

Outlines Of Dairy Technology By Sukumar Dey

Outlines of Meat Science and Technology Dairy Processing and Quality Assurance Dairy Processing Handbook Setting up sustainable dairy business hubs: A resource book for facilitators Fundamentals Of Food Engineering Microbial Decontamination in the Food Industry Dairy Technology Rural Dairy Technology Yogurt in Health and Disease Prevention Human Milk Outlines of Dairy Technology Case Studies in Food Product Development Food Processing for Increased Quality and Consumption Microbial Cultures and Enzymes in Dairy Technology Human Milk Biochemistry and Infant Formula Manufacturing Technology Food Authenticity and Traceability Biofilms in the Dairy Industry Building Enterprise IoT Applications Hand Book Of Dairy Farming Tamime and Robinson's Yoghurt Food Processing Technology Reducing Salt in Foods Microbiology in Dairy Processing Dairy Technology Hand Book of Mushroom Cultivation, Processing and Packaging Milk Processing and Quality Management Modern Technology Of Milk Processing & Dairy Products (4th Edition) The Australian Journal of Dairy Technology Objective Food Science & Technology, 3rd Ed. Smallholder Dairying in the Tropics Microstructure of Dairy Products Handbook On Analysis Of Milk: Chemical And Microbiological Analysis Of Liquid Milk Textbook Library Edition Functional Dairy Products Report of the FAO E-mail Conference on Small-scale Milk Collection and Processing in Developing Countries Sustainable Agriculture Dairy Ingredients for Food Processing Dairy Technology Characterization of Food Dairy Processing Advances in Dairy Products

Outlines of Meat Science and Technology

Dairy Processing and Quality Assurance

Dairy Processing and Quality Assurance, Second Edition describes the processing and manufacturing stages of market milk and major dairy products, from the receipt of raw materials to the packaging of the products, including the quality assurance aspects. The book begins with an overview of the dairy industry, dairy production and consumption trends. Next are discussions related to chemical, physical and functional properties of milk; microbiological considerations involved in milk processing; regulatory compliance; transportation to processing plants; and the ingredients used in manufacture of dairy products. The main section of the book is dedicated to processing and production of fluid milk products; cultured milk including yogurt; butter and spreads; cheese; evaporated and condensed milk; dry milks; whey and whey products; ice cream and frozen desserts; chilled dairy desserts; nutrition and health; sensory evaluation; new product development strategies; packaging systems; non-thermal preservation technologies; safety and quality management systems; and dairy laboratory analytical techniques. This fully revised and updated edition highlights the developments which have taken place

in the dairy industry since 2008. The book notably includes: New regulatory developments The latest market trends New processing developments, particularly with regard to yogurt and cheese products Functional aspects of probiotics, prebiotics and synbiotics A new chapter on the sensory evaluation of dairy products Intended for professionals in the dairy industry, Dairy Processing and Quality Assurance, Second Edition, will also appeal to researchers, educators and students of dairy science for its contemporary information and experience-based applications.

Dairy Processing Handbook

Setting up sustainable dairy business hubs: A resource book for facilitators

Previous editions of Yoghurt: Science and Technology established the text as an essential reference underpinning the production of yoghurt of consistently high quality. The book has been completely revised and updated to produce this third edition, which combines coverage of recent developments in scientific understanding with information about established methods of best practice to achieve a comprehensive treatment of the subject. General acceptance of a more liberal definition by the dairy industry of the term yoghurt has also warranted coverage in the new edition of a larger variety of gelled or viscous fermented milk products, containing a wider range of cultures. Developments in the scientific aspects of yoghurt covered in this new edition include polysaccharide production by starter culture bacteria and its effects on gel structure, acid gel formation and advances in the analysis of yoghurt in terms of its chemistry, rheology and microbiology. Significant advances in technology are also outlined, for example automation and mechanisation. There has also been progress in understanding the nutritional profile of yoghurt and details of clinical trials involving yoghurts are described. This book is a unique and essential reference to students, researchers and manufacturers in the dairy industry. Includes developments in the understanding of the biochemical changes involved in yoghurt production Outlines significant technological advances in mechanisation and automation Discusses the nutritional value of yoghurt

Fundamentals Of Food Engineering

Microbial Decontamination in the Food Industry

Processing of milk into various dairy foods, i.e. Dairy Technology is underpinned by disciplines such as chemistry and biochemistry, microbiology and process engineering. Strong emphasis on public health aspects and product quality demands that proper attention be given to the points in the production and processing chain where both pathogenic and

spoilage microorganisms can be controlled effectively. Keeping above points in view, a very comprehensive book has been written encompassing entire gamuts of chemical, physical and microbiological characteristics of milk, processing and preservation of milk. The main objective of the book is to provide the latest information in a consolidated form at one point to meet the requirements of not only undergraduate and postgraduates students but also teachers and dairy professionals.

