

Mitigating food fraud - best use of analytical screening tools

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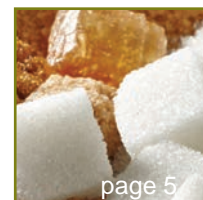
To comply with BRC Global Food Safety Standard issue 7 (Chapter 5.4) companies must minimise the risk of purchasing fraudulent or adulterated food raw materials and ensure that all their product descriptions and claims are legal, accurate and verified. Sometimes, they may need to test high risk raw materials and ingredients.

Our new member funded research project 'Mitigating food fraud - best use of analytical screening tools' will assess the practical applications and limitations of screening approaches. It will also produce guidance for preparation and use of authentic materials in the creation of databases used to calibrate analytical systems. ■

The project will be steered by the food and drink science MIG. If you are a member of Campden BRI and would like to help shape the direction of the project in its early stages please get in touch.



Newsletter





Registration open

Campden BRI Day 2018

www.campdenbri.co.uk/campdenbri-day.php

This year's Campden BRI Day will be on Wednesday 6 June. Come and explore how science and technology is being used to tackle industry needs with a focus on innovation, assurance and compliance, and productivity and cost management.

- Chat with our experts
- Network with others from industry
- Attend briefing sessions on hot topics
- Learn about the practical solutions offered by science and technology
- Tour our extensive pilot plant. ■

Search 'CBD' at www.campdenbri.co.uk

For a flavour of the day watch the 2017 overview video, listen to the lecture given by Heather Hancock, FSA Chair, or read the free briefing sessions

Contact us

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

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New members

We are delighted to welcome the following new members:

The Real Lancashire Black Pudding Company - manufacturer of black puddings

Branded Drinks Ltd - co-packer of beer and cider

Osem UK Ltd - importer of Israeli products

La Tua Pasta Ltd - manufacturer of cooked and chilled ready to cook meat, fish and vegetable filled pastas - chilled and frozen

My Foods Worldwide - African foods wholesaler

Little Freddie - co-manufacturing baby food

The Surrey Copper Distillery Ltd - gin distillery

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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.



Martin Whitworth - university appointment

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Congratulations to Martin Whitworth who has been appointed Honorary Associate Professor in the School of Biosciences at the University of Nottingham. The appointment is for three years and will help to strengthen our links with the university. Martin delivers an annual lecture for Food Science undergraduates at the University and was supervisor for Nick Caporaso while he studied for his PhD at our Campden site in association with the University (see page 7). Links with universities enable us to encourage and support the industrialists of tomorrow and promote an industrial perspective to the academic world, whilst drawing on the experience and world-leading expertise universities have to offer. ■

Virus testing - UKAS accreditation

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Our UKAS accreditation now covers the detection of Hepatitis A and Norovirus in fresh and frozen berries and salad vegetables. We are the only laboratory in the UK to be accredited for the detection of these two viruses in these product types.

Expertise in viruses - including Norovirus and Hepatitis A virus detection methods - will be of value to salad producers, berry producers, retailers and anyone that handles these products within the supply chain and who wishes to extend the scope of their quality management systems. ■

To find out how foodborne viruses get into food and what we can do about it, download our free white paper www.campdenbri.co.uk/white-papers/foodborne-viruses.php

Search 'virus' at www.campdenbri.co.uk

New microbiology facilities

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We have opened a new suite of laboratories to support our microbiology process hall facilities, in which we can conduct process trials with problem microbes.

The lab suite, adjacent to the hall, contains a new, large open-plan laboratory dedicated to studies on heat resistance microbiology, challenge testing, heat process optimisation and validation investigations for the development of new products, processes and technologies. A new self-contained decontamination room will be used to evaluate surface sanitisation and assess the effectiveness of decontamination systems for food production facilities. ■

Get in touch to find out more about our microbiology services



Avoid delays to your analysis results

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Do you need to send samples to us for analysis? You can quickly create address labels for these with our new easy-to-use template. This will help you to get your results as quickly as possible as it will ensure your package goes direct to the right analyst.

The template is available on our website - www.campdenbri.co.uk/services/sample-receipt-form.php or search "send sample" on our website. ■

For more information about sending samples to us visit www.campdenbri.co.uk/services/sample-receipt.php

Sugar reduction - regulatory challenges

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We receive lots of questions about labelling and how the gradual reduction in sugar content of products can be communicated to consumers. Any on-pack claim must comply with legislation, must not be misleading and be chosen from a pre-existing list.

Here are the answers to some of the frequently asked questions we receive:

I am developing a new drink to avoid the UK soft drinks levy. Does this mean that I will be able to put a 'low in sugars' claim on my packaging?

Not necessarily! For the soft drinks levy which will come into effect in April 2018 there are essentially three groups:

- 1 Drinks with a sugar content lower than 5g per 100ml will not be subject to the levy
- 2 A lower rate of 18 pence per litre for drinks with a total sugar content between 5 to 8g per 100ml
- 3 A higher rate of 24 pence per litre for drinks with total sugar more than 8g per 100ml

Rules on nutrition claims have not changed. Products for which a company wishes to make an on-pack 'low sugars' claim will still need to have less than 2.5g of sugars per 100ml for liquids. This means that it will be possible for drinks companies to be exempt from the sugar levy (because their product has less than 5g /100ml) for a product that does not qualify for a 'low sugars' claim.

Could an energy reduced claim be made?

