CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE, MYSORE

READY-TO-EAT LOW-FAT FLACKED SPICY MAIZE/CORN SNACK

1. INTRODUCTION

It is a ready-to-eat maize/corn snack with spice-salt to taste. The product is suitable as a low-fat snack because the step of frying in oil/fat has been completely eliminated to provide a shelf life without sacrificing the taste of a crispy snack. The product is low in cost and can also be considered as a health food. The product can be shelf stored for more than 4 months at ambient conditions with good shelf stability.

2. Materials and Process

Raw materials: Maize/corn grain, sugar, salt, hydrogenated fat, chilli powder, asafetida and BHA/BHQ.

Process

The process involves the following steps

Cleaning \rightarrow Soaking \rightarrow Roasting \rightarrow Conditioning \rightarrow Polishing \rightarrow Flaking \rightarrow Grading \rightarrow Drying and toasting \rightarrow Flavouring \rightarrow Final drying

3. Plants and machinery

Principal equipments: Destoner cum cleaner, Soaking tanks, Water heater, Roaster with horizontal brushing unit, Polisher, Aspirator, Flaker, 2-deck sieve shaker/grader, Drier, Toaster, Pan coater, general heating and lighting and Heat sealer.

Auxiliary equipments: Handling equipments/vessels and trolleys, weighing scales, weighing counter scale, working tables and electric stoves.

4. Project Cost – Fixed Cost – Working Capital (Rs. in '000) (estimate for a model project)

Land (4,000 sq.ft)	240.00
Building (2,625 sq.ft)	735.00
Plant and machinery	1810.00
Pre-operative expenses	329.00
Miscellaneous	10.00
Total fixed cost	3124.00
Working capital margin	173.00
Total project cost	3297.00
	Land (4,000 sq.ft) Building (2,625 sq.ft) Plant and machinery Pre-operative expenses Miscellaneous Total fixed cost Working capital margin Total project cost

5. **Production capacity** – (estimate)

The installed capacity 500 Kg raw material / day / shift

6. Technology / manufacturing Process - availability

CFTRI has standardized the technology and general methods of processing of ready-toeat low-fat flacked spicy maize snack. Apart from this procedure for quality control, packaging and packaging material specification, the institute also provides equipment details.