

PROJECT REPORT OF CHICKEN NUGGETS PROCESSING UNIT

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Chicken Nuggets Processing Unit.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]

Lucknow Office: Sidhivinayak
Building , 27/1/B, Gokhley Marg, Lucknow-226001
Delhi Office: Multi-Disciplinary Training
Centre, Gandhi Darshan Rajghat, New Delhi 110002

Email: info@udyami.org.in
Contact: +91 7526000333, 444, 555



SAMADHAN
Nurturing Dreams - Innovative Solutions

PROJECT AT GLANCE

1 Name of Proprietor/Director	XXXXXXXXXX
2 Firm Name	XXXXXXXXXX
3 Registered Address	XXXXXXXXXX
4 Nature of Activity	XXXXXXXXXX
5 Category of Applicant	XXXXXXXXXX
6 Location of Unit	XXXXXXXXXX
7 Cost of Project	24.67 Rs. In Lakhs
8 Means of Finance	
i) Own Contribution	2.47 Rs. In Lakhs
ii) Term Loan	16.20 Rs. In Lakhs
iii) Working Capital	6.00 Rs. In Lakhs
9 Debt Service Coverage Ratio	3.11
10 Break Even Point	0.23
11 Power Requirement	20 KW
12 Employment	12 Persons
13 Major Raw Materials	Chicken meat brests, flour, Cornstarch, sea-salt, Edible oil & Food preservatives

14 Details of Cost of Project & Means of Finance

Cost of Project

Particulars	Amount in Lacs
Land	Owned/Leased
Building & Civil Work	Owned/Leased
Plant & Machinery	17.00
Furniture & Fixture	-
Other Misc Assets	1.00
Working Capital Requirement	6.67
Total	24.67

Means of Finance

Particulars	Amount in Lacs
Own Contribution	2.47
Term Loan	16.20
Working capital Loan	6.00
Total	24.67

1. INTRODUCTION



A chicken nugget is a chicken product made from either meat slurry or chicken breasts cut to shape, breaded or battered, then deep-fried or baked. Fast food restaurants typically fry their nuggets in vegetable oil, such as coconut oil. The chicken nugget was invented in the 1950s by Robert C. Baker, a food science professor at Cornell University, and published as unpatented academic work. Dr. Baker's innovations made it possible to form chicken nuggets in any shape. McDonald's recipe for Chicken McNuggets was created on commission from McDonald's by Tyson Foods in 1979 and the product was sold beginning in 1980.

2. PRODUCT DESCRIPTION

2.1 PRODUCT USES

Invented in the 1950s, chicken nuggets have become a very popular fast food restaurant item, as well as widely sold frozen for home use. Chicken Nuggets are widely used in households as ready to eat snacks and are also loved by people of all age groups. Chicken Nuggets are one of the most commonly eaten dish in fast food restaurants.

2.2 PRODUCT RAW MATERIAL

The major raw material required for processing Chicken Nuggets are:

- Chicken meat breasts
- Flour
- Cornstarch
- Sea salt
- Edible oil
- Food preservatives

2.3 MANUFACTURING PROCESS

The processing required for making chicken nuggets begins with deboning. The chicken is cut and shaped to the correct size. This is done either manually, or by a series of automatic blades, or by a process called grinding (a method of deboning in which the softer parts of the chicken carcass are forced through a mesh, leaving behind the more solid pieces, resulting in a meat paste. If used, this paste is then shaped before battering). The pieces are battered and breaded in a large cylindrical drum that rotates, evenly coating all of the pieces in the desired spices and breading. The pieces are then fried in oil until the batter has set and the outside reaches the desired color. Finally, the nuggets are packaged, frozen and stored for shipping.

CHICKEN DEBONING

The process of making Chicken Nuggets starts with "deboning" with whole chickens. All the chicken cuts are separated and the Chicken Breast Meat are set aside for the Chicken Nuggets.

