

# GUAVA CHEESE:

## A GOURMET OF FLAVOUR AND RICHNESS

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# INTRODUCTION

Guava (*Psidium guajava* L.) is a significant fruit globally and has been cultivated in India since the early 17th century, eventually becoming a commercially important crop. It ranks as the fourth most important fruit crop in India, following mangoes, bananas, and citrus fruits, in terms of area and production. Often referred to as the "poor man's fruit" or the "apple of the tropics," the guava tree is a medium-sized shrub that can reach about 9 meters in height. It produces abundant fruit with minimal care, offering substantial returns with low input costs. Guava fruits are available year-round in the market. Winter season fruits can be stored for 6 to 9 days under ambient conditions, while those from the rainy season typically last 2 to 4 days, depending on the variety. Key varieties include Allahabad Safeda, Lucknow-49, and Apple guava, valued for their yellowish-white color, sweet taste, and mild-flavored pulp. Guava is nutritionally rich and financially beneficial, forming a vital part of human diets. It is an excellent source of vitamin C (260 mg/100 g), pectin (0.52 to 2.0%), phosphorus (23-27 mg/100 g), and calcium (14-30 mg/100 g). It also provides vitamins like niacin, pantothenic acid, thiamin, riboflavin, and vitamin A. Immature guava fruits are used in treating gastrointestinal issues, high blood pressure, and cardiovascular diseases. Despite India's significant production of

50 million tonnes of fruits annually, the potential for exports is limited due to poor post-harvest management and processing technology. Seasonal surpluses often lead to farmers selling their produce at very low prices, and the highly perishable nature of guavas makes long-term storage challenging, especially in tropical climates. Typically, 20-25% of fruits are damaged before reaching consumers.

Processing is an effective method for adding value to fruit crops, extending shelf life, and creating additional income and employment opportunities. As demand for processed food products increases, it is crucial to focus on guava processing to help growers achieve better prices and allow consumers to enjoy guava in various forms. Current guava processing includes making jam, jelly, pulp, puree, toffee, leather, juice, baby foods, beverage bases, syrup, and wine. Additionally, guava pulp is being used to produce cheese. While traditional products like jam and jelly are still popular, modern products such as fruit cheese are gaining international interest. Recent efforts to develop guava cheese technology using local varieties have faced issues with consistency. There is limited systematic information available on guava cheese production, including additives, packaging, and quality during storage.



# PREPARATION OF GUAVA CHEESE :



**Sorting of fruits:** Well ripened healthy and fresh guava fruits of each variety were selected for the study. Over ripened, unripened and rotted fruits were discarded.

**Washing of fruits:** Before processing, the fruits were thoroughly cleaned with tap water to eliminate dust and other unwanted foreign materials on their surface.

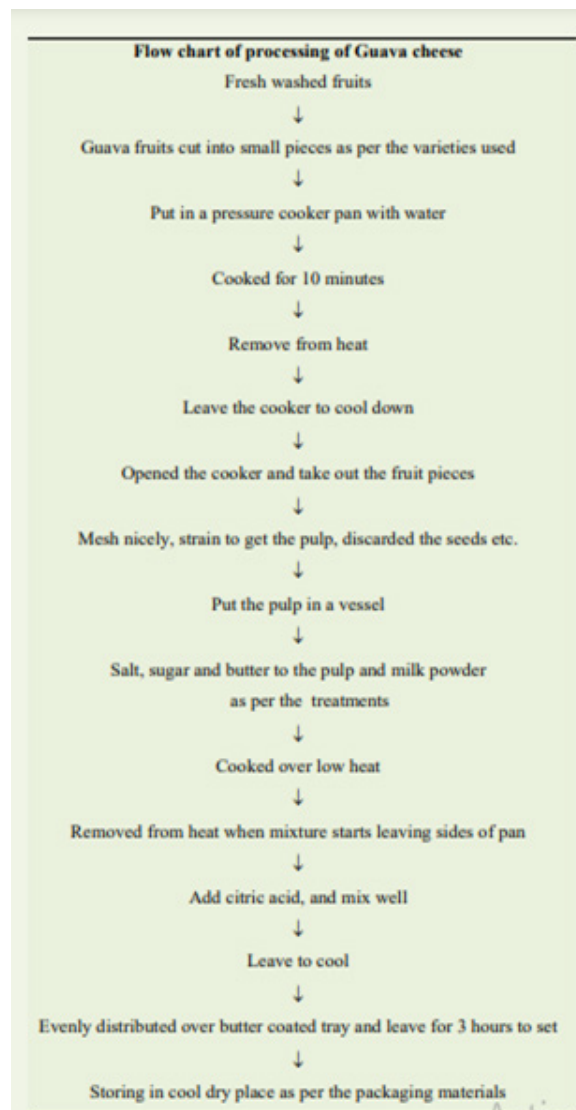
**Cutting of Fruits:** The cleaned fresh fruits were sliced into 1 cm thick pieces using a stainless steel knife for each treatment.

**Boiling of Fruit Slices:** The fruit slices for each treatment were boiled in water until they became completely soft. Once softened, the slices were left to cool naturally.

**Mashing and Sieving of Fruit Slices:** The softened fruit slices were manually mashed to make sieving easier and more efficient. After mashing, the pulps were sieved.

**Addition of Sugar, Butter, Citric Acid, and Milk Powder:** After mashing and sieving, the required amounts of sugar, butter, and citric acid were mixed into the fruit pulp to prepare the cheese. In some formulations, milk powder was also added along with the other ingredients.

**Determination of End Point for Cheese Preparation:** Once the sugar, butter, citric acid, and milk powder were incorporated into the fruit pulp, the mixture was cooked in a metallic pan with continuous stirring until it thickened sufficiently and began to pull away



from the sides of the pan. This indicated the end point of the cheese preparation, at which point the pan was removed from the heat. Setting of Guava Cheese: After cooking, the guava cheese mixture was spread onto a butter-coated tray (20 cm x 20 cm) to a uniform thickness of 1 cm. It was then allowed to set for 3 hours

The following material was used to prepare the cheese of guava fruits:

S. No.	Name of material	Quantity	Remarks
1.	Pulp of fresh guava fruits	500 g	Pulp used as per variety
2.	Sugar	500 g	-
3.	Butter	100 g	-
4.	Milk powder	100 g	As per requirement
5.	Citric acid	¼ tea spoon	-
6.	Salt	¼ tea spoon	-

## SUGGESTIONS FOR FUTURE RESEARCH:

Conduct comparative studies on the shelf life of products stored at various temperatures and using different packaging materials. Explore the preparation and assessment of mixed fruit cheese. Investigate the effects of varying sugar levels on the quality of guava cheese. Consider developing and evaluating additional guava pulp-based products beyond cheese.

## SUMMARY

The future of guava cheese lies in its ability to blend tradition with innovation. As global interest in artisanal and natural foods grows, guava cheese has the potential to expand beyond its cultural roots. Modern adaptations could include gourmet variations, such as infusing it with spices, pairing it with exotic cheeses, or incorporating it into desserts like tarts and pastries. Sustainable packaging and health-conscious recipes with reduced sugar might appeal to contemporary consumers. By embracing these trends while preserving its authenticity, guava cheese could find a place in global markets as a versatile and unique delicacy.