Reduction of the number of calories in products that are likely to be consumed by an individual at one time is one of



the ways the sugar reduction targets can be achieved. An energy reduced claim is therefore an appropriate nutrition claim providing the food can satisfy the conditions for the claim laid down in the Annex as follows:

A claim that a food is energy-reduced, and any claim likely to have the same meaning for the consumer, may only be made where the energy value is reduced by at least 30%, with an indication of the characteristic(s) which make(s) the food reduced in its total energy value. For example '30% less calories - low in sugar' providing the low in sugar claim can also be substantiated.

Could we use 'Now with 30% less sugar than the original recipe' without being concerned about regulatory requirements?

'Now with 30% less sugar than the original recipe' would have the same meaning for the consumer as a reduced sugar claim and would need to satisfy the conditions of the claim laid down in Regulation 1924/2006 as follows:

A claim stating that the content in sugar has been reduced, and any claim likely to have the same meaning for the consumer, may only be made where the reduction in content is at least 30% compared to a similar product.

In addition the claim 'reduced sugars', and any claim likely to have the same meaning for the consumer, may only be made if the amount of energy of the product bearing the claim is equal to or less than the amount of energy in a similar product.

As there are two elements to this claim then both parts of the regulatory requirement must be adhered to and not just the percentage reduction. ■

Search 'sugar reduction' at www.campdenbri.co.uk for video, information and research



Fusing whisky tradition with innovative technology

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We helped InchDairnie to create a new rye whisky - Ryelaw. We used our 50kg pilot maltings to bridge the gap between conventional micro malting systems and the full-scale production.

We malted InchDairnie's raw rye in our pilot maltings and then mixed it with distillers malt before brewing it using a mash filter to separate the wort. The wash was then taken to the distillery to distil.

Ryelaw brings together elements of Scotch whisky and American rye whiskey and is believed to be the first Scotch whisky to use rye in over 100 years.

The rye whisky will take around 6-8 years to mature at the Fife distillery. ■

For more information about our brewing and malting pilot plant

www.campdenbri.co.uk/tours/brewing-malting.php

Member zone

to access privileged member information and services

Member benefits - research summary sheets

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Practical, relevant research remains the cornerstone of what we do. We invest £2 million of membership fees each year to fund relevant research that is voted for and steered by our members.

Research Summary Sheets (RSSs) provide concise overviews of the individual member-funded projects. Members are welcome to discuss projects with the relevant project manager to see how to tap into the research findings. ■

Mailing preferences

We want to make sure that we only send you information that interests you. To update your preferences, visit the opt-in page on our website (campdenbri.co.uk/optin.php). Simply sign-in and select your topics of interest (you can easily register if you haven't already got a sign-in).

You can also choose whether to receive our newsletter by e-mail, post or both. ■

Search 'preferences' at www.campdenbri.co.uk



Spring MIG dates

www.campdenbri.co.uk/research/migs.php

Member Interest Group	Spring '18
'Food and Drink Science' and 'Sensory and Consumer' *	1 May
'Meat and Poultry' and Microbiology' *	2 May
Quality and Food Safety Management	3 May
Agri-Food	9 May
Cereals, Milling and Baking	10 May
Fermented and Alcoholic Drinks	15 May
'Food Service' and 'Nutrition and Health' *	17 May
Packaging	31 May
Processing, Operations and Preservation	24 May

Three spring MIGs will be held jointly*, tackling issues and themes that are important to both groups. If you would like to join a MIG (open to full members), receive an agenda or suggest an agenda item please contact Harry Williams, MIGs manager - harry.williams@campdenbri.co.uk

Our dedicated membership team are committed to making your experience at Campden BRI a rewarding one

www.campdenbri.co.uk/memberzone.php

Preparing a due diligence analysis plan for a brewery

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A food safety analysis (due diligence) plan provides a risk-based approach to food safety analyses. It helps ensure that you carry out all the analyses needed to prove your products are safe and compliant with legislation. A due diligence plan also ensures that regular checks of the latest regulations, industry guidelines and in-house specifications are made, and that you have evidence to show that you comply with them.

The key steps in preparing the plan are:

- Identify the risks and limits
- Sample and carry out the analysis
- Interpret the analysis results and take action, if needed
- Review the plan. ■

For more information read our white paper - www.campdenbri.co.uk/white-papers/due-diligence-brewery.php

If you would like to discuss us helping with your due diligence analysis plan or analysing your samples please get in touch.

Predicting the caffeine content of whole green coffee beans

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Predicting the level and distribution of different compounds of coffee has applications for coffee breeding and roasting. We quantitatively predicted the sucrose, caffeine and trigonelline content of whole green coffee beans at a single bean level using hyperspectral NIR imaging (HSI).

The model performed best for caffeine and trigonelline, but we were also able to estimate the sugar content. This was the first time HSI has been applied to whole green coffee beans.

Our research, conducted in collaboration with the University of Nottingham, has been published in Food Research International - <https://doi.org/10.1016/j.foodres.2017.12.031>



Protein for healthy ageing

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We are involved in a research project that is looking at ways to ensure elderly people get enough protein in their diet - called Protein 4 Life. The aim of the project is to create guidelines on the best way to produce appetising higher-protein foods. We will use our pilot plant facilities to produce higher-protein product samples for consumer trials. The project brings together many universities and companies from across the food industry - reflecting our ethos of bringing together the best partners to deliver what industry needs.

The research, to date, has focused on identifying the optimal level of protein needed in the diet and the type of protein needed to help prevent sarcopenia (degenerative loss of skeletal muscle mass).

The project team, so far, have published:

- An industry based report describing challenges and opportunities specific to the product design brief for protein based foods
- An academic review of optimal protein quantity, distribution, sustainable sources and the effect on appetite in ageing adults ■

To find out more visit the project website - <http://research.ncl.ac.uk/proteinforlife/>



