



Studies on Sensory Evaluation of Jamun Juice Based Paneer Whey Beverage

M.U.Jadhao, S.R.Shegokar, P.V. Wankhede, P.S. Kashid

Department of AHDS, Dr. Panjabrao Deshmukh Krishi Vidyapeeth Akola,

ABSTRACT

To study the sensory evaluation of Jamun juice based Paneer whey beverage. Fresh cow milk was procured from the Deptt. of AH & DS, PGI, Akola. sugar, citric acid and ripened jamun was purchased from the local market and the pulp was extracted and used in the preparation of jamun juice based paneer whey beverage. It was observed from above findings that as the percentage of jamun juice increased in the blend, the flavour score of the product also increased. This is due to jamun juice which enhanced the flavour of the jamun juice based paneer whey beverage.

Keywords: Sensory evaluation, Jamun, Citric Acid, Whey beverage

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INTRODUCTION

Whey is the watery component removal after paneer manufacturing. In India, large quantities of whey is used in the production of paneer in dairy sector. Jamun is an edible fruit have a good quality, naturally present antioxidant compounds & very good for its curative function chiefly against Diabetes because of its effect on pancreas. Nutritive value of whey may be increased by the addition of jamun juice. Hence, utilization of such whey for the conversion into good quality beverage [1-5].

Chemical composition of paneer whey and Jamun juice.

The data regarding average chemical composition of paneer whey and Jamun juice are presented in table 1.

Table 1. Average chemical composition of paneer whey and Jamun juice.

Sr. No.	Constituent (%)	Paneer whey	Jamun juice
1	Moisture	93.50	81.2
2	Total solid	6.50	18.8
3	Fat	0.5	0.3
4	Protein	0.41	0.7
5	Ash	0.6	0.4
6	Acidity	0.25	1.3
7	Carbohydrate	5	14

MATERIALS AND METHODS

Fresh cow milk was procured from the Deptt. of AH & DS, PGI, Akola. sugar, citric acid and ripened jamun was purchased from the local market and the pulp was extracted and used in the preparation of jamun juice based paneer whey beverage.

Preparation of whey

Whey was prepared by heating cow milk at 82^o C and one per cent citric acid solution was added in milk. After coagulation of milk the whey filtered with muslin cloth. pH of whey was adjusted at 5.0 using 10 per cent NaHCO solution. Thus prepared whey was utilized for the preparation of jamun juice based paneer whey beverage.

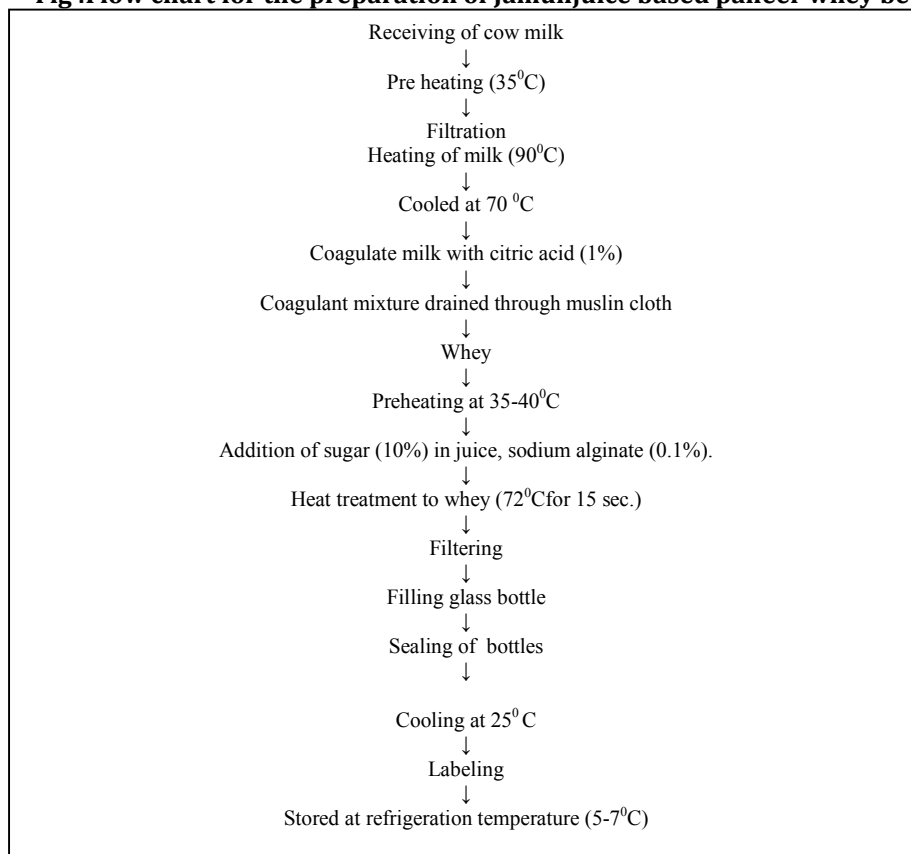
Preparation of Jamun juice

Ripened jamun were cleaned with water and removing the skin. The pulp was extracted aseptically and mixed well so as to have uniform mixed. Then the pulp was refined by passing it through the muslin cloth and used for the preparation of jamun juice based paneer whey beverage.

