Confectionery in a broader sense implies the preservation of sweet meat preparation in the form of candies, caramels, chocolate, processed cocoa products and traditional Indian confections. India is a country with a collection of wide range of different cultures and many festivals and occasions are being celebrated in different parts of the nation and confectioneries play a major role in those special occasions. Therefore, the confectionery industry in this country has got a huge potential and this sector has grown recently in the India with the entry of many foreign companies. Special emphasis has been made on describing the various process parameters and equipments used with the help of process diagrams wherever necessary. This major content of this book are confectionery ingredients, flavour, gelatinizing agents, gums, glazes, waxes, traditional Indian confections, manufacturing processes and formulations of confections, nutritive value of confectionery products. This book also describes about the science and technology of chocolate and confectionery, packaging of confectionery products, quality control, future confectionery industry etc. Apart from these it also contains details of cooking techniques, formulae, processes. The incorporation of flavours and essences, permitted colours used quality control aspects along with sources of plant, machinery and raw material. This book is an invaluable resource for research centers, professionals, entrepreneurs and end users in academic and industry working on the subject.

Contents

1. Confectionery Ingredients
   - Caramel
   - International Standards for Sugar and Sugar Syrups
   - Reserved Descriptions for sugar Products
   - Maltodextrins (Roquette Freres, 1984)
   - Dried Glucose Syrups
   - Uses of Glucose Syrups and Maltodextrins.
   - Dextrose Manufacture
Fructose (Levulose)
Sorbitol
Mannitol
Lycasin 80/50
-Nonnutritive (Synthetic) Sweeteners
Saccharin
Cyclamates
Sodium Cyclamate C6H12NSO3Na
Acesulfam K (Acesulfam Potassium)
Aspartame (Naturasweet, Canderel)
Talin
Legislation
-Invert Sugar
Use in Confectionery Industry
Honey
Malt Extract
Testing of Refined Sugars
Anti-Tailing Devices
Automatic Continuous Sugar Cooker
Automatic Continuous Sugar Cooker
Batch Roller
Cocoa
Cocoa Moth
Cocoa Selection
Fermentation of Cocoa Beans
2. Confectionery Fats
-Commonly used fat in confectionery industry
Production and Processing of Fats
Refining is Carried in 3 stages
Chemistry of Fats
Glycerides, Fatty Acids
-Hardening Fats
Packing and Storage of Fats
3. Milk and Milk Products
Liquid Milk
Composition
Milk Standards
Dry Milk
Whey Products
Lactose
Condensed Milk, Evaporated Milk
Block Milk
Other Milk products
4. Fruits, Preserved Fruits, Jam, Dried fruits
Composition of Natural Fruits
Preservation of fruit and fruit pulps
Candied and Preserved Fruits
Jams
Glazed or Glace Fruit
-Dried Fruit
Artificial Drying
Chellies
Freeze Drying
Ginger
Colouring
5. Flavour
Dried Fruit
Artificial Drying
Chellies
Freeze Drying
Nuts
Varieties of Nuts
Storage of nuts
-Starches, Soya Flour, soya protein
6. Gelatinizing Agents, Gums, Glazes, Waxes
Gelatine
Agar-Agar
Agar occurs in three forms
Pectin
Gums
Uses of Gum Arabic
Gum Tragacanth
Guar Gum, Locust Bean (carob) Gum
Guar Gum
Carob gum
Lacquers and wares
Shellac
Other Glazes
Spermaceti
Carnauba Wax
7. Traditional Indian Confections
Raw Materials
Packaging
8. Confectionery Processes and Formulations
-summary of confectionery Processes
Rolling and Cutting
Casting or Depositing
Hard Candy
Die Forming
Hard Candy
-Manufacturing Process
Fruit and nut bars
Fruit punch chocolates
Butter Creams Chocolate
-Soft candies
-Carbonated Candy
Process of Manufacture
-Seed Confections (Popcorn Balls)
-Cotton Candy
-Coated Confections
Chewing Gum And Bubble Gum
Industry in India
-Toffee
Introduction
Manufacturing Process
-How to cut a Toffee by Toffee Cutter
Formulation For Different Kinds of Toffee
Plain Toffee
Butter toffee
Coconut Toffee
Milk Toffee
Malt Toffee
Plain Chewing Toffee
Chocolate Toffee
Pistachio Toffee
Everton Toffee
Licorice Toffee
Molasses Toffee
Molasses Toffee
Marmalade Toffee
-Chocolates
Chocolate toffee
Chocolate Covered Butter Toffee
Chocolate Annex Caramels
Chocolate Caramel Nougat Roll
Chocolate Honey Tablets
Chocolate Covered Coconut Caramels
Chocolate Coating Caramels
Speciality Chocolates
-Caramels, Toffees, Butter scotch, Fudge
The Milk Ingredient
Reconstitution of Milk Powder
Fats
-Large-Scale Production
Water Activity (ERH)
Composition
Colour
Faults
Preparation of Agar Jellies, Fruit Slices
-Coconut Paste, Coconut ICE
-Creme and Lozenge Pastes, Cachous, Tablets
Liqueurs
Chocolate Liqueurs
Sugar Crust Liqueurs
Licorice
Manufacture of Licorice Confectionery
Legislation
9. Nutritive Value of Confectionery Products
Food Value and its Composition
Carbohydrates
Fat
Proteins
-Mineral Matter
Vitamins
-The Labeling of Foods Containing Vitamins
Disadvantages of Confectionery
10. BIS Specifications
11. Science and Technology of Chocolate and Confectionery
-Sugar Confectionery
-Solubility, Saturated and Supersaturated Solutions
-Relative Humidity, Dew Point, Vapour Pressure,
-Water Activity Equilibrium relative humidity
-Relative Humidity, Dew Point
-pH, HYDROGEN ION CONCENTRATION
-Optical Activity
-Specific Ration-Dextrose Equivalent
-Scientific Instruments
-Spoilage Problems
-Chocolate Bloom
-Fat Bloom
-Crystallization of Cocoa Butter Under Different Ambient Conditions-Melting Point Changes
-Heat Treatment of Chocolate
-Fat Bloom-Summary
-Sugar Bloom-Causes and Methods of Prevention
-Other Faults

