



HERBAL LIP BALM: TO TREAT A BURN, CRACK AND LIGHTEN LIPS CAUSED BY SMOKING

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Abstract: Lip balm is a wax-like substance implemented topically to the lips. This research aims to prepare herbal lip balm to treat burn cracks and lighten lips caused by smoking. In this study, lip balm has been made with the aid of using the usage of numerous elements like honey, sesame oil, castor oil, nutrition E and rose essence. A homogenous blending technique used to prepare the lip balm. The formulation of lip balm examined by making use of it on a glass slide. Various parameters consisting of chemical stability, pH, melting point, and spreadability have been conducted for the evaluation of lip balm. The pH observed to be 7.4 and the melting factor became 63-66 °C. After carrying out stability study at room temperature (25.0±3.0°C), and refrigerated condition (4.0± 2.0°C), it proved that formulated lip balm turned uniform in nature, became flawlessly applied, with no deformation at room temperature and refrigeration. Lip balm formulated from the above elements might be a higher choice for treatment of miscellaneous lip problems.

Key words: Lip Balm, Sesame oil, moisturizing, stability, homogenous blending

INTRODUCTION:

Lip balms are methods implemented on the lips to prevent dryness and protect against numerous environmental factors [1]. To formulate lip balms, it is essential to balance the concentration of the main ingredients including oils and waxes, so that the final product will be efficient and useful. On the contrary, this work involves the improvement of a lip balm formulated with natural raw materials and the execution of stability tests which are Water Seal Testing and Temperature Testing. Evaluation of organoleptic characteristics such as colour, odour and appearance and functionality evaluation like spreadability test [2].

The aim and objective of this study is to formulate lip balm to deal with burns, and cracks and lighten the dark lips caused by smoking. A moisturizing lip balm facilitates the prevention of dry and chapped lips by deeply hydrating the outer skin cells of lips [3]. Hence, honey was selected as a moisturizing agent collectively with other ingredients such as beeswax, sesame oil and rose oil vitamin E. Honey has anti-bacterial, anti-fungal and natural

oxidant properties that are suitable to be added in the formulation of lip balm. Numerous studies have been conducted to investigate the stability of natural lip balm [4- 6].

ROLE OF INGREDIENTS

1. BEES WAX



Fig 1 Beeswax

Beeswax is very moisturizing, can assist protect the lips from the harmful rays of the sun, and has a pleasant smell. Beeswax acts as a natural emulsifier [7]. Research has also discovered that beeswax includes a small quantity of natural anti-bacterial agents. This is particularly useful for people who have excessively dry and cracked lips. These anti-bacterial agents can help prevent the painful inflammation that comes with infection [8].

2. CASTOR OIL



Fig 2 castor oil

One of the advantages of castor oil for lips is that it may act as a natural barrier that helps prevent water from escaping from your lips, hence preventing your skin from flaking or chapping.

3. VITAMIN E



Fig 3 Vitamin E

Vitamin E is an antioxidant and a natural conditioner. Vitamin E helps to maintain the soft, younger texture of the lips by lowering the signs of ageing [9]. Topical vitamin E oil may be used to alleviate chapped, dry lips. Since vitamin E promotes cell turnover and regeneration, its usage of it on dry lips brings new cells to the surface faster. The thick and oily consistency of vitamin E oil can also prevent similar irritation [10].

4. SESAME OIL



Fig 4 Sesame oil

It's rich in antioxidants: Studies have proven that once carried out topically, Sesame Oil may reduce cell damage by inhibiting certain compounds known to produce DNA-damaging free radicals.

It can speed the healing of sunburns, cracks, sores, and wounds Sesame Oil's effective antioxidant and anti-inflammatory properties help to speed up recovery time and have additionally been proven to stimulate collagen production at the site of the wound.

5. ROSE OIL



Fig 5 Rose oil

Moisturize Your Lip: Keeping your lips hydrated using rosehip oil will assist in keeping them full and decrease the appearance of wrinkles. Rosehip oil is important for maintaining lips smooth and young.

Supple lips: With a swipe of rosehip oil, thin, dry lips emerge as plump and moisturized, giving you the ultimate movie star pout! Several lip glosses claim to plump your lips, however, moisturizing them every day is an incredible method to maintain your lips looking young and supple.

6. HONEY



Fig 6 Honey

Honey is a natural humectant, and because of this that it attracts and retains moisture, keeping your lips hydrated throughout the day. Honey also has anti-inflammatory properties to help soothe chapped lips. Honey's antibacterial properties also assist to prevent infection if the lips become cracked.

7. BEETROOT



Beetroot on lips helps in getting rid of darker lips making your lips brighter and lighter. Also, the pink colour of beetroot adds a tinge of pink to your lips. Beetroot provides great nourishment to your lips. It heals dry and chapped lips and acts as the best natural moisturizer for your lips.

