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# Formulation and Evaluation of Banana lip Balm

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**Abstract:** Since ancient times, there has been a tremendous demand for cosmetics. The emphasis has moved more toward naturally derived cosmetics these days The synthetic source's ingredient has numerous negative effects, but the word "herbal" is a sign of safety. Lip balm formulations are the most popular among all cosmetic products because they enhance the beauty of lips and give a glamorous touch to makeup The lip balm is resistant to changes in temperature outside and other factors. Lip balm is a product that works well for all genders and is simple to apply. The idea behind our product is a long- lasting natural lip balm that can be made with naturally occurring base, coconut oil, banana powder. Banana powder which can be evaluated for their variation pleasant and flavor and smoothness during application adherence and easy intentional removal etc. Current cosmetic lip product are based on use of toxic chemical ingredient with various adverse effect . That's why leads to study natural ingredient used to production of natural lip balm. This article reviews on the natural ingredients used for natural lip balm along with their advantages and disadvantages.

**Keywords:** Lip balm, Lips, Banana Powder, Natural ingredients.

## INTRODUCTION

The lips function as speech, suction, swallowing organs. It consists of up of the muscles that are inserted surrounding it (areolar tissue & mucous membrane), the skin, superficial fascia, and the orbicularis muscle. Dry, red mucous membrane that is continuous with the skin and has many touch corpuscles and vascular papillae covers the lip edges. The mucous membrane forms two folds, superior and inferior, in the median line, reflecting off the gums of the upper and lower lips. The coronary vessels, which completely surround the buccal orifice close to the free edge of the lips, are found in the areolar tissue or submucous layer[(4)]. The superior and inferior coronary arteries, which emerge from the face, are the coronary vessels. Compared to the inferior coronary, the superior coronary is bigger and anastomoses with Its counterpart on the other side, the septum arteriaseptinas , receives a little artery

from it. There are occasions when nasal hemorrhage can be controlled by compressing this artery. The inferior coronary vein empties into the facial vein slightly below the superior labial vein; however, the main branch from the lower lip usually descends to the submental vein, which is then to the facial or frequently to the anterior jugular. The superior labial, also known as the coronary vein, starts as a plexus in the orbicularis muscle of the upper lip, passes with the coronary artery, and drains into the facial vein a little below the alae of the nose of the veins which would rain the lower lip[3]. The mental, which arises from the bone through the mental foramen and sends big twigs to the mucous membrane, the integument, and the fascia of the lip and chin, is the source of the nerves supplying the lower lip. While some of the lip's lymphatic veins go to the submaxillary glands, others flow to a gland located directly above the hyoid bone's body. There are labial glands in the layer of tissue beneath the lips surrounding the mouth's opening. They release mucous secretion the development of mucous retention cysts occurs when these glands' ducts obstruct[5].

Lip balms are products that are applied to the lips to shield them from the elements and stop them from drying out. There are a lot of chemical-based lip balms on the market right now from brands like Nivea, Himalaya, Blistex, The Body Shop, and so on. There isn't much information on this kind of formulation in the cosmetic literature, but since it's a cosmetic form akin to lip balm, references to lipstick are relevant. Similarities include resistance to temperature changes, a pleasant taste, innocuousnes , smoothness during application, adherence, and ease of intentional removal, among other organoleptic and stability requirements. Considering that lip balm is a product meant for both men and women to use, it should not be confused with lip gloss. Creating lip balm the concentrations of the primary ingredients, such as butters, oils, waxes, and other excipients, must be balanced. To guarantee they have healthy, glowing skin, many people look for anti-aging lotions, weekly facials, daily skin scrubs, and a host of other products. However, lip care is frequently overlooked in favor of healthy skin. Natural lip balms provide a natural means of preserving and advancing lip health. Since lip balms are frequently consumed by the user, it is essential that health regulators examine the ingredients of lip balms at a microscopic level. When consumed by humans, the lip balm's coloring dyes pose a risk to health [9, 10. 11].

