -it contains anthraquinones like Rhein, aloin, emodin, mineral and mucilage. chemically mucilage is a polysaccharide consisting of salts of poly uranic acid.

Uses – 1) It help to improve flexibility

2) It is usually applied with carminative.

3)It also reduces eczema.

4)It also helps to reduce ageing and wrinkles.

### BEETROOT



Biological sources -It consist of fresh beta vulgarise.

Family - Chenopodiaceae.

Chemical Constituents -red beta lain, beta xanthine's, kaempferol glycoside, betaine.

Uses -1) May help balance energy intake.

2)Reduce tan.

### OLIVEOIL



Synonyms Oleum olive, sweet oil, Salad oil.

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

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 helps to strengthening bone.

### HONEY



Synonyms-Madhu, mad, Mel, purified honey

**Biological Source** -Honey is a viscid and sweet secretion stored in the honey comb by various species of bees, such as *Apis mellifera*, *Apis dorsa a*, *Apis florae*, *Apis indica* and other species of *Apis* Family-Apidae.

**Chemical Constituents** -The average composition of honey is as follows: no Moisture 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 an admixture of enzymes.

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

#### Vitamin E

Oxidant and environmental conditioner, folic acid. Vitamin E slows down the ageing process, keeping the lips' delicate, young texture. Dry, chapped lips can be treated with topical vitamin E oil Utilising vitamin E on dry lips speeds up the appearance of newly formed cells because it encourages cell repair and cycle. The vitamin E. oil's thick and greasy texture can also prevent further irritation. The extent of the freshness of a product can also be determined by its hue. Nature colours, however, are less hazardous than manufactured ones. For appealing colours, synthetic dyes were used commercially. However, it is harmful to the environment and skin. Lip balm's usage guarantees that dry, cracked lips quickly repair. Your lips' epidermis is a lot thinner than the skin of your face. Therefore, utilising a lip balm can ensure that the lips remain well-hydrated and that they recover more quickly if you have cracked and dry lips. The current study project intends to develop and assess herbal lip balm for the preservation of lips utilising readily available materials. Additionally, it will give lips a more appealing and glossy aspect. The goal of this endeavour was to thoroughly study natural lip balm.



#### Almond Oil

Almond oil's lipids aid to moisturize the lips by deeply into the skin tissues. Olive oil's soothing effects lessen the discomfort of cracked and sunburned lips. To combat inflammation, aloe Vera extract possesses anti-inflammatory effects. Antioxidants that prevent wrinkles and other types of skin damage are infused into the lips<sup>[16]</sup>



#### 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



Evaluation parameter of lip balm:

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 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 spread ability:

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

Types of lip balm

There are 7 kinds of lip balms to choose from

1. Tinted Lip Balm A type of lip balm used to hydrate and colorize the lips called tinted. If the user doesn't want to wear a heavy coat of lipstick, tinted lip balms are a perfect alternative. Users use tinted lip balm to moisturize their lips as well as to give them a brilliant wash of colour. Just apply the coloured lip balm directly to the lips to use it.

2. Medicated Lip Balm Medicated lip balms are most likely to be the least soothing and irritating lip balms amongst the others. This lip balm is usually prescribed by dermatologists in medication for chapped lips and other conditions regarding the lips.

3. Flavoured Lip Balm The flavoured lip balm is a kind of lip balm which has flavourings. Flavoured lip balms are lip balms that are added with flavour such as vanilla, mint, mango and many more fruity flavours. This lip balm is made for moisturizing and is also added with special flavours in order to entice the taste buds and smell of the users.

4. Organic Lip Balm The organic lip balm is a kind of lip balm which have organic or natural ingredients. While there are other lip balms which has chemical ingredients that may harm the lips and skin, the organic lip balm is usually made from organic ingredients such as avocado oils, jojoba oils, beeswax, vitamin E, hemp, and cocoa butter. The organic lip

balm still functions like any other lip balms, which provides moisture and protection from dry and chapped

5. SPF Lip Balm the SPF lip balm are a kind of lip balm which contains ingredients that protect the lips from the harmful effects of the Sun rays. The SPF lip balm functions like a sunscreen to protect the lips from sun damage, burning, and even skin cancer. If the user is skin conscious and is avoiding the harmful effects of the sun, then this lip balm is the perfect thing to use on a day's out.

