Cocoa Butter Alternatives From Aak The Natural Choice

In recent years, the food industry has made substantial advances in replacing partially hydrogenated oils, high in trans-fatty acids, in foods. Trait-modified oils were then developed to produce trans-fat free, low saturated functional oils. Trait-modified Oils in Foods offers top line information on the sources, composition, performance, health, taste, and availability of modified next generation oils. Coverage extends to public policy development, discussions of real world transition to healthy oils by food service and food processing industries and the future of trait-modified oils. The book provides solutions to food companies with the potential of improving the health benefits of foods through eliminating trans-fats and reducing saturated fats from formulations. A landmark resource on modified next-generation, trait-modified oils, this book is essential reading for oil processors, manufacturers and producers, as well as any professional involved in food quality assurance and public health.

The need to reduce saturated fat levels in food and the different ways of doing this are among the most important issues facing the food industry. Reducing saturated fats in foods reviews the sources and effects of saturated fats in food and the ways in which the food industry can effectively reduce saturates. Part one covers the functional and nutritional aspects of saturated fats in foods, with chapters covering sources of dietary saturated fats, their functional attributes and the health issues associated with saturated fatty acids. Part two focuses on reducing saturated fats through food reformulation, concentrating on both the technologies used and the food categories affected. Chapters cover topics such as emulsion technology for reduction of saturated fats and the application of diacylglycerol oils, as well as different food categories including milk and dairy products, processed meats, fried foods and pastry products. With its distinguished editor and international team of contributors, Reducing saturated fats in foods is an essential reference for oils and fats processors and food manufacturers, as well as those researching saturated fats in the academic sector. Reviews the sources and effects of saturated fats in food and the ways in which the food industry can effectively reduce saturates Explores the functional and nutritional aspects of saturated fats in foods, covering sources of dietary saturated fats and their functional attributes Focuses on reducing saturated fats through food reformulation, concentrating on both the technologies used and the food categories affected

Manley’s Technology of Biscuits, Crackers and Cookies is widely regarded as the standard work in its field. Part one covers management issues such as HACCP, quality control, process control and product development. Part two deals with the selection of raw materials and ingredients. The range and types of biscuits is covered in part three, while part four covers the main production processes and equipment, from bulk handling and metering of ingredients to packaging, storage and waste management. Eight expert authors have joined Duncan Manley in extensively updating and expanding the book, which is now some 25% longer than the previous edition. Part one now includes a new chapter on sustainability in the biscuit industry and the discussion of process and efficiency control is more detailed. In part two the information on wheat flour has been extensively revised to reflect recent developments and there are entirely new chapters on fats and oils and packaging materials. Photographs of the major types of biscuits now illustrate chapters in part three, which also includes a newly-composed chapter on the position of biscuits in nutrition. Finally, part four has been comprehensively reviewed and revised with the assistance of an author from a major machinery manufacturer. With its distinguished editor and team of expert contributors this new edition consolidates the position of Manley’s Technology of Biscuits, Crackers and Cookies as the standard reference work in the industry. Widely regarded as the standard work in its field Covers management issues such as HACCP, quality control, process control and product development Deals with the selection of raw materials and ingredients

Fat is the most expensive component in confectionery such as chocolate. It may comprise of cocoa butter, milk fat, palm oil, lauric oil, exotic fats, etc. This new handbook, with a large number of figures and tables, provides a comprehensive guide to all aspects of confectionery fats, with particular emphasis on the later. Unlike sugar confectionery, chocolate is a fat-continuous product and the sugar, like the other non-fat components, is merely mixed with the fat rather than melted/boiled. The properties of chocolate confectionery are thus determined mainly by the fat, which comprises about 26-35% in a typical chocolate formulation. The book describes the essential physical chemistry needed to understand the properties of confectionery fats, analytical methods, raw materials, the production and properties of confectionery fats, and their application in sugar and chocolate confectionery. It concludes with consideration of legislation and regulatory aspects of producing confectionery and of using milk fat, cocoa butter and alternative fats together with a chapter on analytical methods for detecting and quantifying confectionery fats. Finally, four appendixes provide: a glossary of terms and abbreviations used; details of confectionery fat manufacturers; details of confectionary fat products produced by these manufacturers; and a list of websites from other relevant organizations that the reader may find useful.

