Publications
for the food and drink industry
Publications

Practical application of technical excellence

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Agriculture and raw materials

Guidelines to the principles of assuring the microbiological safety of low moisture food such as nuts and seeds

Guideline 73 (2014) Members £90 / non-members £135

This guideline highlights the main sources of contamination, good manufacturing practices to minimise the risks of contamination, the principles of validation of decontamination procedures, and processes and controls to prevent recontamination. The key stages of pasteurisation protocol evaluation are explained, and guidance is given on demonstrating the validity of manufacturing steps to third party auditing bodies.

Risk assessment and management of raw materials

Guideline 65 (2011) Members £60 / non-members £90

Most food raw materials have potential hazards associated with them - be they chemical, microbiological or physical. This guideline provides specific guidance on the application of risk assessment techniques to identify, evaluate and control hazards associated with raw materials in a food, drink or feed manufacturing environment.

Managing pesticide controls in the food chain (third edition)

Guideline 19 (2013) Members £90 / non-members £135

Practical guidance to help farmers, growers, fresh produce marketers, food processors, food manufacturers and retailers with the control of pesticides in the food chain, using a systematic and structured approach including good practice in the selection, use and monitoring of pesticides.

Prioritisation for pesticide residue analysis: a practical guide

Guideline 32 (2001) Members £50 / non-members £75

Enables companies to prioritise the pesticides, circumstances and hence materials at which analysis should be targeted, by using a standardised, structured approach which takes account of factors such as the origin of the raw material, the supply route and the pesticide/crop combination. The approach advocated is backed up with a worked example.

Raw materials and ingredients in food processing

Key Topic 11 (2005) Price per copy: £30

Describes some of the major raw materials and ingredients used in foods - including wheat, potatoes, rice, fats, proteins, emulsifiers and stabilisers, starch, thickeners and gelling agents, sugar, and salt - and explains how their properties influence the quality and performance of the end-products.

Agriculture in the food supply chain: an overview

Key Topic 5 (2002) Price per copy: £30

Describes what agriculture is, provides examples of production practices, illustrates why some safety issues have to be tackled at the agricultural stage and discusses product quality in terms of both raw material performance and wider issues such as care of the environment and animal welfare. Also includes a glossary of agricultural terms.

Risks of pathogens in ready-to-eat fruits, vegetables and salads through the production process


Review of the microbiological risks associated with sprouted seeds


Organic agriculture and food production: a review of current developments

Chemistry (general)

Understanding chemical hazards in support of risk assessment
Review 52 (2010) Members £100 / non-members £150
This compendium of monographs of 75 of the most commonly encountered potential chemical hazards will help manufacturers to identify which areas need specific attention. Each monograph details the general nature of the chemical, its hazard classification, relevant EU or UK legislation and suitable analytical methods.

Nutritional status of fruit and vegetable crops - a review
Review 61 (2008) Members £50 / non-members £75
Tailoring the nutritional characteristics of crops to meet needs is likely to assume greater importance in the coming years. The many compounds in fruits and vegetables which are reported to have a beneficial effect on human health are described. The roles of plant breeding, agronomic practice, temperature, fertilisation, irrigation and crop maturity are identified as having an influence on the biochemical profile of a range of crop types.

Chemical analysis of foods: an introduction
Key Topic 10 (2005) Price per copy: £30
Explains and illustrates the importance of chemical analysis of food in the day-to-day activities of industry and enforcement bodies, including examples based on food safety and quality assurance, composition and authenticity, labelling and legislation enforcement, product development, and raw material and ingredient use.

Food chemical composition: dietary significance in food manufacturing
Key Topic 6 (2002)
Published in collaboration with the Royal Society of Chemistry
Price per copy: £30
Explains, for those without expertise in food chemistry, the basics of food chemical composition and how this relates to manufacturing - and particularly issues like safety assurance, traceability, product development and labelling.

Bioinformatics: a review of current and future applications in the food industry
Review 59 (2007) Members £50 / non-members £75

Chilled and frozen foods

Discoloration in raw and processed foods
Review 54 (2007) Members £40 / non-members £60

Endocrine disrupting chemicals: relevance to the food industry

The manufacture of vacuum and modified atmosphere packaged chilled foods: a code of practice (second edition)
Guideline 11 (2009) Members £60 / non-members £90
Ensure that your products can safely achieve the shelf life that you set with the second edition of this important Code of Practice which gives clear and practical advice on what conditions must be met in order to give chilled vacuum-packaged foods a shelf-life of more than 10 days. It details why such precautions are necessary and, in simple terms, explains the science behind the conditions under which psychrotrophic Clostridium botulinum will grow and produce toxin, and importantly when it will not.

