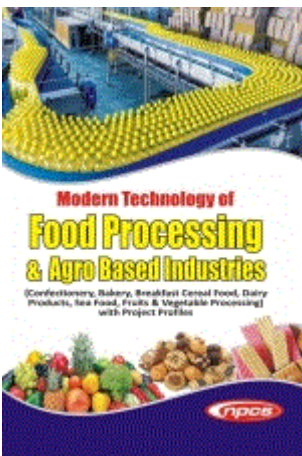


Modern Technology of Food Processing & Agro Based Industries(Confectionery,Bakery,Breakfast Cereal Food,Dairy Products, Sea Food, Fruits & Vegetable Processing) with Project Profiles (3rd Revised Edition)



Author: NIIR Board of Food Technologists

Format: Paperback

ISBN: 9789381039823

Code: NI10

Pages: 688

Price: Rs. 1,775.00 US\$ 150.00

Publisher: NIIR PROJECT CONSULTANCY SERVICES

Usually ships within 5 days

Developing competitive agro-industries is crucial for generating employment and income opportunities. It also contributes to enhancing the quality of, and the demand for, farm products. Agro-industries have the potential to provide employment for the rural population not only in farming, but also in off-farm activities such as handling, packaging, processing, transporting and marketing of food and agricultural products.

Food processing & agriculture based industry is important from the point of view of contribution to industrial production and employment generation. The food sector has emerged as a high-growth and high-profit sector due to its immense potential for value addition, particularly within the food processing industry. The agriculture processing sector has the vast potential in the development of an economy through its multiplier effect.

This handbook contains processes formulae, manufacturing method of various products, brief profiles of various projects which can be started and providing information regarding land area cost, project cost plant & machinery cost etc. It contains Photographs of Plant & Machinery with Supplier's Contact Details and Plant Layout and Process Flow Sheets.

The major contents of the book are Biotechnological Applications in Dairy Industry, Packaging of Orange Squash in Rigid Plastic Containers, Quality Assurance for Food Products, Canning of Vegetables, Cocoa Butter, Chewing Gums, Confectionery Manufacturing Process, Corn Flakes and Starch, Dairy Products, Dehydration of Fruit & Vegetables, Extruded Sugar Products, Fish Canning and Processing, Fruit Beverages, Fruit Juices, Squashes and Cordials, Honey, Ice Cream, Jam, Jellies & Marmalades, Pickles, Chutneys & Sauces, Preservation Fruits and Vegetables, Sugar Candy & Confectionery etc.

This publication is an outcome of contributions from project consultants, engineers and food technologists aimed at highlighting the manufacturing project details. It is expected that the information presented in this

handbook will help everyone who wants to startup as entrepreneur.

Contents

1. Biotechnological Applications in Dairy Industry

Introduction

Application of Biotechnology, Starter Culter

Chesse Ripening

Microbial Rennet, Bio-Sweeteners, Milk Production By-Product Utilization

Lactose Free Milk

Additives, Therapeutic Value, Effluent Treatment, Milk Proteins

2. Packaging of Orange Squash in Rigid Plastic Containers

Introduction

Materials and Methods

Experimental Procedure, Analytical Methods

Results and Discussion

Summary and Conclusion

3. Present Status and Future Trends in the Development of Snack Food Industry in the Country

Type of Sack Foods

Shelf Stable Fried Products

Moist Fried Products, Popped or Puffed Cereals

Extruded Products, Ready to Eat Expanded Products

Traditional Sweets

Nutritional Aspects, Packaging Profiles

Marketing Needs

Future Needs of Research and Development

4. Quality Assurance for Food Products

All Metal Detectors and Separators

Safety Requires Intelligence

Safety and Service Guarantee

5. Canning of Vegetables

Canning of Broad Beans

Canning Schedule for Non-Acidic Vegetables

6. Chewing Gums

Formulation for Longer-Lasting Flavour and Sweetness

Special Order for Chewing Gum Manufacture

Candied Chewing Gum

Freezing, Comminuting and Heating

7. Cocoa Butter

Extracting Cocoa Butter with Carbon Dioxide

Flavour Enhancer for Cocoa

8. Confectionery Manufacturing Process

Hard Candles

Soft Candles

Cotton Candles
Chewing Gum and Bubble Gum
Industry in India
Toffee
Chocolates

9. Corn Flakes and Starch

Manufacturing Process of Corn Flakes
Wheat and Rice Flakes
Corn Starch
Manufacturing Process of Cereal Starch

10. Dairy Products

Process Description for Evaporated Milk
Dried Milk Powder
Skimmed Milk Powder
Butter
Ghee
Milk Paneer
Cheese
Prevention of Common Defects in Chesse

11. Dehydration of Fruit & Vegetables

Sun Drying
Process of Dehydration
Process for Vegetables
Packing and Storage
List of Plant & Machinery
Quality Control Tests
Rehydration Ratio Determination, BIS Specifications

12. Expanded/Extruded Snack Foods

Introduction, Manufacturing Process
Basic Process for Cereal Puff Snack Making Plant
Prawn Cracker
Mincing Machine
Plant and Machinery

13. Extruded Sugar Products

Low Calorie Snack
High Protein Chocolate Snack
Expanded Confections
Special Packaging
Bonded to Ice Cream Cone
Ice Cream Cone, Fig.