## MATEIRAL AND METHODS

Add bees wax, ghee, coconut oil in beaker and melt in water bath at 55 to 60 d C

Add honey, banana powder and vitamin E into beaker and mix vigorously sothat honey will not clump and add into the lip balm mould

Before pouring the mixture in moulds; on the mould applying glycerinwith the help of cotton

Put the filled moulds into ice bath for 10 min

Final product of lip balm

**RESULTS AND DISCUSSION**

Table No 1.organoleptic characteristics

| Sr.No | Physical Parameter | Methods | Observation |
|---|---|---|---|
| 1 | Colour | Visual Observation | Cream |
| 2 | Appearance | Visual Observation | Smooth |
| 3 | Odour | Smelling by nose | Pleasant |

**Test of Spreadabilty**

Fig no 1. Spreadabilty Test

The product was applied repeatedly to a glass slide at room temperature in order to visually observe the uniformity in the formation of the protective layer. This wasdone as part of the spreadability test.

**Melting Point**

The apparatus for determining the melting point of lip balm. A sample of lipbalm was placed in a glass capillary with one end flame-sealed in order to ascertain the melting point. The medication-filled capillary was submerged in liquid paraffin inside the melting point apparatus, which had a magnetic stirring mechanism.Melting was assessed visually, and the point of melting was noted. A pH meter was used forthe measurement.

**Stability Testing**

For 30 days, the lip balm was prepared and subjected to acceleratedstability studies at three different temperatures: room temperature (25.0 ± 3.0 ºC), refrigeration (4± 2.0 ºC), and oven temperature (40.0 ± 2.0 ºC). Its spreadability, meltingpoint, and organoleptic characteristics were assessed after 30 days.

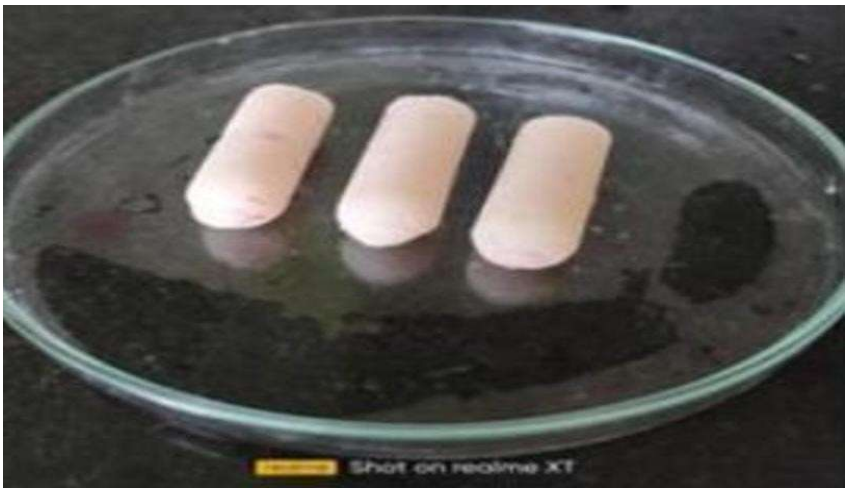


Fig no .2 Stability studies of lip balm at different temperature

At room temperature (25.0 ± 3.0 ºC) and refrigeration (4± 2.0 ºC), theprepared lip balm was observed to exhibit G-Good (uniform, no fragmentation, perfect application, without any deformation), and I (intermediate: uniform, leaves few fragments, appropriate application, little deformation at oven temperature (40.0 ± 2.0 ºC).

## CONCLUSION

During the stability test, the formulation stored at room temperature and in the refrigerator exhibited comparable behavior. The spreadability was rated as "Good," and the organoleptic characteristic was stable. Because the product's functionality was preserved, storage under these circumstances was deemed sufficient. Lip balm that has been prepared spreads well at room temperature. It was determined that organic lip balm can be a better option for treating various lip issues.The developed formulation of organic lip balm exhibited an appropriate melting point (mean of 69oC) during the stability test. The results of the spreadability tests indicated that storage in the oven (40.0 ± 2.0°C) was not recommended due to the loss of product functionality observed during thenormal stability test.

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