Pasteurisation: a food industry practical guide (second edition)
Guideline 51 (2006) Members £80 / non-members £120
This guide explains the principles of pasteurisation and considers its use in the context of a range of manufacturing options in relation to product pH, hurdle technology, curing, multi-component formats, mixed particulars, hot filling and product cooling. It also explains how pasteurisation processes should be validated and tabulates a list of typical pasteurisation treatments, while emphasising that the heat treatment delivered needs to be assessed on a product-by-product basis.

Evaluation of product shelf-life for chilled foods
Guideline 46 (2004) Members £50 / non-members £75
Practical guidance on how to establish the shelf-life of chilled food products, from the viewpoints of both safety and quality, on an informed and scientific basis - organised around a series of shelf-life ‘evaluation sequence’ flowcharts from pilot scale through pre-production run to full scale production.
Heat processing

Guidelines for operation of continuous cookers for in-pack heat processing of foods
Guideline 69 (2012)  Members £70 / non-members £95

This guideline covers the operation of three different types of continuous heat processing machines used for the sterilisation of packs of food and drink: reel and spiral retorts, hydrostatic retorts, and pasteurisation tunnels.

Guidelines on the safe production of aseptically processed and packaged foods
Guideline 53 (2007)  Members £60 / non-members £90

Understand the key factors that underpin the control of aseptic processing and packaging operations. Aseptic technology is the manufacture of food products which are separately sterilised from the packaging material and then filled and sealed within a sterile environment. This guideline highlights key aspects such as system design, installation, maintenance, control and operation, and discusses the need for adequate records of production and quality control tests.

Guidelines for batch retort systems - full water immersion - raining/spray water - steam/air
Guideline 13 (1997)  Price per copy: £50

Provides clear guidance to companies and individuals on the use of batch retort systems - and specifically those which do not use saturated steam - in the production of heat sterilised or pasteurised foods. Complements Guideline 17.

Acid resistance of E. coli O157:H7: a review
Review 28 (2001)  Members £30 / non-members £45

Guidance on achieving reasonable working temperatures and conditions during production of chilled foods

Explains approaches to achieving the desired degree and duration of product chilling while maintaining appropriate working temperatures for production personnel in the context of food hygiene and health and safety legislation.

Identification and prevention of hazards associated with slow cooling of hams and other large cooked meats and meat products
Guidelines for establishing heat distribution in batch overpressure retort systems
Guideline 17 (1997)  Price per copy: £50
Gives clear guidance on when to conduct heat distribution studies, how to approach such studies, and how to interpret heat distribution data. Complements Guideline 13.

Guidelines on the verification of reheating instructions for microwaveable foods
Guideline 14 (1997)  Price per copy: £30

Analysis of temperature distribution and heat penetration data for in-container sterilisation processes

Effect of heat processing on foreign bodies in canned foods
Review 16 (2000)  Members £40 / non-members £60

Heat processing of low acid foods: an approach for selection of Fo requirements

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Hygienic design and practice

Guidelines on good manufacturing practice for high pressure processed foods
Guideline 67 (2011)  Members £60 / non-members £90
Ensure that you understand the key characteristics of high pressure processing, and take advantage of this major opportunity for producing high quality, safe food.

Hand hygiene: guidelines for best practice
Guideline 62 (2009)  Members £60 / non-members £90
Hands are one of the major sources and routes for cross-contamination in the food industry. Reducing cross-contamination is key in the production of microbiologically safer, higher quality food. This document brings together and reviews knowledge and practices relating to hand hygiene within the food and medical industries and uses this to propose best practice for hand hygiene within the food industry.

Validation of cleaning to remove food allergens
Guideline 59 (2009)  Members £60 / non-members £90
Ensure that the cleaning procedure you use to remove allergens is effective. This guideline looks at the steps that have to be taken to demonstrate that the cleaning mechanisms used are effective - it does not discuss cleaning per se, but looks at what tests need to be done after the cleaning to show that the allergen has been removed. It looks at what can be tested and the techniques that can be used. It also discusses the limitations of what can be done.

Cleaning and disinfection of food factories: a practical guide
Guideline 55 (2008)  Members £60 / non-members £90
Ensure that your factory is cleaned to the highest possible standard by planning when and how to clean and which cleaning chemicals to use. This guideline addresses the importance of cleaning, management responsibilities and basic principles, before discussing the chemicals required, the many types of cleaning techniques, and the timing and frequency of cleaning, including the order in which cleaning must be undertaken. It also looks at the setting of targets, ways of ensuring that the agreed strategy is carried out and how to assess the effectiveness of that strategy.
Ranking of cross-contamination vectors of ready-to-eat foods: a practical approach
Guideline 54 (2007) Members £60 / non-members £90

Determine the most significant sources of product contamination in your manufacturing environment and target resources to maximise or improve contamination control. Ranking of vectors using the approach is this guide shows clear differences between them in terms of microbial contamination transfer and identifies those that present the greatest risk to food, post-decontamination. Correct use of such information can help to reduce out-of-specification product and recalls, increase product safety and reduce costs.

