Details of Raw Materials used for Sweets Manufacture

- Sweeteners: gur (jaggery), khandsari, bura, and chini
- Gur (jaggery)
- Regulatory Status Technology
- Khandsari (Khand)
- Regulatory Status Technology
- Bura
- Regulatory Status
- Technology
- Chini (Refined Sugar) Technology
- Storage
- Packaging
- Grains: Chawal (Rice), Maida, Suji, Rava
- Rice (Chawal)
- Quality Characteristics
- Packaging
- Maida and Suji or Rava (Wheat Flours)
- Maida (Refined Wheat Flour)
- Characteristics
- Microscopic appearance
- Grades
- Packaging
- Suji or Rava (Semolina)
- Characteristics
- Microscopic Appearance.
- Grading
- Large Particle Grade.
- Small Particle Grade.
- Packaging
- Storage.
- Dry Fruits And Other Nuts:
  - Badam, Kaju, Copra,
  - Pista, Khaskhas,
  - Akhrot, Kishmish
  - Almonds (Badam)
- Description
- Quality Characteristics
- Shelf Life
- Nutritive Value
- Applications.
- Almond Oil
- Kaju (Cashew)
- Quality Characteristics
- Preservation
- Packaging and Storage
- Copra (Dried Coconut Kernel)
- Description.
- Quality Characteristics.
- Microbiological Quality.
- Grades
- Packaging and Storage
- Pistachio (Pista)
- Processing.
- Regulatory status
- Shelf Life
- Nutritive Value
- Application
- Khaskhas (Poppy Seeds)
- Application
- Akhrot (Walnuts)
- Quality characteristics
- Inshell Walnuts
- Shelled Walnuts
- Applications
- Kishmish (Raisins)
- Processing.
- Sulphur Fumigation
• Drying and Postdrying
• Packaging and Storage
• Flavourings And Colourings:
  • Chhoti Elaichi (Cardamom), Gulab Jal (Rose Essence), Kesar (Saffron), Cocoa
  • Chhoti Laichi (Cardamom)
• Characteristics
• Grading
• Packaging
  • Gulab Jal (Rose Essence)
• Chemical Composition
• Imitation Rose Flavours
• Application
  • Kesar (Saffron)
  • Packaging
• Flavour
• Freedom from moulds, insects etc.
• Saffron in Filament
• Saffron in Cut Filaments
• Yellow Filaments
• Floral Waste
• Extraneous Matter
• Saffron Powder
• Chemical Requirements
  • Cocoa (Cocoa, Cocoa Powder & Coatings)
• Cocoa Coatings
• Characteristics
• Packaging and Storage
• Miscellaneous
  • Makhana (Gorgon Fruit)
• Harvesting and Processing
• Roasting and Popping
• Polishing, Grading and Packaging
• Uses
• Sabudana (Sago)
• Characteristics
• Gelatinization
• Applications
• Packaging
Making of Milk-based Sweets

- Khoa/Mawa
- Product Description Technology
- Process Mechanization
- Innovations
- Continuous Khoa Machine
- Packaging of Khoa
- Packaging Study
- Recommended Packaging
- Physico-chemical Aspects
- Water Activity of Khoa
- Rheology of Khoa
- Microbiological Quality
- Preservation of Khoa
- Nutritive Value of Khoa
- Khoa Powder
- Reverse Osmosis (RO)
- Tray Drying at Atmospheric Pressure
- Spray Drying Process
- Fluidized Bed Drying
- Roller Drying Process
- Gulabjamun
- Product Description
- Technology
- Composition
- Rheological Properties
- Potential Process
- Modifications
- Shelf Life
- Dry Gulabjamun Mix
- Skim Milk Powder-based
- Gulabjamun Mix
- Whole Milk Powder-based
- Gulabjamun Mix
- Kalajamun
- Technology
- Pantua
- Product description
- Technology
- Physico-chemical aspects
- Lalmohan
- Technology
- Burfi
- Technology
- Industrial manufacture
- Quality factors
- Fat content
- Stage of sugar addition
- Effect of additives
- Corn syrup addition
- Desiccation temperature
- Physico-chemical characteristics
- Flavour
- Colour
- Body
- Texture
- Equilibrium relative humidity (ERH) of burfi
- Free fatty acids
- Hydroxy methyl furfural (HMF) content
- Microbiological quality
- Shelf-life
- Rancidity
- Acid development
- Browning
- Packaging
- Kalakand
- Product description
- Size of industry
- Technology
- Sensory quality
- Fat
- Sugar
- Strength and type of coagulant
- Microbiological quality
- Biochemical quality
- Sensory quality
- Packaging and storage.
- Milk cake
- Technology
- Peda
- Product description
- Technology
- Current status
- Quality factors
• Packaging
• Shelf-life.
• Dharwad peda
• Size of industry
• Technology.
• Thirattupal.
• Technology
• Prospects of mechanization
• Rabri
• Product description
• Technology
• Physico-chemical
• aspects
• Current status
• Khurchan
• Product description.
• Technology
• Basundi.
• Product description
• Size of industry
• Technology
• Physico-chemical
• aspects
• Innovations
• Kulfi and frozen desserts
• Product description
• Technology
• Innovations
• Formulation of kulfi
• Sweet fresh cream and
• fresh milk.
• Frozen cream
• Fluid whole and skim
• milk
• Plain condensed skim
• milk.
• Plain condensed whole
• milk
• Super-heated condensed
• skim or whole milk
• Sweetened condensed
• whole or skim milk
• Packaging
• Physico-chemical
• aspects
• Shelf-life
Manufacture of Bengali Sweets

