

## A Review - Jaggery “A Healthy Sweetener”

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### ABSTRACT

Jaggery, an indigenous sweetener, is being manufactured in India since time immemorial. Last century witnessed the growth of white sugar manufacturing at the expense of jaggery and khandsari industry. White sugar contains only sucrose which leads to varieties of health problems. Its excessive consumption causes coronary thrombosis, dental carries and other heart related problems. On the other hand jaggery contains 51% sucrose, 0.25% protein, 21.2% glucose and 3.4% minerals in addition to trace amounts of fats, iron, calcium and phosphates, which are absent in white sugar. In addition it also possesses medicinal properties. In rural India jaggery enjoys wide acceptability. Scientific production and storage of jaggery will encourage this cottage industry and provide a healthy alternative to white sugar.

**Key words :** Jaggery, White Sugar, Storage, Clarificants, Medicinal Properties

### INTRODUCTION

Jaggery or Gur is a processed solid or semisolid product produced by boiling down juice of sugarcane (or sap of palm tree) with or without purification. Jaggery is being manufactured in India since time immemorial. Jaggery and khandsari industry has been one of the ancient and important rural-based cottage industries in our country. Prior to 1902 almost all the sugarcane produced was processed for manufacturing of Jaggery and khandsari. Later, while Jaggery and khandsari industry remained practically static, the sugar industry made rapid stride. Number of sugar mills increased from one in 1902 to above 400 in 1997-98. Even after such a phenomenal increase in number of sugar mills during the past 50-60 years, above 40% of the total sugarcane produced is still being utilized for manufacturing of jaggery and khandsari Alam, (1999).

About 75% of sucrose consumption in rich countries has been through manufactured foods such as confectionery, cakes, biscuits, soft drinks, ice creams, etc. White sugar contains only sucrose (99.7%), excessive consumption of which leads to varieties of problems such as coronary thrombosis, dental carries and other heart related problems. On the other hand, jaggery produced from sugarcane possesses 51% sucrose, 0.25% protein, 21.2% glucose and 3.4% minerals in addition to trace amounts of fats, iron, calcium and phosphates, which are absent in white sugar Shahi, (1999).

Jaggery contains appreciable amount of carbohydrates, proteins, minerals and vitamins, which are basic food ingredients for human consumption. Jaggery,

besides having high nutritional value has medicinal properties also. It is considered good to cure breathlessness, cough, coryza, headache, rheumatism, cardiac disease, piles, inflammation of body, leucorrhoea, impotency, and is useful in hair care.

*Sugarcane Varieties for Quality Jaggery :*

Sugarcane varieties have a pivotal role in the production of quality and quantity of jaggery. The colour of produce may vary from yellow to dark brown, texture from crystalline to amorphous and taste from fine to disagreeable. A wide variation in quality of gur is noticed resulting from different varieties although grown under identical conditions. For the manufacture of gur, preference is given to those varieties having juice of high degree of claribility which depends on low levels of colloids, minerals (N, Cl, etc.), non-sugar and non-protein nitrogen, high level of phosphate and wider ratio of sucrose to glucose. Parameters for the selection of sugarcane for good quality jaggery are higher sucrose and purity with lower organic non-reducing sugar, and ash Mishra, (1992). The best jaggery quality was from Co.J.78 & Co.J.64, associated with low value for N: P ratio, K, Ca, Mg and Cl and high contents of P, Zn, Mn and Cu Kapur et al., (1988). Anakapalle center found variety 87A298, 88A189, 85A261, Co6907, 81A99 etc recorded good quality jaggery with high sucrose content (83.8 to 87.1%) and less total non-sugar content (5.1 to 8.5%), bright colour and hardness. Anon (1998) reported that jaggery prepared from cane varieties of Co 92103, Co90018, Co7219, gave good quality jaggery with high sucrose contents (82.6-85.2%)

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