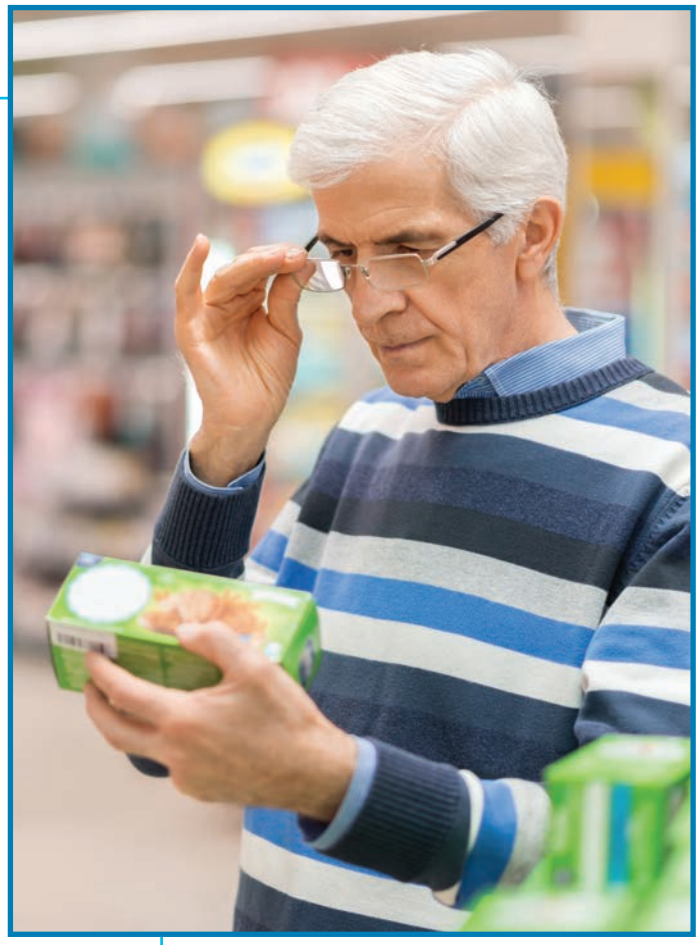
Campden BRI
food and drink innovation



Sensory claims

The impact of sensory substantiation claims on consumers' purchase decisions

Search 'sensory claims' at campdenbri.co.uk

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Sensory claims give companies an opportunity to positively characterise their products in sensory terms and position them accordingly on the market. Technical claims need to be substantiated, demonstrable and verifiable so that consumers are not misled. Despite these requirements, there is minimal guidance available to industry practitioners.

One of our latest member-funded research projects will provide members with insights into if and why sensory substantiation claims are seen to be credible, meaningful and valuable, and look at their impact on consumer behaviour. The two-year project will also look at how to communicate claims to consumers and how to make a claim for a global product. ■

Catch up with the research by attending the Sensory and Consumer MIG or by getting in touch

Newsletter

Campden BRI 100 years with industry for industry


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page 3

April 2019
www.campdenbri.co.uk

Information

We can help you track social media

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Tracking social media can provide real time information that can inform business activities, such as monitoring trends, consumer opinions or competitor activity. Information can spread rapidly through social media. It is estimated that there are 2.77 billion social media users worldwide and the number is growing.

We have tools which enable us to conduct scans and anaylsis of social media tailored to selected criteria including:

- trending themes
- media exposure
- sentiment
- geographical location of posts
- top sources

We can also continually monitor social media and provide regular updates. ■

To find out more about the benefits of social media monitoring, get in touch

Contact us

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For other sites, see
www.campdenbri.co.uk/campdenbri/contact.php

support@campdenbri.co.uk
www.campdenbri.co.uk

New members

We are delighted to welcome the following new members:

A E Rodda and Son Ltd - clotted cream manufacturer

Alcarelle Ltd - developers of an alternative to alcoholic drinks

Deltagen UK Ltd - producers of plant-based protein alternatives

Eyepro Systems SRL - manufacturers of systems for online measurements on bakery production lines

