

## **FLAVOURED PASTEURIZED MILK**

### **1. INTRODUCTION:**

Flavored pasteurized milk Made with milk, sugar, colorings and artificial or natural flavorings. Flavored milk is often pasteurized using ultra-high-temperature (UHT) treatment, which gives it a longer shelf-life than plain milk. Pre-mixed flavored milk is sold in the refrigerated dairy case alongside other milk products. Flavored sweetened powders or syrups which are added to plain milk are also available. Since centuries, milk is Used for making various products as well as for direct consumption. With the advent of new processing techniques, many products are added in this category. This phenomenal growth is on account of nutritional values present in milk and its acceptance as a "complete food". India has made commendable progress in milk production and is one of the largest producers along with the USA. Milk and Milk products are consumed round the year by people from all age and income groups. The overall market for flavored milk in India grew 27 per cent in value terms in 2014-15. With increased lifestyle and health concerns flavored milk market is expected grow at considerably high rate in near future. Flavored milk has gained substantial popularity but somehow coffee flavored milk is still not easily available even though consumption of coffee has steadily increased, thus has potential in the market.

### **2. PRODUCT & ITS APPLICATION:**

Flavored milk contains sugar, colorings, and (mostly inexpensive artificial) flavouring added to make it more appetizing, especially to children (a prominent example can be found in the artificial strawberry flavor, ethyl methylphenylglycidate) can be sold as a powder to be added to plain milk, or bought pre-mixed alongside other milk products. Flavouring can be included in a straw, and some flavored milk products are designed as dietary supplements by including additional vitamins or minerals. Only people who have certain diseases benefit from this odd drink. Bottled spiced (masala) milk is a popular beverage in the Indian subcontinent.

### **3. DESIRED QUALIFICATIONS FOR PROMOTER:**

Promoter with high business skill is basic need for this type of project. Successful running this project does not require any specific qualification.

### **4. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:**

The size of India's dairy industry is 3 lakh crore rupees and milk accounts for most of this. The 2014-15 figures indicate that we produced 147 million tons of milk which makes us the world's largest milk producer. Though a large part of this market is raw buffalo milk, we decided to taste pasteurized cow's milk because it's more popular in Tier 1 and Tier 2 cities where you won't find too many takers for raw milk. Raw milk comes straight from the farm to your doorstep, along with a long list of unanswered questions about 'health and safety'. The World Health Organization (WHO) suggests that an adult needs 400 to 500 milligrams of calcium a day to prevent bone fracture and maintain good bone health. One glass of toned milk has about 125 milligrams of calcium, which means you need to drink anywhere between three to four glasses of milk a day. Some other advocates of health and food recommend as high as 1200 milligrams of calcium a day for people up to the age of 50. The United States Department of Agriculture recommends three cups of milk a day for anyone over the age of 8. In the dairy sector, most of the processing is done by the unorganized sector. Though the share of organized sector is less than 15 per cent, it is expected to rise rapidly, especially in the urban regions. Among the milk products manufactured by the organized sector, some of the prominent ones are ghee, butter, cheese, ice creams, milk powders, malted milk food, condensed milk and infant foods. Addition of milk in tea or coffee is the most common and equally popular practice. Flavored milk is yet another variant. Consumption of coffee is increasing steadily but availability of coffee flavored milk is still not very comfortable. With increasing health awareness, many people are switching over to milk and coffee flavored milk would be an attractive proposition. Railway stations, air-ports, bus-stands, tourist spots, picnic canter, cold drink stalls, hostels, restaurants, coffee bars or fast food restaurants, clubs, school canteens etc. could be the major outlets.

## 5. RAW MATERIAL REQUIREMENTS:

Raw Material Required Raw Milk, Sugar, Flavors.

## 6. MANUFACTURING PROCESS:

Fresh milk is standardized according to fat contents and then heated at around 40 degree C and filtered. Filtered milk is again heated at about 60-65degree C and stabilizers like DSHP or TSC are added in very small quantity. Milk is then processed in homogenizer. Simultaneously 5% concentrated coffee powder or flavor is mixed with water and filtered. Then homogenized milk, sugar syrup and coffee/ flavor water are at around 80-85 degree C and sterilized for about half an hour and immediately bottled.

