

## ***Handbook Of Functional Beverages And Human Health***

**Milk-Based Beverages, Volume 9 in The Science of Beverages series, presents current status, developments, and technologies for researchers and developers to meet consumer demand and understand consumer trends toward healthy drinks. This resource takes a multidisciplinary approach to address issues in safety and quality control, while also discussing the nutritional and functional information that professionals in the beverage industry need. The book presents a framework for researchers, product developers, engineers, and regulators in the beverages industry for understanding new research developments in milk-based products to meet industry needs in producing competitive products. Covers the most recent advances in various milk-based products Includes a solid review of safety and hygiene for the development of new products Presents engineering techniques and applications using novel technologies**

**Nutrients in Beverages, Volume Twelve, in the Science of Beverages series, introduces the role of nutrients in beverages and provides details into the biological effects of beverage ingredients by presenting their nutritional properties and**

**characterization. This scientific reference covers both the current state-of-the-art and future trends in the beverage industry, and is designed as a comprehensive guide to this area of research. Detailed research information is presented to not only help researchers and students understand the nature of the challenges associated with incorporating nutrients, but to also help strengthen the knowledge transfer between research institutions and industry. Includes information on the health impact of various nutrients Discusses nutrients in beverages as a potential delivery system for nutraceuticals Presents research example detection techniques to assist in identifying nutrient types and functionalities**

**Sports and Energy Drinks, Volume 10 in The Science of Beverages series, is the first single-volume resource to focus on the science behind these beverages-for-purpose products. As consumers seek ways to effectively replenish key nutrients after strenuous activity—while also balancing calories and vitamin intake—sports and energy drinks is one of the fastest growing markets in the industry. From protein to fruit, athlete to adolescent consumption, this book explores the key issues and challenges in developing products that meet consumer demand in a safe-and-effective manner. This series takes a multidisciplinary approach to help research and development professionals understand the scientific complexities of these unique beverages. As demand for sports and energy drinks is growing and with a**

**more competitive market, this timely and useful resource will equip industry professionals with the tools they need to create new and innovative health-promoting products. Presents new findings on the health effects of sports and energy drinks Provides research analysis of existing products to promote new product innovation Includes information on trace minerals to promote safety and quality**

**The purpose of this Handbook is to bring together all the available information on the nutritional requirements of animal organisms for specific processes and functions. This is believed to be the first systematic treatment of nutrition in a functional context. Apart from furnishing specific nutritional data, this Handbook provides a useful framework for a comparative physiologist or biochemist searching for commonality or idfferences among various biological systems.**

**Volume 14: The Science of Beverages**

**Health Benefits of Fermented Foods and Beverages**

**Volume 1. The Science of Beverages**

**Handbook of Dietary Fiber**

**Handbook of Nutraceuticals and Functional Foods,Second Edition**

**Production and Management of Beverages**

*\* Covers the manufacturing and processing of foods in: Bakery, Beverages,*

*Cereals, Cheese, Confectionary, Fats, Fruits, and Functional Foods* \* Includes coverage of manufacturing principles \* Presents details of commercial processing for each commodity including (where appropriate) a general introduction, ingredients, technologies, types and evaluation of industrial products, special problems, types and evaluation of consumer products, and processing and product trends \* Includes truly international coverage with editors and contributors from all over the world.

*Health Benefits of Fermented Foods and Beverages* discusses the functionality and myriad health benefits of fermented foods and beverages of the world. It examines health-promoting and therapeutic properties, covering the molecular process of fermentation and the resulting benefit to nutritional value and long-term health. Exploring a range of ferme  
Over the past decade, new applications of genetic engineering in the fermentation of food products have received a great deal of coverage in scientific literature. While many books focus solely on recent developments, this reference book highlights these developments and provides detailed background and manufacturing information. Co-Edited by Fidel

*Biotechnological Progress and Beverage Consumption, Volume 19 in the Science of Beverages series*, presents a scientific resource that discusses current and emerging advancements in technologies and novel applications