- Rasogolla
- Product description
- Size of industry
- Technology
- Sugar syrup
- Mechanized production
- Use of milk powder
- Dried rasogolla mix
- Yield
- Packaging
- Rasomalai
- Product description
- Technology
- Rajbhog
- Technology
- Khirmohan.
- Sandesh
- Product description
- Technology
- Physico-chemical aspects
- Chhana-murki.
- Product description
- Technology
- Prospects for mechanization
- Cham-cham
- Technology
- Prospects for mechanization
• Chhana podo
• Surti paneer
• Technology
• Bandel cheese
• Product description
• Technology
• Regional products
• Ksheer sagar.
• Sita bhog
• Chhana gaja
• Chhana jhele
• Chhana kheer
• Chhana pakora
• Rasaballi
• Shosim
• Kalari

Shrikhand Manufacture

• Product description
• Technology
• Traditional method
• Innovations
• Preparation of curd
• Preparation of chakka
• Preparation of shrikhand from chakka
• Starter cultures
• Separation of whey from curd
• Mixing of chakka with cream and sugar
• Packaging of shrikhand Shelf-life.
• Physico-chemical aspects.

Chakka Powder

Shrikhand Wadi

• Approximate composition
• Lassi
• Manufacturing process
• Innovations
• Physico-chemical aspects

Kheer Manufacture
• Rice kheer
• Product description
• Mango coconut rice kheer
• Size of industry
• Technology
• Process upgradation
• Selection of rice
• Cooking characteristics of rice
• Long-life kheer
• Physico-chemical characteristics
• Shelf-life

**Dried Kheer Mix Manufacture**

• Nutritional properties of kheer
• Advantages
• Process
• Manufacturing method
• Physico-chemical characteristics
• Shelf-life
• Plant parameters
• Manpower
• Raw material
• Utilities
• Plant & machinery

**Payasam Manufacture**

• Product description
• Classification
• Pulse-based payasams
• Cereal-based payasams
• Vermicelli payasams
• Rice suji-based payasam
• Wheat suji-based payasam
• payasam
• Avalakki (beaten rice-based) payasam
• Ada-based payasam
• Tuber crop-based payasams
• Fruit-based payasams
• Seed-based payasams
• Physico-chemical characteristics
Phirni Manufacture

- Ingredients
- Technology

Sevian Manufacture

Product description
Technology

Sohan Halwa

Product description
Technology

Gajar-ka-Halwa

Product description
Technology
Innovations
Quality factors
Packaging

Kaju Burfi Manufacture

Product description
Technology

Ghevar Preparation

Product description
Technology
Lauki halwa
Padusha (makkhan bada)
South indian sweet
Mohandas

Rasogolla, Kheer and Pal Payasam

Preparation of Lassi

Introduction
Composition
Method of preparation.
Materials required
Preparation of sugar syrup
Preparation of lassi
Microflora of lassi

**Shrikhand Preparation**

Introduction
Material required
Method of preparation
Traditional method
Industrial method