Extensively revised, reorganized, and expanded, the third edition of the industry standard, The Lipid Handbook reflects many of the changes in lipid science and technology that have occurred in the last decade. All chapters have been rewritten, many by new authors, to match the updated thinking and practice of modern lipid science and bring a fresh perspective to twenty years of tradition. Retaining the general structure of the previous editions, The Lipid Handbook with CD-ROM, Third Edition collates a wide range of information into a single volume. New contributions highlight the latest technologies utilized in today's lipid science such as chromatographic analysis and nuclear magnetic resonance spectroscopy. An entirely new chapter is devoted to non-food uses such as lipids as surfactants, cosmetics, and biofuels. Expanded sections illustrate a growing emphasis on lipid metabolism and the nutritional, medical, and agricultural aspects including human dietary requirements and disorders of lipid metabolism. The dictionary section is vastly expanded to cover chemical structure, physical properties, and references to thousands of lipid and lipid related molecules. The handbook now includes a CD-ROM that allows instant access to tabulated and referenced information and can be searched either as the full text or by structure or substructure. Drawing from the best minds in the field, The Lipid Handbook with CD-ROM, Third Edition presents the latest technological developments and the current and future directions and applications of lipid science to the next generation of researchers.

Join the clean beauty revolution that’s taking the nation by storm and discover the delights of making your own beauty products in the comfort of your own home. Gone are the days of paying a premium for fancy-pants moisturizers and toners, whose ingredients read like a chemistry lesson. The Clean Beauty girls challenge you to take control over what you put on your skin and hair by making it yourself! Green and clean beauty is growing up, and the London-based Clean Beauty Co are leading the way with luxury beauty recipes packed full of only the good stuff. Scrub that bad day away with a coffee body scrub, or take a long restorative bath

with a coconut milk soak. Perhaps you fancy fixing those split ends with a banana split hair mask. Whatever the problem, the Clean Beauty girls have a homemade recipe that you can whip up in no time. So what are you waiting for? Join the revolution today!

The Forest of the Lacandon Maya: An Ethnobotanical Guide, with active links to audio-video recordings, serves as a comprehensive guide to the botanical heritage of the northern Lacandones. Numbering fewer than 300 men, women, and children, this community is the most culturally conservative of the Mayan groups. Protected by their hostile environment, over many centuries they maintain autonomy from the outside forces of church and state, while they continue to draw on the forest for spiritual inspiration and sustenance. In The Forest of the Lacandon Maya: An Ethnobotanical Guide, linguist Suzanne Cook presents a bilingual Lacandon-English ethnobotanical guide to more than 450 plants in a tripartite organization: a botanical inventory in which main entries are headed by Lacandon names followed by common English and botanical names, and which includes plant descriptions and uses; an ethnographic inventory, which expands the descriptions given in the botanical inventory, providing the socio-historical, dietary, mythological, and spiritual significance of most plants; and chapters that discuss the relevant cultural applications of the plants in more detail provide a description of the area’s geography, and give an ethnographic overview of the Lacandones. Active links throughout the text to original audio-video recordings demonstrate the use and preparation of the most significant plants.

Arachidonic acid (AA) is an ?-6 polyunsaturated fatty acid found in the phospholipids of the membranes of the human bodys cells, and is abundant in the brain, muscles, and liver. This fatty acid is particularly obtained from meat products including chicken, beef, pork, and fishes. An interesting source of AA is through its accumulation in a green microalga, Myrmecia incisa, enhanced by nitrogen starvation. The general functions of AA and its metabolites including its association with coronary heart disease, oxidative stress and cancer, metabolic syndrome, insulin resistance, and its endocrine response to stress are also discussed.