*to help researchers understand and apply the latest techniques to improve beverages. This reliable reference explores how beverages have been improved through biotechnology and provides technical information to improve professional development in a competitive market. Topics include a broad range of trends where some of the most advancements have been made, including improvements in bioactive concentration, probiotics, green technologies in fermentation, and in clarification processes. Provides technical aspects of bioprocesses for a deeper understanding of product creation Presents modeling and simulation examples for quality control and safety of fermented beverages Includes research methods and analysis to improve product development including texture and flavor*

*Biotechnological Progress and Beverage Consumption*

*Functional and Speciality Beverage Technology*

*Natural Beverages*

*Fermented Beverages*

*Handbook of Food Chemistry*

*Healthy Helen's Handbook of Funky and Functional Foodstuffs*

**Scientific advances in this field have not only given us a better understanding of what is an optimal diet, but has allowed food and nutraceutical companies to market products with specific health claims,**

**fortify existing foods, and even create new foods designed for a particular health benefit. Handbook of Nutraceuticals and Functional Foods, Second Edition, compiles the latest data from authoritative, scientific sources. It provides hard evidence on the prophylactic and medicinal properties of many natural foods. This handbook reviews more than 200 nutraceutical compounds. Each chapter includes the chemical properties, biochemical activity, dietary sources, and evidentiary findings for each compound. New topics include the use of exopolysaccharides from lactic acid bacteria, protein as a functional ingredient for weight loss, and nutraceuticals to be used in the adjunctive treatment of depression. Two new chapters discuss recent evidence on oxidative stress and the antioxidant requirements of athletes as well as the use of nutraceuticals for inflammation. The scientific investigation of nutrition and lifestyle changes on the pain and debilitation of osteoarthritis is the subject of another new article. The book concludes with a look at future marketing opportunities paying particular attention to the alleviation of obesity. With contributions from a panel of leading international experts, Handbook of Nutraceuticals and Functional Foods, Second Edition, provides instant access to comprehensive, cutting edge data, making it possible for food scientists, nutritionists, and researchers**

**to utilize this ever growing wealth of information.**

**Fermented Beverages, Volume Five, the latest release in The Science of Beverages series, examines emerging trends and applications of different fermented beverages, including alcoholic and non-alcoholic drinks. The book discusses processing techniques and microbiological methods for each classification, their potential health benefits, and overall functional properties. The book provides an excellent resource to broaden the reader's understanding of different fermented beverages. It is ideal for research and development professionals who are working in the area of new products. Presents research examples to help solve problems and optimize production Provides recent technologies used for quality analysis Includes industry formulations for different beverages to increase productivity and innovation Includes common industry formulations to foster the creation of new products**

**Advances in food science, technology, and engineering are occurring at such a rapid rate that obtaining current, detailed information is challenging at best. While almost everyone engaged in these disciplines has accumulated a vast variety of data over time, an organized, comprehensive resource containing this data would be invaluable to have. The**

**Handbook of Functional Beverages and Human Health provides potential applications and new developments in functional beverages, nutraceuticals, and health foods. In addition to serving as a reference manual, it summarizes the current state of knowledge in key research areas and contains novel ideas for future research and development.**

**Additionally,**

**Case Studies on the Business of Nutraceuticals, Functional and Super Foods**

**Sports and Energy Drinks**

**Principles, Bakery, Beverages, Cereals, Cheese, Confectionary, Fats, Fruits, and Functional Foods**

**Handbook of Functional Beverages and Human Health**

**Functional Foods and Nutraceuticals for Human Health**

**Handbook of Food Products Manufacturing**

Handbook of Nutraceuticals and Functional Foods, Second Edition is a thorough revision of an extremely successful professional handbook that is also used in advances and graduate courses. This book offers a snapshot of the most current topics in this important field of nutraceuticals and functional foods. It is an ideal all-in-one reference

for food scientists, academic professors, nutritional scientists and pharmaceutical scientists. For this new edition, seven brand new chapters have been added: Vitamin E; Nutritional Supplements and Inflammation; Whey Protein; Personalized Nutrition; Fruits; Beverages; and Cereals. Other chapters have been cut and remaining chapters have been updated and revised.

