Food Flavours Technology Handbook

Author:- NIIR Board
Format: paperback
Code: NI113
Pages: 544
Price: Rs.1075**US$** 125
Publisher: NIIR PROJECT CONSULTANCY SERVICES
Usually ships within **5** days

No doubt flavour is one of the most important attributes of the food products we eat in our daily life. Man does not eat simply to live but even more so lives to eat. Flavourings are focused on altering or enhancing the flavours of natural food product or creating flavour for food products that do not have the desired flavours for example bakery goods and other snacks. Flavour is generally defined in terms of three components; odour, taste and texture. Its characterization is concern with the similarities in human flavour perception using methods that designed to average out the differences. The flavour of foods may be classified as natural flavour (pre existing in diet particularly in fruits, vegetables and spices), process flavour (arising in end products as a result of conventional processes), compounded flavour (intentionally added flavouring), taste modifiers and abnormal taste and taints. Some of the flavouring materials produced by processing are chocolate, cheese, blue cheese, yogurt, wine, aroma chemicals etc. The flavour industry has become a vital element in the growth and success of food and beverage industries worldwide. The flavours industry remains very country specific and complex, with product formulations and flavours varying from country to country, as well as from region to region within countries. Processed foods, their flavours and textures, are adapted to local consumer preferences. Local or traditional foods have unique flavours evolving from the indigenous climate, land, etc. Generally speaking, trends in flavours closely mirror those in the packaged food and drink market. This includes the trends toward premium quality, savoury, natural and authentic, and health and wellness. The global flavour industry can be characterized as highly technical, specialized, and innovative. This industry is highly competitive and concentrated, compared to other product categories within the food and beverage market. The global flavours market is predicted to grow at a Compound Annual Growth Rate (CAGR) of 2% per annum.

This book majorly deals with flavour in fruits and vegetables, additional pathways for vegetable flavour, change in food flavour after processing, flavours formed via fermentation, odd flavours in foods, odd flavours due to chemical changes in the food, relationships between the food and flavour manufacturers, flavour characters of herbs preparation of herbs for marketing, flavour constituents of grapes and wine, dried inactive yeast powder, synthetic flavouring materials, flavour potentiators, baked goods and bakery products, sugar and chocolate confectionery, techniques of sensory testing, fruit based products, gas chromatography, microbiological analysis

The present book contains formulae, processes of various flavours applied in food and beverage industries. This book is intended to be a practical companion to the flavourist, technologists, entrepreneurs, libraries or for those who are already in the field of manufacturing.

Gas Chromatography of Flavour Concentrates
Capillary Column GC
GC Detectors
7. High Resolution Infrared Specctra of Some
Naturally Isolated Food Flavours
8. Flavouring Materials of Natural Origin
Natural Flavours and Flavourings:
Sources of Natural Flavouring Materials
Standards of Purity
Sensory Assessment
Flavour Profiles
Spice Importation
Herbs and Spices
Herbs
Spices
Historical Associations
Commercial Considerations
Relationships of Components and Profiles
Classification of Herbs and Spices
Flavour Characters of Herbs
Preparation of Herbs for Marketing
Production and Economic Aspects
Recent Developments
Specifications Analysis and Quality
Purchasing and Processing
Use of Spices
Individual Spices
Anise Seed
Basil Sweet Basil
Bay Laurel Leaves.
Benne Also Benni or Bene
Capsicum.
Caraway Seed
Cardamom Seed
Cayenne
Celery Seed
Chilli Powder
Chilies
Cinnamon
Cloves
Coriander Seed
Cumin Seed
Curry Powder
Dill Seed
Fennel Seed
Fenugreek Seed Foenugreek
Garlic Powder
Garlic Salt
Ginger
Mace
Marjoram (Sweet Marjoram)
Mint
Mustard

Nutmeg
Onion Powder
Onion Salt
Oregano
Parsley (Parsley Flakes)
Parsley Seed
Pepper, Black
Pepper, White
Poppy Seed
Red Pepper
Rosemary
Saffron
Sage
Savory Summer Savory
Sesame Seed Benne, Benni, or Bene Seed
Tarragon Estragon
Thyme
Turmeric Curcuma
Vanilla
Spice Processing-Milling
Microbiology of Spices
Gas Sterllization of Spices
Spice Essential Oils
Distillation ot Volatile Oils
Gamma Irradiation
Spice Essential Oils
Application of Spice Essential Oils
Essential Oil Content of Spices
Extraction and Oleoresins
Solvents
The Extraction Process
Quality of Oleoresins
Application of Oleoresins
Seasonings
Flavour Index and Formulation
Plants as Sources of Essential Oils
Citrus Fruits
Processed Citrus Oils
Other Citrus Peel Oils
Citrus Leaf and Flower Oils
Peppermint
Spearmint
Blended Peppermint Oils
Composition of Mint Oils
Other Commercially Important Sources
Fruit, Fruit Juices and Concentrates
Classification of Fruits
Fruit Juice and Flavour
Fruit Juice Extraction
Preservation of Fruit Juices
Concentrated Fruit Juices
Recovery of Aromatics
Brix Value