Glucanova AB - production of oat-based food ingredients

Lindt and Sprungli UK Limited - UK distributor of chocolate products

Loblaw Companies Limited - retailer

Montezuma's Chocolates - manufacturer and packer of chocolates and truffles

National Trust Enterprises Ltd - charity

Parkside Flexibles (Europe) Ltd - flexible packaging manufacturers

Sacoma Global - produces of sweet potato products

The Five Points Brewing Company Ltd - brewers

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membership@campdenbri.co.uk

Please notify the Membership Department of any changes to your company's name or address to allow us to keep our records up to date.

Grain quality and safety bulletin now available

The Grain Quality and Safety Bulletin has been developed and launched as part of a member-funded research project. Members can opt-in to receive this regular technical bulletin here: www.campdenbri.co.uk/optin.php ■

More alerts and updates for members on page 7

New Russian regulation on the safety of alcoholic beverages

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After eight years of negotiations, Technical Regulation of the Eurasian Economic Union "On the Safety of Alcoholic Beverages" (TR EAEU 047/2018) was finally published on 09 January 2019. It is a major step for the EAEU towards a single market for alcoholic beverages as it ensures uniform terminology and harmonised requirements for various types of alcoholic beverages, their production, storage, sale, transportation, and disposal across all EAEU member states (Russian Federation, Belarus, Kazakhstan, Kyrgyzstan, and Armenia).

The new regulation brings with it many improvements but also harbours some challenges. For instance, manufacturers based abroad may need to comply fully with the same requirements for raw materials and production facilities as the ones based in the EAEU. Due to reclassification, manufacturers of some beverages (e.g. cognac) may require new licenses, different excise duty stamps, and revamped labels. On the other hand, the updated definition of beer beverages is poised to boost the craft brewing sector even though it does not provide for stronger craft beer (7% ABV or more). In beer, replacing up to 50% of malt with grain and sugar-containing products (an increase from 20%) will be a new norm. Honey brewing and cider industries will also be among the winners. ■

Get in touch if you want to find out how the new regulation affects you.

Using microscopy to investigate packaging

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Microscopy can aid the investigation of plastic and metal packaging material specification or allow in-depth analysis of defects or irregularities. Both types of packaging can experience a variety of defects.

For metal packaging these include issues such as external or internal corrosion, sulphur staining, pin holing and breaks in the lacquer/coatings.

Defects commonly associated with plastic packaging include issues such as faulty seals, delamination, perforations and pin holing.

Examination of defects and irregularities using microscopy allows the integrity of the packaging to be studied to establish if, and how, it has been compromised. Microscopy uses a range of techniques, including stereo microscopy, compound microscopy, scanning-electron microscopy (coupled with x-ray microanalysis and X-ray mapping) and Fourier Transform infrared (FTIR) spectroscopy to investigate plastic and metal packaging. ■

These tests complement our complete packaging analysis. It covers all forms of packaging and can harness additional techniques, including micro-CT scanner, dye penetration testing, pressure testing and migration testing.
Get in touch to find out more.

Feature

How to reduce costs and improve quality by optimising thermal processing

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What is thermal processing?

Thermal processing is an important method of food preservation, controlling the presence of microbial spoilage organisms in food stuffs and ensuring products are safe. A growing range of food products is preserved using thermal technologies, ranging from sterilisation, such as canning and ultra high temperature (UHT) processing, to milder pasteurisation heat treatments, such as high temperature short time (HTST), steam/air oven cooking and pasteurisation tunnels.

Why optimise thermal processing?

Preservation of a food's nutritional and sensory attributes during heat processing is very important for quality and consumer acceptance of the product. As the thermal stability of nutrients or quality attributes often differ from pathogenic organisms, it can be challenging to find an optimal thermal process, but it is possible.