Guidelines for preventing hair contamination of food
Guideline 48 (2006) Members £50 / non-members £75

Contamination of food with hair is unacceptable - mainly from an aesthetic perspective though it also carries a risk of introducing bacterial contamination. Good hygienic practice involves protecting food from hair contamination through the use of protective clothing. This guide was developed to help food producers identify important aspects of protective clothing designed to prevent food contamination with hair - including head coverings and beard snoods.

Guidelines on air quality standards for the food industry (second edition)
Guideline 12 (2005) Members £60 / non-members £90

Explanations of the principles of air handling in food production environments with detailed practical guidance on managing air systems such that the risk of airborne contamination of food products is minimised.

Guidelines for the hygienic design, construction and layout of food processing factories

Practical guidance on the food hygiene related issues associated with building, adapting or refurbishing a food factory as a whole. Covers issues ranging from site location, estimating the size of the factory required and planning the flow of materials and people within the finished, working factory, through to developing the construction brief and considerations for undertaking the building work.

Guidelines for the design and construction of floors for food production areas (second edition)
Guideline 40 (2002) Members £60 / non-members £90

Practical guidance on principles of hygienic design and construction for floors of food production areas, to make management of factory hygiene easier and help prevent food contamination. Covers decisions on flooring design, underlying and overlying substrates, movement joints, drainage, surfaces, cleaning, maintenance and repair.

Guidelines for the design and construction of walls, ceilings and services for food production areas (second edition)
Guideline 41 (2003) Members £60 / non-members £90

Details the practicalities and principles of appropriate hygienic design and construction for walls, ceilings and utility services for food production areas. Covers construction of external and internal walls, preparation of backgrounds, movement joints, finishes, coving and protection, openings including doors and windows, ducts, ceilings, services and pest proofing.

Guidelines for the hygienic design, selection and use of dry cleaning equipment
Guideline 44 (2003) Members £50 / non-members £75

Outlines the options for cleaning dry food production areas to ensure that the approaches chosen are both practicable and effective in ensuring good hygienic practice, and also provides guidance for cleaning equipment manufacturers on relevant aspects of good hygienic design.

Manual of hygiene methods for the food and drink industry
Guideline 45 (2003) Members £80 / non-members £120 (Ringbinder - loose leaf)

Provides a set of standardised methods for taking environmental samples for hygiene testing of surfaces, people, packaging, air and process water, to provide confidence in the validity of hygiene test results, and help improve the analysis and control of potential environmental sources of food and drink contamination. Complements Guideline 20 which can be supplied in loose-leaf format with this guide if required.

The use of chlorine for fresh produce washing

Guidance for companies producing, supplying and packing fresh produce on the principles and practicalities of chlorine-based washing, and how to adopt best practice in its use. Illustrates how factors such as organic loading (i.e. the amount of material being washed) and monitoring of chlorine levels can influence the approach taken and the effectiveness of the wash.

Whole room disinfection: a review of current methods
Review 63 (2009) Members £50 / non-members £75

Regular use of novel techniques that can decontaminate the whole of the area may help to reduce the number of environmental microorganisms, thereby improving both the safety and quality of the food being produced. This review provides an introduction to all of the major techniques and materials currently available.
Introduction to hygiene in food processing
Key Topic 4 (2001)
Price per copy: £30

Presents an overview of the philosophy and practice of good food hygiene in the prevention of microbiological, chemical and physical contamination of food covering issues like personnel hygiene, the design of equipment, layout of premises, and the management of cleaning regimes.

Hygienic design of liquid handling equipment
(second edition)
Members £80 / non-members £120

Details the principles and practicalities of hygienic design and their significance in assuring the safety of liquid products, with extensive use of high resolution colour images to illustrate key points of design practice and how problems can arise.

Review of current cleaning practices and contamination controls in the dry goods industries
Review 30 (2002)
Members £30 / non-members £45

Review of industry practice on fruit and vegetable decontamination
Review 14 (1999)
Members £20 / non-members £30

Laboratory guides

Guidelines for the design and safety of food microbiology laboratories
Guideline 66 (2011)
Members £60 / non-members £90

Make sure that your microbiology laboratory is designed to be safe for those working there and to facilitate the provision of reliable results.

Challenge testing protocols for assessing the safety and quality of food and drink
Guideline 63 (2010)
Members £60 / non-members £90

Microbiological challenge testing is the laboratory simulation of what can happen microbiologically to a product during distribution and subsequent handling if it were to be contaminated with a microorganism. This guideline contains the necessary information for companies wishing to follow a standardised protocol for challenge testing their food products.