TRIMMING OF CHICKEN BREAST

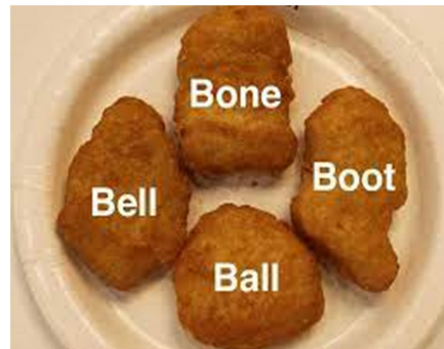
This process involves trimming of chicken breast of fat.

BELNDING

The chicken breasts that have been separated are collected into bin for blending. Inside the blender, the ground chicken meat is mixed with some seasonings and chicken skin for flavoring.

FORMING OR SHAPING OF CHICKEN NUGGETS

The blended chicken meat is portioned in equal proportion for giving them the shape of Chicken Nuggets. The Shape of the Chicken Nuggets can be: The ball, the bell, the boot, and the bow tie.



BATTERING AND BREADING

Then the shaped pieces of Chicken Nuggets are firstly covered in light batter for evenly coating all of the pieces in the desired spices and breading to give crisp texture to the nuggets. After being dipped in the light batter, they are covered in a second, thicker batter called tempura.

FRYING

The pieces are then fried in oil until the batter has set and the outside reaches the desired color. The pieces have only been partially cooked at this stage.

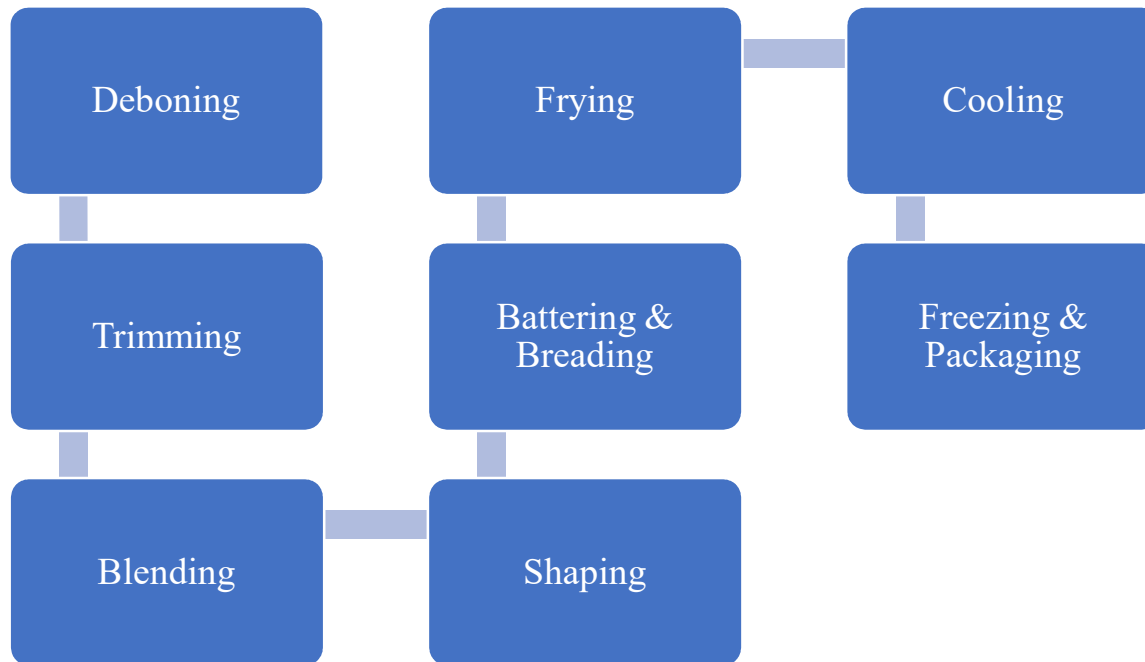
COOLING

The fried nuggets will be kept in freezer for cooling after which they will be frozen and packaged.

FROZEN, PACKAGING AND SHIPPING

Standard and recommended formulated nuggets were packed in low density polyethylene bags, sealed and then kept at frozen storage (-18 ± 2 °C) for 0, 25, 50 and 75 days. The products were analysed at studied interval after thawing in a refrigerator (4 ± 1 °C) for 5–6 h.