Process optimisation, i.e. a reduction in over-processing, can aid the retention of natural or added quality components such as colour, vitamins and antioxidants after heating. It can also extend product shelf-life, increase product throughput and reduce energy consumption of equipment.

How can thermal processing be optimised for quality?

Thermal processes are primarily applied to assure product safety. The time and temperature of the treatment can be tailored to optimise quality - such as flavour, colour, texture and vitamin or nutrient levels - without compromising safety.

Maximising the efficiency of the heat transfer is key when optimising a thermal process for quality reasons. There are

several factors that affect the rate of heat transfer, including, heating method, packaging type and product composition. Adjusting any of these factors to improve the rate of heat transfer can aid quality retention - and sometimes a small adjustment can have a large impact.

Processes can be optimised to increase quality with the help of theoretical calculations and modelling software. These tools provide insights into heating effects on product properties without extensive trial work. For example, lower temperatures applied for longer periods may improve quality for some products, but higher temperatures applied for shorter periods of time may benefit others.

When should I optimise my thermal process?

Quality optimisation work can be an easy add-on to a thermal process validation project. Validation checks that food safety requirements are met but optimising the process can ensure that the product isn't over processed, potentially reducing time and energy requirements.
If you're looking to improve existing processes, or to explore the potential of new products and process equipment, we can help you optimise your existing processes using calculations, modelling or with on-site trial work. ■

Get in touch to find out more

White papers

www.campdenbri.co.uk/white-papers.php

BRC Global Standard for Food Safety, Issue 8
Clause 5.2.5: Cooking (heating) instruction validation

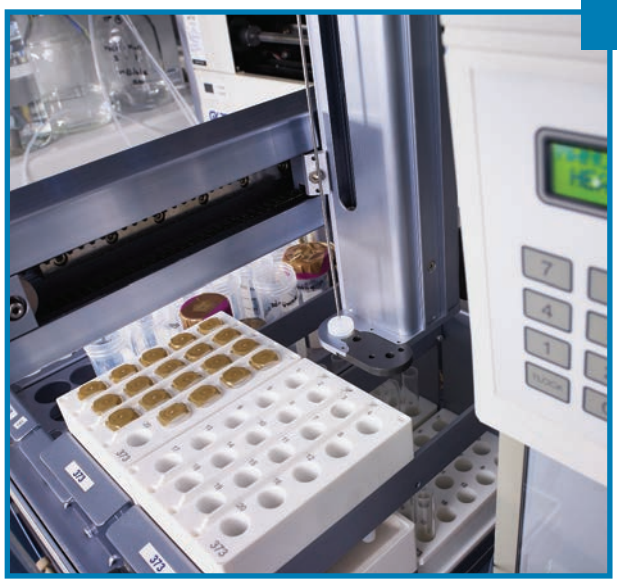
by Greg Hooper

The application of validation principles to continuous thermal and non-thermal processing

by Martin George and Danny Bayliss

Thermal process compliance - seven things you should know

by Martin George



Brewing Analytes Proficiency Scheme

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The Brewing Analytes Proficiency Scheme (BAPS) is an international scheme designed to promote quality in the measurement of a range of chemical, microbial and sensory analytes in beer, and to help brewers monitor and improve the quality of their measurements, building confidence in their testing.

Participating in BAPS enables companies to:

- demonstrate the effectiveness of their own quality systems
- compare their laboratory's measurements with those of their peers
- demonstrate competence to third parties such as accreditation bodies, regulators and customers
- monitor trends in measurements over time
- monitor an individual's capability as part of their training programme

BAPS is accredited by the United Kingdom Accreditation Services (UKAS) and is run as a partnership between Campden BRI and LGC Standards - a world leader in proficiency testing.

The scheme covers chemical, microbiological and sensory analysis. Participants analyse the samples using their in-house methods and the results are sent to the scheme organisers. Each then receives a report which benchmarks their performance against all other participants. ■

Get in touch to find out more

Member zone

to access privileged member information and services

Meet a MIG - Sensory and Consumer

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In the second of this series, we focus on the Sensory and Consumer Member Interest Group (MIG). The Sensory and Consumer MIG provides a unique forum for sensory and market research professionals from member companies to discuss areas of common interest.