This report considers the feasibility of applying to forest clearance for agriculture the same consumer country measures that have been used to exclude illegal timber from agricultural commodity supply chains.

Get rid of Acne ONCE AND FOR ALL But first let me just ask, Does This Sound Like You? You have started noticing Acne Scars around your forehead. You have started grabbing every single product you can find that promises to Cure Acne. Have you spent a great deal of money on Acne Treatment products which didn't work? You know, anyone cans treat Acne Scars when they know how. Acne Prevention is very real & it doesn't have to cost the earth! Would You Like to know 35 EASY WAYS TO GET RID OF ACNE FAST? Finally 35 Treatments For Acne that really work It's time everyone knew all of those little secrets to keeping Healthy Sexy skin, I believe everybody has the right to know the truth about keeping that youthful look, which is why I'm about to lift the lid on some of the beauty industry's most closely guarded secrets. Let me show you the 35 natural ways to Prevent Acne. Find out how to look and feel so much younger using simple Acne Removal Solution that actually achieves great results. I've put together over 50 pages of what I consider to be one of the most extensive guides to Acne Cure and Prevention there is. Even if you are considering surgical intervention this publication will quickly help you understand other options. In this guide you will learn: 1.Regular Skincare Routine 2.Cure Blackhead With Home Remedy 1 3.Cure Blackhead With Egg Mask 2 4.Cure Blackhead With Egg And Honey Mask 3 5.Cure Blackhead With Honey And Yogurt 4 6.Cure Blackhead With Mineral Water 5 7.Cure Blackhead With Cinnamon Powder 6 8.Cure Whitehead With Lemon 1 9.Cure Whitehead With Baking Soda 2 10.Cure Whitehead With Banana Cream 3 11.Cure Whitehead With Aspirins 4 12.Cure Whitehead With Lemon And Honey 5 13.Cure Whitehead With Turmeric Face Mask 6 14.Cure Whitehead With Eggs And Honey 7 15.Cure Acne 1 16.Cure Acne With Hot Water Treatment 2 17.Cure Acne With Peroxide And Baking Soda 3 18.Cure Acne With Lemon Juice And Sugar 4 19.Cure Acne With Strawberries And Vinegar 5 20.Cure Acne With Honey And Lemon 6 21.Cure Acne With Ice Cubes 7 22.Cure Acne With Avocado Mask 8 23.Cure Acne With Green Tea Mask 9 24.Cure Acne With Tea And Lemon Mask 10 25.Cure Acne With Tea And Honey Mask 11 26.Cure Acne Scars With Lemon Scrub 1 27.Cure Acne Scars With Potato 2 28.Cure Acne Scars With Cocoa Butter 3 29.Cure Acne Scars With Banana Mask 4 30.Cure Acne Scars With White Vinegar 5 31.Cure Acne Scars With Banana Peels 6 32.Cure Pimples With Herbs 1 33.Cure Pimple With Herbs 2 34.Cure Pimples With Vicks Vapor Rub 35.Cure Pimples With Cinnamon 36.Cure Pimples With Orange Peels You can start removing acne in 8 hours! Just follow this blueprint and you'll learn how to stop acne fast. Would You Like To Know More? Order now and start Curing Acne Scars TODAY! Scroll to the top of the page and select the 'buy button' Tags: acne, acne products, acne cure, acne cures, acne medications, pimple medication, natural acne cures, natural remedies for acne, natural acne treatment, natural acne prevention, acne natural treatments, natural organic skincare, adult acne, acne treatment, acne treatments acne prevention, acne free, acne home remedies, acne book, acne eBook, acne on face, acne info, acne prevention tips, acne tips, treatments for acne, how to cure acne forever, how to cure acne, acne home remedies, vulgaris acne, aromatherapy skincare, organic skin products, anti-aging skin treatment