Dairy Technology

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

Rural Dairy Technology

Advances in Dairy Product Science & Technology offers a comprehensive review of the most innovative scientific knowledge in the dairy food sector. Edited and authored by noted experts from academic and industry backgrounds, this book shows how the knowledge from strategic and applied research can be utilized by the commercial innovation of dairy product manufacture and distribution. Topics explored include recent advances in the dairy sector, such as raw materials and milk processing, environmental impact, economic concerns and consumer acceptance. The book includes various emerging technologies applied to milk and starter cultures sources, strategic options for their use, their characterization, requirements, starter growth and delivery and other ingredients used in the dairy industry. The text also outlines a framework on consumer behavior that can help to determine quality perception of food products and decision-making. Consumer insight techniques can help support the identification of market opportunities and represent a useful mean to test product prototypes before final launch. This comprehensive resource: Assesses the most innovative scientific knowledge in the dairy food sector Reviews the latest technological developments relevant for dairy companies Covers new advances across a range of topics including raw material processing, starter cultures for fermented products, processing and packaging Examines consumer research innovations in the dairy industry Written for dairy scientists, other dairy industry professionals, government agencies, educators and students, Advances in Dairy Product Science & Technology

includes vital information on the most up-to-date and scientifically sound research in the field.

Yogurt in Health and Disease Prevention

Human Milk

Widely regarded as a standard work in its field, this book introduces the range of processing techniques that are used in food manufacturing. It explains the principles of each process, the processing equipment used, operating conditions and the effects of processing on micro-organisms that contaminate foods, the biochemical properties of foods and their sensory and nutritional qualities. The book begins with an overview of important basic concepts. It describes unit operations that take place at ambient temperature or involve minimum heating of foods. Subsequent chapters examine operations that heat foods to preserve them or alter their eating quality, and explore operations that remove heat from foods to extend their shelf life with minimal changes in nutritional quality or sensory characteristics. Finally, the book reviews post-processing operations, including packaging and distribution logistics. The third edition has been substantially rewritten, updated and extended to include the many developments in food technology that have taken place since the second edition was published in 2000. Nearly all unit operations have undergone significant developments, and these are reflected in the large amount of additional material in each chapter. In particular, advances in microprocessor control of equipment, 'minimal' processing technologies, genetic modification of foods, functional foods, developments in 'active' or 'intelligent' packaging, and storage and distribution logistics are described. Developments in technologies that relate to cost savings, environmental improvement or enhanced product quality are highlighted. Additionally, sections in each chapter on the impact of processing on food-borne micro-organisms are included for the first time.

Outlines of Dairy Technology

McKinsey Global Institute predicts Internet of Things (IoT) could generate up to \$11.1 trillion a year in economic value by 2025. Gartner Research Company expects 20 billion inter-connected devices by 2020 and, as per Gartner, the IoT will have a significant impact on the economy by transforming many enterprises into digital businesses and facilitating new business models, improving efficiency and increasing employee and customer engagement. It's clear from above and our research that the IoT is a game changer and will have huge positive impact in foreseeable future. In order to harvest the benefits of IoT revolution, the traditional software development paradigms must be fully upgraded. The mission of our book, is to prepare current and future software engineering teams with the skills and tools to fully utilize IoT capabilities. The book introduces essential IoT concepts from the perspectives of full-scale software development with the emphasis on creating

niche blue ocean products. It also: Outlines a fundamental full stack architecture for IoT Describes various development technologies in each IoT layer Explains IoT solution development from Product management perspective Extensively covers security and applicable threat models as part of IoT stack The book provides details of several IoT reference architectures with emphasis on data integration, edge analytics, cluster architectures and closed loop responses.