Beetroot makes your lips juicy and plump. The juice of beetroot adds an instant glow to your lips and it appears more hydrated, nourished, and juicier.

MATERIALS AND METHOD

S.no	Ingredients	Quantity
1.	Bees wax	4 gm
2.	Sesame oil	5 ml
3.	Castor oil	5ml
4.	Honey	5gm
5.	Beetroot	q.s
6.	Vitamin E	5gm
7.	Rose oil	3ml

Ingredients	Manufacturers
Bees wax	Lab scale
Sesame oil	Kapiva organic sesame oil
Castor oil	Neurochem Labs Pvt. Ltd
Honey	Patanjali Ayurved Pvt. Ltd.
Vitamin E (even 400mg capsule)	Merck Consumer Healthcare Ltd.
Rose oil	Arvedikas Rose oil

PROCEDURE:

1. Weigh accurately all the required ingredients.
2. In a clean evaporating dish, take Bees wax first and melt it in a water bath (not exceeding the temperature range of 50- 64°C).
3. Then add the beetroot powder, Sesame oil and castor oil respectively and stir vigorously and label it as A.

4. Then in another evaporating porcelain dish, take Honey and Vitamin E (pour the capsule content into Honey) and mix thoroughly and label it as B.
5. Pour the contents of porcelain Dish B into Dish A by observing the uniform temperatures of both the dishes and adding it drop by drop with vigorous stirring.
6. Finally, add Rose oil to the Formulation and finally pour the liquid lip balm into a clean wide-mouth container. Keep the lip balm for cooling at room temperature [11].

EVALUATION OF LIP BALM

1. Melting point

For melting point, the sample of lip balm was taken in a glass capillary whose one end was sealed with the aid of using a flame. The capillary-containing drug was dipped in liquid paraffin in the melting point equipment which was equipped with a magnetic stirring facility. Melting was determined visually and melting point was reported [12].

2. Organoleptic properties

The organoleptic characteristics such as colour, odour, taste and appearance of lip balm were studied [13].

3. Test of spreadability

The product was applied (at room temperature) repeatedly onto a glass slide to visually examine the uniformity in the formation of the protective layer and whether the stick fragmented, deformed or broke during application [14].

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

I – Intermediate: uniform, leaves few fragmentations, appropriate application, few deformations of lip balm

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

4. Measurement of pH

The pH of the lip balm was determined to inspect the possibility of any side effects. The pH measurement was studied by dissolving 1gm of sample into 100ml of water. The pH measurement was done by the use of a pH meter. The pH of the lip is near neutral [15].

5. Stability studies

Prepared lip balm was placed for accelerated stability studies at room temperature (25.0 -3.00C) and refrigeration (4 -2.00C) for 30 days. After 30 days it was again characterized for organoleptic properties, melting point, spreadability and pH [16].

RESULT AND DISCUSSION

1. Melting point

The melting point of the lip balm was observed to be in the range of 66 - 68, which matches with the appropriate melting point of between 65 and 75

2. Organoleptic property

Colour	Red colour
Odour	Pleasant
Appearance	Smooth and excellent

3. Test of spreadability

Prepared lip balm was examined for its ability to spread has shown Good– uniform, no fragmentation perfect application, with none deformation



4. Measurement of pH

The pH of lip balm, was near to neutral pH i, e 7.4 this would not cause any irritation to lips.



5. Stability studies

INITIAL:

Temperature	Colour	Odour	Spreadability	PH	Melting point
25±3 ⁰ C	Faint yellowish	Pleasant	Intermediate	7.4	66
5 ±2.0 ⁰ C	Faint yellowish	Pleasant	Good	7.0	67

AFTER 30 DAYS:

Temperature	Colour	Odour	Spreadability	PH	Melting point
25±3 ⁰ C	Faint yellowish	Pleasant	Good	7.1	66
5 ±2.0 ⁰ C	Faint yellowish	Pleasant	Good	7.2	66

CONCLUSION:

The research work aimed to prepare lip balm to treat burns, cracks and lighten lips caused by smoking using natural ingredients. Mainly beetroot extract was selected as a colouring agent, rose oil was used as a flavouring agent, vitamin E capsule was used as an antioxidant, castor oil was used as a humectant, sesame oil was used to speed up healing, and honey was used as a moisturizing agent. The effects of these ingredients on

physicochemical properties such as organoleptic characteristics, melting point, consistency and spreadability on formulation were studied. The method stored at room temperature and refrigerator confirmed same stability behaviour. The organoleptic characteristics were stable and spreadability was observed to be "Good". During the stability test, the lip balm made from natural ingredients showed and appropriate melting point (mean of 64°C). According to the test of spreadability, the storage condition of oven (40.0± 2.0°C) is not recommended because of loss of product functionality when as compared with the normal stability test. It was concluded that lip balm made from natural ingredients is safe to use and this mixture proved to be better choice in formulation of a lip balm

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