The dairy industry plays an important role in our daily life. It is difficult to realize how fast changes are taking place in the dairy industry. Milk is an important human food, it is palatable, easy to digest and highly nutritious. One of the important factors affecting the total amount of milk produced and the way in which this milk is utilized is the demand for the various products. In order to prepare such a diversity of products, many different processes have been developed by the industry. There are numerous types of milk products such as ghee, butter, paneer, cheese, yogurt, ice cream powder, baby cereal food, cream, and so on. Each of these has been designed to take advantage of some particular property of milk. Dairy products are generally defined as food produced from the milk of mammals; they are usually high energy yielding food products. Enzymes play an important role in the production of cheese. Raw milk contains several native enzymes some of which can be used for analytical and quality purposes for example pasteurization can be assessed by determining indigenous alkaline phosphate activity. India is known as the Oyster of the global dairy industry, with opportunities galore to the entrepreneurs globally. Anyone might want to capitalize on the largest and fastest growing milk and milk products market. The dairy industry in India has been witnessing rapid growth. The liberalized economy provides more opportunities for MNCs and foreign investors to release the full potential of this industry. The main aim of the Indian dairy industry is only to better manage the national resources to enhance milk production and upgrade milk processing using innovative technologies. The major contents of the book are cholesterol, coronary heart disease and mil fat, cholesterol and cardiovascular diseases, fatty acids & cholesterol, factors affecting cardiovascular disease, application of enzymes in dairy and food processing, utilisation of milk components: casein, advances in the heat treatment of milk, varieties of sheep's cheese, whey cheese, potted cheese, filled cheese, testing butter at different stages, presentation of butter at different stages, condensed and evaporated milk, dried milk powder, malted powder, butter powder, ghee yoghurt, technology processing of dairy and dairy products, dried milk shake, milk powder, dahi from sweet cream butter milk, packaging of dairy and milk products, dairy farm, dairy products & milk packaging in pouches, etc.

Developments in the dairy industry are enough to justify a revision of a considerable amount of material in this book. This book deals with processes, formulae, project profiles, details of plant, machinery & raw materials with their resources etc. of various dairy products. This book will help all its readers from entrepreneurs to food industries, technocrats and scientists.

Contents

1. Cholesterol, Coronary Heart Disease and Mil Fat
Cholesterol and Cardio Vascular Diseases
Fatty Acids & Cholesterol
Factors Affecting Cardio Vascular Disease
Dietary Recommendations
Conclusion

2. Application of Enzymes in Dairy and Food Processing
   Introduction
   Enzymes in Dairy Industry
   Enzymes in Food Industry

3. Utilisation of Milk Components: Casein
   Extraction of Casein from Milk
   Properties of Casein from Milk
   Composition of Caseinates
   Composition of Co-Precipitates
   Industrial Uses of Casein
   Uses of Rennet Casein

4. Developments in Cream Separation and Processing
   Separation and Development in Separators
   Vacreation
   Consumer Cream Products
   Packaging & Presentation of Cream

5. Advances in the Heat Treatment of Milk
   Raw Milk
   Pasteurisation
   Sterilised and UHT Milks
   Comparison of Direct/Indirect Processes
   Volatile Sulphur components Milk
   Flavour Improvement
   Nutritional Value
   Texture of UHT Milks
   Heat Exchanger Fouling
   Concluding Remarks

6. Utilisation of Milk Components: Whey
   Production
   Whey Characteristics
   Processing of Whey
   Unit Processing and Products
   Lactose Production
   Conclusion

7. Grading Dairy Produce
   Early History
   The Separator

8. The Cream Supply
   Value of Well Mixed Cream

9. Grading of Milk and Cream
   Knowledge Required
Grading Milk

10. Butter Grading
Microflora of the Dairy
Framing for Flavours
Standardise
Grading Statistics
Commercial Grading & Buying
Fixity of Flavour in Butter
Butter Grading

11. Cheese
Hard Varieties
Factors of Viral Importance
Process of Making Cheese
Value of Experiments
Varieties of Sheep's Cheese
Whey Cheese
Potted Cheese
Filled Cheese

12. Refrigeration
Testing Butter at Different Stages
Presentation of Butter at Different Stages

13. Condensed and Evaporated Milk
Dried Milk Powder
Skimmed Powder
Malted Powder
Butter Powder
Ghee
Yoghurt
Cheese
Presentation of Common Defects in Cheese
Processed Cheese

14. Milk

15. Co-Operative Role in Dairy Development

16. Technology Processing of Dairy and Dairy Products
Milk Shake
Combination
Steps in Processing
Dried Milk Shake Milk Powder
Dahi from Sweet Cream Butter Milk
Composition
Acidoptiles Milk
Yoghurt from Butter Milk
Cheddar Cheese from Cow Milk
Cheddar Cheese from Buffalo Milk
Mozzarella Cheese
Cottage Cheese
17. Packaging of Dairy and Milk Products
Form Fill & Seal (FFS) System
Aseptic System
Butter

18. Baby Cereal Food & Milk Powders
Introduction
Uses & Application
Manufacturing Processes of Milk Powder
Raw Material Supplier
Supplier of Plant & Machinery

19. Confectionery Industry-Semi Automatic Plant
Introduction
Properties
Uses and Application
Formulations
Process of Manufacturing
Suppliers of Plant & Machinery
Suppliers of Raw Materials

20. Condensed Milk (Sweetened)
Introduction
Properties
Uses & Application
Methods of Manufacturing
Address of Raw Materials Suppliers
Address of Plant & Machinery Suppliers
List of Plant & Machinery

21. Dairy Farm
Introduction
Uses & Applications of Milk
Composition of Milk
Manufacturing Process
Refrigeration or Freezing System
Addresses of Complete Plant & Machinery Suppliers
List of Plant & Machinery

22. Dairy Products & Milk Packaging in Pouches
Introduction
Properties
Uses & Application
Manufacturing Process
Suppliers of complete Plant & Machinery
Suppliers of Raw Material
List of Plant & Machinery
23. Flavored Milk
Introduction
Flavoring Essence
Process of Manufacture
Supplier of Plant & Machineries

24. Ice Cream of Different Flavours
Introduction
Process of Manufacture
Complete Plant & Machinery Suppliers
Raw Material Suppliers

25. Milk Powder
Introduction
Composition of Dry Milk Powder
Property of Milk Powder
Process of Manufacture
Suppliers of Raw Materials
Suppliers of Plant & Machinery

26. Milk Toffee Manufactures
Introduction
Formulation
Manufacturing Process
Complete Plant & Machinery Suppliers
Suppliers of Raw Materials

27. Milk Preservation and Marketing to Wholesalers
Introduction
Properties of Milk
Buying & Collection of Milk
Chilling & Transportation of Milk to Processing Station
Manufacturing Process
Suppliers of Raw Material, Plant & Machinery

28. Paneer
Introduction
Nature of cheese
Classification of Cheese
Uses & Applications
Equipment's Required
Process of Manufacture
Plant & Machinery Supplier
Raw Material supplier

29. Directory Section
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 varies 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.