Case Studies in Food Product Development

Dimensions: 22x15x3 cm Description: The Book Covers Introduction, Biology Of The Mushroom, Food Value Of Mushrooms, Uses Of Mushrooms, Cultivation Of White Button Cultivation Of Agaricus Bitorquis, Cultivation Of Paddy Straw Mushroom (Volvariella Spp.), Cultivation Of Pleurotus Spp. Common Edible Mushrooms Of India, Delicious Recipes Of Mushroom, Laboratory Aspects, Growth, Picking, Grading & Packing, Cultivation Of Oyster Mushroom & Paddy Straw Mushroom, Mushroom Preservation & Processing, Requirements Of A Project On Mushroom For Export, Marketing Of Mushrooms Etc. -Engineers India Research Institute

Food Processing for Increased Quality and Consumption

Microbial Cultures and Enzymes in Dairy Technology

The objective of this book is to provide single platform for preparation of competitive examinations in Food Science and Technology discipline. The book contains over 10000 objective questions on the subjects such as Food Chemistry, Food Microbiology, Food Engineering, Dairy Technology, Fruits and Vegetables Technology, Cereals Technology, Meat Fish and Poultry Processing, Food Additives, Foods and Nutrition, Bioprocess Technology, Food Packaging, food Analysis, Functional Foods, Emerging Food Processing Technologies, Food Biochemistry and Miscellaneous topics. The book also contains 1500 subjective keynotes for above mentioned topics. Previous five years (2013-2017) ICAR NET Exam solved question papers (memory based) are also included in this addition. Special Features of the Book: 1. More than 10,000 MCQs for ASRB-NET, ICAR JRF-SRF and IIT GATE examination 2. Five years ICAR-NET solved question papers 3. Revised and updated 1500 subjective keynotes.

Human Milk Biochemistry and Infant Formula Manufacturing Technology

Human Milk: Sampling and Measurement of Energy-Yielding Nutrients and Other Macromolecules presents comprehensive, rigorous, state-of-the-science information on the origins, analysis, concentrations and variation in energy-yielding nutrients

and other macromolecules present in human milk. The book includes information on how best to collect and store milk for determining concentrations of these important milk constituents and considers how to conduct milk composition analysis in research, clinical and resource-poor settings. Written by a group of international experts who are actively conducting research related to human milk macronutrients, each chapter also provides cutting-edge rationale for what research is still needed in this evolving field. In addition, the book also outlines challenges and opportunities faced by clinicians, industry leaders and regulators interested in adding these components to infant foods, human milk nutrient fortifier and formula. Presents analytical issues and challenges Contains information regarding optimal milk collection and storage procedures for each milk component Uses a systematic treatment of common factors relating to milk composition variation (e.g., time postpartum, maternal diet) Provides a brief summary at the end of each chapter Reviews the literature related to history/discovery, analysis, isoforms, origins/transport, variability, metabolism and research gaps

Food Authenticity and Traceability

Concerns have grown that consumption levels of salt are well above those needed for nutritional purposes and that this can lead to adverse effects on health, in particular cardiovascular disease. Consumers are increasingly looking to reduce their salt intake, making salt reduction a priority for food manufacturers. This is not straightforward, though, as salt plays an important role in food preservation, taste and processability. Written by a team of international experts, Reducing salt in foods provides a unique review of current knowledge in this field. This book is divided into three parts and discusses the major issues concerned with salt reduction and how it may be achieved. Part one reviews the key health issues driving efforts to reduce salt, government action regarding salt reduction and the implications of salt labelling. Consumer perception of salt and views on salt reduction and are also discussed. The second part focuses on the technological, microbiological and sensory functions of salt and strategies that can be taken to reduce salt. The final part of the book outlines strategies which have been taken to reduce salt in particular food groups: meat and poultry, seafood, bread, snack foods, dairy products and canned foods. Reducing salt in foods is an essential reference for health professionals, governments and food manufacturers. Discusses methods to reduce salt while maintaining food sensory quality, shelf-life and processability Provides a unique review of current knowledge in this field An essential reference for health professionals, governments and food manufacturers

Biofilms in the Dairy Industry

Dairy Farm, Ration, Housing, Livestock management, Care manufacturing process, clean milk production, Dairy cattle economics, Diseases of animals, suppliers of equipment, packaging of milk.

