



# Formulation And Evaluation Of Herbal Lip Blam

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## Abstract:

The lip-care products for everyday basis contains harmful heavy metals and preservatives Other than leaching through the pores on your lips, these heavy metals and other chemicals can also be accidentally ingested.

Lip balm formulations are most widely used to enhance the beauty of lips and add glamour touch to the make-up. Lip balms offer a natural way to maintain and promote healthy lips. Current cosmetic lip products are based on use of enormous chemical ingredients which has a various side effects. Hence, an attempt has made to study the natural ingredients which is used to formulate the natural lip balm. The natural lip balm can made using naturally occurring base ,oils,colour, flavouring agent etc. Organic lip balm nourishes the lips and help to get hydrated and protect lips which was affected by the dryness. Organic lip balm can be better option for treatment of various lip issues. Beetroot lip balm was found to process the antioxidant activity.

## 1. Introduction

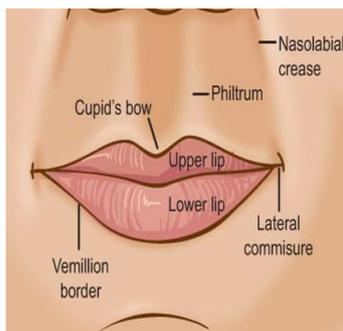
Lip balm was first marketed in the 1880s by Charles Browne Fleet, though its origins may be traced to earwax. More than 40 years prior to the commercial introduction of lip balm by Fleet, Lydia Maria Child recommended earwax as a treatment for cracked lips in her highly-popular book, *The American*. The 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 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 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 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. The beauty of lips can be enhanced by Lip Color, it also enhances the overall charm of the face. Various makeup and lip care products mainly include lipstick, lip balm, lip balm. The main role of lip care products is to create attractiveness, moisturize, protect lips from harmful UV rays, etc. The skin on the lips is thin and different from other parts of the body. It has no hair follicles, sebaceous glands and sweat. It lacks an inherent mechanism to retain moisture and protect from the external environment. Therefore, the lips need more care, protection and moisture retention. Poor quality products can cause dryness and pigmentation or discoloration of the lips. Especially some ingredients like phenol or menthol are harmful to the lip

## Anatomy of Lips

The 5 main areas are vermilion/white roll, subvermilion, peristomal, philtral column and commissure. The subcutaneous part corresponds to the dry mucosal lip and the peristalsis corresponds to the junction of the dry and wet mucosal lips. The vermilion/white roll can be split on the upper lip to include the lateral and apex areas of the cupid and the central filter areas, while the vermilion lower lip is divided into the middle and beside. The subvermillion is divided into medial and lateral regions, and the

peristalsis into medial and lateral regions. Lips: The surface of the lips consists of four areas: hairy skin, vermilion rim, vermilion mucosa, and cheeks.



### Lip Disorders

. 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 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. But often the cause of swelling remains a mystery. A condition called hereditary angioedema can cause recurrent episodes of swelling. Non-genetic conditions such as erythema multiform, sunburn, cold weather, dryness, or trauma can also cause lip swelling.

### Sun Damage :

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. This type of damage can be reduced by covering the lips with a lip balm that contains sunscreen or by protecting the face from the sun's harmful rays with a wide-brimmed hat.

### Discoloration

Freckles and irregularly shaped brown areas (melanomas) are common around the lips and can persist for years. These signs are not cause for concern8 years of age and younger, can cause dry, cracked lips and redness of the lining of the mouth.

### Advantages of Natural 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 gender specific 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

### Disadvantages of Natural Lip Balm

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. 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.
3. The naturally derived colours and flavours are more difficult to obtain and also have issues related to stability in the products.
4. Natural oils have other disadvantages such as greasier, comedogenic, and less spread ability
5. Ideal characteristics of herbal lip balm
6. It is smooth and easy to apply.
7. It is non-irritant and non-toxic.
8. it's have required plasticity, different odour, colour, texture and packaging etc.
9. It is stable in shelf-life time and it is free from bloom and sweating during storage of Lip balm
10. It should be free from contamination.
11. It should be free from gritty particles.
12. It should be long lasting.
13. It should not melt or harden within a reasonable variation of climatic temperature.
14. 9.It should be nontoxic & nonirritant to the lips.
15. It should impart uniform color to the area of application.
16. It should make lips soft.