Handbook of Functional Beverages and Human Health CRC Press  
With contributions from a panel of leading international experts, the Handbook of Nutraceuticals and Functional Foods, Second Edition, provides a collection of the most current topics in nutraceuticals and functional foods. This edition features new and revised chapters, including the topics of vitamin E, nutritional supplements and inflammation, whey protein, cereals, beverages, and fruits.

This book focuses on advanced research and technologies in dairy processing, one of the most important branches of the food industry. It addresses various topics, ranging from the basics of dairy technology to the opportunities and challenges in the industry. Following an introduction to dairy processing, the book takes readers through various aspects of dairy engineering, such as dairy-based

peptides, novel milk products and bio-fortification. It also describes the essential role of microorganisms in the industry and ways to detect them, as well as the use of prebiotics, and food safety. Lastly, the book examines the challenges faced, especially in terms of maintaining quality across the supply chain. Covering all significant areas of dairy science and processing, this interesting and informative book is a valuable resource for post-graduate students, research scholars and industry experts.

Handbook of Nutritional Requirements in a Functional Context

Handbook of Alcoholic Beverages

Nutrients in Beverages

Volume 12: The Science of Beverages

Volume II, Hematopoiesis, Metabolic Function, and Resistance to Physical Stress

Handbook of Food Proteins

*Functional and Medicinal Beverages, Volume Eleven, in the Science of Beverages series, discusses one of the fastest growing sectors in the food industry. As the need for research and development increases based on consumer demand, the information in this volume is essential. This reference includes the latest research*

*trends, nutritive and medicinal ingredients, and analytical techniques to identify health beneficial elements. The contents of the book will bring readers up-to-date on the field, thus making it useful for researchers and graduate students in various fields across the food sciences and technology. Highlights new concepts, innovative technologies and current concerns in the functional beverages field Covers detailed information on the engineering and processing of novel ingredients for health benefits Includes common and alternative ingredients for juices, vegetable blends, milk-based drinks, and probiotic and prebiotic based alternative beverages*

*Polyphenol phytoestrogens - bioactives found in specific foods and beverages - impart antioxidant, phytoestrogenic, antiproliferative, and enzyme modulating activities within the human metabolic system. It is believed that these compounds protect against several forms of cancer, cardiovascular and neurodegenerative diseases, osteoporosis, and menop*

*Natural Beverages, Volume Thirteen, in the Science of Beverages series, takes a multidisciplinary approach to address the shifting beverage landscape towards the global trend of natural beverages. As global beverage consumption has progressed towards healthier and 'natural' ingredients, researchers and scientists need to understand the latest scientific developments and the proposed health*

*benefits and improved effects. Classical examples are presented as a basis for innovation expansion to help new researchers understand this segment of the industry. This is a great resource for researchers and scientists in the beverages industry. Describes natural beverage production and its impact on nutritional value Provides overall coverage of hot topics and scientific principles in the beverage industry Explores the pros and cons of natural vs. artificial beverages in product development Covers the production of all commonly consumed 'natural' beverages*

*The Handbook of Food Products Manufacturing is a definitive master reference, providing an overview of food manufacturing in general, and then covering the processing and manufacturing of more than 100 of the most common food products. With editors and contributors from 24 countries in North America, Europe, and Asia, this guide provides international expertise and a truly global perspective on food manufacturing.*