Building Enterprise IoT Applications

Provides the most recent developments in microscopy techniques and types of analysis used to study the microstructure of dairy products. This comprehensive and timely text focuses on the microstructure analyses of dairy products as well as on detailed microstructural aspects of them. Featuring contributions from a global team of experts, it offers great insight into the understanding of different phenomena that relate to the functional and biochemical changes during processing and subsequent storage. Structured into two parts, *Microstructure of Dairy Products* begins with an overview of microscopy techniques and software used for microstructural analyses. It discusses, in detail, different types of the following techniques, such as: light microscopy (including bright field, polarized, and confocal scanning laser microscopy) and electron microscopy (mainly scanning and transmission electron microscopy). The description of these techniques also includes the staining procedures and sample preparation methods developed. Emerging microscopy techniques are also covered, reflecting the latest advances in this field. Part 2 of the book focuses on the microstructure of various dairy foods, dividing each into sections related to the microstructure of milk, cheeses, yogurts, powders, and fat products, ice cream and frozen dairy desserts, dairy powders and selected traditional Indian dairy products. In addition, there is a review of the localization of microorganism within the microstructure of various dairy products. The last chapter discusses the challenges and future trends of the microstructure of dairy products. Presents complete coverage of the latest developments in dairy product microscopy techniques. Details the use of microscopy techniques in structural analysis. An essential purchase for companies, researchers, and other professionals in the dairy sector. *Microstructure of Dairy Products* is an excellent resource for food scientists, technologists, and chemists—and physicists, rheologists, and microscopists—who deal in dairy products.

Hand Book Of Dairy Farming

An authoritative guide to microbiological solutions to common challenges encountered in the industrial processing of milk and the production of milk products. *Microbiology in Dairy Processing* offers a comprehensive introduction to the most current knowledge and research in dairy technologies and lactic acid bacteria (LAB) and dairy associated species in the fermentation of dairy products. The text deals with the industrial processing of milk, the problems solved in the industry, and those still affecting the processes. The authors explore culture methods and species selective growth media, to grow, separate, and characterize LAB and dairy associated species, molecular methods for species identification and strains characterization, Next Generation Sequencing for genome characterization, comparative genomics, phenotyping, and current applications in dairy and non-dairy productions. In addition, *Microbiology in Dairy Processing* covers the Lactic Acid Bacteria and dairy associated species (the beneficial microorganisms used in food fermentation processes): culture methods, phenotyping, and proven applications in dairy and non-dairy productions. The text also reviews the potential

future exploitation of the culture of novel strains with useful traits such as probiotics, fermentation of sugars, metabolites produced, bacteriocins. This important resource: Offers solutions both established and novel to the numerous challenges commonly encountered in the industrial processing of milk and the production of milk products Takes a highly practical approach, tackling the problems faced in the workplace by dairy technologists Covers the whole chain of dairy processing from milk collection and storage through processing and the production of various cheese types Written for laboratory technicians and researchers, students learning the protocols for LAB isolation and characterisation, Microbiology in Dairy Processing is the authoritative reference for professionals and students.

Tamime and Robinson's Yoghurt

The objective of this book is to provide a single reference source for those working with dairy-based ingredients, offering a comprehensive and practical account of the various dairy ingredients commonly used in food processing operations. The Editors have assembled a team of 25 authors from the United States, Australia, New Zealand, and the United Kingdom, representing a full range of international expertise from academic, industrial, and government research backgrounds. After introductory chapters which present the chemical, physical, functional and microbiological characteristics of dairy ingredients, the book addresses the technology associated with the manufacture of the major dairy ingredients, focusing on those parameters that affect their performance and functionality in food systems. The popular applications of dairy ingredients in the manufacture of food products such as dairy foods, bakery products, processed cheeses, processed meats, chocolate as well as confectionery products, functional foods, and infant and adult nutritional products, are covered in some detail in subsequent chapters. Topics are presented in a logical and accessible style in order to enhance the usefulness of the book as a reference volume. It is hoped that Dairy Ingredients for Food Processing will be a valuable resource for members of academia engaged in teaching and research in food science; regulatory personnel; food equipment manufacturers; and technical specialists engaged in the manufacture and use of dairy ingredients. Special features: Contemporary description of dairy ingredients commonly used in food processing operations Focus on applications of dairy ingredients in various food products Aimed at food professionals in R&D, QA/QC, manufacturing and management World-wide expertise from over 20 noted experts in academe and industry

Food Processing Technology

Reducing Salt in Foods

The dairy sector continues to be at the forefront of innovation in food processing. With its distinguished editor and

international team of contributors, this book reviews key developments and their impact on product safety and quality. The first two chapters provide a foundation for the rest of the book, summarizing the latest research on the constituents of milk and reviewing how agricultural practice influences raw milk quality. The remainder of part one focuses on key aspects of safety: good hygienic practice; improvements in pasteurization and sterilization and the use of modelling to assess the effectiveness of pasteurization. Parts two and three review some of the major technological advances in the sector and look in detail at key advances in cheese manufacturing.

