



REVIEW ARTICLE

An Overview Encompassing the Present Status of Jaggery Processing

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Abstract

Jaggery, also known as Gur, is a traditional sweetener made from sugarcane juice and is commonly used in India. This concentrated product is available in solid, liquid, or granular forms and has a golden hue, firm texture, crystalline nature, and less moisture. Jaggery is known for its health benefits, including aiding digestion, relieving constipation, cleansing liver, increasing energy, purifying blood, and has anticarcinogenic and anti-toxic effects. Several value-added food products made of jaggery are used in daily cuisines, beverages, and desserts around the world. It is often incorporated into pharmaceutical and food formulations due to its nutritional advantages such as protein, amino acids, vitamins, and phytochemicals. Jaggery is processed into different forms to replace the use of refined white sugar in bakery and confectionary products, chocolates, drinks, etc. However, efforts are being made to manufacture a consistent product that would increase productivity while enhancing hygiene measures, uniformity of shape, size, and storage stability. Various studies have been made to improve the processing technology of jaggery, value addition of jaggery through fortification and improved packaging systems for improved shelf life. This review provides an overview of jaggery processing, including its value addition as a potential nutraceutical, health benefits, storage, and packaging considerations.

Keywords Jaggery · Sugarcane · Processing · Value addition · Packaging · Storage

Introduction

Jaggery or Gur, as defined by the Food Safety and Standards Authority of India (FSSAI), is "the product formed by processing or boiling juice strained from sugarcane either derived through coconut, date, or palmyra palm" (Hirpara et al. 2020). Jaggery is a traditional sweetener manufactured by concentrated sugarcane juice and is recognized by several diverse terms around the globe by the Food and Agriculture Organization of the United Nations. In Asia, Africa, Latin America, and the Caribbean, Jaggery is a type of unrefined non-centrifugal cane sugar. It is considered the healthiest

sugar in the world because it contains all the vitamins and nutrients in sugarcane juice (Tyagi et al. 2022). India is the world's leading jaggery producer, accounting for half of global production and more than 70% of consumption (Rao et al. 2009). Jaggery is an essential part of the Indian diet, and it is either consumed directly or used to make sweet-based delicacies. Jaggery is commonly called "medicative sugar" due to its use in Ayurveda and its proximity to honey (Hirpara et al. 2020).

Due to the ongoing demand from consumers concerned about their diets for high-quality, organic, clean-labeled food, the food production industry is attempting to improve and add value to the current line of products to promote wellness. The jaggery-making industry requires expansion because it is one of the significant agricultural-processing industries in the rural sector. By doing so, higher-quality jaggery and its products may be produced at lower costs, thus, boosting the rural economy. In this article, the effort is made to give an overview of jaggery and its consequences

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