*Milk-Based Beverages*

*Value-Added Ingredients and Enrichments of Beverages*

*Food Processing for Increased Quality and Consumption*

*Dairy Processing: Advanced Research to Applications*

*Handbook of Nutraceuticals and Functional Foods, Third Edition*

## Bookmark File PDF Handbook Of Functional Beverages And Human Health

Packed with case studies and problem calculations, Handbook of Food Processing: Food Safety, Quality, and Manufacturing Processes presents the information necessary to design food processing operations and describes the equipment needed to carry them out in detail. It covers the most common and new food manufacturing processes while addressing rele

Handbook on Natural Pigments: Industrial Applications for Improving Food Colour is unique in its approach to the improvement of food colors. The book is written with industrial applications in mind, with each chapter focusing on a color solution for a specific commodity that will provide food scientists with a one-stop, comprehensive reference on how to improve the color of a particular food product. The first section of the book looks at the legal frameworks which underpin natural food colorings, also investigating the consumer expectations of food color. The second section of the book focuses on specific industrial applications of natural colorants with chapters covering the use of natural colorants in aqueous food products, cereal-based foods, and meat products, amongst many other topics. The various pigments which can be used to effectively color these commodities are presented with information on safety and testing included throughout. The final section in the book looks at recent developments and future perspectives in natural food colorings. There are chapters which cover the health benefits of natural pigments, the use of novel fruits and vegetables in pigments, and stable natural solutions for blue colorings. Presents recent advances in consumer demand and worldwide legislation regarding natural food colorants Discusses the use of natural food colorants for one specific product category per chapter rather than one pigment class per chapter – this makes the book extremely useable for industrialists working in a specific sector Contains a comprehensive array of product-specific coloration approaches, from using pigment-enriched feed additives to the direct addition of color formulations

If you're anything like Healthy Helen, you've probably been wondering: \* What exactly is

# Bookmark File PDF Handbook Of Functional Beverages And Human Health

KOMBUCHA and what is it doing in my kitchen? \* How can SEAWEED improve my life? \* Where have all the B VITAMINS gone? Answers to these and other culinary queries lie within! But don't panic - this is NOT a cookbook! It's a fun, feel-good field guide for foodies, chock full of fascinating facts about vegetarian and vegan vittles that are funky (unusual), functional (unusually nutritious), or both! Beneficial beverages, friendly fruits and veggies, great grains, helpful herbs, mighty mushrooms, special spices, superfoods... From Acai to Yerba Mate, these the most incredible edibles on Earth! PLUS! Interesting info on antioxidants, alternative sweeteners, fatty acids, disease-fighting foods, protein, and MORE!

A comprehensive two- volume set that describes the science and technology involved in the production and analysis of alcoholic beverages. At the heart of all alcoholic beverages is the process of fermentation, particularly alcoholic fermentation, whereby sugars are converted to ethanol and many other minor products. The Handbook of Alcoholic Beverages tracks the major fermentation process, and the major chemical, physical and technical processes that accompany the production of the world's most familiar alcoholic drinks. Indigenous beverages and small-scale production are also covered to a significant extent. The overall approach is multidisciplinary, reflecting the true nature of the subject. Thus, aspects of biochemistry, biology (including microbiology), chemistry, health science, nutrition, physics and technology are all necessarily involved, but the emphasis is on chemistry in many areas of the book. Emphasis is also on more recent developments and innovations, but there is sufficient background for less experienced readers. The approach is unified, in that although different beverages are dealt with in different chapters, there is extensive cross-referencing and comparison between the subjects of each chapter. Divided into five parts, this comprehensive two-volume work presents: INTRODUCTION, BACKGROUND AND HISTORY: A simple introduction to the history and

development of alcohol and some recent trends and developments, **FERMENTED BEVERAGES: BEERS, CIDERS, WINES AND RELATED DRINKS:** the latest innovations and aspects of the different fermentation processes used in beer, wine, cider, liquor wines, fruit wines, low-alcohol and related beverages. **SPIRITS:** cover distillation methods and stills used in the production of whisky, cereal- and cane-based spirits, brandy, fruit spirits and liquors **ANALYTICAL METHODS:** covering the monitoring of processes in the production of alcoholic beverages, as well as sample preparation, chromatographic, spectroscopic, electrochemical, physical, sensory and organoleptic methods of analysis. **NUTRITION AND HEALTH ASPECTS RELATING TO ALCOHOLIC BEVERAGES:** includes a discussion on nutritional aspects, both macro- and micro-nutrients, of alcoholic beverages, their ingestion, absorption and catabolism, the health consequences of alcohol, and details of the additives and residues within the various beverages and their raw materials.