Microbiology in Dairy Processing

This book covers some of the crucial issues of sustainability in agriculture, which are presented in five sections viz., Concepts and Status, Sustainable Technologies in Crop Production & Management, Sustainability of Crops in Agro-ecosystems, Agro-forestry, and Spatial Informatics in Sustainable Agriculture. The sub-themes covered in the papers are: land use planning, sustainable livelihood, shifting cultivation, wetlands, weed management, technologies in crop production, traditional knowledge and management of agriculture, sustainability of crops in different agro-ecosystems, methods and policies, digital opportunities; use of remote sensing and GIS in agro-ecological zoning and agricultural resources information technology. The Contributions by scientists, planners, technocrats, researchers and practitioners, address both the conceptual and policy related issues with important empirical research findings.

Dairy Technology

Hand Book of Mushroom Cultivation, Processing and Packaging

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 nutritive. 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 milk 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, skimmed 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.

Milk Processing and Quality Management

Rapid and continued developments in electronics, optics, computing, instrumentation, spectroscopy, and other branches of science and technology resulted in considerable improvements in various methodologies. Due to this revolution in methodology, it is now possible to solve problems which were previously considered difficult to solve. These new methods have led to a better characterization and understanding of foods. The aim of this book is to assemble, for handy reference, various emerging, state-of-the-art methodologies used for characterizing foods. Although the emphasis is on real foods, model food systems are also considered. Methods pertaining to interfaces (food emulsions, foams, and dispersions), fluorescence, ultrasonics, nuclear magnetic resonance, electron spin resonance, Fourier-transform infrared and near infrared spectroscopy, small-angle neutron scattering, dielectrics, microscopy, rheology, sensors, antibodies, flavor and aroma analysis are included. This book is an indispensable reference source for scientists, engineers, and technologists in industries, universities, and government laboratories who are involved in food research and/or development, and also for faculty, advanced undergraduate, graduate and postgraduate students from Food Science, Food Engineering, and Biochemistry departments. In addition, it will serve as a valuable reference for analytical chemists and surface and colloid scientists.

Modern Technology Of Milk Processing & Dairy Products (4th Edition)

The Australian Journal of Dairy Technology

New product development is vital for the future of the food industry. Many books have been written on NPD theory over the last 40 years, but much can still be learnt by studying actual experiences of NPD. Case studies in food product development describes specific NPD projects in a variety of industries internationally and also records overall comments, written by the very people who have completed the projects. Part one outlines new product development in the food industry and part two views product development strategy and management in different companies and organisations. Parts three, four and five are twelve case studies on respectively the product development process, technological development, consumer and market research. Part six considers product development in practice and the final chapter demonstrates how product developers are being educated. The case studies are written by experienced product developers talking openly about experiences with their own products. It is hoped that those faced with similar challenges will gain from these real life experiences. Mary and Dick are also co-authors with Allan Anderson of Food product development, which has achieved international success. Case studies in food product development is a complement and a practical companion to this book. Describes new product development in a variety of international industries Outlines new product development in the food industry and views product management and strategy in different organisations Includes case studies focusing on the product development process, technological development, and consumer and market research

Objective Food Science & Technology, 3rd Ed.