There were some "tasty" hot topics discussed at the last meeting in February, including:

- what impact will technology (e.g. AI and virtual reality) have on sensory science?
- preference mapping - uses, deployment, limitations, developments
- packaging - how it influences sensory characteristics

Like all MIGs, the Sensory and Consumer MIG is responsible for steering member-funded research projects, current projects include

- design and modelling of the impact of food structure on food texture, and
- the impact of sensory substantiation claims on consumers' purchase decisions.

Do you have a view on any of the hot topics? Want to know more about the research projects?

Come along to the next MIG on Tuesday 21 May - just email migs@campdenbri.co.uk and we'll add you to the group. ■

Members can access copies of past presentations delivered at our Member Interest Group (MIG) meetings

Search 'migs' at campdenbri.co.uk

New research

Sugar reduced biscuits - understanding technical challenges and consumer reactions

This research project looked at the impact of reducing sugar levels, on biscuit quality and consumer acceptance. The project also demonstrated the use of a novel application of survival analysis to help manufacturers identify the critical point at which a product becomes unacceptable to consumers.

The outcome of the research has been published in RD448 and was conducted as part of a member-funded research project into clean label sugar reduction.
The report is free and exclusive to our members - www.campdenbri.co.uk/research/sugar-reduction.php ■

Superchilling to extend shelf-life

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Superchilling occurs when food is stored between 0°C and -12°C. At these temperatures the food product is partially frozen.

A three-year member funded research project that ran from 2016-2018 investigated how long a product can be kept at superchill whilst retaining an acceptable chilled shelf-life. Products were stored at superchill temperatures until they were released into the chill chain. The shelf-life was determined by a sensory score and the effects on microbiology were also determined for both safety and spoilage flora.

Our research showed that is possible to extend the stored shelf-life of certain products before they are released into the chilled distribution chain and maintain their original chilled shelf-life. ■

To find out more about the research search 'superchilling' at campdenbri.co.uk

Campden BRI Day 2019

Wednesday 12 June

This event, which is free to members, allows you to explore how science and technology is being used to tackle industry needs. You have the opportunity to network with industry peers, talk to our experts and view scientific and technical exhibits, attend briefings, take the pilot plant tour and hear the annual Campden Lecture. ■

To register and for more information search 'CBD' at campdenbri.co.uk

Keep up to date

Alerts and updates free with your membership

www.campdenbri.co.uk/optin.php

Food Law Alert

A Campden BRI member service providing prompt and succinct news of developments in UK and EU food law. It is made available to subscribers every fortnight.

Library catalogue

Search all publications held by Campden and Nutfield site libraries - includes scientific and technical journals.

Member funded research (MFR) project websites

View our individual project pages or open our complete programme for active projects. The emphasis is on practical outcomes and industrial relevance.

New technologies bulletins and updates

Designed to enable members to monitor developments in novel and emerging technologies which offer potential to the food and drink industries

R&D reports

The output from our research programme is published through a series of R&D reports; those arising from our MFR projects are available only to members

