

Processing of a Novel Sugar Product Incorporated with Selected Natural Plant Extracts

C.H. Samarasinghe ^{1*}, M.A. Jayasinghe ², S.P.A.S. Senadheera ³,
I. Wijesekara ⁴, K.K.D.S. Ranaweera ⁵

Abstract

“Sugar” generally refers to sucrose, which is manufactured primarily from sugar cane (*Saccharum officinarum*) or sugar beets (*Beta vulgaris*) has been part of the human diet for millennia. Excessive consumption of sugar can increase the risk of adverse health outcomes, including type II diabetes mellitus and cardiovascular disease. The main objective of this study was to produce cane sugar that is incorporated with Ginger (*Zingiber officinale*) and Gooseberry (*Phyllanthus emblica*) extracts; in aim to suppress glycaemic impact. Initially a sugar solution was made from normal cane sugar. Then this solution was heated to 115°C and was cooled down while stirring well. At specific temperatures gooseberry extract and ginger extract were mixed in a particular ratio. Mixture was cooled down further and final crystalized product was dried for 3 hours at 50°C and packed in an air tight packaging. The results of the study indicated that sugar product incorporated with selected plant food extracts; has a significantly lower GI (38±9) than normal cane sugar (GI = 65) and hence could be used in the diet of patients with hyperglycaemic complications.

Key words : Glycaemic Index, Diabetes Mellitus, Cane Sugar, Ginger, Gooseberry

^{1,2,4,5}Department of Food Science and Technology, Faculty of Applied Sciences,
University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka.

³ Department of Biochemistry, Faculty of Medicine and Allied Sciences,
Rajarata University of Sri Lanka, Saliyapura, Sri Lanka.