## 7. MANPOWER REQUIREMENT:

Sr. No.	Designation	Salary	Salary ₹	Number of Employees				
				Year-1	Year-2	Year-3	Year-4	Year-5
1	Production Manager	18000	36000	2	2	2	3	3
2	Operators	12000	60000	5	5	5	7	7
3	Helpers	10000	100000	10	10	10	12	12
4	Admin Manager	15000	30000	2	2	2	2	2
5	Accounts/Stores Assistant	12500	50000	4	4	4	4	4
6	Office Boy	9000	27000	3	3	3	3	3
	Total		303000	25	25	25	30	30

## 8. IMPLEMENTATION SCHEDULE:

The project can be implemented in 4months' time as detailed below:

Sr. No.	Activity	Time Required
1	Acquisition of premises	2.00
2	Construction (if applicable)	2.50
3	Procurement & installation of Plant & Machinery	2.50
4	Arrangement of Finance	1.00
5	Recruitment of required manpower	1.00
	Total time required ( <i>some activities shall run concurrently</i> )	4.00

## 9. COST OF PROJECT:

Sr. No.	Particulars	₹ in Lacs
1	Land	50.00
2	Building	100.00
3	Plant & Machinery	125.00
4	Furniture, other Misc. Equipments	5.00
5	Other Assets including Preliminary / Pre-operative expenses	12.50
6	Margin for Working Capital	60.00
	<b>Total</b>	<b>352.50</b>

## 10. MEANS OF FINANCE:

Bank term loans are assumed @ 75 % of fixed assets.

Sr. No.	Particulars	₹ in Lacs
1	Promoter's contribution	88.13
2	Bank Finance	264.38
	<b>Total</b>	<b>352.50</b>

## 11. WORKING CAPITAL CALCULATION:

Sr. No.	Particulars	Gross Amt	Margin %	Margin Amt	Bank Finance
1	Inventories	30.00	0.25	7.50	22.50
2	Receivables	15.00	0.25	3.75	11.25
3	Overheads	15.00	100%	15.00	0.00
4	Creditors	-		0.00	0.00
	<b>Total</b>	60.00		26.25	33.75

## 12. LIST OF MACHINERY REQUIRED:

Plant and Machinery Major Plant and machinery required for the proposed project are as follows: Flavor Mixing /Sugar blending tank, Milk Transfer Pump, Mix Homogenizer, Balance tank, Bottling Machine, Batch Sterilizer, SS Pipes, valves and Fittings

Sr. No.	Particulars	UOM	Qty	Rate (₹ In Lacs)	Value (₹ In Lacs)
	<b>Plant &amp; Machinery / Equipments</b>				
<b>A)</b>	<b>Main Machinery</b>				
1	Flavor Mixing Tanks	Nos	1	15.00	15.00
2	Sugar Blending Mixing	Nos	1	12.00	12.00
3	Milk Conditioner	Nos	1	18.00	18.00
4	Milk Homogenizer	Nos	1	26.00	26.00
5	Bottling Plant	Nos	1	15.00	15.00
6	Boiler	Nos.	1	11.00	11.00
7	Tax, Transport, Installation	LS	1	28.00	28.00
	<i>Sub-Total Plant &amp; Machinery</i>				<b>125.00</b>
	Office Furniture And Electrification	LS	1	0.50	<b>5.00</b>
1	<i>Sub Total</i>				5.00
	<b>Other Assets</b>				
	Preliminary And Preoperative	LS			12.50
1	<i>Sub-Total Other Assets</i>				12.50
	<b>Total</b>				<b>142.50</b>

### 13. PROFITABILITY CALCULATIONS:

Sr. No.	Particulars	UOM	Year-1	Year-2	Year-3	Year-4	Year-5
1	Capacity Utilization	%	60%	70%	80%	90%	100%
2	Sales	₹. In Lacs	180.00	210.00	240.00	270.00	300.00
3	Raw Materials & Other direct inputs	₹. In Lacs	143.11	166.96	190.82	214.67	238.52
4	Gross Margin	₹. In Lacs	36.89	43.04	49.18	55.33	61.48
5	Overheads except interest	₹. In Lacs	16.67	17.71	19.80	20.42	20.84
6	Interest @ 10 %	₹. In Lacs	26.44	26.44	17.63	13.22	10.58
7	Depreciation @ 30 %	₹. In Lacs	87.50	62.50	43.75	31.25	28.13
8	Net Profit before tax	₹. In Lacs	-93.72	-63.62	-31.99	-9.56	1.94

### 14. BREAKEVEN ANALYSIS:

The project shall reach cash break-even at 51.10 % of projected capacity.

Sr. No.	Particulars	UOM	Value
1	Sales at full capacity	₹. In Lacs	300.00
2	Variable costs	₹. In Lacs	238.52
3	Fixed costs incl. interest	₹. In Lacs	31.42
4	$BEP = FC/(SR-VC) \times 100 =$	% of capacity	51.10%