This brief presents the state of the art on enzymatic synthesis of structured triglycerides and diglycerides, focusing on glycerol as the substrate and covering interesterification of vegetable oils in one and two steps. It critically reviews the available literature on enzymatic and chemo-enzymatic synthesis of di- and triglycerides in one or more steps. The effects of the structure, length and unsaturation of the fatty acids are carefully considered, as well as the inhibitory potential of highly unsaturated complex fatty acid structures. The brief also addresses acyl migration and the use of adsorbents, taking into account the most recent literature and presenting the problem in an industrial context. It discusses experimental and analytical problems concerning, e.g. the lab scale and the scaling up to bench and pilot plants. Several examples are presented, and their successes and failures are assessed. Biocatalysts based on lipases are analyzed with regard to problems of immobilization, stability on storage time and activity after multiple uses. The need for specific Sn-2 lipases is presented and strategies for optimizing Sn-2 esterification are discussed. Lastly, practical aspects are examined, e.g. lipase “leaching” with loss of activity, taking into account the latest findings on continuous and batch reactor configurations and presenting the advantages and disadvantages of each.

This book analyzes the current economic situations in African countries at the local, regional, and national level. It examines the growing interest from developed and developing countries to invest in Africa and their different reasons for doing so, which aren’t always aligned with the interests of African countries. Growth in African GDP has benefitted mainly multinational corporations while the rest of the population remains at the subsistence level, creating a smaller middle class and less opportunity for local businesses to flourish. This book offers potential models of cooperation which could create added value for both African countries and the MNCs investing in them.

This book covers the progress of the last 10 years of studies on cocoa butter. Descriptions of several aspects, including physical characteristics such as rheology, hardness, melt profiles, etc., studied by new and advanced techniques are included. Similarly, the polymorphism of cocoa butter is reconsidered in light of studies done by synchrotron DSC, FTIR, and SAXS techniques. These data are complemented by new understandings on the cause of the crystallization and transitions of the polymorphs. Other aspects such as the effect of minor components, emulsifiers, and other fats are discussed in great detail in this book. Brings together all that is known about cocoa butter into one book Describes physical characteristics of cocoa butter including rheology, hardness, and melt profiles Reconsiders polymorphism of cocoa butter in light of recent studies by various analytical techniques Presents new understandings on the cause of crystallization and transitions of polymorphs

Beckett's Industrial Chocolate Manufacture and UseJohn Wiley & Sons

Specialty Oils and Fats in Food and Nutrition: Properties, Processing and Applications examines the main specialty oils and fats currently in use in food processing, as well as those with significant potential. Specialty oils and fats have an increasing number of applications in the food industry, due to growing consumer interest in “clean label functional foods and the emerging markets in “free-from and specialist foods. Part One of this book covers the properties and processing of specialty oils and fats, with a focus on the chemistry, extraction, and quality of different fats and oils, including chapters on shea butter, tropical exotic oils, and structured triglycerides. Part Two looks at the applications of specialty oils and fats in different food and nutraceutical products, such as confectionary, ice cream, and margarine. Specialty Oils and Fats in Food and Nutrition is a key text for R&D managers and product development personnel working in the dairy, baking, and dairy analogue sectors, or any sector using fats and oils. It is a particularly useful reference point for companies reformulating their products or developing new products to alter fat content, as well as academics with a research interest in the area, such as lipid scientists or food scientists. Authored by an industry expert with 35 years of experience working for Unilever and Loders Croklaan Broad coverage encompasses tropical exotic oils, tree nut oils, algal oils, GM vegetable oils, and more Addresses growing application areas including nutraceuticals, infant formula, and ice cream and confectionery

Developed at Carleton University, Ottawa, this is a comprehensive workbook -- now in its second, revised edition -- designed primarily for use with introductory courses in linguistics. With 334 graded excercises and problems from more than 60 languages and dialects.