12. Packaging of Confectionery Products
-Requirement of Packaging
-Packaging Requirement
-Use of Containers
-Packaging Materials
-Materials
-Metal Cans
-Types of Paper
-Metal Foil
-Foil Containers
-Transparent Films
-Metallized Films
-Shrink and Stretch Films
-Laminates
-Testing of Wrappers for Various Other Properties
-Types of Cans
-Built-up Body
-DESSICANT POUCHES

13. Quality Control
-PRINCIPLES OF QUALITY CONTROL
-The Decidina Factor envolved in the Standard of Quality?
-Quality Controllers
-How Should Quality Control Be Organized?
-Raw materials
-Type of Raw Material
-Microbiologicaly Quality Control
-Factory Hygiene and Sanitation

14. Research and Development in the Confectionery Industry
-Research and Development in large Companies
-Research and Development in small companies
-Research Facilities
-Ingredients
-Manufacturing Processes
-Conditions To Be Observed During Production
-Coloured Coatings and Pastel Coatings
-FORMULATIONS
-DIETETIC COATINGS
  Diabetic Chocolate
  Carob Coatings
  Defatted Wheat Germ
  "Slimming" Chocolates
  Medicated Chocolates
-Emulsifiers in Chocolate
-Confectionery Coatings and Cocoa
-VEGETABLE LECITHINS
  Soya Lecithin
  Other Vegetable Lecithins
-SYNTHETIC PHOSPHOLIPIDS AND MODIFIED
-VEGETABLE LECITHINS
  Toxicity Checks on YN
  Fractionated and Modified Vegetable Lecithins :
  -Use of lecithin in chocolate, cocoa Powder, Chocolate Drinks
  Chocolate
  -Cocoa and Drinking Chocolate Powders
-COLOURS FOR CONFECTIONERY
  SELECTION OF COLOURING MATTER
  METHOD OF DISSOLVING
  -COMBUSTOR SUGAR BOILER
  CONCHES
-THE SECOND SCHEDULE
  Other Glazes
  15. Future of Confectionary Industry
  16. The Marketing of Confectionery
  Plant, Machinery & Equipments
  Directory Section
  Suppliers of Raw Material
  Suppliers of Different Types of Confectionary Machinery

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.


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.