Handbook of Nutraceuticals and Functional Foods, Second Edition

Handbook of Food Processing

Occupational Outlook Handbook

Volume 9: The Science of Beverages

Volume 5. The Science of Beverages

Ingredients, Formulations, and Applications

Traditionally a source of nutrition, proteins are also added to foods for their ability to form gels and stabilise emulsions, among other properties. The range of specialised protein ingredients used in foods is increasing. Handbook of food proteins provides an authoritative overview of the characteristics, functionalities

and applications of different proteins of importance to the food industry in one convenient volume. The introductory chapter provides an overview of proteins and their uses in foods. The following chapters each focus on a particular protein ingredient or group of ingredients covering their origins, production, properties and applications. The proteins discussed are caseins, whey proteins, gelatin and other meat-derived protein ingredients, seafood proteins, egg proteins, soy proteins, pea and other legume proteins, mycoprotein, wheat gluten, canola and other oilseed proteins, algal proteins and potato protein. A chapter on texturised vegetable proteins completes the volume. Innovative products and potential methods for improving nutrition and diet using these proteins are described. With its distinguished editors and international team of expert contributors Handbook of food proteins is an invaluable reference tool for professionals using food protein ingredients for both food and other applications. An authoritative overview of the characteristics, functionalities and applications of different proteins of importance to the food industry Chapters each focus on a particular protein ingredient or group of ingredients Innovative products and potential methods for improving nutrition and diet using proteins is also described

This handbook is intended to be a comprehensive reference for the various chemical aspects of foods and food products. Apart from the traditional knowledge,

this book covers the most recent research and development of food chemistry in the areas of functional foods and nutraceuticals, organic and genetically modified foods, nonthermal food processing as well as nanotechnology. This handbook contains both the basic and advanced chemistry both for food research and its practical applications in various food related industries and businesses. This book is appropriate for undergraduates and postgraduates in the academics and professionals from the various disciplines and industries who are interested in applying knowledge of food chemistry in their respective fields.

As soon as Dr. Stephen DeFelice coined the phrase nutraceutical, product and supplement developers swung into action. Yet among the numerous books available on nutraceuticals, there is none that systematically lists, categorizes, and analyzes nutraceutical extracts and formulations in a pharmacopoeia-like manner. Handbook of Nutraceuticals, Volume 1: Ingredients, Formulations, and Applications lists information on many ingredients used in nutraceuticals, developing their formulations and applications. The book includes contributions from experts with pharmaceutical backgrounds, providing an examination of nutraceuticals from a pharmaceutical perspective. Building a foundation with coverage of historical background, definitions, and challenges, the book offers insight into nutraceutical ingredients from plant, animal, and mineral origin. It then covers the

characterization of nutraceuticals' physicochemical, analytical, pharmacological, and pharmacokinetic classification, followed by information on regulatory requirements. The book highlights applications in cardiovascular disease, bone and joint treatments, diabetes management, weight management, skin health, probiotics and prebiotics, tranquilizing medicinal plants, dietary foods, and more. Interest in new diet regimens and new products for increased health and longevity will continue to grow, giving dietary supplements an increasing amount of cupboard space in most households. With quality of content unsurpassed by many resources, the book discusses the characterization processes for nutraceuticals based on the contributors' experience in pharmaceuticals. It then explores how those proven techniques may be applied to the development and manufacture of nutraceutical products.