Manual of microbiological methods for the food and drink industry (fifth edition)
Guideline 43 (2007)
Members £160 / non-members £240

Contains 69 standardised methods for the microbiological analysis of food, drink and food environment samples, presenting each as a detailed working protocol that specifies its scope, principle, media and reagents, apparatus and procedure, and results interpretation. The methods cover detection, confirmation and enumeration of a range of established and emerging pathogens and spoilage organisms.

Meat and meat products: the calculation of meat content, added water and connective tissue from analytical data (second edition)
Guideline 22 (2007)
Members £60 / non-members £90

Gain a full understanding of meat content calculations to help ensure accurate and legal meat content declarations on products. This extensively revised and updated guideline provides a clear explanation of meat content calculations. It first explains the basic calculation of meat content, and then works step-by-step through the calculations to allow for the presence of soya, cereal protein, connective tissue, added water and fat migration, as well as restrictions imposed by recent meat content legislation. The calculations are illustrated with realistic worked examples.

A code of practice for microbiology laboratories handling food samples (fourth edition)
Guideline 9 (2013)
Members £90 / non-members £135

Practical guidance on safe and efficient operation of microbiology laboratories involved in analysis of food samples, covering laboratory hygiene, equipment, media preparation and various procedures.
Guidelines for the preservation of official samples for analysis
Guideline 36 (2002) Price per copy: £45

Advice on minimising the effects of handling and storage on food samples taken for chemical and compositional analysis that will help to assure reliable and verifiable results - which is particularly important for official samples, where the test results could be used in legal proceedings.

Guidelines for the identification of foreign bodies reported from food (second edition)

Explains the main approaches to foreign body identification, commenting on their significance, limitations and practical application and highlighting how correct identification, based on appropriate techniques, can help to trace the source of the foreign body and prevent recurrences. Complements Reviews 13 and 16.

Guidelines on the incubation testing of ambient shelf stable heat preserved foods
Guideline 34 (2001) Price per copy: £45

Explains incubation testing - its role, methods, benefits and limitations - and gives practical guidance on its use in the quality control of ambient shelf stable heat preserved foods, to provide an authoritative reference guide for all personnel concerned with incubation testing of these foods.

The catalogue of rapid microbiological methods (seventh edition)
Review 1 (2012) Members £60 / non-members £90

Using simple tables for ease of cross-referencing, the 7th edition of this well established review lists over 400 kits from around 50 kit manufacturers. It covers pathogens of interest to the agri-food chain (e.g. Salmonella, Listeria, Staphylococcus aureus, Escherichia coli and Cryptosporidium), spoilage organisms (e.g. yeasts) and hygiene testing.

Guidelines for establishing the suitability of food microbiology methods
Guideline 29 (2001) Members £50 / non-members £75

Provides standardised criteria for assessing the suitability of microbiological methods for food analysis to ensure the reliability of results, achieve or sustain laboratory accreditation, or support a due diligence defence.

Guidelines for the measurement of water activity and ERH in foods

Practical guidance on how to ensure accurate measurement of water activity, accompanied by explanations of underlying theory and a description of the importance of water activity in food preservation.

Effective microbiological sampling of food processing environments

Describes a philosophy and a range of general practical considerations in planning a programme and approaches to sampling the food production environment for microorganisms that can contaminate food and compromise food safety. Complements Guideline 45 and available in loose-leaf format as a supplement to that guide.

Microbiological control of food industry process waters: guidelines on the use of chlorine dioxide and bromine as alternatives to chlorine
Guideline 15 (1997) Members £40 / non-members £60

Reviews the required operating parameters and monitoring and control systems for successful operation of food process water system and provides guidance on the relative merits of these biocides for waters used in product washing, fluming and cooling operations.

Review of methods for the determination of fat and oil
**Microbiology (general)**

**A guide to microorganisms and their control**
Guideline 68 (2012) Members £70 / non-members £95

Details of the key growth characteristics of individual microorganisms and microbial groups - at your fingertips in a series of one-page summaries.

**Establishment and use of microbiological criteria (standards, specifications and guidelines) for food**
Guideline 52 (2007) Members £60 / non-members £90

The guideline sets out the current thinking with respect to microbiological criteria (microbiological specifications, microbiological guidelines and microbiological standards), and how microbiological specifications and guidelines can be developed and suggests best use of the resource and resulting data when testing food for the presence of microorganisms.

**Industrial microbiological risk assessment - a practical guide (second edition)**
Guideline 28 (2007) Members £60 / non-members £90

Describes the concept of microbiological risk assessment and explains how it can be used as an integrated part of food safety assurance systems to help improve food safety.

**Microbiological measurement uncertainty: a practical guide**

Explains uncertainty in microbiological measurements and how to take account of it to help ensure the reliability of microbiological analyses using a step-by-step approach devised by a group of industrial microbiologists and data analysts. The strong emphasis is on practical day-to-day application and specifically addresses the ISO 17025 requirements.