Major tree crops contribute substantially to the economy of many developing countries on the Asian, African and Latin American continents. For example, coffee is the main revenue earner for Kenya. This book provides a comprehensive review of the agronomy, botany, taxonomy, genetics, chemistry, economics, and future global prospects of a range of crops that have great food, industrial and economic value such as cocoa, coffee, cashew, oil palm and natural rubber. Discusses the major tree crops of great economic value to the developing world The author is an eminent scientist who has won numerous awards for his work in this area

Edible Oleogels, Structure and Health Implications, Second Edition presents a novel strategy on how to eliminate trans fats from our diets. Topics covered include how to avoid excessive amounts of saturated fat by structuring oil to make it behave like crystalline fat and how to develop trans fat free, low saturate, functional shortenings for the food industry. The major approach to form these materials is covered, helping manufacturers incorporate specific molecules (polymers, amphiphiles, waxes) into oil components. As such, this an ideal resource for those in product development and anyone interested in understanding the role of trans and saturated fats in health and nutrition. In an effort to provide alternatives to trans and saturated fats, scientists have been busy modifying the physical properties of oils to resemble those of fats. Many food products requiring a specific texture and rheology can be made with these novel oil-based materials without causing significant changes to final product quality. Hence, this book provides a valuable resource on new advancements. Presents emerging science on beta gels using natural triglycerides, ethylcellulose oleogels, and oleotropic liquid crystals Suggests a novel strategy to eliminate trans fats from our diets and avoid excessive amounts of saturated fat by structuring oil to make it behave like crystalline fat Reviews the structuring of edible oils to form new mesoscale and nanoscale structures, including nanofibers, mesophases, and functionalized crystals and crystalline particles Identifies evidence on how to develop trans fat free, low saturate, functional shortenings for the food industry

This book offers an in-depth analyses of value chain policies, past and present in West Africa. The book contains a large number of in-depth case studies of food value chains in particular countries, including traditional export commodities (cocoa, cotton), high value exports (mangoes, horticulture) and the most important staple food value chains (oil palm, rice, maize, sorghum and millet and cassava) in the region. It also contains a large number of private and public initiatives, and thematic analyses relating to the role of the private agro-industry and producer organizations and their role as market agents.

Our dietary intake comprises three macronutrients (protein, carbohydrate and lipid) and a large but unknown number of micronutrients (vitamins, minerals, antioxidants, etc). Good health rests, in part, on an adequate and balanced supply of these components. This book is concerned with the major sources of lipids and the micronutrients that they contain. The volume provides a source of concentrated but accessible information on the composition, properties and uses of the vegetable oils commonly found within the food industry. It includes the modifications of these oils that are commercially available by means of partial hydrogenation, fractionation and seed breeding. The major food uses are linked, wherever possible, to the composition and properties of the oils. This is a book for food scientists and technologists, chemists and technologists working in oils and fats processing, analytical chemists and quality assurance personnel.

This book systematically explains the application principles and green processing technologies of industrial oil plant. Firstly, the industrial plant oil resources are elaborated as an independent discipline for systematic research. Secondly, it has laid a solid theoretical foundation for the utilization of industrial plant oil resources, and will greatly promote the development of industrialization and modernization of industrial plant oil resources worldwide. Thirdly, it constructs integrated technology system of oil plant cultivation, oil extraction technology and products application. Finally, it elaborates a series of environmental issues including the protection of biodiversity and the balance of the forest ecology during the industrial plant oil resources processing. The technological process for green conversion of industrial plant oil resources to the oil-based materials and high value products will be of particular interest to the readers among oil researchers, producers and managers.