A volume in the Consumer Science and Strategic Marketing Series, *Case Studies on the Business of Nutraceuticals* considers nutraceuticals from a strategic marketing perspective, exploring consumer needs and trends as a pathway to defining novel opportunities in developing and marketing these products. In addition to highlighting the importance of consumer needs in shaping a market strategy for nutraceuticals, this book also defines emerging trends and explores recent developments in the nutraceutical industry. Containing 11 chapters, this book,

explores the competitive landscape of the global and European nutraceutical market, focusing on key market drivers, consumer and product trends, and marketing and technological challenges. Case Studies on the Business of Nutraceuticals outlines the processes that lead to the introduction of new products and the entrance of new competitors in the market and highlights how a market strategy that's focused on consumers' needs can contribute to a company's strategy. The case studies and examples contained in this book demonstrate how companies can employ consumer science strategies to revise existing or develop new products and are sure to be a welcomed resource by new product developers, policy makers, food scientists, academicians, and students studying related fields. Explores the importance of understanding consumers when defining a market strategy Highlights the importance of adopting a sustainable orientation in the nutraceutical industry Addresses the competitive dynamics that are currently affecting the nutraceutical industry

Industrial Applications for Improving Food Color

Technical, Analytical and Nutritional Aspects

Handbook of Food Products Manufacturing, 2 Volume Set

Handbook of Nutraceuticals Volume I

Handbook of Food Science, Technology, and Engineering - 4 Volume Set

## Volume 19: The Science of Beverages

*This handbook compiles information on novel ingredients and functional food products from leading authors in their respective areas of expertise. It provides an evidence-based and authoritative review of the prophylactic properties exerted by food components, foods, and dietary patterns. It includes information on the chemical properties, dietary sources, intakes, efficacy, health effects, and safety of each bioactive compound, functional food, or nutraceutical. This edition contains many new topics, including inflammation relief, exercised-induced immunity, Alzheimer's disease, and dementia.*

*Food Processing for Increased Quality and Consumption, Volume 18 in the Handbook of Food Bioengineering series, offers an updated perspective on the novel technologies utilized in food processing. This resource highlights their impact on health, industry and food bioengineering, also emphasizing the newest aspects of investigated technologies and specific food products through recently developed processing methods. As processed foods are more frequently consumed, there is increased demand to produce foods that attract people based on individual preferences, such as taste, texture or nutritional value. This book provides advantageous tools that improve food quality, preservation and aesthetics. Examines different frying techniques, dielectric defrosting, high pressure processing, and more Provides techniques to improve the quality and sensory aspects of foods Includes processing techniques for meat, fish, fruit, alcohol, yogurt and whey Outlines techniques for fresh, cured and frozen foods Presents processing methods to improve the nutritional value of foods*

*Presents the latest research on the analysis, metabolism, function, and physicochemical properties of fiber, fiber concentrates, and bioactive isolates--exploring the effect of fiber on chronic disease, cardiovascular health, cancer, and diabetes. Examines food applications and the efficacy and safety of psyllium, sugar beet fiber, pectin, alginate, gum arabic, and rice bran. Did you know? It's estimated that fermentation practices have been around since as early as 6000 BC, when wine was first being made in Caucasus and Mesopotamia. Today, there are roughly 5000 varieties of fermented foods and beverages prepared and consumed worldwide, which accounts for between five and forty percent of daily meals. Fermented Foods a Fermented Foods and Beverages of the World*