Table 1: Sensory evaluation of Jamun juice based paneer whey beverage

Treatment	Flavour	Colore& appearance	Consistency	Over all acceptability
T ₁	7.30	7.18	7.18	7.35
T ₂	7.58	7.21	7.23	7.84
T ₃	8.65	7.53	8.36	8.15
T ₄	8.79	7.60	8.65	8.76
T ₅	8.55	7.34	8.20	7.90

Fig :Flow chart for the preparation of Jamun juice based paneer whey beverage

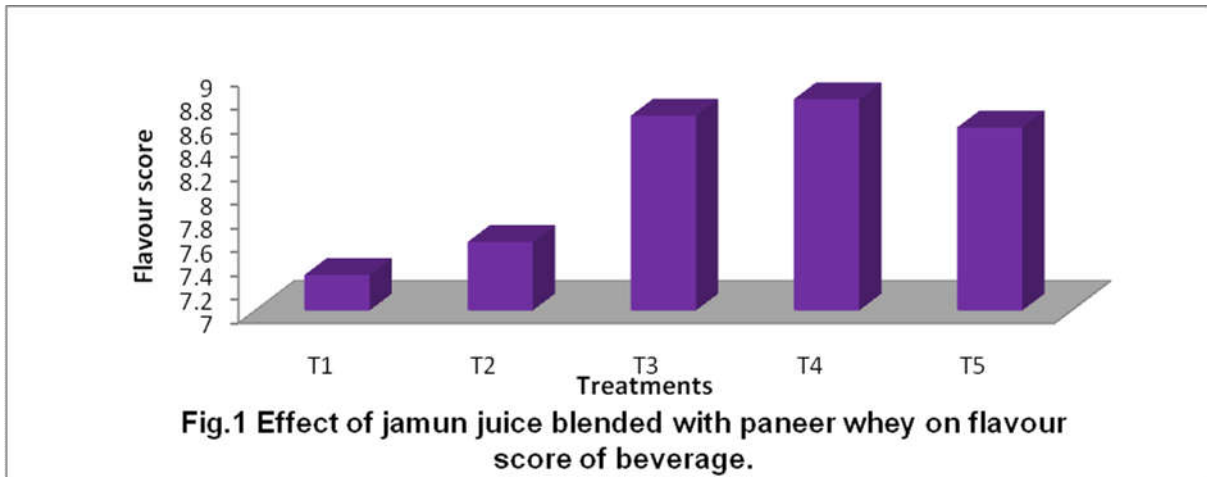


ensory evaluation of jamun juice based paneer whey beverage (JJBPWB) prepared from different levels of jamun juice were subjected to sensory evaluation for colour and appearance, flavour, consistency and overall acceptability by trained judges, using 9 point hedonic scale.

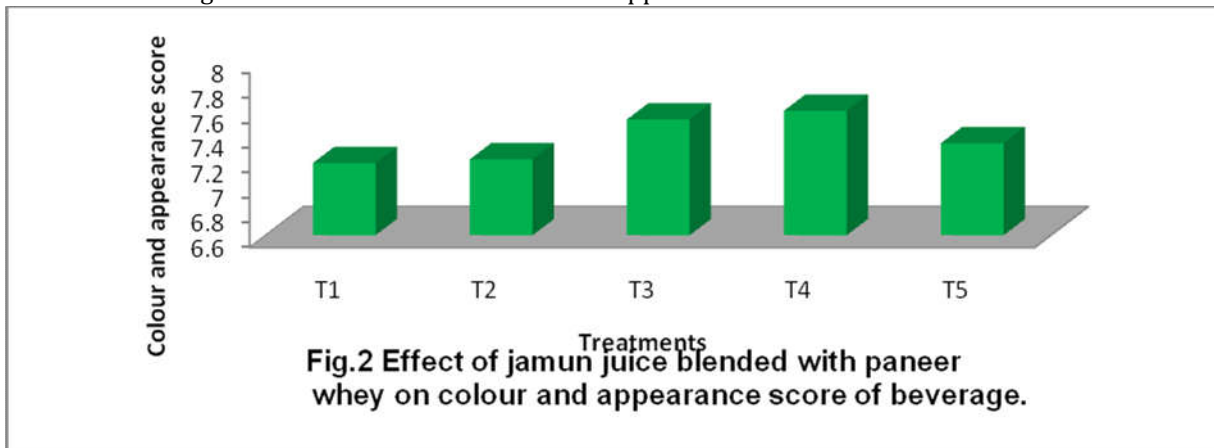
RESULTS AND DISCUSSION

Flavour:

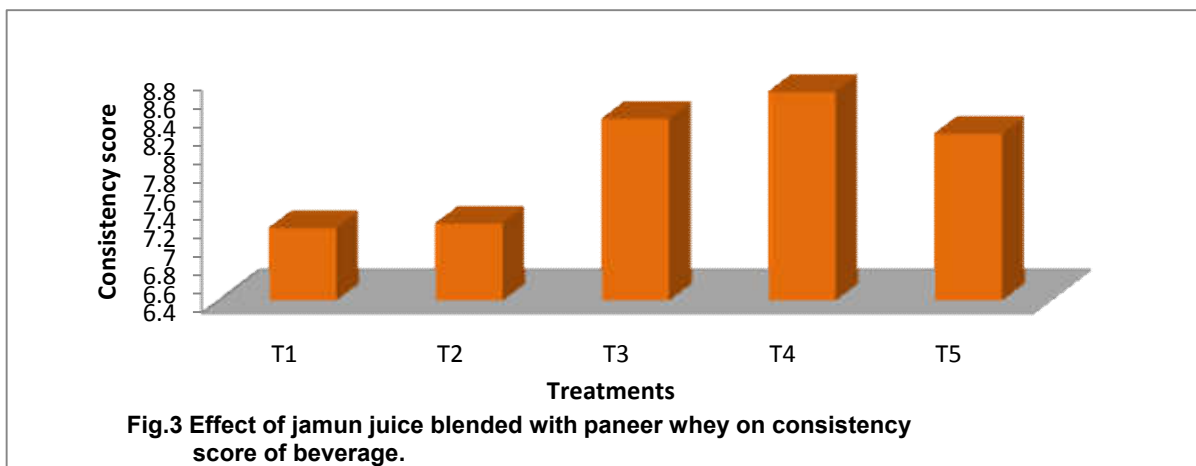
Mean score for flavour ranged lies between 7.30 to 8.79. The treatment T₁ were scored the lowest score followed by treatment T₂ and T₃ treatment. All the treatments, maximum score were recorded in treatment T₄ followed by treatment T₅. It was observed from above findings that as the percentage of jamun juice increased in the blend, the flavour score of the product also increased. This is due to jamun juice which enhanced the flavour of the jamun juice based paneer whey beverage (JJBPWB).



Colour and Appearance: It is evident from Table 1 that, the mean colour and appearance score for different treatment of whey beverage ranged from 7.18 to 7.60. The data shows that treatment T4 scored the highest score by other treatments. It was observed that addition of jamun juice increases the colour and appearance score of jamun juice based paneer whey beverage (JJBPWB). There were no significant differences amongst all the treatments for colour and appearance score.



Consistency: Table 1 shows the mean score for the consistency attributes of jamun juice based paneer whey beverage (JJBPWB) it was in the range of 7.18 to 8.50. The score of consistency for treatment T4 scored the highest score. The treatment T₁ scored lowest score followed by T₂, and T₃.



Overall Acceptability:

It is evident from Table 1 that the overall acceptability score of jamun juicebased paneer whey beverage for various treatments varied between 7.35 to 8.76. The mean overall acceptability score for treatment T₁,

T₂, T₃, T₄ and T₅ was 7.35, 7.84, 8.15, 8.76 and 7.90, respectively. The treatment T₄ (8.76) was most acceptable by the judges, so addition of 15 per cent jamun juice was most acceptable than other treatment combinations. The present findings are in conformity with the results reported by [5].

CONCLUSION

It is concluded that the whey can be utilized for preparation of jamun juice based paneer whey beverage. The whey beverage prepared from paneer whey blended with (15%) jamun juice was most acceptable.



Jamun fruit

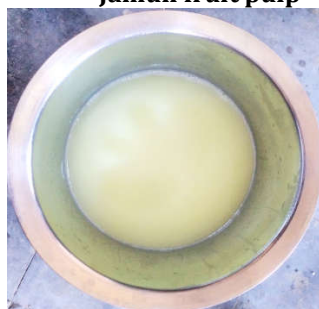
Remove skin of fruit Jamun fruit, seed, skin



Jamun fruit pulp



Jamun juice



Milk whey



Jamun juice based paneer whey beverage all treatment.

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