Smallholder Dairying in the Tropics

The ability to trace and authenticate a food product is of major concern to the food industry. This important topic is reviewed extensively in this authoritative text on current and emerging techniques. Part one deals with analytical techniques applied to food authentication. There are chapters on both established and developing technologies, as well as discussions of chemometrics and data handling. Part two relates these methodologies to particular food and beverage products, such as meat, dairy products, cereals and wine. In part three traceability is reviewed in detail, looking at the development of efficient traceability systems and their application in practice to such areas as animal feed and fish processing. Food Authenticity and Traceability is an essential reference for all those concerned with food safety and quality. Outlines methods and issues in food authentication and traceability Deals with analytical techniques applied to food authentication, with chapters on established and developing technologies, chemometrics and data handling Explores how techniques are applied in particular sectors and reviews recent developments in traceability systems for differing food products

Microstructure of Dairy Products

Since infant formula substitutes for human milk, its composition must match that of human milk as closely as possible. Quality control of infant formula is also essential to ensure product safety, as infants are particularly vulnerable food consumers. This book reviews the latest research into human milk biochemistry and best practice in infant formula processing technology and quality control. The most up to date reference on infant formula processing technology Reviews both human milk biochemistry and infant formula processing technology for broad and applied coverage Focusses exclusively on infant formulae

Handbook On Analysis Of Milk: Chemical And Microbiological Analysis Of Liquid Milk Textbook Library Edition

Functional Dairy Products

Dairy products have a prominent position in the development of functional foods. As understanding of the health benefits of dairy products increases and consumer awareness of these health benefits grows, demand for new and improved functional dairy products is likely to rise. Functional dairy products: Volume 2 reviews the latest developments in the field and their industrial applications. Part one outlines the health benefits of functional dairy products and their applications in areas such as weight management, child health and gut health. The second part of the book discusses various ingredients used in functional dairy products such as pro- and prebiotics, hypoallergenic hydrolysates and plant sterols and stanols. The final part of the book considers aspects of product development such as biomarkers and experimental models to investigate health benefits, genomics of probiotic microorganisms and functional dairy product regulation and safety. With its distinguished editor and collection of international authors, Functional dairy products: Volume 2, together with its companion volume, provides professionals and researchers within the field with an invaluable reference. Outlines the health benefits of functional dairy products, and their applications in areas such as weight management and gut health Discusses ingredients used in functional dairy products such as pro- and prebiotics Considers various aspects of product development

Report of the FAO E-mail Conference on Small-scale Milk Collection and Processing in Developing Countries

The problem of creating microbiologically-safe food with an acceptable shelf-life and quality for the consumer is a constant challenge for the food industry. Microbial decontamination in the food industry provides a comprehensive guide to the

decontamination problems faced by the industry, and the current and emerging methods being used to solve them. Part one deals with various food commodities such as fresh produce, meats, seafood, nuts, juices and dairy products, and provides background on contamination routes and outbreaks as well as proposed processing methods for each commodity. Part two goes on to review current and emerging non-chemical and non-thermal decontamination methods such as high hydrostatic pressure, pulsed electric fields, irradiation, power ultrasound and non-thermal plasma. Thermal methods such as microwave, radio-frequency and infrared heating and food surface pasteurization are also explored in detail. Chemical decontamination methods with ozone, chlorine dioxide, electrolyzed oxidizing water, organic acids and dense phase CO₂ are discussed in part three. Finally, part four focuses on current and emerging packaging technologies and post-packaging decontamination. With its distinguished editors and international team of expert contributors, Microbial decontamination in the food industry is an indispensable guide for all food industry professionals involved in the design or use of novel food decontamination techniques, as well as any academics researching or teaching this important subject. Provides a comprehensive guide to the decontamination problems faced by the industry and outlines the current and emerging methods being used to solve them Details backgrounds on contamination routes and outbreaks, as well as proposed processing methods for various commodities including fresh produce, meats, seafood, nuts, juices and dairy products Sections focus on emerging non-chemical and non-thermal decontamination methods, current thermal methods, chemical decontamination methods and current and emerging packaging technologies and post-packaging decontamination

Sustainable Agriculture

Microorganisms are an integral part of the fermentation process in food products and help to improve sensory and textural properties of the products. As such, it is vital to explore the current uses of microorganisms in the dairy industry. Microbial Cultures and Enzymes in Dairy Technology is a critical scholarly resource that explores multidisciplinary uses of cultures and enzymes in the production of dairy products. Featuring coverage on a wide range of topics such as dairy probiotics, biopreservatives, and fermentation, this book is geared toward academicians, researchers, and professionals in the dairy industry seeking current research on the major role of microorganisms in the production of many dairy products.