**Technology of Khoa Manufacture and Storage**

Introduction
Definition
Varieties and grades
of khoa
Chemical composition
of khoa
Microbiological quality
of khoa
Methods of
manufacture
Small scale preparation of khoa
Equipment
Quality of milk
Traditional process
Improved batch method for khoa preparation
Packaging and storage of khoa

**Peda**

Introduction
Composition
Method of manufacture of peda

**Khoa-based Sweet - Kalakand**

Introduction
Chemical composition
Method of manufacture of kalakand

**Khoa-based Sweet - Gulab Jamun**
Introduction
Composition of gulab jamun
Method of preparation

Milk-based Sweet - Burfi

Introduction
Composition of burfi
Method of preparation of burfi
Microbiological standards

Chhana-based Sweet - Rasogolla

Introduction
Composition of rasogolla
Method of rasogolla preparation
Microbiological standards

Preparation of Kulfi

Introduction
Materials required
Procedure

Yoghurt

Definition
History
Types of yoghurt
Method of manufacture
Traditional method of yoghurt making
Industrial method of yoghurt making
Therapeutic value of yoghurt
Examination of yoghurt
Defects of yoghurt

Production of Sandesh

Introduction
Traditional method of sandesh preparation
Production of sandesh.
Mechanisation of sandesh preparation
Optimisation of processing parameters for mechanised production
Vented extruder for the continuous cooking of chhana sugar mixture
Testing of vented extruder
Evaluation of sandesh

Manufacture of Shrikhand by Ultrafiltration Process

Introduction.
Materials and methods
Ultrafiltration (UF) unit
Basket centrifuge.
Shrikhand making
Sensory evaluation.
results and discussion.

Preparation of Traditional Sweets

Karah (halwa)
Instant mix for halwa
Shelf stable halwa.
Choorma/panjiri
Pinnis

Gulab Jamun/Rasogullas

Gulab jamun/rasogullas
Chaamp, kaleji, keema
Rice products
Marunda
Phirni
Kheer
Gur wale chawal
Bhelpuri
Chirva
Mrumura/kheel
Pulav
Khichri
Phulwarian

Winter Products

Marunda
Gacchak
Reorian
Summer drinks
Sattu (bary water)
Ganne ka ras (cane juice)
Kanki
Some Selected Recipes of Traditional Foods

Mathi
Ingredients
Method
Matri
Ingredients
Method
Sevian
Ingredients
Method
Suji halwa
Ingredients
Method
Pinnis
Ingredients
Method
Mall pura
Ingredient
Method
Gulab jamun
Ingredients
Method
Poories
Ingredients
Method
Jalebi
Ingredients
Method
Samosa
Ingredients
Method
Dalia (broken wheat porridge)
Ingredients
Method
Phulvarian
Ingredients
Method
Rice khichri
Ingredients
Method
Sweet rice
Ingredients
Method
Sugarcane juice kheer
Ingredients
Method
Phirni.
Ingredients
Method.
Puffed rice laddoo.
Ingredients.
Marunda.
Ingredients
Method.
Black gram (urad) papads.
Ingredients
Method.
Vadian
Ingredients
Method.
Besan poora.
Ingredients
Method.
Besan laddoos
Ingredients
Method.
Pakoras
Ingredients.
Method.
Bhuga
Ingredients.
Method.
Sesame gachak.
Ingredients.
Method.
Chikki
Ingredients
Method.
Gulgulas
Ingredients
Method.

**Dessert Powders & Puddings**

Gelatin dessert powders
Gelatin dessert powder
Flavours for gelatin desserts
Strawberry
Cherry
Pineapple
Lemon
Orange
Lime
Pudding powders
Chocolate flavour:
formula no. 1
Vanillin flavour
Formula no. 1
Formula no. 2
Formula no. 3
Cocoanut flavour pudding.
Maple-flavor powdered pudding
Custard pudding
Custard cream (french style)
Custard filling for pies
Custard pie—rich and nonwatering
Dry vanilla cream powders

**Extruded Snacks**

Terminology
Extrusion process
Preconditioning configuration
Extruder configuration
Die configuration
Expanded snacks
Fried collettes
Product description
Process description
Formulation
Baked collettes or shapes
Product description
Process description
Formulations
Third generation snacks
Quality control considerations.
Product description.
Process description
Formulations.
Pre-cooked masala snacks
Product description
Process description
pre-cooked masa snacks
Coextruded snacks.
Potato-based Textured Snacks