## Literature Review

### 1. Lip balm

Add Rose watarr, Rose oil Women frequently use lip balm to give their lips a lovely colour and protection. Lip balm is a information cosmetic product with added benefits. Oil, colorant, and other chemicals are the basic components of a lip stick. Beeswax is the typical wax used in lip balm. In lip Lick composition 10, camellias are wax and e camellias are wax are combined to create strength and strike true colour in the lip balm. The composition of lip uses a variety of plant-based oils, including jojoba seed oil, the oil of sweet almonds, and castor seed oil.

### 2. Global Lip balm Demand

The quick urbanisation. Consumers' purchasing power is increased by Ilion in developing nations. The global demand for lip balm is driven by the trend of increased internet usage. According to Alana from Thai advertising tactics, consumer appetite for lip balm will increase over the course of the upcoming year as they advertise their products on social media platforms like YouTube, YouTube, Facebook, and Instagram. Based to a company analysis, worldwide sales for lip balm peaked in 2016 at \$7.15 billion and is expected to reach 59.2 billion in 2018. The Lipbalm market is predicted to produce \$13.4 billion in sales by the year 2021. The market's rise is mostly attributed to the increase in demand from young adults who work women globally. In the near future, the demand for lip balm will progressively rise. A negative impact of synthetic colours on the health of people has increased along with the population. The current study's goal is to produce natural lip balm colouring. Give the most effective answer to this problem.

### 3. Self-Decoration

Mankind have long decorated themselves to draw attention to the other gender. Anthropologists contend that women utilise cosmetics to mimic an orgasmic condition in their bodies. Doune Ackerman living in Pallingston in 1999. Because the lips resemble the genitals, The consciously maund unconsciously causes why women constantly make them look even redder using lip balm are hat they blush red and swell while around. Despondent animal behaviourist these assertions are apported by Moates, who sees makeup as a trick used by con artists to divert focus from the rest.

#### 1.Beet Root

Lips are a part of the human body that is very thin as compared to face skin, even though it consists of three to four layers of the skin. Lips are susceptible where lips disorder such as inflammation and swelling of lips can quickly occur. Therefore, lips must be moisturized using any lip product such as Lip balm. Lip balms are formulations applied onto the lips to prevent drying and protect adverse environmental factors.Products that are used to protect lips rather than decorate them are known as lip balms. They form an adherent, flexible , moisture resistant film of oily substance.It is necessary to balance the concentration of main ingredients to formulate lip balms including the base, oils, colouring agents and flavouring agents. Natural lip balms offers a natural way to maintain and promote healthy lips. Cleanses Blood Vessels,

Anti-Aging Detoxifies Body, Pregnancy Food, Improves oxygen use, stamina, and increase exercise performance.



#### 2 .Bees wax

Bees wax is a very moisturizing , can help protect the lips from the harmful rays of the sun, and has a pleasant smell. Bees wax acts as a natural emulsifier.Research has also discovered that bees wax contains small amount of natural anti-bacterial agents. This is especially helpful for individuals who have excessively dry and cracked lips. These anti- bacterial agents can help prevent a painful inflammation that comes with an infection.Beet root is rich in anti oxidants that make the lips soft, supple and improveth the elasticity of the skin Oxidation found in abundance in beets root boost the suppleness of the epidermis and leave lips feel smooth and soft. 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 boost the suppleness of the epidermis and leave lips feel smooth and soft.



### 3. ALMOND OIL

Almond oil penetrates deep into the skin tissues and its fatty acids help to moisturize the lips. The anti-inflammatory properties of almond oil reduces and pain associated with chapped and sun burnt lips. Aloe-vera has anti - inflammatory properties that fight irritation. It infuses the lips with anti-oxidants that fight wrinkles and other forms of skin damage 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. International Journal of Pharmacy and Pharmaceutical Science. 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.



