

PROJECT PROFILE

ON

DIGESTIVE CANDIES

Month & Year Aug 2010

PREPARED BY TANSTIA-FNF SERVICE CENTRE B-22, INDUSTRIAL ESTATE CHENNAI-600032

Supported by

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DIGESTIVE CANDIES

1. Introduction

Digestive candies or sweets are prepared from sugar along with invert sugar, extracts of tamarind, pepper, ajowan, jeera and lahori namak. It can also contain some amounts of mint extracts. They are basically fun products used in the event of indigestion. A common example is "Hajmola" candy prepared by Dabur India Limited.

2. Market

The major market outlets are the "A" and "B" class outlets. The product also finds placement in self service counters and departmental stores. Some "C" class outlets and pharmacies also stock the product.

3. Packaging

The processed product is packed in twist and wrap cellophane wrapper.

4. Production capacity

- The plant will be in operation for two shifts a day with each shift of 8 hours duration.
- The plant operates to a production capacity of 500 kilograms per shift.
- The estimated production per day is 1000 kilograms.
- The total production per month will be 25.0 M.T while the annual production is estimated at 300 M.T
- The time period required for achieving full capacity utilisation is one year.



5. Sales revenue

 The ex-factory selling price will be Rs. 100 per kilogram thereby yielding a sales revenue of Rs. 300 lakhs on full capacity utilisation. The MRP is fixed at Rs. 140 per kilogram.

6. Production process outline.

Equal quantities of pepper, jeera and ajowan are ground fine in a micropulveriser. The mixture is boiled in water till the extraction of their water soluble constituents is complete. The solution is filtered and the filtrate concentrated once again till a thick syrup like mass is obtained. This extract is used for mixing with sugar in the preparation of digestive candy.

The required quantity of sugar and extracts of pepper, jeera and ajowan per batch is taken in the candy cooker. Lahori Namak is also added in trace quantities. The mixture is boiled with the required quantities of invert sugar and citric acid. When the desired consistency is achieved, it is poured on to the cooling tables and rolled to the desired sizes in the roller. The candy former forms the candies to the desired shapes and sizes when it begins to harden. The candies are further rolled on to the cooling conveyer wherein the product is brought to room temperature before being twist wrapped in the wrapping machine. They are then packed into weights of one kilogram in polypropylene pouches before being dispatched into the market.

7. Quality specifications

Sulphated ash
Ash
Acid insoluble ash
Maximum 1.5%
Maximum 1.0%
Maximum 0.5%

Sulphur dioxide - Maximum 350 parts per million.

8. Pollution control measures

Not necessary as there are no pollutants or effluents.

9. Energy conservation measures

Common measures will do.



10. Land and construction cost for the proposed unit

The proposed unit is to be set up in a leased area. The area required is 4600 square feet as detailed below:

SI	Description	Sq. feet
1	Processing area	3000
2	Sugar storage room	300
3	Raw material (others) storage room	200
4	Finished goods storage room	200
5	Packaging material storage room	100
6	Laboratory	200
7	Office space	200
8	Machinery spares room	100
9	Toilet space	200
10	Miscellaneous space	100
11	Total	4600

Lease rent per square foot – Rs. 8.00

Total rent per month – Rs. 36800

Lease advance - Rs. 2.00 lakh

11. Costing of machinery and equipment

SI	Description	Rs. lakhs
1	Baby boiler and accessories	2.850
2	Candy cooker	2.339
3	Cooling tables (2 nos)	1.600
4	Batch roller	2.386
5	Roto plant candy former	3.600
6	Cooling conveyer	1.928
7	Wrapping machines (2 nos)	8.440
8	Total Machinery	23.143
9	Laboratory equipment	1.000
10	Grand total machinery and equipment	24.143



12. Project cost

SI	Description	Rs. lakhs
1	Land	On lease
2	Civil works	On lease
3	Plant machinery	23.143
4	Laboratory equipment	1.000
5	Transport vehicle (Tata Ace)	3.760
6	Pollution control equipment	0.000
7	Energy conservation equipment	0.000
8	Cost of power connection	0.500
9	Cost of electrification	1.000
10	Erection and commissioning	1.500
11	Cost of machinery spares	0.350
12	Cost of office equipment	1.000
13	Deposits if any	1.000
14	Company formation expenses	0.100
15	Gestation period expenses	1.000
16	Sales tax registration expenses	0.100
17	Initial advertisement and publicity	10.000
18	Contingencies	0.500
19	Working capital margin money	7.763
20	Total	52.716

