Formulation And Standardization of Jamun Mysore Sri

K. Sri Mathangi[1], Dr K. U. Pavitra Krishna[2]
Head of the Department, B.Sc., Food Science and Processing Management, Subbalakshmi Lakshmipathy College of Science, Madurai, Tamil Nadu, India

Abstract: The study focused on developing a nutritious and value-added sweet by incorporating Jamun fruit pulp in traditional South Indian sweet Mysore Pak. This innovation combines the cultural richness of Mysore Pak with the therapeutic and nutritional properties of Jamun fruit (Syzygium cumini). Jamun fruit is known for its Antioxidant, Antidiabetic, and Anti-inflammatory properties, containing bioactive compounds such as Anthocyanins, Flavonoids, and Jamboline. However, its short shelf life limits its utilization. Incorporating Jamun pulp into Mysore Pak provides a unique opportunity to extend the fruit's usability and value. Three formulations were developed by varying Jamun fruit pulp concentrations at 30%, 40%, and 50% levels, respectively. The products were analyzed for sensory characteristics, nutritional composition, cost effectiveness, and shelf stability. Sensory evaluation using a five-point hedonic scale revealed that the 40% Jamun Mysore Pak formulation (Sample C) was the most preferred in terms of taste, color, and overall acceptability. Nutrient analysis indicated that the standardized product per 100g contained 5.36g protein, 1.69g fat, 1.25g fiber, 39.32g carbohydrates, 88.6mg calcium and 2.74mg iron, contributing to a total energy value of 246.4 kcal. The product was found to be rich in micronutrients and suitable for health-conscious and diabetic individuals. Cost analysis revealed that the overall marketable price of 100g is ₹80, ensuring both affordability and profitability. The product's packaging and labeling were designed to preserve quality and appeal to consumers. Overall, the study demonstrates that Jamun Mysore Pak is a successful blend of tradition, nutrition, and innovation, offering a sustainable approach to value addition in functional confectionery.

Keywords: Jamun fruit, Quality Control, Packaging, Shelf life Extension, Nutritional value, Food Safety Regulations.

I. INTRODUCTION

The product has chosen for this project is Jamun Mysore Pak, a unique and flavorful twist on the traditional South Indian sweet. The main ingredient, Jamun fruit (botanically known as *Syzygium cumini*), is also commonly referred to as Java Plum, Black Plum, Malabar Plum. This fruit is native to the Indian subcontinent and Southeast Asia. Chosen this product primarily because of my personal love for it, and its bright and vibrant colors are especially appealing to children—my target customer group. By combining the rich heritage of Mysore Pak with the tangy-sweet flavor and striking appearance of Jamun, this product aims to be both delicious and visually attractive, making it an ideal sweet treat for younger audiences. Rich in vitamins C and A, minerals iron and potassium, and potent antioxidants anthocyanins and flavonoids. Jamun is a nutrition superfood. Jamun fruit Mysore Pak is greater than a dessert—it's a marriage of tradition and contemporary nutrition. By taking an underutilized fruit and converting it into a functional food, this product highlights how culinary culture can adapt to serve contemporary health needs. This preliminary information provides the background to discuss how Jamun Mysore Pak is prepared, the nutritional benefits it offers, and the ways in which it can win over dessert enthusiasts around the world.

Objectives:

- To Develop a Nutritionally Balanced Jamun Mysore Sri Formulation.
- To Provide Immunity to children.

II. MATERIALS AND METHODS

2.1Procurement of Raw Material:

The raw materials such as Besan flour, Sugar, Jamun fruit, Ghee were purchased in local super market.

