AN ISO 9001 : 2015 CERTIFIED COMPANY

Manufacture of Food & Beverages with Project Profiles (3rd Edn.)

FREE SAMPLE: contents and introduction of the 227-page book
Price: Rs 2,295 | US$ 71

Order the full book >

AN ISO 9001 : 2015 CERTIFIED COMPANY

Author: P.K. Tripathi
Format: hardcover
Code: NI14
Pages: 227
Price: Rs 2,295 | US$ 71
Publisher: NIIR PROJECT CONSULTANCY SERVICES
Shipping: 5 days

About the Book

Manufacture of Food & Beverages with Project Profiles
(Food Processing, Beverages, Potato Powder, Herbal Health Drink, Carbonated Health Drinks, Chocolate, Candy, Toffee, Microbrewery, Functional Food Based Bakery Products (Modern Bakery Unit), Rice Beer, Craft Beer, Lemon-Lime Flavoured Soft Drink (Nimbu Pani) and Fruit Juice (Apple, Plum and Peach))
The Food and Beverage industry in India has been growing at a fast pace, with an annual growth rate of 10%. The food and beverage industry is an essential sector of any nation's economy, since it offers basic needs for survival. The industry provides employment to thousands of people across all levels; from suppliers to people in distribution, manufacturing, sales and marketing. Every country has its own market dynamics that contribute to a specific food culture as well as its own specialty products. In general terms, there are two ways: one method involves processing raw materials into packaged foods which can be sold at supermarkets or grocery stores; another method involves cooking meals or drinks at restaurants or bars. Some companies focus on only one aspect of production while others handle both aspects. Regardless of what method is used, it's important to keep in mind that these products need to be transported from their place of origin (i.e., farms) all over a country and eventually reach consumers' homes. This process is called distribution. Distribution channels vary greatly by region but usually include wholesale suppliers, retailers (grocery stores), wholesalers and local distributors who sell directly to customers through restaurants or small shops. The industry also includes packaging manufacturers, advertising agencies and event planners for food festivals like Taste of Chicago.

The money-making opportunities are very huge because most Indians eat three times a day. Snacks have become an important part of our daily life, some people have them at breakfast while others prefer to have their favourite snack during lunch or dinner time. Some of these companies provide all kinds of food products like readymade meals, vegetables, fruits, bakery products etc. There are various kinds of snacks available for various tastes like salty snacks for those who love salty foods; sweet ones for those who love sweets; spicy ones for those who love spicy foods; crunchy ones for those who love crunchy foods; soft drinks for children and adults alike; fruit juices which can be prepared from fresh fruits or by adding water to powder concentrates. These companies also supply dairy products like milk, cheese, butter, paneer (cottage cheese), curd (yoghurt) etc. These days many fast food chains are coming up in big cities where you can get your favourite fast food on your doorstep within minutes after placing your order over phone or internet. Many of

these companies sell frozen foods too. Frozen food items include ice creams, kulfi (Indian ice cream), rasgullas (sweet dumplings made with cottage cheese), samosas, vadas etc. In addition to that there are large number of beverage companies which make carbonated and non-carbonated drinks like aerated water, juice drinks, squashes, lemonades etc. For example Coca Cola has more than 200 brands worldwide including Thums Up in India; Pepsi has Slice and Mirinda in India; Cadbury Schweppes sells Fanta and Sprite in India. All these beverage companies manufacture carbonated as well as non-carbonated drinks but they do not manufacture any alcoholic beverages.