BIending of Fruit Juices-WONF
Depectinized Juices
Dehydrated Fruit Juices
Fruit Pastes and Comminutes
Historical Introduction
The Vanilla Plan
The Curing Process
Classification and Grading of Vanilla Beans
The Flavour of Vanilla
The Chemistry of Vanilla Flavour
Precursors and the Development of Flavour during Curling
Vanilla Absolute
Vanilla Sugar
Authenticity of Vanilla Extracts
Vanillin and Ethyl Vanillin
Beverage Flavours
Cacao (Cocoa)
The FIavour of Cocoa
Chocolate
Coffee
The Flavour of Coffee
Caffeine
Tea
Onion
The Flavour of Onion
Dehydrated Onion
The Flavour of Garlic
9. Chemical Modification of Turmeric Oil to more value added products
Results and Discussion
Conclusion
Experimental
Reduction of turmerones to turmerols:
Acetates of turmerols:
Propionates of turmerols:
Butyrates of turmerols
Catalytic hydrogenation of turmerones
Reduction of dihydro-turmerones to dihydro-termerols
Acetates of dihydro-turmerols
Propionates of dihydro-turmerols
Butyrates of dihydro-turmerol
Acknowledgement
10. Flavouring Materials made by Processing
Natural Products Made by Roasting:
Cocoa/Chocolate
Production of Cocoa Powder
The Dutch Process
Chocolate
Reaction Flavours:
Imitation Meat Flavours
Imitation Meat Flavours

Hydrolyzed Vegetable Protein-H VP
Autolyzed Yeast Extract
Enzymatically Derived Flavourings: Butter, Cheese
Butter
The Flavour of Butter
Enzymatic Production of Butter Flavours
Butter Oil
Cheese
Cheese Flavour
Cheddar Cheese Flavour
Blue Cheese Flavour
Enzyme-Modified Cheese (EMC)
Lactic Acid Fermentation-Yogurt
Yogurt Flavour
Flavourings for Yogurt
Flavours Made by Fermentation
Yeasts
Vinegar/Actetic Acid
Wines
Quality Factors
Wine Making
Flavour Constituents of Grapes and Wine
Dried Inactive Yeast Powder
Biotechnology: Production of Aroma Chemicals
Micro-organisms in Flavour Formation
Flavours Made by Pyrolysis: Smoke Flavours
The Smoking of Foods
Natural Liquid Smoke Flavourings
Pyroligneous Acid
Smoke Condensates
Chemistry of Smoke Flavours
Flavour Chemicals
Colour Compounds
Polycyclic Aromatics
Methods of Application
11. Synthetic Flavouring Materials
Imitation Flavourings:
Matching Nature
Synthetic Organics
Quality Control
Consumer Attitudes toward Synthetic Chemicals
Classification of Flavourants by Molecular Structure
Sensory Characters of Organics
Hydrocarbons
Carboxylic Acids
Acetals
Alcohols
Carbonyls
Ketones
Esters
Heterocyclic Compounds
Ketals
Lactones

14. Flavour Production
Liquid FIavourings
Emulsions
Dry Flavourings
Extended or Plated Flavours
Phase Separation/Coacervation Processes
Addition and Mixing
Emulsification
Solidification and Hardening
Separation
Washing
Drying
Dehydration Processes
Emulsification
Dehydration
Extrusion
15. Sensory Testing Method
Test Purpose and Objectives
Applications
Panel Selection and Indoctrination
Types of Judges
Eligibility
Indoctrination
Panel Morale
Conditions of Testing
Techniques of Sensory Testing
Sample Handling
Sample Carriers
Sample Presentation.
Sample Coding
Testing Methods
Analysis and Reporting of Test Results.
Directional Triangle Tests
Paired Difference Testing
Paired Intensity Testing
16. Quality Control
Natural Plant Materials
General tests
Tests of limited application
Additional specific tests
Essential Oils
General tests
Tests of limited application
Instrumental tests
Specifi tests for constituents
Tests specific for citrus oils
Oleoresins
General tests
Specific tests
Plated or Dispersed Spices
General tests
Tests of limited application
Synthetic Chemicals

General tests-liquids
General tests-solids
Specific tests for chemical identity and purity-Instrumental methods
Flavourings
General tests-liquid flavourings
General tests-emulsions
General tests-encapsulated dry flavourings
Vanilla Extract
Fruit-Based Products
General tests
Special tests
Specific Gravity
Refractive Index
Optical Rotation
Alcohol Content
Residual Solvent
Particle Size of Emulsions
Volatile Oil
Surface Oil
Moisture Content
Gas Chromatography
Microbiological Analysis

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 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.

Our Detailed Project report aims at providing all the critical data required by any entrepreneur vying to venture into Project. While expanding a current business or while venturing into new

business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.

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

Mon, 13 Jan 2025 07:13:09 +0000