

Blending Guava to Create Nutritious Fruit Leather

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SUMMARY

Guava (*Psidium guajava* L.) has been grown in India since the early 17th century and has steadily grown in importance as a commercial crop. It now covers approximately 1.12 lakh hectares in India, producing 12.04 lakh tonnes of fruit per year with a productivity of 10.77 tonnes per hectare (Department of Agriculture and co-operation, 2019). Guava is quite hardy, prolific bearer and highly remunerative even without much care. It is widely grown in the tropics and subtropics, including in India, in states such as Uttar Pradesh, Bihar, Madhya Pradesh, Maharashtra, Andhra Pradesh, Tamil Nadu, West Bengal, Assam, Orissa, Karnataka, Kerala, Rajasthan, and others. Allahabad Safeda, Luck now -49, Chittidar, Nagpur Seedless, Bangalore, Dharwar, Arka, CISHG - 3, and other varieties are commonly grown in India.

INTRODUCTION

Guava is usually eaten fresh as a dessert fruit because of its sweet and refreshing taste. This massive Myrtaceae or Myrtle family member is thought to have arisen in Central America and the southern part of Mexico (Somogyi et al., 1996). After mango, banana, and citrus, it is said to be the fourth most important cultivated fruit in terms of area and production. India is major world producer of guava (Jagtian et al., 1998). Whole fruit is edible, including the skin, and is considered one of the most tasty and luxurious fruits, also advertised as "Super fruits," with seeds rich in omega-3 and omega-6 polyunsaturated fatty acids, dietary fibre, riboflavin, proteins, and mineral salts.