The market is grow at a CAGR of 9.5%. The rise in CAGR is attributable to this market's demand and growth returning to pre-pandemic levels and even exceeding once the pandemic is over. Functional foods and beverages are enriched with functional nutrients, in addition to the basic nutritional value of the product, to provide multiple health-related benefits. These nutrients include amino acids, vitamins, minerals, proteins, fatty acids, and prebiotics. Functional products have gained importance in recent years due to the increased awareness among consumers.
Rising Spending on Healthy & Nutritious Diet Products to Fuel Market Growth The functional food and beverage market trends are driven by the rising demand for healthy and nutrition-rich diets. Evolving lifestyles and increasing incomes of consumers across the world have fueled the demand for products with superior nutritional profiles. Functional beverages, for instance, are designed to be consumed on-the-go, providing enhanced nutrition. Increasing product development and innovation activities, the availability of a wide variety of products, especially across e-commerce platforms, and the adoption of unique promotional strategies by market players are collectively furthering the growth of this market.

The market segments for functional foods and drinks, based on type, include functional dairy products as the leading product type. Increased consumer inclination towards aiding digestive health has contributed to raising the demand for prebiotics and probiotics dairy products. The higher affordability of functional dairy products such as yogurt is further boosting its demand across developing economies where per capita income and spending on health food products are comparatively lower. The cereal and grain segment is another important segment that is generating the highest revenue after functional dairy products. The fortification of cereals & grains is one of the most effective methods to tackle nutrient deficiencies. Governments and regulatory authorities across the world have been taking initiatives to address the growing concern of nutrient deficiencies among populations with fortified foods. The addition of iodine in salt, vitamin D in milk, and vitamin B and iron in flour and bread are some of the examples of food fortification.

The book covers a wide range of topics connected to Food Industry, Potato Powder, Herbal Health Drink, Carbonated Health Drinks, Chocolate, Candy And Toffee, Microbrewery, Functional Food Based Bakery Products (Modern Bakery Unit), Rice Beer With Can & Bottle Packaging, Craft Beer, Lemon-Lime Flavoured Soft Drink (Nimbu Pani), Fruit Juice (Apple, Plum And Peach), as well as their manufacturing processes and plant economics.

A thorough guide on Food and Beverage manufacture and entrepreneurship. This book is a one-stop shop for everything you need to know about the Food and Beverage Industry, which is ripe with opportunity for producers, merchants, and entrepreneurs. This is the only book that covers the process of making commercial Food and Beverage. From concept through equipment procurement, it is a veritable feast of how-to information.

Contents

CONTENTS

1. INTRODUCTION 1
1.1. HISTORY
1.2. F&B INDUSTRY IN INDIA
1.3. OTHER SECTORS IN THE F&B INDUSTRY
1.4. GROWTH OF FOOD AND BEVERAGE INDUSTRY
1.5. DEMAND OF FOOD AND BEVERAGE INDUSTRY
1.6. PROFIT IN FOOD AND BEVERAGE INDUSTRY
1.7. BUSINESS PROFIT IN THE FOOD AND BEVERAGE INDUSTRY IN INDIA
1.8. FUTURE OF FOOD AND BEVERAGE INDUSTRY IN INDIA
2. HOW TO START FOOD BUSINESS 9
2.1. DECIDE THE BUSINESS STRUCTURE
2.2. RESEARCH THE MARKET WELL
2.3. GET FSSAI LICENSE/REGISTRATION
2.4. APPLY FOR THE TRADEMARK
2.5. VERIFY NUTRITION CHART
2.6. LOCATION OF THE ORGANIZATION
3. FOOD PROCESSING INDUSTRY 12
3.1. PRODUCTION
3.2. METHODS
3.3. REASONS AND CONSEQUENCES
3.4. HOW DOES PROCESSED FOOD FIT INTO A HEALTHY DIET?
4. HOW TO START BEVERAGES INDUSTRY 16
4.1. HOW TO START BEVERAGES INDUSTRY
4.2. DIFFERENT TYPES OF SOFT DRINKS
4.3. CONDUCT MARKET RESEARCH
4.4. ANALYSIS OF RECIPES
4.5. KEEP CHANGING
4.6. REGISTRATION OF THE COMPANY
4.7. CERTIFICATES AND LICENSES
4.8. PROMOTE DRINKS BUSINESS
4.9. INFRASTRUCTURE AND THE LOCATION
4.10. EQUIPMENT AND RAW MATERIALS
4.11. PROCESSING AND PACKAGING
4.12. MERCHANDISING
5. BEVERAGES INDUSTRY 20
5.1. PRODUCTION OF BEVERAGE INDUSTRY
5.2. TYPES OF BEVERAGE
5.3. BEVERAGE PROCESSING STEPS
5.4. SELECTING A CLARIFYING OR PREFILTER
5.4.1. Final Filtration Processing Steps
5.4.2. Process Monitoring Processing Steps
5.4.3. Tank Venting Processing Steps
5.4.4. Gas Filtration Processing Steps
5.4.5. Housings Processing Steps
5.4.6. Integrity Testing Processing Steps
5.4.7. Diffusion Test Processing Steps
5.4.8. Pressure Hold Testing
6. POTATO POWDER 31
6.1. INTRODUCTION
6.2. PROPERTIES
6.2.1. Physical Properties