FLOW CHART OF THE PROCESS



3. PROJECT COMPONENTS

3.1 Land & Building

The land required for this manufacturing unit will be approx. around 3000 square feet. Land Purchase and Building Civil Work Cost have not been considered as part of the cost of project. It is expected that the premises will be on rental and approximate rentals assumed of the same will be Rs.30,000 per month.

Land and building requirement may vary depending on the size of project.

3.2 Plant & Machinery

- **Meat Deboning Machine:** Meat deboning machine is ideal equipment used for deboning the poultry, rabbit carcass or small animal skeleton, and produce meat paste in order to further process them into meat products efficiently.



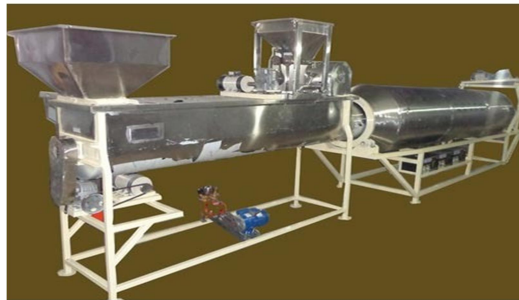
- **Meat mincing machine:** Meat mincing machine is mainly used for grinding chicken meat into meat stuffing's preparing for making chicken nuggets, chicken sausages, etc.



- **Automatic Chicken Nugget Forming Machine:** This machine is for making chicken nuggets, chicken hamburger in the chicken meat processing line. It can automatically perform various procedures, such as meat filling, forming and output.



- **Chicken Nugget Battering and Breeding Machine:** It is used for battering hamburger patties, chicken Nuggets, pumpkin pie, meat skewers, etc for seasoning and flavouring. The machine can be used with fully automatic chicken nugget forming machine, and can be used separately.



- **Deep-Frying Machine:** Deep frying is a method of cooking by submerging food into oil at high heat, typically between temperatures of 350 °F and 375 °F (175 °C to 190 °C).



- **Blast Freezer:** Blast Freezer are used for cooling food quickly to a low temperature that is relatively safe from bacterial growth.



- **Packaging Machine:** Packaging machine is used for filling, sealing, cutting, heating pouches. packaging speed can be changed according to the speed of production. touch screen display for setting up different parameters. It involves setting up of parameters such as bag length and weight followed by sealing of bag and final product delivered by conveyor.



- **Material handling and other Equipment's:** These Equipment's are used for material handling. Other equipment's like water pumps, weighing machine, etc are also used.



4 LICENSE & APPROVALS

Basic registration required in this project:

- Registration at Bureau of Indian standards.
- Trade License from the local authority.
- MSME Udyam registration.
- GST Registration
- FSSAI Registration
- Factory license
- Choice of a Brand Name of the product and secure the name with Trademark if required.

PROJECTED BALANCE SHEET						(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year	
<u>Liabilities</u>						
Capital						
Opening balance		4.53	6.36	9.13	13.15	
<i>Add:- Own Capital</i>	2.47					
Add:- Retained Profit	4.57	6.32	9.27	13.02	17.28	
Less:- Drawings	2.50	4.50	6.50	9.00	11.50	
Closing Balance	4.53	6.36	9.13	13.15	18.93	
Term Loan	14.40	10.80	7.20	3.60	-	
Working Capital Limit	6.00	6.00	6.00	6.00	6.00	
Sundry Creditors	1.84	2.26	2.71	3.19	3.73	
Provisions & Other Liability	0.20	0.24	0.29	0.35	0.41	
TOTAL :	26.97	25.65	25.33	26.29	29.08	
<u>Assets</u>						
Fixed Assets (Gross)						
Fixed Assets (Gross)	18.00	18.00	18.00	18.00	18.00	
Gross Dep.	2.70	5.00	6.95	8.60	10.01	
Net Fixed Assets	15.30	13.01	11.05	9.40	7.99	
Current Assets						
Sundry Debtors	4.93	6.23	7.47	8.82	10.29	
Stock in Hand	3.76	4.56	5.43	6.36	7.32	
Cash and Bank	2.98	1.86	1.37	1.71	3.47	
TOTAL :	26.97	25.65	25.33	26.29	29.08	