Enrobed and filled confectionery and bakery products, such as praline-style chocolates, confectionery bars and chocolate-coated biscuits and ice-creams, are popular with consumers. The coating and filling can negatively affect product quality and shelf-life, but with the correct product design and manufacturing technology, the characteristics of the end-product can be much improved. This book provides a comprehensive overview of quality issues affecting enrobed and filled products and strategies to enhance product quality. Part one reviews the formulation of coatings and fillings, with chapters on key topics such as chocolate manufacture, confectionery fats, compound coatings and fat and sugar-based fillings. Product design issues, such as oil, moisture and ethanol migration and chocolate and filling rheology are the focus of Part two. Shelf-life prediction and testing are also discussed. Part three then covers the latest ingredient preparation and manufacturing technology for optimum product quality. Chapters examine tempering, enrobing, chocolate panning, production of chocolate shells and deposition technology. With its experienced team of authors, Science and technology of enrobed and filled chocolate, confectionery and bakery products is an essential purchase for professionals in the chocolate, confectionery and bakery industries. Provides a comprehensive review of quality issues affecting enrobed and filled products Reviews the formulation of coatings and fillings, addressing confectionery fats, compound coatings and sugar based fillings Focuses on product design issues such as oil, moisture and chocolate filling rheology

This book examines how agricultural innovation arises in four African countries ? Ghana, Kenya, Tanzania, and Uganda ? through the lens of agribusiness, public policies, and specific value chains for food staples, high value products, and livestock.

Revised edition of: Industrial chocolate manufacture and use / edited by Stephen T. Beckett. 2009.

A great deal of research has been carried out on this important class of compounds in the last ten years. To ensure that

scientists are kept up to date, the editors of the First Edition of The Lipid Handbook have completely reviewed and extensively revised their highly successful original work. The Lipid Handbook: Second Edition is an indispensable resource for anyone working with oils, fats, and related substances.

In this book the author utilizes his over fifty years of experience in food chemistry and technology in order to produce the most detailed and comprehensive guide on natural food flavors and colors. Unique coverage of natural flavors and natural colorants in the same volume Includes chemical structures of all principal constituents and CAS, FEMA and E numbers. Wherever available FCC (Food Chemicals Codex) Includes techniques and characteristics of extracts, such as solvent extraction, dispersion and solubitization, nutraceutical function and effect of heat

This book explores the challenges facing food security, sustainability, sovereignty, and supply chains in the Arctic, with a specific focus on Indigenous Peoples. Offering multidisciplinary insights and with a particular focus on populations in the European High North region, the book highlights the importance of accessible and sustainable traditional foods for the dietary needs of local and Indigenous Peoples. It focuses on foods and natural products that are unique to this region and considers how they play a significant role towards food security and sovereignty. The book captures the tremendous complexity facing populations here as they strive to maintain sustainable food systems – both subsistent and commercial – and regain sovereignty over traditional food production policies. A range of issues are explored including food contamination risks, due to increasing human activities in the region, such as mining, to changing livelihoods and gender roles in the maintenance of traditional food security and sovereignty. The book also considers processing methods that combine indigenous and traditional knowledge to convert the traditional foods, that are harvested and hunted, into local foods. This book offers a broader understanding of food security and sovereignty and will be of interest to academics, scholars and policy makers working in food studies; geography and environmental studies; agricultural studies; sociology; anthropology; political science; health studies and biology.

The Doing Business series provides research, data, and analysis on regulation in 181 economies across 10 areas of the business life cycle. Doing Business 2009 identifies top reformers in business regulation and highlights best practices and global reform trends. This year s report builds upon the five previous editions, adding new economies and updating all indicators. This year s report covers 3 additional economies, bringing the total number of economies covered to 181. Now included are the Bahamas, Bahrain, and Qatar. The report also adds a preface on Doing Business methodology, as well as in-depth analysis throughout the report on the main trends and findings of the past six years of Doing Business. Doing Business is an invaluable resource for entrepreneurs, investors, advisors, academics, professionals, and policymakers. The indicators benchmark regulation across 10 areas of a typical business lifecycle, and are used to analyze economic and social outcomes that matter such as equal opportunity, unemployment, poverty, and growth. This annually-published report gives policymakers the ability to measure regulatory performance in comparison to other economies, and learn from best practices.