6. Plumping Lip Balm The plumping lip balm is a kind of lip balm that doesn't just moisturize the lips, but also makes the lips look rounder. Plumping lip balms is made to give protection to the lips, but at the same time it has special ingredients to make the lips look fuller. The plumping lip balm is essential to users who want to achieve a plumper lip without doing any surgical procedures.

7. CBD or Hemp Oil Lip Balm Cannabidiol (CBD) or hemp oil lip balm are a kind of lip balm that contains CBD oil or hemp oil. Hemp oil is from the hemp plant which is an excellent moisturizer for the lips, while the CBD oil is an active compound of cannabinoids which has anti-inflammatory benefits. The lip balm will act as an anti-oxidant to the lips to help sooth dry and heal chapped lip<sup>[19]</sup>.

Main active Ingredient:

ROSE



KINGDOM	PLANTAE
Class	Tracheophytes
Family	Rosaceae
Sub family	Rosaceae
Tribe	Roseau

Genus	Rosa. L
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A rose is either a woody perennial flowering plant of the genus Rosa in the family Rosacea or the flower it bears. There are over three hundred species and tens of thousands of cultivars. They form a group of plants that can be erect shrubs, climbing or trailing with stems that are often armed with sharp prickles. Their flowers vary in size and shape and are usually large and showy, in colours ranging from white through yellows and reds.

Chemical constituents: Rose petals and rose hips contains Vitamin A, B1, B2, B3, B6, C, E and K, folic acid, potassium, Calcium, Iron, tannin and wide range of enzymes. Rose flowers are Anti-depressant, anti-spasmodic, aphrodisiac, astringent, increase bile production, cleansing, anti- bacterial and antiseptic. Rose hips tea is also used in the treatment of diarrhoea. Rose petals are mildly sedative, antiseptic, anti-inflammatory, and antiparasitic. They are also mild laxative, a good supportive tonic for the heart, and useful for lowering cholesterol. The antiseptic nature of rose petals make them a wonderful treatment for wounds, bruises, rashes and incisions, their anti-inflammatory properties make them a wonderful treatment for sore throats or ulcers. They can stimulate the liver and increase appetite and circulation. The extract of the rose petals is used as e drops or eye wash in burning sensation of the

Uses:

- Cure Depression & Anxiety
- Anti- inflammatory property
- Rose oil for different in infection: Rose essential oil has strong antiseptic properties, which means that it can be used to prevent wounds from becoming septic or developing tetanus.
- Skin care benefit: Rose essential oil is widely used for cosmetic purposes as it is very good for your skin. It can help you fade away scars left over from acne, boils, pox, and injuries and leave you with smooth skin.
- Perfuming agent
- Make lips look pull

Material and method:

Water bath	Glass rod
Bunsen burner	China dish
Spatula	Filter paper

FORMULATION:

Weighing balance	Beaker
Tipon'd stand	Glass slide

#### RAW MATERIAL

Bees wax	Beetroot
Shea butter	Vitamin E
Rose oil	Rose infused oil

Collection and extraction:

All the medicinal plants and herbs are selected for herbal lip balm for lip moisturization are rose, beetroot, vitamin E, shea butter, these materials are collected from local market.

Rose infused oil:

Dried rose petals were placed in a clean, dry glass jar. Coconut oil was added in such a way that the petals were covered by about one inch of oil. Cover the jar was covered with a tight-fitting lid and was Shaked. The jar was placed in a paper bag and was stored near a warm, sunny window. Once the oil has been infusing for 4-6 weeks, the calendula petals were strained out and the oil was extracted.