6.2.2. Chemical Properties
6.2.3. Microbiological Properties
6.3. USES
6.4. BENEFITS OF POTATO POWDER
6.5. B.I.S. SPECIFICATIONS
6.6. NUTRITION VALUE OF POTATO POWDER
6.7. DESCRIPTION OF RAW MATERIALS
6.7.1. Properties of Raw Material
6.8. MANUFACTURING PROCESS
6.8.1. Basic Raw Material Required
6.8.2. Packing and Marking
6.9. PROCESS FLOW DIAGRAM
6.10. PLANT ECONOMICS
7. HERBAL HEALTH DRINK 44
7.1. INTRODUCTION
7.2. BENEFITS OF HERBAL HEALTH DRINK
7.3. B.I.S. SPECIFICATIONS
7.4. LIST OF PLANT AND MACHINERY
7.5. FORMULATIONS
7.6. MANUFACTURING PROCESS
7.7. PROCESS FLOW DIAGRAM
7.8. PLANT ECONOMICS
8. CARBONATED HEALTH DRINKS 52
8.1. INTRODUCTION
8.2. CARBONATED SOFT DRINKS
8.3. B.I.S SPECIFICATIONS
8.4. ADDITIONAL LABEL INFORMATION
8.5. BENEFITS
8.6. MANUFACTURING PROCESS
8.7. PROCESS FLOW DIAGRAM
8.8. PLANT ECONOMICS
9. CHOCOLATE, CANDY AND TOFFEE 61
9.1. INTRODUCTION
9.2. COMPOSITION OF PRODUCTS
9.2.1. Chocolate
9.2.2. Candy
9.2.3. Toffee
9.3. TYPES OF PRODUCT
9.3.1. Chocolate
9.3.2. Candy and Toffee
9.4. USES OF PRODUCTS
9.5. HEALTH BENEFIT OF PRODUCTS
9.5.1. Chocolates
9.5.2. Candy & Toffee
9.6. B.I.S. SPECIFICATIONS
9.7. NUTRITIONAL PROPERTIES OF CHOCOLATES PRODUCTS
9.7.1. White Chocolate
9.7.2. Dark Chocolate
9.8. FORMULATIONS
9.8.1. Milk Chocolates
9.8.2. Coating Chocolate

