

A Low Glycemic Index (GI) Beverage for Diabetics

INTRODUCTION

Diabetes is one of the major metabolic disorders affecting all strata of society which is characterized by altered carbohydrate, lipid and protein metabolism. Sustained hyperglycemia leads to micro and macro vascular complications which include nephropathy, retinopathy and neuropathy. Hence maintaining optimal blood glucose levels becomes imperative to prevent long term deleterious complications associated with diabetes.

The process developed at CFTRI for the development of low GI milk re-constitutable product was screened for its ability to reduce basic diabetic parameters. The product can be used as a beverage by reconstituting with warm milk and can be consumed preferentially before breakfast and snacks at least twice a day.

RAW MATERIAL

Cereals, spices, etc.

PLANTS AND MACHINERY

Tray drier, roaster, apex mill/ grinder, ribbon blender, walk – in – cooler, etc.

PROJECT COST – FIXED COST – WORKING CAPITAL (in Rs. '000) (Estimate for a model project)

a)	Land & land development (900 Sq. M)	900.00
b)	Building & civil construction (30 Sq. M)	2700.00
c)	Plant and machinery	2263.50
d)	Miscellaneous fixed assets	100.00
e)	Pre-operative expenses	542.00
	Total fixed capital	6505.50
	Working capital margin	1362.00
	Total Project cost	7867.50

Means of finance

Promoters contribution 1966.875

Term loan 5900.625

PRODUCTION CAPACITY- (estimate)

The installed capacity 100Kg/ shift/ day and working for 300 days in a year

TECHNOLOGY/MANUFACTURING PROCESS – Availability

CFTRI has standardized the technology and general methods of processing of A Low Glycemic Index (GI) Beverage for Diabetics. Apart from this procedure for quality control, packaging and packaging material specifications, equipment details are also provided by the institute.