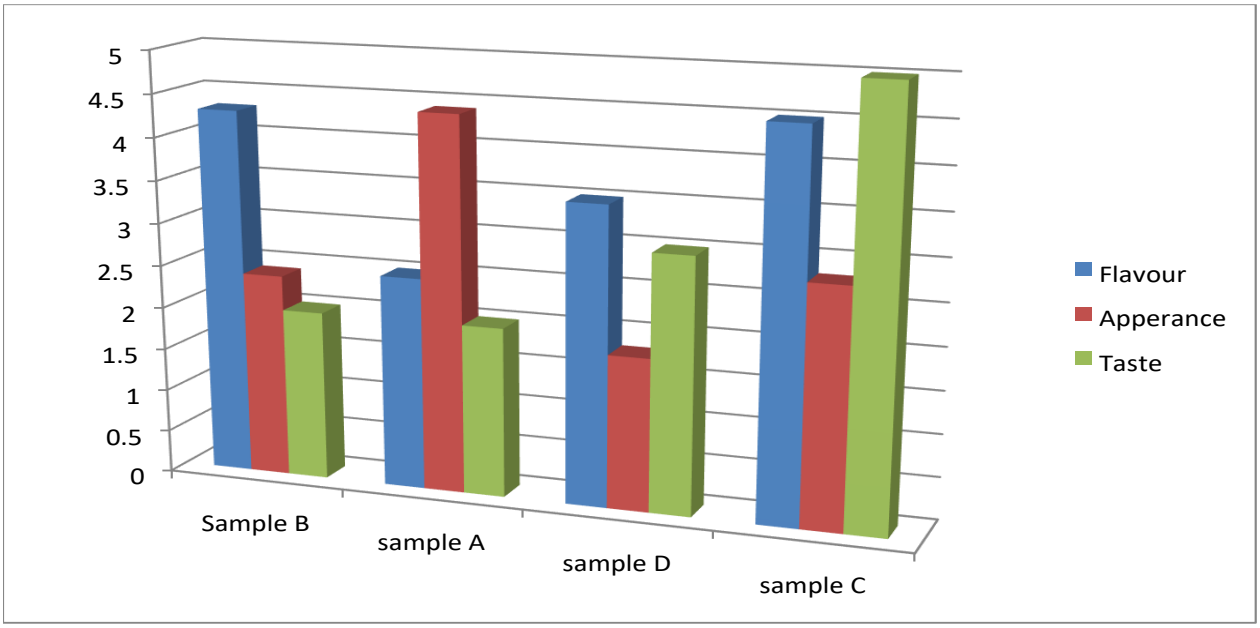
2.2 Methods

2.2.1 Standardization and Formulation of Jamun Mysore Sri

There formulation were developed:

The proportion of ingredients used in the preparation of control is Jamun fruit, Besan flour, Ghee, Sugar is given

- JMP1: 30% Jamun fruit pulp incorporated in Mysore Pak
- JM 2: 40% Jamun fruit pulp incorporated in Mysore Pak
- JMP3: 50% Jamun fruit pulp incorporated in Mysore Pak



Sensory evaluation of the sample C

2.2.2 Sensory Evaluation

The samples were assessed on appearance, colour, flavour, texture, taste, and overall acceptability by a semi-trained panel of ten people using a five-point hedonic scale (1 = Dislike very much, 5 = Like very much).

2.2.3 Nutrient Analysis of Jamun Mysore Sri

Nutritional analysis is the scientifically set stepwise process of assessing the types, amount, and nature of nutrients available in the given food sample .The development and evaluation of were subjected to nutrient analysis namely Energy, protein, fat, Fibre, calcium, phosphorous, Iron, Carotene, Thiamine, Riboflavin ,Niacin, Folic acid, Vitamin A, Vitamin C, Carbohydrate, Moisture using NIN Nutritive value of Indian foods.

Nutritive value for Jamun Mysore Sri per 100g:

Nutrients	Nutritive Value
Moisture	50.27
Protein	6.08
Fat	1.44
Fibre	0.57
Calcium	65.17
Phosphorous	95.35
Energy	187.95
CHO	37.98
Iron	5.2

III. COST ANALYSIS

The cost of Jamun Fruit Mysore Pak was analyzed by taking into account the fixed and variable cost include during the course of processing and production. Cost benefits of the product were done and it is given below.

Cost of Jamun Mysore Pak

S.NO	Ingredients	Cost	Quantity
1.	Jamun Fruit	6.00	40g
2.	Besan Flour	4.25	30g
3.	Sugar	1.05	30g
4.	Packaging	15.00	_

Total Cost = 70

Profit = 10

Total Amount = 80

IV. RESULTS

Jamun fruit Mysore Pak had the greatest overall acceptance score (4.6/5) out of all the formulations. A pleasing colour and natural sweetness were produced by the balanced fruit concentration. Jamun fruit Mysore pak nutritional analysis showed 37.98 g of carbs, 6.08 g of protein, 189.95 kcal of calories, and important micronutrients. At ₹80 per 100 g, the product was significantly less expensive than commercial Mysore Pak, which cost between ₹150 and ₹300.

V. DISCUSSION

The Jamun Mysore pak nutritional value and sensory appeal were enhanced by the addition of extract from Jamun fruit, making it appropriate for customers who are health-conscious and mainly for children who are attracted by bright and vibrant color. Jamun fruit plup natural pigments improved colour without the need for additional chemicals. The results show commercial potential in the wellness sector and are consistent with consumer preferences for functional and Immunity boosting food.

VI. CONCLUSION

Taste, nutrition, and affordability were all successfully combined in the Jamun Mysore Sri. Superior sensory and nutritional performance was demonstrated by the formulation containing 30% fruit extract. According to the study's findings, Jamun Mysore Pak can be a healthier substitute for Mysore Pak and that is appropriate for all age groups. Future research could focus on flavour diversification, shelf-life studies, and the development of sustainable products using biodegradable packaging.

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