9.8.3. Couverture Chocolate
9.8.4. Dark Chocolates
9.8.5. Dark Chocolates
9.8.6. Milk Chocolate
9.8.7. English Milk Chocolate
9.8.8. Chocolate Toffee
9.8.9. Chocolate Annex Caramels
9.9. CHOCOLATE MANUFACTURING PROCESS
9.9.1. List of Machine
9.9.2. Chocolate Products
9.9.3. Packaging
9.10. PROCESS FLOW DIAGRAM
9.11. TOFFEE MANUFACTURING PROCESS
9.11.1. List of Machinery
9.11.2. Process
9.12. PROCESS FLOW DIAGRAM
9.13. CANDY MANUFACTURING PROCESS
9.13.1. List of Machinery
9.13.2. Process
9.14. PROCESS FLOW DIAGRAM
9.15. PLANT ECONOMICS
10. MICROBREWERY 86
10.1. INTRODUCTION
10.2. MICROBREWERY
10.2.1. Nanobrewery
10.2.2. Farm Brewery
10.2.3. Craft Brewery
10.3. RAW MATERIAL DETAILS
10.4. MANUFACTURING PROCESS
10.5. PROCESS FLOW DIAGRAM
10.6. PLANT ECONOMICS
11. FUNCTIONAL FOOD BASED BAKERY PRODUCTS (MODERN BAKERY UNIT) 100
11.1. INTRODUCTION
11.1.1. Biscuit
11.1.2. Cookies
11.1.3. Bread
11.2. PROPERTIES
11.3. USES
11.4. TYPES OF BISCUITS & COOKIES
11.5. B.I.S. SPECIFICATIONS
11.6. RAW MATERIAL DETAILS
11.6.1. Flour
11.6.2. Functional Food
11.6.3. Functional Flour
11.6.4. Leavening
11.7. MANUFACTURING PROCESS DETAILS
11.7.1. General Process of Bread
11.7.2. White Bread
11.7.3. Multigrain Bread
11.7.4. Process Flow Diagram of Bread
11.7.5. General Process of Biscuits

11.7.6. Process Flow Diagram of Biscuits
11.7.7. Process of Cream Biscuits
11.7.8. Process Flow Diagram of Cream Biscuits
11.7.9. Biscuits from Soy Flour and Rice Bran
11.7.10. Process Flow Diagram of Biscuits from Soy Flour and Rice Bran
11.7.11. Chocolate Chips Cookies
11.7.12. Process Flow Diagram of Chocolate Chips Cookies
11.7.13. Oatmeal Raisin Cookies
11.7.14. Process Description
11.7.15. Process Flow Diagram of Oatmeal Raisin Cookies
11.8. PRESERVATIVES AND STORAGE
11.8.1. Leavening Agents
11.8.2. Fully Saturated Mono and Diglycerides
11.8.3. Whey-Based Ingredients
11.9. COOKIE STORAGE
11.10. PLANT ECONOMICS
12. RICE BEER WITH CAN & BOTTLE PACKAGING 131
12.1. INTRODUCTION
12.2. PROPERTIES OF THE RICE BEERS
12.2.1. Physicochemical Properties
12.2.2. Volatile Compounds in the Rice Beers
12.3. B.I.S. STANDARDS
12.4. TYPES OF RICE BEER
12.5. TOP 10 BEER BRANDS IN INDIA
12.6. RAW MATERIAL
12.7. MANUFACTURING PROCESS
12.7.1. Lautering
12.7.2. Fermentation
12.7.3. Maturation
12.7.4. Filtration
12.7.5. Packaging, Storage and Distribution
12.8. UTILITIES IN A BREWERY
12.9. REFRIGERATION TECHNOLOGY
12.10. PROCESS CONTROL SYSTEM FOR THE BREWING PROCESS
12.11. PROCESS FLOW DIAGRAM
12.12. HAZARD ANALYSIS CRITICAL CONTROL POINTS (HACCP)
12.13. FERMENTER & FERMENTATION EQUIPMENT-BEER EQUIPMENT
12.14. PLANT ECONOMICS
13. CRAFT BEER 156
13.1. INTRODUCTION
13.2. MICROBREWERY
13.3. CRAFT BREWERY
13.4. HEALTH BENEFITS ASSOCIATED WITH MODERATE CONSUMPTION OF BEER
13.5. CHARACTERISTICS
13.6. APPEARANCE
13.7. AROMA
13.8. FLAVOR AND MOUTHFEEL
13.9. ALCOHOL CONTENT
13.10. B.I.S. SPECIFICATIONS
13.11. RAW MATERIAL DETAILS
13.12. TYPES OF HOPS

