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## Studies on sensory parameters of lassi prepared from jackfruit pulp

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### Abstract

The present investigation entitled “Studies on sensory parameters of lassi prepared from jackfruit pulp” was undertaken during the year 2021-2022. In this study probiotic culture of *Lactobacillus delbrueckii* sub. sp. *bulgaricus* was used @ 2% for all treatments, whereas processed jackfruit pulp was used @ 12%, 14% and 16% along with honey @ 14%, 16% or 18% was used. The product obtained were subjected to sensory evaluation characteristics like flavour, body and texture, colour and appearance, and overall acceptability. The most acceptable quality of probiotic herbal jackfruit lassi can be prepared from 14 percent of jackfruit pulp.

**Keywords:** sensory, lassi, prepared, jackfruit, characteristics

### Introduction

In terms of the therapeutic benefits of fermented milk, fermented milk products are essential to human nutrition. There is ample evidence to support the importance of fermented milk in human nutrition. One of the widely consumed, ready-to-serve local fermented milk drinks is lassi. In practically every state, lassi is offered in great quantities throughout the summer in cold drink establishments and restaurants. Popularly known as sweet stirred yoghurt, lassi is a pleasant beverage that has been enjoyed throughout India's history, particularly in the country's western, northern, and central areas. In certain other regions of the world, lassi is also a popular beverage. It is made by blending entire curd with sugar or salt, and a tiny bit of ice or cold water to make the mixture flow able. The numerous physico-chemical uses of jackfruit have been linked to its health advantages. Research indicates that eating foods high in potassium can help reduce blood pressure. Eating jackfruit also provides the advantage of being a high source of vitamin C. Therefore, the goal of the current study is to assess the sensory quality of lassi made with various jackfruit pulp proportions.

### Materials and Methods

The probiotic herbal jackfruit lassi was prepared as per the method given by (Patange et al. 2018) [9] with slight modifications. The fresh good quality buffalo milk was pre-heated to 35-40 °C and subjected to filtration. The milk was heated to 90°C for 15 min. and then cooled to 35 °C. milk was taken in, which were properly cleaned and sterilized. Then 2 percent culture of *Lb. bulgaricus* were added in utensil. The contain were properly mixed, distributed into tins and incubated at 37 °C for 8 hrs then probiotic herbal jackfruit lassi is prepared by following process.

### Sensory Evaluation

A panel of eight to ten judges assessed the fresh lassi samples organoleptic ally using a nine-point hedonic scale for a variety of quality attributes, including overall look, body, texture, and flavour. The judges were given the experimental samples at a temperature of 7 °C. Each sample was to be rated by the panellists using a nine-point hedonic scale. They received score cards on a hedonic scale, as outlined in IS: 6273 (part-II) 1971 [6,] for assessing the product's quality.

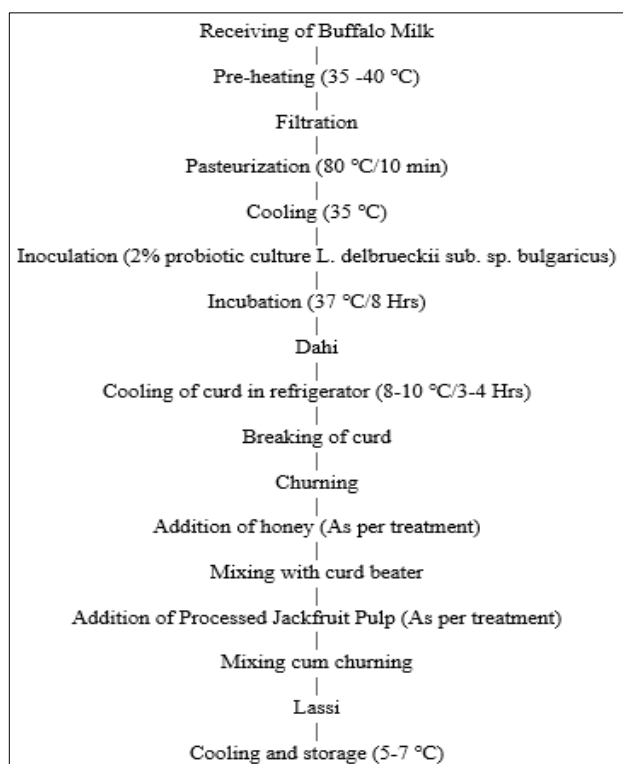


Fig 1: Flow chart for probiotic jackfruit herbal lassi

### Sensory Evaluation

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### Results and Discussion

The average composition of milk used to prepare dahi was 15.64 percent total solids, 6.34 percent fat, 3.79 percent protein, and 0.146 percent titratable acidity. These numbers showed that the buffalo milk utilised in the study was of a high calibre. The average composition of dahi used to prepare lassi was 14.54 percent total solids, 5.31 percent fat, 3.64 percent protein, 4.48 percent total sugar, 0.74 percent ash, and 0.66 percent acidity.