14. Fish Canning and Processing

Uses and Applications
Handling of Raw Materials
Treatment of Fish Before Canning
Packing

Methods of Obtaining a Vacuum
Heat Processing
Labeling and Boxing
Detection of Non-Sterile Packs
Prevention of Bacteria Spoilage
Chemical Spoilage
List of Plant & Machinery
Dried Fish Meal

15. Fruit Beverages
Preparation and Preservation
Use of Fining Agents
Pasteurization
Preservation with Chemicals
Preservation by Addition of Sugar, Preservation by Freezing
Preservation by Carbonation, Preservation by Filtration
Squashes and Cordials
Dehydration of Ripe Banana
Canning Schedule for Fruits (Table)

16. Fruit Juices, Squashes and Cordials
Equipment for Fruit Juices
Extraction Equipment
Halving and Burning Machines
Plunger Type Press
Pressing
Fruit Beverages
Preparation and Preservation
Juice Extraction

17. Honey
Honey Product in Water Form
Method for Preserving

18. Hygienic Conditions in Bakery Plant
Equipment and Machinery
Hygiene During Processing

19. Ice Cream
Manufacturing Process
Common Formulations
Machinery & Equipment
Soft Ice Cream Freezer (With Pump) Fig.

20. Jam, Jellies & Marmalades
Jams
Plant Requirements
Manufacture
Analytical Control

Faults in Jam Making
Jellies
Cooking of Jelly
Some Typical Jams & Jellies
Marmalades
Jam Marmalade

21. Pickles, Chutneys & Sauces

Pickles
Raw Material for Pickle
Causes of Pickles Spoilage & Its Remedies
Chutneys
Various Recipes for Chutneys
Sauces
Recipes for Sauces
Miscellaneous Formulations for Pickles and Chutneys

22. Preservation Fruits and Vegetables

Manufacturing Process for Preserved Vegetables
Fruit for Bottling or Canning
Precautions for Bottling Fruits
Fruit Preservation with Chemical
Jams
Various Recipes for Jams
Method of Testing for Setting Point in Jams
Jellies
Marmalades

23. Products of Bakery Industries

Bread
Market Potential
Bread Manufacture
Automatic Process to Manufacture Bread
Recipes for Bread
Special Breads
Biscuits
Biscuit Raw Materials
Market Potential
Manufacturing Process
Few Points for Making Good Biscuits
Cookies
Equipment's for the Manufacture of Cookies
Fruit Fillings
Pie Crusts
Formulations & Procedures for Pie Crusts
Soda Crackers
Cakes
Common Faults in Cakes
Hard Rolls
Buns
Icings

24. Sugar Candy & Confectionery

Raw Materials for Confectionery

Flavour (For Confectionery)

Examining an Essence

Colours for Confectionery

Manufacture of Hard Candy

Lollypops Manufacture

Toffee and Caramel

Plant and Machinery Details

25. Project Profiles

Functional Food Based Bakery Products

Biscuits & Candy

Milk Powder (SMP, WMP and Dairy Whitener)

Wheat Flour Mill

Dairy Farming and Dairy Products

(Pasteurised Milk & Curd)

Packaged Drinking Water (Automatic)

Garlic Oil & Powder

Apple Chips

Vegetables and Fruit Juice Powder

Banana Powder

Tomato Paste (Tomato Concentrate)

Caramel Food Colorant

Health Drink (Cocoa Beverages in Granules Form)

Cashew Nut Processing

Vacuum Fried Vegetable Chips (Sweet Potato,

Beans and Beetroot)

26. Plant Layout and Process FlowSheets

27. Photographs of Plant & Machinery with Supplier's

Contact Details

About NIIR

NIIR PROJECT CONSULTANCY SERVICES (NPCS) is a reliable name in the industrial world for offering integrated technical consultancy services. NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.

Our various services are: Detailed Project Report, Business Plan for Manufacturing Plant, Start-up Ideas, Business Ideas for Entrepreneurs, Start up Business Opportunities, entrepreneurship projects, Successful Business Plan, Industry Trends, Market Research, Manufacturing Process, Machinery, Raw Materials, project report, Cost and Revenue, Pre-feasibility study for Profitable Manufacturing Business, Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Business Opportunities, Investment Opportunities for Most Profitable Business in India, Manufacturing Business Ideas, Preparation of Project Profile, Pre-Investment and Pre-Feasibility Study, Market Research Study, Preparation of Techno-Economic Feasibility Report, Identification and Section of Plant, Process, Equipment, General Guidance, Startup Help, Technical and Commercial Counseling for setting up new industrial project and Most Profitable Small Scale Business.

NPCS also publishes various process technology, technical, reference, self employment and startup books, directory, business and industry database, bankable detailed project report, market research report on various industries, small scale industry and profit making business. Besides being used by

manufacturers, industrialists and entrepreneurs, our publications are also used by professionals including project engineers, information services bureau, consultants and project consultancy firms as one of the input in their research.

NIIR PROJECT CONSULTANCY SERVICES , 106-E, Kamla Nagar, New Delhi-110007, India. **Email:** npcs.india@gmail.com **Website:** NIIR.org

Sun, 19 Nov 2017 07:07:39 +0530