13.13. MANUFACTURING PROCESS
13.14. PROCESS FLOW DIAGRAM
13.15. LICENSES REQUIRED FOR OPENING A MICROBREWERY IN INDIA
13.16. FORMALITIES FOR SETTING UP BEER INDUSTRY
13.16.1. Technical Requirements
13.16.2. Existing Machines:
13.16.3. Licence
13.17. PLANT ECONOMICS
14. LEMON-LIME FLAVOURED SOFT DRINK (NIMBU PANI) 173
14.1. INTRODUCTION
14.2. BENEFITS OF SOFT DRINKS
14.3. RAW MATERIALS
14.4. RAW MATERIAL PROPERTY AS PER STANDARDS
14.4.1. IS 10500: Drinking Water
14.4.2. Sugar
14.4.3. Acidity Regulator IN 330
14.4.4. Stabilizer (445)
14.4.5. Preservative (E Number 202)
14.5. MANUFACTURING PROCESS
14.6. QUALITY CONTROL
14.7. PROCESS FLOW DIAGRAM
14.8. MACHINERY DETAILS
14.8.1. Bottle Preparation Equipment
14.8.2. Mixing Equipment
14.8.3. Filling Machinery
14.8.4. Conveyor System
14.9. PLANT ECONOMICS
15. FRUIT JUICE (APPLE, PLUM AND PEACH) 184
15.1. INTRODUCTION
15.2. HEALTH BENEFITS OF FRUITS
15.2.1. Apple
15.2.2. Health Benefits of Apple
15.2.3. Peach
15.2.4. Health Benefits of Peaches
15.2.5. Plums
15.2.6. Health Benefits of Plums
15.3. B.I.S. SPECIFICATION
15.4. MANUFACTURING PROCESS
15.4.1. Acceptance of Raw Material
15.4.2. Fruit Pulp Preparation and Processing
15.5. OTHER ENZYMES IN JUICE PRODUCTION
15.6. PROCESS FLOW DIAGRAM
15.7. COLD-PRESSED JUICE PROCESS
15.8. HIGH PRESSURE PROCESSING
15.9. ASEPTIC PACKAGING FOR FRUIT JUICE
15.10. PACKAGING TECHNOLOGY IN FRUIT JUICE INDUSTRY
15.10.1. Aseptic Packaging
15.10.2. Tetra Packaging
15.10.3. Layers of Aseptic Carton Package
15.10.4. PET Bottle Packaging
15.11. SPOUT PACKAGING

15.11.1. Canning Packaging
15.12. FOOD SAFETY REQUIREMENTS & STANDARD REQUIRED FOR CONSTRUCTING FRUIT PROCESSING UNIT
15.13. WASTE COLLECTION & MANAGEMENT PROCEDURES
15.13.1. Major Waste Generating Activities
15.13.2. Waste Management Practices
15.13.3. Zero Emissions Systems Concepts
15.14. POLLUTION PREVENTION AND CONTROL
15.15. PLANT ECONOMICS

Get the full book

This sample shows only the contents and introduction. The full book has every chapter.
Price: Rs 2,295 | US$ 71
Delivery: Shipped within 5 working days of payment
Order online: niir.org/books/food-beverages-manufacture/ **WhatsApp:** +91 9097-075-054

Planning a unit? NPCS project reports:

- Carbonated Soft Drink project report
- Potato Powder project report
- Chocolate project report

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, Market Research, Manufacturing Process, Machinery, Raw Materials, Project Feasibility, Investment Opportunities, Technical Consultancy and Startup Help.

NPCS also publishes process technology books, technical books, startup books, directory, business database, detailed project reports and market research reports.

Our Detailed Project Report aims at providing all the critical data required by entrepreneurs for starting new business ventures.

NIIR PROJECT CONSULTANCY SERVICES
106-E, Kamla Nagar, New Delhi-110007, India

Email: npcs.india@gmail.com **Website:** https://www.niir.org/

Scan to order the full book on niir.org