**Food microbiology: an introduction**
Key Topic 12 (2006) Price per copy: £30

Although food microbiology is a very large topic, this book attempts to deal in brief with all of the major aspects. These include the characteristics, growth requirements and effects on the food (or those consuming it) of pathogens, spoilage organisms and ‘beneficial’ organisms, the primary methods of reducing or eliminating unwanted organisms and preventing food recontamination, and the principal techniques for detecting, identifying and enumerating food microorganisms.

**Yeast and moulds: occurrence and control in the food factory**
Review 58 (2007) Members £50 / non-members £75

This review summarises the biological nature of yeasts and moulds and their significance in relation to different food
products and processing regimes. It looks at factors that control their growth, ways in which they get into and move around the factory environment, methods for controlling them (including the growing problem of resistance to various factors), and the latest analytical techniques, as well as the production of mycotoxins and other food safety issues.

Microbial spoilage of food: a review

This review provides a guide to the general spoilage patterns of different food groups and investigates whether there are any relevant spoilage organisms that could be used routinely as a more reliable microbial indicator of product quality of a range of food groups. It demonstrates that, when current target levels for specific organisms or groups of organisms are met, the food in question often shows no sign of microbial deterioration (i.e. the food is still fit for consumption from a microbial standpoint).

Review of natural antimicrobial food ingredients

Modelling of microbial non-linear thermal inactivation kinetics: a review
Review 26 (2001) Members £30 / non-members £45

Significance of injured microorganisms in food

Milling and baking

Starch handbook - cereal and tuber starches: their nature and performance in foods
Review 51 (2006) Members £40 / non-members £60

This handbook provides practical guidance on starches as raw materials, for use by food technologists and other industrialists. Taking a strong practical stance, and containing the type of information that a practising food technologist is likely to need on a day-to-day basis, it describes what starch is and explains how basic starch materials are made. It then looks at how starch can be treated to modify its properties, describes how these properties can be measured, and examines the performance of starches in a range of liquid, semi-moist and hard foods.

CCAT manual of methods

This manual provides a single reference guide to the main wheat and flour test methods used in laboratories throughout the milling and baking industries. It also includes methods applicable to a broad range of cereals and methods specific for cereal product testing and, in particular, has expanded its scope to include oats in its new methods and method validation.

Members: Free. Access via our website (login required): www.campdenbri.co.uk/ccat

Non-members £300 E version (pdf zip file) (as at time of purchase)

Rheological and other techniques and methods used in the characterisation of food systems
Review 57 (2007) Members £40 / non-members £60

Aspects of cakemaking

Dried gluten in baking

Microbially generated spoilage odours during grain storage: factors affecting their formation

The production of laminated bakery products
Packaging technology

Guidelines on good manufacturing practice for heat processed flexible packaging
Guideline 50 (2006) Members £60 / non-members £90

Growth in the use of flexible pouch packaging for heat preserved foods has created new opportunities for presentation of products ranging from rice and pasta ready-meals, meats and vegetables to sauces, desserts and pet food. Produced by representatives actively involved in the manufacture and development of these types of products, this document provides guidance on in-pack heat processing of such products to encourage and enable the adoption of good manufacturing practice in the processing of such products. It takes in packaging requirements (pre-formed, reel fed and secondary), filling techniques, sealing conditions, processing (both pasteurisation and sterilisation) and transportation. It also includes information on recommended quality assurance checks and on pouch defects.

Active and intelligent packaging: a review

Active packaging involves an interaction between pack and food product to extend the shelf life of the product. An intelligent pack monitors the quality and/or safety of a food product, providing an indication that can be helpful in the distribution chain. This review highlights the different materials used in the manufacture of active and intelligent packaging, and the types of product to which they may be applied. It includes many examples of products already in the marketplace.

Fresh prepared produce: GMP for high oxygen MAP and non-sulphite dipping
Guideline 31 (2001) Price per copy: £80

Describes how the quality shelf-life of fresh prepared fruit and vegetables can be extended with the use of novel high oxygen modified atmosphere packaging (MAP) and non-sulphite dipping treatments, and explains the underlying principles of the technology.

Safe packing of food and drink in glass containers: guidelines for GMP

Provides detailed practical guidance on use of glass packaging, and its compatibility with the process and product, relevant to operations of all sizes including small and medium sized operators, and includes an illustration of the principles of HACCP (Hazard Analysis and Critical Control Points) to this type of product.

Food packaging: an introduction
Key Topic 7 (2003) Price per copy: £30

Describes the main packaging materials (metal, glass, paper and board, plastics) and the benefits and limitations of each, and looks at the main functions of packaging (covering food safety, physical protection, marketing and conveying information), before discussing the importance of compatibility between the food, the process and the package.