Raw materials
Potato granules
Potato flakes
Potato starch
Potato flour
Methods of manufacture
Forming and frying of wet dough
High shear dry extrusion
Low shear pellet extrusion
Potato chip manufacture.
Similar products using a basis other than potatoes
Flaked cereals
Puffed cereals

Snacks and Namkeen Recipes

Aloo bhujia
Ingredients
Method
Other recipe
Ingredients
Preparation
Masala khakra:a tasty
Indian snack
Ingredients for masala khakra
Directions to make masala khakra
Khakra gujarathi dish
Ingredients required for this gujarathi dish

Method to make khakra – gujarathi dish
Recipe of ganthia
Ganthia (chickpea snack)
Ingredients
Method

Dhokla
Ingredients
Preparation
Condiments
Dhokla recipe from Gujarat
Ingredients (serves 4):
Seasoning
Method
Sandwich dhokla.
Ingredients.
For yellow dhokla
For white dhoklas
For green chutney
Method
Bhel puri
Ingredients
Ingredients for tamarind chutney
Ingredients for mint chutney
Method
Method for bhel puri
Bhel puri recipe
Ingredients
Method

**Snack Food Preservation & Packaging**

Conventional snacks
Packaging materials for maintaining product integrity
Factors responsible for loss of quality in snack foods
Barrier properties of plastic films
Metallized films
Cosmetic improvements
Cost savings Bags Machinery
Form-fill-seal (ffs) machines
Bagging and cartoning machinery
Computer application in snacks

**Details of Plant, Machinery and Equipments for Snacks Food**
Comminution and particle size control
Comminution of lowmoisture snackfoods or snack food ingredients
Impact milling or hammer milling
Comminution to produce suspensions and emulsions
Lamination
Sizing and shaping
Coating
Enrobing
Liquid spray coating
Dusting
Immersion
Panning
Decorating of snacks
Dewatering and removal of liquid fat.
Heat transfer
Mechanical and engineering facts of organoleptic quality
control of snacks
Ambience
Mechanical and weight and/or volume control of snack
Moisture control
Hygiene control
Composition control
Contaminant and foreign body control
Specific gravity
Magnels.
X-ray examination

**Namkeen and Sweets**

Manufacturing process of namkeen
Dalmoth
Chanachur
Bhujia
Dal moth
Chanachur
Bhujia
Flavour and essences
Lemon flavour essence
Orange flavour oil
Universal flavour
essence
Wheat flour grades
Straight flour.
Patent flour
Cut straight flour
Clear flour
Plant economics
Land and building
Plant and machinery
Fixed capital.
Raw materials
Total working capital/month
Total capital investment
Turn over/annum.
Preparations of sweets
Moong dal ladoos
Process
Besan ladoos
Process
Mysore pak
Process
Moong dal halwa
Process
Rash bara (badar dipped in jaggery syrup)
Process
Boondi ladoo
Process
Manufacture of petha.
Sone papadi
Process of manufacturing
Raw material
Manufacturing process
Formulation II for 1 kg Elaichi Laddu
Formulation - III for 1 kg Cashewnut Laddu
Formulation IV -Pistachio Laddu
Formulation - V (Baisin Laddu 1 kg)
Formulation - VI
Plant economics
Land and building
Plant and machinery
Fixed capital
Raw materials
Total working capital/month
Total capital investment
Turn over/annum
Processed Products from Potato

Classification of processed products
Fried products
Potato chips
French fries
Dehydrated products
Dehydrated potato chips, dices and waris.
Potato flakes and granules
Potato starch
Potato flour
Potato custard powder.
Soup or gravy thickener
Potato biscuits
Canned potatoes

Pappad and Bariyan Plant

Manufacturing process of bariyan
Packaging of pappad
Automatic pappad plant and machinery
Plant economics
Land and building
Plant and machinery
Fixed capital
Raw materials
Total working capital/month
Total capital investment
Turn over/annum

Potato Chips/Waffers

Process of manufacture
Details of machinery
Operation
Potao wafer mchine
Plant economics
Land and building
Plant and machinery
Fixed capital
Raw materials
Total working capital/month
Total capital investment
Turn over/annum
**Potato Chips (Automatic Plant) with Imported Machinery**