PROJECTED PROFITABILITY STATEMENT					
(in Lacs)					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	30%	35%	40%	45%	50%
SALES					
Gross Sale					
Chicken Nuggets	98.66	124.60	149.45	176.49	205.86
Total	98.66	124.60	149.45	176.49	205.86
COST OF SALES					
Raw Material Purchased	55.08	67.66	81.22	95.74	111.78
Electricity Expenses	1.15	1.61	1.72	1.94	2.15
Depreciation	2.70	2.30	1.95	1.66	1.41
Wages & labour	15.36	17.66	20.31	23.36	26.86
Repair & maintenance	2.96	3.74	5.23	6.18	5.15
Packaging	7.89	9.97	11.96	14.12	16.47
Cost of Production	85.14	102.94	122.39	142.99	163.82
Add: Opening Stock	-	2.84	3.43	4.08	4.77
Less: Closing Stock	2.84	3.43	4.08	4.77	5.46
Cost of Sales	82.31	102.35	121.74	142.31	163.13
GROSS PROFIT	16.35	22.25	27.71	34.19	42.74
	16.57%	17.86%	18.54%	19.37%	20.76%
Salary to Staff	3.96	4.75	5.70	6.84	8.21
Interest on Term Loan	1.59	1.40	1.01	0.61	0.21
Interest on working Capital	0.66	0.66	0.66	0.66	0.66
Rent	3.60	3.78	3.97	4.17	4.38
Selling & Administrative Exp.	1.97	4.98	5.98	7.06	8.23
TOTAL	11.79	15.58	17.32	19.34	21.70
NET PROFIT	4.57	6.67	10.40	14.84	21.04
Taxation	-	0.35	1.12	1.82	3.76
PROFIT (After Tax)	4.57	6.32	9.27	13.02	17.28
NET PROFIT RATIO	4.63%	5.08%	6.20%	7.38%	8.40%

PROJECTED CASH FLOW STATEMENT					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	2.47				
Net Profit	4.57	6.67	10.40	14.84	21.04
Depreciation & Exp. W/off	2.70	2.30	1.95	1.66	1.41
Increase in Cash Credit	6.00	-	-	-	-
Increase In Term Loan	16.20	-	-	-	-
Increase in Creditors	1.84	0.42	0.45	0.48	0.53
Increase in Provisions & Oth labilities	0.20	0.04	0.05	0.06	0.07
TOTAL :	33.97	9.43	12.85	17.04	23.05
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	18.00				
Increase in Stock	3.76	0.80	0.87	0.93	0.96
Increase in Debtors	4.93	1.30	1.24	1.35	1.47
Repayment of Term Loan	1.80	3.60	3.60	3.60	3.60
Drawings	2.50	4.50	6.50	9.00	11.50
Taxation	-	0.35	1.12	1.82	3.76
TOTAL :	30.99	10.55	13.34	16.70	21.29
Opening Cash & Bank Balance	-	2.98	1.86	1.37	1.71
Add : Surplus	2.98	-1.12	-0.49	0.34	1.77
Closing Cash & Bank Balance	2.98	1.86	1.37	1.71	3.47

CALCULATION OF D.S.C.R					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	7.27	8.62	11.22	14.68	18.69
Interest on Term Loan	1.59	1.40	1.01	0.61	0.21
Total	8.86	10.02	12.23	15.29	18.91
REPAYMENT					
Instalment of Term Loan	1.80	3.60	3.60	3.60	3.60
Interest on Term Loan	1.59	1.40	1.01	0.61	0.21
Total	3.39	5.00	4.61	4.21	3.81
DEBT SERVICE COVERAGE RATIO	2.61	2.00	2.65	3.63	4.96
AVERAGE D.S.C.R.	3.11				