Standard Methods for the analysis of Oils, Fats and Derivatives Sixth Edition, Part 1 (Sections I and II) describes the methods of analysis, which have been adopted and edited by the Commission on Oils, Fats and Derivatives. This book is composed of two sections. The first section deals with the presentation of standard methods and procedure for oleaginous seeds and fruits analysis of oil, fats, and their derivatives. The next section describes the determination procedure of physico-chemical properties of determined oil, fats, and derivatives. Such characteristics include density, refractive index, color, dilatation, acid, ester, iodine value, and moisture and volatile matter content This book will prove useful to analytical chemists and researchers in the allied fields.

Date palm, Phoenix dactylifera L. (Arecales: Arecaceae), is an important palm species cultivated in the arid regions of the world since pre-historic times and traditionally associated with the life and culture of the people in the Middle-East and North Africa which are the pre-dominant date palm growing regions worldwide. The Food and Agriculture Organization of the UN estimates that there are over 100 million date palms with an annual production of over 7.5 million tonnes A recent report on the arthropod fauna of date palm, enlists 112 species of insects and mites associated with date palm worldwide including 22 species attacking stored dates. Enhanced monoculture of date palm in several date palm growing countries coupled with climate change, unrestrained use of chemical insecticides and extensive international trade is likely to impact the pest complex and the related natural enemies in the date agro-ecosystems. In view of the importance of date palm as an emerging crop of the future and the need to develop and deploy ecologically sound and socially acceptable IPM techniques, this book aims to comprehensively address issues related to the biology and sustainable management of major insect and mite pests of date palm by assessing the current IPM strategies available, besides addressing emerging challenges and future research priorities. The issues pertaining to the role of semiochemicals in date palm IPM involving new strategies revolving around “attract and kill” and “push-pull” technologies, phytoplasmas and their insect vectors with implications for date palm, innovative methods for managing storage pests of dates and knowledge gaps in devicing sustainable strategies for the management of red palm weevil, Rhynchophorus ferrugineus (Olivier) are also addressed

A new stage adaptation of one of Pratchett's best-selling novels Set in Ankh-Morpork one of the most thoroughly imagined cities in fantasy, Night Watch is the story of Sam Vimes, running hero of the Guards sequence, who finds himself cast back in time to the Ankh-Morpork of his youth. With a psychopath from his own time rising in the vile ranks of the Cable Street Unmentionables complicating things, Vimes has to ensure that history takes its course so that he will have the right future to go back to, and to keep his younger self alive."One of the funniest English authors alive" (Independent)

The functional foods market represents one of the fastest growing and most fascinating areas of investigation and innovation in the food sector. This new volume focuses on recent findings, new research trends, and emerging

technologies in bioprocessing: making use of microorganisms in the production of food with health and nutritional benefits. The volume is divided into three main parts. Part I discusses functional food production and human health, looking at some newly emerged bioprocessing technological advances in the functional foods (chocolates, whey beverages) in conjunction their prospective health benefits. Part II, on emerging applications of microorganism in safe food production, covers recent breakthroughs in food safety in microbial bioprocessing. Chapters discuss spoilage issues, harmful/pathogenic microorganisms, genetically modified microorganisms, stability and functionality, and potential of food-grade microbes for biodegradation of toxic compounds, such as mycotoxins, pesticides, and polycyclic hydrocarbons. Chapters in Part III, on emerging scope and potential application in the dairy and food industry, explore and investigate the current shortcomings and challenges of the microbially mediated processes at the industrial level. The editors have brought together a group of outstanding international contributors at the forefront of bioprocessing technology to produce a valuable resource for researchers, faculty, students, food nutrition and health practitioners, and all those working in the dairy, food, and nutraceutical industries, especially in the development of functional foods.