Packaging requirements for fried potato chips  
Physico-chemical changes during storage  
Transparent and opaque package  
Packaging materials  
Packaging and storage studies  
Manufacturing process  
Sorting, cleaning and washing  
Slicing and washing  
Drying of slices  
Treating with chemicals  
Chip frying  
Batch frying method  
Method of batch processing  
Packaging  
Working of imported continuous potato producing unit  
Imported plant and machinery  
Description machineries  
Optional equipment available  
Processing section  
Investment  
Potato chips (imported plant)

**Rice Puff**

Raw materials  
Manufacturing process  
Puffed rice  
General considerations  
Details of process  
Oven puffed process  
Plant economics  
Land and building  
Plant and machinery  
Fixed capital  
Raw materials  
Total working capital/month  
Total capital investment  
Turn over/annum

**Rice Flakes, Corn flakes and Wheat flakes (integrated unit)**

Raw materials
Snack Food

Manufacturing process
Humidification
Puffing
Cutting
Roasting
Seasoning (by rotary seasoning machine)
Finishing and drying
Packaging
Protein snack
Process
Process details
Details of snacks food plant
Plant economics
Land and building
Fixed capital
Total working capital/month
Total capital investment
Turn over/annum

Packaging of Snack Foods

Introduction
The product group
Packaging materials
for snack foods
Packaging system
Gas flushing
Compensated vacuum.

PREFACE
Sweets are part of any Indian celebration or festivity of any kind. They are prepared in Indian households not only for special feasts and occasions, but also for simple celebrations like birthdays, anniversaries, graduations or even any other concocted reason. Every event big or small, calls for the sharing sweets with the whole neighborhood even simply because he/she is the proud owner of a new car. There are several categories of Indian sweets like its varieties. They can be classified as: Kheer And Payasams, Laddu Or Ladoos, Halwas, Burfis, Kulfis, Sugar Syrup Based Sweets etc. Snacks, namkins and pappads are popular food items in Indian diet. Pappad is essentially a thin wafer-like product, circular in shape, rolled from dough made from flour of pulses with salt, chilli and spices added to it. It is easy to digest and nutritious as well. There are many faran items popular throughout the country and minor changes are made in some ingredients to suit the local tastes and preferences. Items like masala puffed rice, chevda, fried peas, dal-muth, roasted masala peanuts etc. fall under the category of farsan. Papad is eaten along with the main course as taste enricher, while farsan is a snack. Quality standards specified by BIS are available. Certification under PFA Act is compulsory. Indians seem to be snacking on ethnic foods with a vengeance. This is good news for the corporate sector, given that the past few years have seen a perceptible shift towards the branded sector at the cost of the unbranded segment. Product is the most important part of the marketing mix. It signifies what you are going to sell to the consumer. A comprehensive analysis of the Industry and Our Market Survey has given us a platform on which our product can be built. Our product will be built for the masses, and expansion shall be gradual, to cater to the entire country’s needs. Namkeen is a product, which needs three important things: 
1. Taste, 
2. Quality and 
3. Variation.
In the same order of significance we need to provide all three to our consumers. Ours is a Company whose Product shall stand for something every Indian craves for. We are entering a market already dominated by a number of branded and unbranded players. Customers are extremely loyal to the namkeen they consume. So we thought about what would make these customers come to us? Initially housewives in India used to make Namkeen at home, but with changing times this is gradually fading away and people have started thinking that it is easier to buy Namkeen than make it at home.

Process, Preparation of Traditional Sweets, Gulab Jamun/Rasogullas, Winter Products, Some Selected Recipes of Traditional Foods, Dessert Powders & Puddings, Extruded Snacks, Potato-based Textured Snacks, Snacks and Namkeen Recipes, Snack Food Preservation & Packaging, Details of Plant, Machinery and Equipments for Snacks Food, Namkeen and Sweets, Processed Products from Potato, Pappad and Bariyan Plant, Potato Chips/Waffers, Potato Chips (Automatic Plant) with Imported Machinery, Rice Puff, Rice Flakes, Corn flakes and Wheat flakes (integrated unit), Snack Food, and Packaging of Snack Foods.