#### BEETROOT POWDER

Beetroot was washed properly and was air dried properly. Then it was Cut into small pieces. The pieces were placed in the mortar and was macerated with help of pestle. The slurry was filtered out with help of filter paper. The liquid separated out and powder was used as a colouring agent in the preparation Beetroot powder:



Si. No	Ingredients	Biological action in the preparation	Amount used in the preparation
1	Bees wax	Base	4g
2	Shea butter	Humectant	2.5g
3	Rose oil	Perfume	0.25ml
4	Beetroot	Colouring agent	0.5g
5	Vitamin E	Preservative	0.15ml
6	Rose infused oil	API	2.6ml

#### Preparation

1. A water bath is kept on the burner and is filled with water for boiling.
2. Bees wax filled in China dish is kept on the boiling water.
3. The beeswax is heated till it melts properly.
4. To the molten beeswax, cocoa/shear butter and honey/vitamin E are added and is made homogeneous with slow stirring with glass rod.
5. In the mixture rose infused oil is added and mixed properly.
6. After homogeneous mixture is obtained, colouring agent and perfume is added.
7. The mixture is poured in the container.
8. Then the mixture is cooled in the ice bath or dried in the sunlight.

#### Lip Disorders

##### Swelling

Allergic reactions can cause lips to swell. Reactions can be caused by sensitivities to certain foods or beverages, medications, lipsticks, or airborne irritants. When a cause can be identified and then eliminated, the lips usually return to normal.

- 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<sup>[22]</sup>

##### Sun damage

can cause the lips, especially the lower lip, to become dry. Thin-looking red or white spots signal damage that increases your risk of cancer later in life. 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

##### Inflammation

When the lips become inflamed (cheilitis), the corners of the mouth may become painful, burning, red, cracked, and scaly. Cheilitis can be caused by a lack of vitamin B2 in the diet. 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 brown areas (melanomas) are common around the lips and can persist for years. These signs are not cause for concern. Many small scattered dark brown spots can be a sign of an inherited condition called Peutz-Jeghers syndrome, in which polyps form in the stomach and intestines. Kawasaki disease, a disease of unknown cause that often occurs in infants and children 8 years of age and younger, can cause dry, cracked lips and redness of the lining of the mouth.

##### Sores

A raised area or hard sore on the lip May be a form of skin cancer. Other sores can develop as symptoms of other medical conditions, such as an infection with the herpes simplex virus of the mouth or syphilis. Still others, such as keratoacanthoma, have no known cause

##### Allergies:

Some individuals may develop allergies to specific ingredients in food, cosmetics, or lip care products. Allergy symptoms include swelling, itching, redness, and even lip blistering<sup>[23]</sup> The most common cause of contact dermatitis includes the use of personal hygiene products such as toothpaste and mouthwash which contain numerous antibacterial agent, essential oils and preservative<sup>[24]</sup>.

##### Experimental work Evaluation

1. Melting Point The sample of lip balm is taken in a glass capillary whose one end was sealed by flame.

The capillary containing Drug dipped in liquid paraffin inside the melting point apparatus. Melting was determined and melting point was reported.

2. Organoleptic properties the formulation was studied for physical appearance, colour and odour. The presence of coarse particles and consistency were used to evaluate the texture and homogeneity of the formulations.

3. Measurement of pH the pH of lip balm was determined in order to investigate the possibility of any side effects. The pH study was carried out by dissolving 1gm of sample into 100 ml water. The pH measurement was done using pH meter. PH of lip was near to neutral.

4. Skin Irritation test It is carried out by applying lip balm on the skin for 10 min 5. Test of spread ability the test of spread ability consisted of applying the product repeatedly onto a glass slide to visually observe the uniformity in the formation of the protective layer and whether the stick fragmented, deformed or broke during application. Prepared lip balm, initially has shown G- Good: uniform, no fragmentation, perfect application, with any deformation at room temperature.

#### CONCLUSION

The present study aimed to create a lip balm with as many natural elements as feasible. The main colouring and flavouring ingredients were beetroot extract, rose water, vitamin E capsules, and almond oil. Almond oil served as the moisturising agent. It looked examined how these components affected the formulation's physical features, including spread ability, uniformity, and organoleptic characteristics. It may be said that using these natural components helped create a great lip balm composition. Findings of numerous studies suggested that the recipe was safe to use and cleared various physical tests. According to stability information, the mixture should be stored at room temperature. In the future, natural bases like She abutter, paraffin wax, etc. could take the place of the beeswax that was employed as a base for the existing formulation.

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