### 4. VITAMIN E

Vitamin E is an anti-oxidant and a natural conditioner. Vitamin E helps to maintain the soft, youthful texture of the lips by reducing the signs of aging. Topical vitamin E oil can be used to relieve chapped, dry lips. Since, vitamin E promotes cell turnover and regeneration, using it on dry lips brings new cells to the surface faster. The thick and oily consistency of vitamin E oil can also prevent further irritation. The colour of a product also provides an indication of product quality and freshness. Natural colours are however, less toxic compared to synthetic colour. The usage of synthetic dyes was done commercially for attractive colours but it is hazardous to skin and environment. Application of lip balm ensures quick healing of dry and chapped lips. The skin on your lips is thinner than your facial skin. So, in case you are suffering from chapped and dry lips , using a lip balm will ensure that your lips are well hydrated and they heal faster.

The current research work aims to prepare and evaluate herbal lip balm by using easily available ingredients for the protection of lips. It will also add attractiveness and glossy appearance to lips. This work was intended for extensive study of natural lip balm. This was based on the comprehensive literature excipients along formulation and evaluation of lip balm.

Vitamin E is found in corn, nuts, olives, green, leafy vegetables, vegetable oils and wheat germ, but food alone cannot provide a beneficial amount of vitamin E, and supplements may be helpful.

The reddish-violet betacyanin, an and the yellow betaxanthins make up the complex. In addition to the colouring agent, beetroot has a number of useful active substances for the body, including carotenoids and anthocyanins. Beetroot's carotenoid has anti-inflammatory, antimicrobial, anti- fungal, and nutritional properties, whilst anthocyanin's have strong antibacterial, anti-inflammatory, and cardiovascular protection.

#### Benefit

- Moisturises your skin
- Can prevent UV damage to the skin
- Prevents free radical damage
- Soothes inflammation
- Treats hyperpigmentation
- Can help scar and wound healing

**Rose Water**

- Rose water is perfect for cleansing your skin and removing any impurities that could cause unwanted spots.
- Because of its gentle nature, it is suitable for people with any skin type - even sensitive skin.
- Using rose water for face and body cleansing will ensure your skin doesn't become dry and irritated.
- It helps fade dark spots and blemishes, leaving your skin looking more even and luminous. Rose water is a natural toner that cleanses your pores.

**Benefits**

- \* Natural Makeup remover
- \* Suitable for all Skin types
- \* Helps fade dark spots on your face
- \* Free from Petrochemicals, Preservatives, Artificial Fragrance, Colourants

**Glycerol**

Also can be synthesized from petrochemical Widely usage range, such as pharmaceutical, spices, cosmetics, health products and other industries. Glycerol also called glycerine or glycerin It is a colorless, odorless, viscous liquid that is sweet tasting and non-toxic.