Regulatory updates

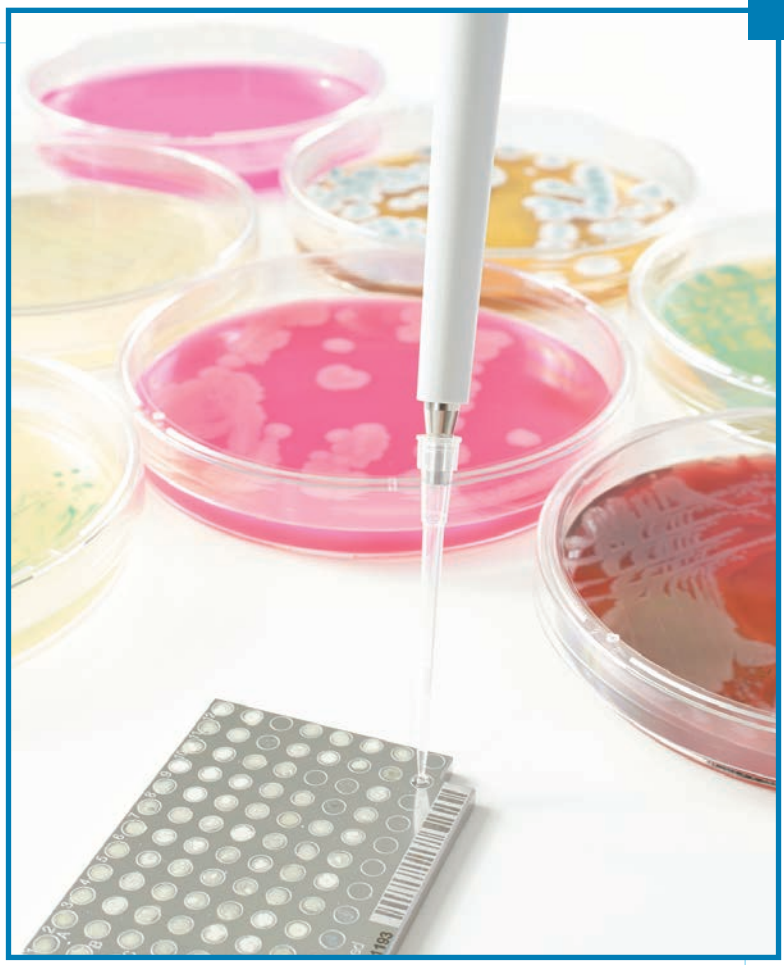
Members have access to our range of regulatory updates. Our monthly updates cover brewing and malt, wine, brewing, cereals,, and grain quality and safety

Research summary sheets (RSSs)

RSSs provide concise overviews of individual R&D projects. They enable you to rapidly identify the developments in your area of interest.

Training and events

A full list of scheduled courses is available on our website www.campdenbri.co.uk/training.php or request a brochure from training@campdenbri.co.uk +44(0)1386 842104



May 2019 training courses

1	HACCP - foundation (level 2)
2	USA food and drink labelling course
~~13-17~~	~~HACCP - advanced (level 4)~~ full
15-16	Internal auditing - principles and practices
21	Food and drink labelling refresher
22-24	Practical microbiology - intermediate
23	HACCP for craft brewers

New course

Microbiology measurement uncertainty: meeting the new requirements for ISO 19036 20 June 2019

Search 'uncertainty' at campdenbri.co.uk

Provides practical guidance on how to apply the new requirements for ISO19036: Microbiology of the food chain - estimation of measurement uncertainty for quantitative determinations.

We have been heavily involved with the development of this new standard and will structure the content on the requirements in the Draft International Standard (DIS) or FDIS (Final Draft International Standard) if published, and any future changes. We expect this standard to be required by accreditation bodies to fulfil ISO 17025:2015. ■

Seminars

BRC Issue 8 briefing 17 May 2019

www.campdenbri.co.uk/brc-v8-seminar.php

Issue eight of BRC Global Standard for Food Safety was released in 2018. An opportunity to hear about the many changes to the standard and what manufacturers seeking certification in the later part of 2019 must do to comply. In addition, the outcomes of the initial audits against the new requirements will be shared for the first time, highlighting trends and patterns of non-conformances against Issue 8.

Health and sustainability challenges for the baking industry 23 May 2019

www.campdenbri.co.uk/baking-sustainability.php

Health and sustainability are hot topics for the baking industry, which is facing increasing pressure from consumers and authorities regarding the nutritional value and sustainability of its products. Delegates will receive an overview of the current health and sustainability issues from industry experts and academia. ■