### Colour and appearance

The mean score for colour and appearance were 7.56, 8.06, 8.04, 7.95, 7.84, 7.68, 7.86, 8.13 and 8.05 for lassi prepared under treatments J<sub>1</sub>H<sub>1</sub>, J<sub>2</sub>H<sub>1</sub>, J<sub>3</sub>H<sub>1</sub>, J<sub>1</sub>H<sub>2</sub>, J<sub>2</sub>H<sub>2</sub>, J<sub>3</sub>H<sub>2</sub>, J<sub>1</sub>H<sub>3</sub>, J<sub>2</sub>H<sub>3</sub> and J<sub>3</sub>H<sub>3</sub> respectively. The highest score (8.13) was obtained by the treatment T<sub>8</sub> i.e., probiotic jackfruit herbal lassi made with jackfruit pulp at 14 percent and honey at 18 percent and lowest score (7.56) was observed for treatment T<sub>1</sub> i.e., probiotic herbal jackfruit lassi with 12 percent jackfruit pulp and 14 percent honey.

### Flavour

The mean score for flavour were 7.51, 7.72, 7.97, 7.79, 7.58, 7.53, 8.03, 8.29 and 8.04 for lassi prepared under treatments J<sub>1</sub>H<sub>1</sub>, J<sub>2</sub>H<sub>1</sub>, J<sub>3</sub>H<sub>1</sub>, J<sub>1</sub>H<sub>2</sub>, J<sub>2</sub>H<sub>2</sub>, J<sub>3</sub>H<sub>2</sub>, J<sub>1</sub>H<sub>3</sub>, J<sub>2</sub>H<sub>3</sub> and J<sub>3</sub>H<sub>3</sub> respectively. The highest score (8.29) was obtained by the

treatment T<sub>8</sub> i.e., probiotic jackfruit herbal lassi integrated with jackfruit pulp at 14 percent and honey at 18 percent and lowest score (7.51) was observed for treatment T<sub>1</sub> i.e., probiotic herbal jackfruit lassi with 12 percent jackfruit pulp and 14 percent honey.

### Body and texture

The mean score for body and texture were 7.63, 7.85, 7.64, 7.75, 7.83, 7.74, 7.79, 8.28 and 7.98 for lassi prepared under treatments J<sub>1</sub>H<sub>1</sub>, J<sub>2</sub>H<sub>1</sub>, J<sub>3</sub>H<sub>1</sub>, J<sub>1</sub>H<sub>2</sub>, J<sub>2</sub>H<sub>2</sub>, J<sub>3</sub>H<sub>2</sub>, J<sub>1</sub>H<sub>3</sub>, J<sub>2</sub>H<sub>3</sub> and J<sub>3</sub>H<sub>3</sub> respectively. The highest score (8.28) was obtained by the treatment T<sub>8</sub> i.e., probiotic jackfruit herbal lassi combined with jackfruit pulp at 14 percent and honey at 18 percent and lowest score (7.63) was observed for treatment T<sub>1</sub> i.e., probiotic herbal jackfruit lassi with 12 percent jackfruit pulp and 14 percent honey.

### Overall acceptability

The mean score for body and texture were 7.65, 7.93, 7.93, 7.67, 7.83, 7.78, 7.66, 8.46 and 8.18 for lassi prepared under treatments J<sub>1</sub>H<sub>1</sub>, J<sub>2</sub>H<sub>1</sub>, J<sub>3</sub>H<sub>1</sub>, J<sub>1</sub>H<sub>2</sub>, J<sub>2</sub>H<sub>2</sub>, J<sub>3</sub>H<sub>2</sub>, J<sub>1</sub>H<sub>3</sub>, J<sub>2</sub>H<sub>3</sub> and J<sub>3</sub>H<sub>3</sub> respectively. The probiotic herbal jackfruit lassi treatment T<sub>8</sub>, which combined jackfruit pulp at 14% and honey at 18%, received the highest score (8.46), while treatment T<sub>1</sub>, which combined probiotic herbal jackfruit lassi with 12% jackfruit pulp and 14% honey, received the lowest score (7.65).

### Conclusion

Based on the findings of this study, it is possible to draw the conclusion that jackfruit pulp can be effectively used to make probiotic herbal jackfruit lassi. The most acceptable quality of probiotic herbal jackfruit lassi can be prepared from 14 percent of jackfruit pulp. As *Artocarpus heterophyllus* has medicinal properties and nutritional importance it can be used in preparation of lassi and other dairy products.

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