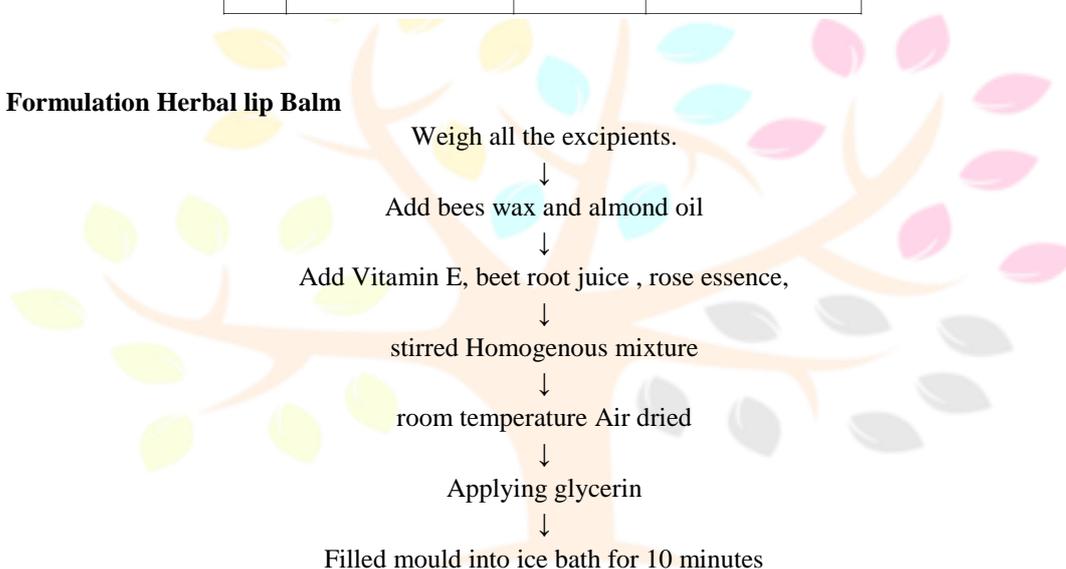
**Uses and Applications**

- Capsules
- Suppositories
- Ear infection remedies
- Anaesthetics
- Cough remedies
- As a vehicle for antibiotics and antiseptics.
- Glycerin is also used in tobacco to prevent the breaking and crumbling during the processing of cigarettes, etc.
- It also adds some kind of flavor to the
- chewing tobacco.
- It is widely used to manufacture cigarette
- filter tips as well



**Formula :**

Sr no.	Ingredients	Quantity	Use
1.	Beet root extraction	0.8 ml	Colouring Agent
2.	Bees wax	9.0 gm	Impart glossiness and hardness
3.	Almond oil	0.6ml	Moisturizing Agent
4.	Vitamin E	0.5ml	Anti-oxidant. Maintain the stability
5.	Rose water	Q.S	Flavouring Agent
6.	Glycerol	Q. S	Glossy Effect

**Flow Chart for Formulation Herbal lip Balm****FORMULATION OF HERBAL LIP BALM**

- Weigh all the excipients.
- Add bees wax and almond oil in a beaker and melt it in water bath.
- Add all other ingredients like vitamin E, beet root juice, rose essence, almond oil were mixed vigorously and add to the mixture and mixture was stirred continuously till homogenous mixture was obtained.
- A mixture was poured into the container and it was let to be air dried at room temperature.
- Before pouring the mixture in lip balm moulds, on the mould applying glycerine with the help of cotton, put the filled moulds into ice bath for 10 min.

**5. Evaluation:**

**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.

**Skin Sensitivity-**

It was carried out by applying the product in the form of a patch on the skin for 10 min and observe the reaction as- N -No reactionR- Redness of the skinI- Itching, swelling , inflammation.

**Effectiveness test-**

Finally, after taking out the lip balm from chiller, it was tested by applying the lip balm on a piece of paper. This process is important to determine colour obtained from different sources. It also can determine the effectiveness of the colour product.

**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.

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- Natural oils have other disadvantages such as greasier, comedogenic, and less spread ability

**Result :**

They rely on how you use your lip balm, such as whether you push down firmly or gently, or if you rub your lips quickly or gently. Each lip balm's physicochemical characteristics were examined, and the top formulas were determined. There have been studies on the interactions among ingredients and the outcomes physicochemical characteristics. It demonstrated how the chemical and physical features of the balm's lips are impacted by all of the components. It's based on the results of irritation test, the lip balm showed no reaction to erythema, papules, or edema, indicating that it is safe to skin of the lips. Finally, the natural ingredients in this study can be used for the formulation and composition of lip balms for tropic to cool regions.

**Conclusion:**

The effects of these ingredients on physicochemical properties such as organoleptic characteristics , melting point, consistency and spreadability on formulation were studied.

It can be concluded that lip balm formulation was successfully prepared by using these natural additives. Results of various tests implied that the formulation passed various tests physicochemical tests and safe to use.

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