Dairy Ingredients for Food Processing

The Society of Dairy Technology (SDT) has joined with Wiley-Blackwell to produce a series of technical dairy-related handbooks providing an invaluable resource for all those involved in the dairy industry; from practitioners to technologists working in both traditional and modern large-scale dairy operations. The fifth volume in the series, Milk Processing and Quality Management, provides timely and comprehensive guidance on the processing of liquid milks by bringing together contributions from leading experts around the globe. This important book covers all major aspects of hygienic milk

production, storage and processing and other key topics such as: Microbiology of raw and market milks Quality control International legislation Safety HACCP in milk processing All those involved in the dairy industry including food scientists, food technologists, food microbiologists, food safety enforcement personnel, quality control personnel, dairy industry equipment suppliers and food ingredient companies should find much of interest in this commercially important book which will also provide libraries in dairy and food research establishments with a valuable reference for this important area.

Dairy Technology

In recent years, the formation and impacts of biofilms on dairy manufacturing have been studied extensively, from the effects of microbial enzymes produced during transportation of raw milk to the mechanisms of biofilm formation by thermophilic spore-forming bacteria. The dairy industry now has a better understanding of biofilms and of approaches that may be adopted to reduce the impacts that biofilms have on manufacturing efficiencies and the quality of dairy products. *Biofilms in the Dairy Industry* provides a comprehensive overview of biofilm-related issues facing the dairy sector. The book is a cornerstone for a better understanding of the current science and of ways to reduce the occurrence of biofilms associated with dairy manufacturing. The introductory section covers the definition and basic concepts of biofilm formation and development, and provides an overview of problems caused by the occurrence of biofilms along the dairy manufacturing chain. The second section of the book focuses on specific biofilm-related issues, including the quality of raw milk influenced by biofilms, biofilm formation by thermotolerant streptococci and thermophilic spore-forming bacteria in dairy manufacturing plants, the presence of pathogens in biofilms, and biofilms associated with dairy waste effluent. The final section of the book looks at the application of modelling approaches to control biofilms. Potential solutions for reducing contamination throughout the dairy manufacturing chain are also presented. Essential to professionals in the global dairy sector, *Biofilms in the Dairy Industry* will be of great interest to anyone in the food and beverage, academic and government sectors. This text is specifically targeted at dairy professionals who aim to improve the quality and consistency of dairy products and improve the efficiency of dairy product manufacture through optimizing the use of dairy manufacturing plant and reducing operating costs.

Characterization of Food

Yogurt in Health and Disease Prevention examines the mechanisms by which yogurt, an important source of micro- and macronutrients, impacts human nutrition, overall health, and disease. Topics covered include yogurt consumption's impact on overall diet quality, allergic disorders, gastrointestinal tract health, bone health, metabolic syndrome, diabetes, obesity, weight control, metabolism, age-related disorders, and cardiovascular health. Modifications to yogurt are also covered in scientific detail, including altering the protein to carbohydrate ratios, adding n-3 fatty acids, phytochemical enhancements,

adding whole grains, and supplementing with various micronutrients. Prebiotic, probiotic, and synbiotic yogurt component are also covered to give the reader a comprehensive understanding of the various impacts yogurt and related products can have on human health. Health coverage encompasses nutrition, gastroenterology, endocrinology, immunology, and cardiology Examines novel and unusual yogurts as well as popular and common varieties Covers effects on diet, obesity, and weight control Outlines common additives to yogurts and their respective effects Reviews prebiotics, probiotics, and symbiotic yogurts Includes practical information on how yogurt may be modified to improve its nutritive value

Dairy Processing

Processing of milk into various dairy foods, i.e. Dairy Technology is underpinned by disciplines such as chemistry and biochemistry, microbiology and process engineering. Strong emphasis on public health aspects and product quality demands that proper attention be given to the points in the production and processing chain where both pathogenic and spoilage microorganisms can be controlled effectively. Keeping above points in view, a very comprehensive book has been written encompassing entire gamuts of chemical, physical and microbiological characteristics of milk, processing and preservation of milk. The main objective of the book is to provide the latest information in a consolidated form at one point to meet the requirements of not only undergraduate and postgraduates students but also teachers and dairy professionals.

Advances in Dairy Products

[ROMANCE](#) [ACTION & ADVENTURE](#) [MYSTERY & THRILLER](#) [BIOGRAPHIES & HISTORY](#) [CHILDREN'S](#) [YOUNG ADULT](#) [FANTASY](#)
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