*Advancements in Natural Wellness and Disease Prevention*

*Volume 10: The Science of Beverages*

*Handbook of Nutraceuticals and Functional Foods*

*Volume 13: The Science of Beverages*

*Functional and Medicinal Beverages*

Oxidative rancidity is a major cause of food quality deterioration, leading to the formation of undesirable off-flavours as well as unhealthy compounds. Antioxidants are widely employed to inhibit oxidation, and with current consumer concerns about synthetic additives and natural antioxidants are of much interest. The two volumes of Oxidation in foods and beverages and antioxidant applications review food quality deterioration due to oxidation and methods for its control. The second volume reviews problems associated with oxidation and its management in different industry sectors. Part one focuses on animal products, with chapters on the

oxidation and protection of red meat, poultry, fish and dairy products. The oxidation of fish oils and foods enriched with omega-3 polyunsaturated fatty acids is also covered. Part two reviews oxidation in plant-based foods and beverages, including edible oils, fruit and vegetables, beer and wine. Oxidation of fried products and emulsion-based foods is also discussed. Final chapters examine encapsulation to inhibit lipid oxidation and antioxidant active packaging and edible films. With its distinguished international team of editors and contributors, the two volumes of Oxidation in foods and beverages and antioxidant applications is standard references for R&D and QA professionals in the food industry, as well as academic researchers interested in food quality. Reviews problems associated with oxidation and its management in different industry sectors Examines animal products, with chapters on the oxidation and protection of red meat, poultry and fish Discusses oxidation of fish oils and foods enriched with omega-3 and polyunsaturated fatty acids

Production and Management of Beverages, Volume One in the Science of Beverages series, introduces the broad world of beverage science, providing an overview of the emerging trends in the industry and the potential solutions to challenges such as sustainability and waste. Fundamental information on production and processing technologies, safety, quality control, and nutrition are covered for a wide range of beverage types, including both alcoholic and nonalcoholic beverages, fermented beverages, cocoa and other powder based beverages and more. This is an essential resource for food scientists, technologists, chemists, engineers, microbiologists and students entering into this field. • Describes different approaches to waste management and eco-innovative solutions for the wine and beer industry • Offers information on ingredient traceability to ensure food safety and quality • Provides overall coverage of hot

topics and scientific principles in the production and management of beverages for sustainable industry

As consumer demand for traditional carbonated drinks falls, the market for beverages with perceived health-promoting properties is growing rapidly. Formulating a nutritional, nutraceutical or functional beverage with satisfactory sensory quality and shelf-life can be challenging. This important collection reviews the key ingredients, formulation technology and health effects of the major types of functional and speciality beverage. Chapters in part one consider essential ingredients such as stabilizers and sweeteners, and significant aspects of formulation such as fortification technology and methods to extend shelf-life. Dairy-based beverages are the focus of Part two, with chapters covering methods to improve the nutritional and sensory quality and technological functionality of milk, a crucial ingredient in many healthful beverages. Chapters on newer dairy ingredients, such as whey and milk-fat globule membrane complete the section. Part three then reviews advances in the significant plant-based beverage sector, with chapters on popular products such as fruit juices, sports drinks, tea and coffee. Soy proteins are also covered. Chapters on product development and the role of beverages in the diet complete the volume. With its distinguished editor and contributors, Functional and speciality beverage technology is an essential collection for professionals and academics interested in this product sector. Reviews the key ingredients, formulation technology and health effects of the major types of functional and speciality beverages Essential ingredients such as stabilizers and sweeteners, and significant aspects of formulation such as fortification technology and methods to extend shelf-life are considered Focuses on methods to improve the nutritional and sensory quality and technological functionality of milk

Handbook of Indigenous Foods Involving Alkaline Fermentation details the basic approaches of alkaline fermentation, provides a brief history, and offers an overview of the subject. Devoted exclusively to alkaline-fermented foods (AFFs), this text includes contributions from experts from around the globe. It discusses the diversity of indigenous fermented foods involving an alkaline reaction, as well as the taxonomy, ecology, physiology, and genetics of predominant microorganisms occurring in AFFs. Presented in nine chapters, the book explains how microorganisms or enzymes transform raw ingredients into AFFs. It discusses the safety aspects of AFFs, and considers the challenges associated with the technological aspects in modernizing AFFs. It stresses the significance of the microbiological and biochemical processes in the fermentations, as well as the factors that influence the development of the characteristic microbiota, and the biochemical and organoleptic changes induced by them. It also proposes solutions, discusses the value of AFFs and related dominant microorganisms, and assesses the future of AFFs. The authors highlight commonly known foods and beverages of plant and animal origin. They provide insight into the manufacture, chemical and microbiological composition, processing, and compositional and functional modifications taking place as a result of microbial and enzyme effects. The text examines safety, legislation, traditional and industrialized processes, as well as new product development, and opportunities for developing commodities from Africa, Asia, Europe, Latin America, and the Middle East. In addition, it also assesses the value of food processing by-products, biotechnology, and engineering of solid-state processes, modern chemical and biological analytical approaches to safety, and health and consumer perception. Focuses on how fermentation of food remains an important aspect of food processing Describes how