Protocols for performance testing of shelf-stable heat sealable containers
Guideline 7 (1995) Members £40 / non-members £60

Includes the results obtained from surveys undertaken by a joint Campden BRI/PIRA Working Group to test containers for integrity and outlines various protocols for individual unit packages and cased containers including visual/measurement seal test, peel test, burst test and drop tests.
Biodegradable and compostable packaging materials for foodstuffs
Review 64 (2010) Members £50 / non-members £75

Biodegradable polymers may replace commonly used oil derived plastics in many applications, including food packaging. Although they are still too expensive and their performance and production volumes do not match those of conventional materials, some of them have properties that make them unique. This review describes the current state of development of biodegradable food packaging. In the first part, the sector is considered as a whole, highlighting both weakness and growth opportunities. In the second part, individual biodegradable plastics are described.

The manufacture and integrity of seals for packaged foods

Guidelines for the good manufacturing and handling of modified atmosphere packed food products
Members £40 / non-members £60

Provides information on all stages of the MAP process covering products such as red meats and offal, fish and other seafood, poultry, cooked, cured and processed meat products, cook-chill food, non-dairy bakery, dairy products, pasta and eggs, combination products, dried foods, and fruit and vegetables.

The shelf stable packaging of thermally processed foods in semi rigid plastic barrier containers: a guideline to GMP
Members £50 / non-members £75

Review of the integrity of heat processed containers through manufacturing and distribution

Processing (general)

Guidelines on the reuse of potable water for food processing operations
Guideline 70 (2012) Members £70 / non-members £95

Provides help on the assessment of microbiological, chemical and physical hazards that can enter potable water following its first use in a food processing operation. In particular, this guidance will help food manufacturers provide evidence and documentation to support the safe reuse of water to their customers and the Competent Authority as required.

Foreign bodies in foods: guidelines for their prevention, control and detection (second edition)

Guidance on how to identify and exploit the latest technology for the prevention, control and detection of foreign bodies in foods, as part of a systematic food safety assurance programme. Provides useful reference information such as contact details for suppliers.

Food preservation: an introduction
Key Topic 9 (2004) Price per copy: £30

Explains the principles of traditional food preservation technologies including heat treatment, chilling, freezing, drying and curing, as well as more recent innovations such as modified atmosphere packaging and explains how these relate to the microbiology, biochemistry and chemistry of foods.
New technologies in food preservation: an introduction
Key Topic 8 (2003) Price per copy: £30

Explains the principles of non-traditional food preservation technologies such as high pressure processing, irradiation, pulsed electric fields and power ultrasound, and illustrates these with examples of products from the marketplace and from research and development.

Food manufacturing: an overview
Key Topic 3 (2001) Price per copy: £30

Explains how various aspects of modern food manufacturing fit together, with sections on preservation and processing, packaging, safety, quality attributes, quality management (including HACCP), and food legislation and regulation.

High pressure sterilisation: a review

Rapid cooling of foods

Power ultrasound - current and potential applications for food processing

The use of high hydrostatic pressure in food microbiology

Practical guidelines for monitoring on-going job performance of sensory descriptive panellists
Guideline 58 (2008) Members £60 / non-members £90

Sensory assessors or panellists play a unique role within any organisation. Collectively, they constitute a sensory panel - an analytical tool that performs objective assessment and is focussed on delivering quantitative and/or qualitative results. There are many factors that can impact on a panellist's motivation and performance. This guideline looks at the monitoring of performance.

Guidelines for the motivation of sensory panels within the workplace
Guideline 57 (2008) Members £60 / non-members £90

Panel motivation under some circumstances is seen as more of a luxury than a necessity. The message conveyed is that motivation plays a large role in all our work environments and is strongly linked to overall performance.

*Combined price when buying both Guideline 57 and 58
Members £90 / non-members £135

A review of ingredients, physiological mechanisms and measurements involved in the enhancement of satiation
Review 60 (2008) Members £50 / non-members £75

This review discusses how different foods and ingredients can affect satiety and therefore subsequent energy intake. It also reviews ways of measuring satiety in human feeding trials. It aims to provide information to the food industry about how food products can be formulated to maximise satiety and provides an insight into how satiety and satiating effects of these food products can be measured.

Product development

Product development guide for the food and drink industry (second edition)
Guideline 8 (2007) Members £50 / non-members £75

Adopt best practice in the development of new food and drink products with the help of the new edition of Campden BRI's product development guide.
Guidelines for the selection and training of assessors for descriptive sensory analysis

Guideline 37 (2002) Members £60 / non-members £90

An easy-to-follow and easy-to-adopt step-by-step approach to sensory panel recruitment, training and monitoring to help achieve optimal panel performance and reliable sensory analyses. For recruitment it covers aspects such as advertising, application procedures, interviews, screening tests, and recruitment criteria. After discussing the importance and likely content of training both of individuals and the panel as a whole, it describes how monitoring can be applied at the training stage and beyond - including the use of graphical and statistical tools.