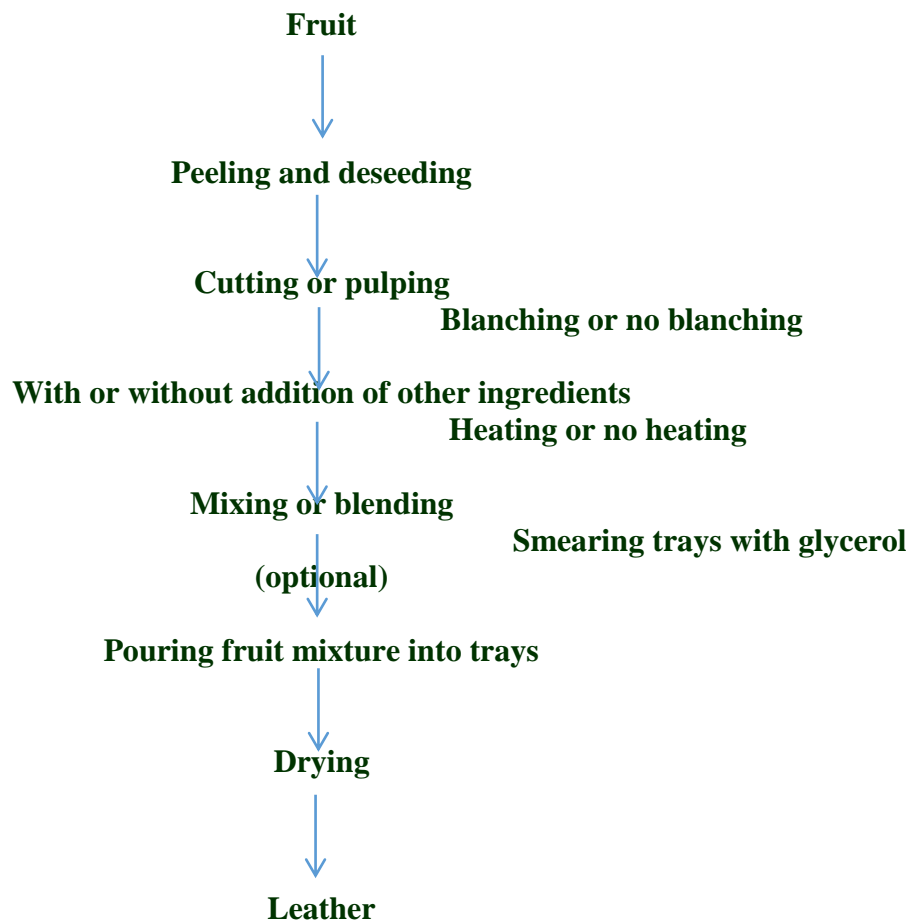
Nutrients and health benefits

Guava's high vitamin C (ascorbic acid) content makes it a powerful fighter against free radicals and oxidation, which are common causes of degenerative diseases. Guavas' antioxidant properties are thought to help prevent cancers of the stomach, oesophagus, larynx, oral cavity, and pancreas. The vitamin C in guava makes absorption of vitamin E much more effective in reducing the oxidation of the LDL cholesterol and increasing the (good) HDL cholesterol. Guava fibres aid digestion and make bowel movements easier. Guava's high vitamin A content is essential for maintaining the quality and health of one's eyesight, skin, teeth, bones, and mucus membranes. The fruit is high in ascorbic acid (100–260 mg/100 g pulp) and pectin (0.5–1.8 percent) (Verma and Shrivastava, 1965), but low in energy (66cal/100g) and protein (Verma and Shrivastava, 1965). (1 percent). The fruit is high in minerals such as phosphorus (23-37 mg/100g), according to the International Journal of Chemical Studies, published in 1921. Calcium (14-30 mg/100g), iron (0.6-1.4 mg/100g), and vitamins such as Niacin, Pantothenic acid, Thiamine, Riboflavin, and vitamin A are all essential (Bose et al., 1999). With changing consumer attitudes, demands, and the introduction of new market goods, it is more important than ever for manufacturers to create products that are both nutritious and safe. Guava has excellent digestive and nutritive value, a good taste, high palatability, and is readily available at a reasonable price. Since fresh fruit has a short shelf life, it is important to use it to make a variety of products in order to increase its supply over time and keep the price stable during glut season.

Guava can be eaten fresh or processed into juice, nectar, pulp, jam, jelly, slices in syrup, fruit bars, or dehydrated items. It can also be added to other fruit juices or pulps as an ingredient (Leite et al., 2006). Guava is used to make delicious salads, puddings, jams, jellies, cheeses, canned fruit, RTS, nectar, squash, ice cream, and toffees (Jain and Asati, 2004). The production rate of these fruits has increased in recent years, which may be attributed to their increased consumption trend in the tropics (FAO, 1983). It is typical to find that 20-25 percent of the fruit is totally rotten and harmed before reaching the market (Yadav, 1997). Therefore, to utilize the produce at the time of As a result, the production of low-cost guava processing technology is critical for utilising the produce during times of glut and preventing spoilage. It will also provide enough self-employment opportunities by establishing a small-scale processing unit or cottage industry that will pay the growers. The advancement of low-cost guava processing technology is critical to reducing glut and preventing spoilage. It will also provide

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Preparation of Guava Leather



CONCLUSION

Fruits serve as a source of energy, vitamins, minerals, and dietary fiber. One of the barriers in increasing fruit consumption is time required to prepare them and the high perishability. Hence, fruit bars can be a good, convenient and natural foods which are with high salt, sugar and fat. Fruit leather is concentrated form of food source with rich nutritional value as compared to fresh counterparts. Nowadays, health conscious consumers are looking for products which support health, wellness and functional properties which may be met through fortified fruit bars. Further, fruit bars can also act as suitable matrix for incorporation of prebiotics as well as probiotics. Sugar is an important ingredient in traditional fruit bar preparation. However, there is lot of scope to use of alternate sweeteners and other sugar substitutes for preparation of fruit bar to meet the increasing demands of low calorie snack food. There is also great potential for use of solar energy as well as alternate drying techniques for popularization of fruit bar processing in rural areas.

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