fermentation of food contributes to its preservation Details how fermented food gets its flavor from microbial and enzymatic modifications of food components such as sugars, fats, and proteins Handbook of Indigenous Foods Involving Alkaline Fermentation offers insight into the microbiology and chemistry of the fermentation processes. This book serves graduate students and researchers of food science and technology, nutrition and dietetics, food microbiology, and related areas.

Management in Different Industry Sectors

Nutritional Composition and Antioxidant Properties of Fruits and Vegetables

Volume 11: The Science of Beverages

Oxidation in Foods and Beverages and Antioxidant Applications

Handbook of Indigenous Foods Involving Alkaline Fermentation

Handbook on Natural Pigments in Food and Beverages

Value-Added Ingredients and Enrichment of Beverages, Volume Fourteen in The Science of Beverages series, takes a multidisciplinary approach in addressing what consumers demand in natural beverages. This in-depth reference covers both natural and unnatural ingredients and explains their impact on consumer health and nutrition. Sweeteners, vitamins, oils and other natural ingredients to improve beverages are included. The book addresses some of the most common enrichments used in the industry, including those with biomedical and nutritional applications. This volume will be useful to anyone in the beverages industry who needs a better understanding of advances in the industry.

Discusses health-related benefits and risks, along with the potential harmful effects of additives and preservatives Provides research examples of health promoting ingredients in beverages to further research and development Presents key steps in designing formulations of enriched beverages, analysis, product development, shelf life, cost-benefit ratio and compliance with WHO regulations

Nutritional Composition and Antioxidant Properties of Fruits and Vegetables provides an overview of the nutritional and anti-nutritional composition, antioxidant potential, and health benefits of a wide range of commonly consumed fruits and vegetables. The book presents a comprehensive overview on a variety of topics, including inflorescence, flowers and flower buds (broccoli, cauliflower, cabbage), bulb, stem and stalk (onion, celery, asparagus, celery), leaves (watercress, lettuce, spinach), fruit and seed (peppers, squash, tomato, eggplant, green beans), roots and tubers (red beet, carrots, radish), and fruits, such as citrus (orange, lemon, grapefruit), berries (blackberry, strawberry, lingonberry, bayberry, blueberry), melons (pumpkin, watermelon), and more. Each chapter, contributed by an international expert in the field, also discusses the factors influencing antioxidant content, such as genotype, environmental variation and agronomic conditions. Contains detailed information on nutritional and anti-nutritional composition for commonly consumed fruits and vegetables Presents recent epidemiological information on the health benefits of fresh produce Provides in-depth

information about the antioxidant properties of a range of fruits and vegetables. This new volume provides important information on potential applications and new developments in functional health foods and nutraceuticals. It looks at the health-promoting properties in functional foods and beverages as well as nutraceuticals. Some health issues that are considered in conjunction with these foods and nutraceuticals include oxidative stress, obesity, pharyngitis, low cognitive concentration, among others. Research topics include the antioxidant properties of certain products, the development of functional and medicinal beverages, nutraceuticals and functional foods for alternative therapies, and more.

Phytoestrogens In Functional Foods

Handbook of Food and Beverage Fermentation Technology

Food Safety, Quality, and Manufacturing Processes