REPAYMENT SCHEDULE OF TERM LOAN

Interest 11.00%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
1st	Opening Balance						
	1st month	-	16.20	16.20	-	-	16.20
	2nd month	16.20	-	16.20	0.15	-	16.20
	3rd month	16.20	-	16.20	0.15	-	16.20
	4th month	16.20	-	16.20	0.15		16.20
	5th month	16.20	-	16.20	0.15		16.20
	6th month	16.20	-	16.20	0.15		16.20
	7th month	16.20	-	16.20	0.15	0.30	15.90
	8th month	15.90	-	15.90	0.15	0.30	15.60
	9th month	15.60	-	15.60	0.14	0.30	15.30
	10th month	15.30	-	15.30	0.14	0.30	15.00
	11th month	15.00	-	15.00	0.14	0.30	14.70
	12th month	14.70	-	14.70	0.13	0.30	14.40
					1.59	1.80	
2nd	Opening Balance						
	1st month	14.40	-	14.40	0.13	0.30	14.10
	2nd month	14.10	-	14.10	0.13	0.30	13.80
	3rd month	13.80	-	13.80	0.13	0.30	13.50
	4th month	13.50	-	13.50	0.12	0.30	13.20
	5th month	13.20	-	13.20	0.12	0.30	12.90
	6th month	12.90	-	12.90	0.12	0.30	12.60
	7th month	12.60	-	12.60	0.12	0.30	12.30
	8th month	12.30	-	12.30	0.11	0.30	12.00
	9th month	12.00	-	12.00	0.11	0.30	11.70
	10th month	11.70	-	11.70	0.11	0.30	11.40
	11th month	11.40	-	11.40	0.10	0.30	11.10
	12th month	11.10	-	11.10	0.10	0.30	10.80
					1.40	3.60	
3rd	Opening Balance						
	1st month	10.80	-	10.80	0.10	0.30	10.50
	2nd month	10.50	-	10.50	0.10	0.30	10.20
	3rd month	10.20	-	10.20	0.09	0.30	9.90
	4th month	9.90	-	9.90	0.09	0.30	9.60
	5th month	9.60	-	9.60	0.09	0.30	9.30
	6th month	9.30	-	9.30	0.09	0.30	9.00
	7th month	9.00	-	9.00	0.08	0.30	8.70
	8th month	8.70	-	8.70	0.08	0.30	8.40
	9th month	8.40	-	8.40	0.08	0.30	8.10
	10th month	8.10	-	8.10	0.07	0.30	7.80
	11th month	7.80	-	7.80	0.07	0.30	7.50
	12th month	7.50	-	7.50	0.07	0.30	7.20
					1.01	3.60	

4th	Opening Balance						
	1st month	7.20	-	7.20	0.07	0.30	6.90
	2nd month	6.90	-	6.90	0.06	0.30	6.60
	3rd month	6.60	-	6.60	0.06	0.30	6.30
	4th month	6.30	-	6.30	0.06	0.30	6.00
	5th month	6.00	-	6.00	0.05	0.30	5.70
	6th month	5.70	-	5.70	0.05	0.30	5.40
	7th month	5.40	-	5.40	0.05	0.30	5.10
	8th month	5.10	-	5.10	0.05	0.30	4.80
	9th month	4.80	-	4.80	0.04	0.30	4.50
	10th month	4.50	-	4.50	0.04	0.30	4.20
	11th month	4.20	-	4.20	0.04	0.30	3.90
	12th month	3.90	-	3.90	0.04	0.30	3.60
					0.61	3.60	
5th	Opening Balance						
	1st month	3.60	-	3.60	0.03	0.30	3.30
	2nd month	3.30	-	3.30	0.03	0.30	3.00
	3rd month	3.00	-	3.00	0.03	0.30	2.70
	4th month	2.70	-	2.70	0.02	0.30	2.40
	5th month	2.40	-	2.40	0.02	0.30	2.10
	6th month	2.10	-	2.10	0.02	0.30	1.80
	7th month	1.80	-	1.80	0.02	0.30	1.50
	8th month	1.50	-	1.50	0.01	0.30	1.20
	9th month	1.20	-	1.20	0.01	0.30	0.90
	10th month	0.90	-	0.90	0.01	0.30	0.60
	11th month	0.60	-	0.60	0.01	0.30	0.30
	12th month	0.30	-	0.30	0.00	0.30	-
					0.21	3.60	
	DOOR TO DOOR	60	MONTHS				
	MORATORIUM PERIOD	6	MONTHS				
	REPAYMENT PERIOD	54	MONTHS				

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