International guidelines for proficiency testing in sensory analysis

Guideline 35 (2001) Price per copy: £45

Reducing the fat content of meat products: a review of fat replacement

Review 65 (2010) Members £50 / non-members £75

Important and useful information for new product development personnel who have been challenged with reducing the fat content of products containing meat, such as sausages or pies. This document provides a background in fat chemistry and summarises the implications of removing fat from meat products. It outlines the methods used to reduce fat in product trials conducted world-wide, including the use of fat replacers in different products, and reviews the literature concerning methods for reducing the fat content of meat products.

Dietary fibre and the glycaemic index: technological and physiological aspects

Review 49 (2006) Members £40 / non-members £60

Edible films and coatings


Gums and thickeners: a review of food hydrocolloids


Integrating consumer needs into product quality using a quality function deployment (QFD) approach

Review 29 (2001) Members £30 / non-members £45

Consumers' approach to eating healthily: key drivers, barriers and other factors affecting food choice

Review 50 (2006) Members £40 / non-members £60

Issues in children’s food choices: methods for sensory and consumer research

Review 53 (2007) Members £40 / non-members £60

The role of consumer expectations in food choice: a review

Review 24 (2001) Members £30 / non-members £45

Time intensity data analyses - panel performance and product characterisation


Quality management

TACCP (Threat Assessment and Critical Control Point): a practical guide

Guideline 72 (2014) Members £90 / non-members £135

This guideline reflects the principles and practices of TACCP, and other methods employed in the assurance of food and drink safety and security. A core element in the defence of food and drink against attack is a systematic evaluation of vulnerable elements of the supply chain, carried out by an experienced and trusted team - Threat Assessment and Critical Control Point (TACCP). The evaluation reflects established procedures for risk management and it is likely that organisations will increasingly incorporate it into a framework for crisis and/or business continuity management. Key points are illustrated with examples and case studies.
exercises for six organic crop and animal product scenarios, and will be of interest not only to those involved in the production of organic raw materials, but also to those who manufacture and sell organic final products.

**HACCP auditing standard (2nd edition) (2009)**  
Members £50 / non-members £75

As companies have become more familiar with HACCP, the emphasis has shifted from establishing a HACCP system to HACCP standards for auditing and verification. Presented in a format that is fully compatible with our other HACCP publications, the HACCP Auditing Standard defines the requirements that a food company needs to fulfil in order to obtain independent, third party recognition of its HACCP system. Included with the Standard is the protocol describing the processes associated with audits carried out against the Standard.

**Traceability in the food and feed chain: general principles and basic system requirements**  
Guideline 60 (2009)  
Members £60 / non-members £90

Ensure that you have a robust system in place that identifies the source (time and place) of all incoming materials, records how they were mixed, and identifies when and where they were dispatched, so that appropriate action can be taken in the event of a problem. Although regulations, international standards and commercial standards require traceability systems, none is prescriptive in the way they are to be achieved. This guideline outlines the general principles and basic system requirements for the design and implementation of a traceability system - with special reference to food safety and to legal and commercial requirements in the European Union.

**HACCP: a practical guide (fourth edition)**  
Guideline 42 (2009)  
Members £50 / non-members £75

Assure the safety of your food products by adopting HACCP with the help of Campden BRI’s long-established practical guide. This guide combines a clear explanation of the principles of HACCP (Hazard Analysis Critical Control Point) with sound practical advice on how to approach and implement HACCP. It particularly focuses on the increasing importance of pre-requisites, and the need to document decisions regarding hazard and risk analysis.

**HACCP in agriculture: a practical guide**  
(Guideline 10 (2009))  
Members £50 / non-members £75

Ensure that the products that you supply to the food industry meet the highest possible safety standards. This updated guidance, which for the first time covers both crop and animal production systems, takes the reader through...
HACCP in a simple, step-by-step way, to help them understand it and apply it to their own systems. Pertinent examples of crop and animal systems throughout the text emphasise both the relevance and simplicity of the analysis.

Crisis prevention through incident management: being prepared and responding effectively
Guideline 49 (2006) Members £50 / non-members £75

All food operations face problems from time-to-time, including 'technical incidents' with their products or processes - perhaps an accidental contamination of an ingredient or a failure in a process. Careful planning for technical incidents and effective management of them when they arise can prevent incidents from becoming crises. This planning and management can greatly reduce the effect that an incident might have on a business - and even save the business's life. This document was produced to help companies - especially small and medium sized companies - prevent and manage incidents, and in particular to prevent incidents from becoming crises.