13. Working capital requirements per month

a. Salaries and wages

SI	Description	No of persons	Total salary / month (Rs. lakhs)
1	Production Manager	1	0.400
2	Production supervisor cum chemist	2	0.500
3	Skilled workers	2	0.200
4	Unskilled workers	4	0.200
5	Packing workers	4	0.160
6	Administrative staff	2	0.500
7	Sales staff	2	0.300
8	Driver	1	0.100
7	Total	18	2.360





b. Raw material requirement per month

SI	Description	Qty (kgs)	Rate / kg (Rs)	Value (Rs. lakhs)
1	Sugar	20000	24.000	4.800
2	Invert sugar syrup	6000	24.00	1.440
3	Citric acid	250	160.00	0.400
4	Jeera, pepper, rock salt, ajowan etc	250	150.00	0.375
5	Total raw material	26500		7.015

c. Packaging material requirement per month

SI	Description	Qty	Rate / unit Rs)	Value (Rs. lakhs)
1	Candy cellophane wrapper film	1000 kgs	100	1.000
2	Polypropylene pouches	250 kgs	100	0.250
3	Cartons and straps	1000 nos	40	0.400
4	Total			1.650

Total raw + packaging material = Rs. 8.665 lakhs

d. Utilities per month

SI	Description	Rs. lakhs
1	Power 6000 kwh @ Rs. 5.50 per unit	0.330
2	Water	0.100
3	Boiler fuel	0.150
4	Total utilities	0.580



e. Contingent expenses per month

SI	Description	Rs. lakhs
1	Rent for processing shed	0.368
2	Postage and stationery	0.020
3	Telephones, fax etc.	0.050
4	Consumable stores	0.020
5	Repairs and maintenance	0.160
6	Local transports, loading and unloading	0.160
7	Advertisement and publicity @20% of sales	5.000
8	Insurance	0.025
9	Sales expenses @ 1% of sales	0.250
10	Miscellaneous expenses @ 1% of sales	0.250
11	Trade incentives @ 2% of sales	0.500
12	Taxes @ 4%	1.000
13	Total contingent expenses	7.803

SI	Description	Rs. lakhs
1	Salaries and wages	2.360
2	Raw material and packaging material	8.665
3	Utilities	0.580
4	Contingent expenses	7.803
5	Total	19.408

14. Means of finance

SI	Description	Rs. lakhs
1	Total Project Cost	52.716
2	Equity	17.396
3	Debt	35.320
4	Working capital margin money	7.763



15. Financial analysis

SI	Description	Rs. lakhs
1	Total recurring cost per year	232.896
2	Depreciation on land and building	0.000
3	Depreciation on machinery and vehicle	2.790
4	Depreciation on furnaces	0.000
5	Depreciation on moulds and fixtures	0.020
6	Depreciation on office equipment	0.100
7	Interest on long term loan @ 13.5%	4.768
8	Interest on short term borrowings@ 13.5%	1.572
9	Total cost of production	242.146

16. Turnover per year

SI	Item	Qty	Rate/unit (Rs)	Total Rs. lakhs
1	Digestive	300,000 kgs	100	300
	candies			

17. Viability analysis

SI	Description	Value
1	Net profit before income tax (Rs. lakhs)	57.854
2	Net profit ratio	19.2%
3	Internal rate of return	29.2%
4	Break even percentage	54%
5	Debt service coverage ratio	2.176

List of machinery suppliers for digestive candies

- 1. Mangal Engineering Works, Factory Area, Patiala 147001, Punjab. Tel: 0175 2364702; Fax: 0175 2360652
- 2. Emersion Engineering Enterprise, Near Gate Station, Surendarnagar, 363001, Gujarat.; Tel: 02752 -221940
- 3. The Ravalgoan Sugar Farm Limited, Factory P.O. Ravalgoan 423108, District Nashik, Maharashtra.