Designing and improving acceptance sampling plans - a tool
Review 27 (2001) Members £30 / non-members £45

Water quality for the food industry: management and microbiological issues
Guideline 27 (2000) Members £40 / non-members £60

Describes how best to manage water as a resource, as a source of potential microbiological problems such as Cryptosporidium and Legionella, and as a bulk waste requiring disposal. Complements and builds on Guideline 21.

Water quality for the food industry: an introductory manual
Guideline 21 (1998) Members £40 / non-members £60

Describes water quality, the factors that affect it, and its importance to food products and food production, by providing a technical overview that will engender a better understanding of water as a resource and its effective management. Complements Guideline 27.

Campden food specifications

Campden Food Specifications have been used for many years by the industry as quality benchmarks for canned and quick-frozen fruit, vegetable, meat and fish products. They are written and approved by representatives from industry - including manufacturers, retailers and relevant trade bodies - and they act as authoritative standards, enabling buyers and suppliers to agree on product characteristics.

Quick frozen specifications
Members free / non-members £60

Specifications are available for the following quick frozen foods:
L2/6 Peas (including petits pois) (2012)
L3/8 Sliced green beans (2014)
L4/6 Cauliflower florets (2011)
L5/7 Small carrots (2012)
L6/5 Brussels sprouts (2011)
L7/5 Broad beans (2008)
L8/5 Diced root vegetables (2011)
L9/3 Cut green beans (2008)
L10/5 Whole green beans (2014)
L11/6 Potato chips (2010)
L12/4 Sliced carrots - rings (2009)
L13/4 Broccoli spears (2009)
L14/4 Cut celery (2009)
L15/4 Strawberries (2009)
L16/5 Raspberries (2014)
L17/6 Sweetcorn kernels (2012)
L18/4 Sliced courgettes (2009)
L19/4 Whole onions (2013)
L20/4 Corn-on-the-cob (2008)
L21/4 Shredded cabbage (2008)
L47/5 Diced peppers (2011)
L58/4 Leaf spinach (2009)
L59/4 Broccoli florets (2011)
L78/4 Sliced onions - unblanched (2009)
L81/4 Diced onions - unblanched (2009)
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<td>L83/4</td>
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<td>L84/4</td>
<td>Julienne carrots (2009)</td>
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<td>L89/2</td>
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<td>L100/2</td>
<td>Roasting potatoes (2011)</td>
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**Canned food specifications**

Members  free / non-members £60

Specifications are available for the following canned foods:

**Fruit**

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<td>L25/6</td>
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<td>L26/6</td>
<td>Pear halves and quarters (2014)</td>
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<td>Fruit salad (2008)</td>
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<tr>
<td>L31/6</td>
<td>Grapefruit segments and sections (2010)</td>
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<tr>
<td>L32/5</td>
<td>Mandarin segments (2008)</td>
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<tr>
<td>L33/6</td>
<td>Peeled and unpeeled apricot halves (2014)</td>
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<tr>
<td>L44/5</td>
<td>Pineapple variants (2010)</td>
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<tr>
<td>L45/5</td>
<td>Cherries - pitted and unpitted (2014)</td>
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<td>L61/3</td>
<td>Strawberries (2008)</td>
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<td>L65/4</td>
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<td>L87/3</td>
<td>Two fruits - peach and pear dice (2009)</td>
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<tr>
<td>L90/3</td>
<td>Prunes - pitted and unpitted (2010)</td>
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<td>L102/3</td>
<td>Crushed pineapple (2010)</td>
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<tr>
<td>L103/2</td>
<td>Solid pack apple and apple slices (2008)</td>
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<td>L109/2</td>
<td>Orange segments (2010)</td>
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<td>L113/2</td>
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**Meat and fish**

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<td>L50/5</td>
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<td>Tuna in oil or brine - flakes (2008)</td>
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<td>L53/5</td>
<td>Sardines in oil or brine (2010)</td>
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<td>L54/5</td>
<td>Sardines in tomato sauce (2010)</td>
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<td>L74/4</td>
<td>Tuna chunks in oil, brine or water (2008)</td>
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<td>L75/5</td>
<td>Tuna steak in oil, brine or water (2014)</td>
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<td>L77/4</td>
<td>Pilchards in tomato sauce (2010)</td>
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<td>L95/3</td>
<td>Mackerel fillets in tomato sauce (2011)</td>
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<td>Mackerel fillets in oil or brine (2011)</td>
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**Vegetables and pasta**

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<td>Whole kernel corn (including sweetcorn with peppers) (2008)</td>
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<td>L67/4</td>
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<tr>
<td>L68/3</td>
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<tr>
<td>L70/3</td>
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<td>Carrots - style 'whole' (2013)</td>
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<td>L79/3</td>
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<td>L108/2</td>
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