

# Newsletter

[www.campdenbri.co.uk](http://www.campdenbri.co.uk)



## Next generation analytical techniques for supply chain resilience

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A new member-funded research project illustrates the work we do to support resilience in the food and drink industry supply chain.

Over recent years there have been significant advances in analytical techniques to provide more rapid results with greater sensitivity, thus supporting the detection of emerging food safety risks. This project will provide the opportunity to assess the use of these next generation techniques to assist in ensuring product quality and safety from both chemical and microbiological perspectives. The inbuilt flexibility within the project will allow the provision of timely responses to emerging issues that may occur during the project's 3-year period. This would allow the multidisciplinary team to collate and disseminate important information as well as developing and validating new methods where necessary. Previous projects in this field have enabled the introduction of additional services to our analytical portfolio, including detection of STEC (Shiga toxin-producing *E.coli*) in sprouted seeds, detection of food borne viruses, and improved taint analysis. Related research has also looked at rapid and cost-effective ways of ensuring the authenticity of foods and drinks and detecting potential adulteration.

Visit the project website at  
[www.campdenbri.co.uk/safety](http://www.campdenbri.co.uk/safety)

Your partner for  
supply chain resilience

June 2015

## How resilient is your supply chain?

Ensuring the resilience of your supply chain is the key to protecting both your consumers and your brand. But ensuring that the journey from farm gate to consumers' plate delivers quality, authentic and compliant products can be complex and challenging for retailers, manufacturers, and producers.

A resilient supply chain is also critical to securing the supply of food in the future. One of the big challenges we will face will be feeding a growing population with limited resources while ensuring that the food is safe. The development of new varieties of crops and their protection through sustainable strategies will be key to this.

Here at Campden BRI we can help you address these challenges through our expertise in TACCP, risk assessment, traceability and primary production systems as well as our comprehensive range of analytical and authenticity services to support your assurance systems.

Over the next two months we will focus on the importance of 'resilience' and how you can ensure that your supply chain is protected. To sign up to receive our email feeds visit [www.campdenbri.co.uk/optin.php](http://www.campdenbri.co.uk/optin.php) or you can follow us on Twitter ([twitter.com/campdenbri](https://twitter.com/campdenbri))

Steven Walker  
Director General

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## Latest on the website

[www.campdenbri.co.uk](http://www.campdenbri.co.uk)

### The role of the pilot plant

Blog by Sarah Chapman and Charles Speirs

[www.campdenbri.co.uk/blog/campdenbri-blogs.php](http://www.campdenbri.co.uk/blog/campdenbri-blogs.php)

### New product development: safety first

Blog by Linda Everis

[www.campdenbri.co.uk/blog/campdenbri-blogs.php](http://www.campdenbri.co.uk/blog/campdenbri-blogs.php)

### Preserving nutritional content

Podcast by Julian South and James Luo

[www.campdenbri.co.uk/nutrition-podcast](http://www.campdenbri.co.uk/nutrition-podcast)

### Liquid Chromatography-Mass Spectrometry

Video by Janitha De-Alwis

[www.campdenbri.co.uk/videos/lc-ms.php](http://www.campdenbri.co.uk/videos/lc-ms.php)



## Latest research published

A selection of new R&D Reports further demonstrates the wide range of subject matter that we look at on your behalf:

**Benchmarking energy and water use at individual steps of the brewing processes** (R&D Report 391) (members only)

A survey and benchmarking of brewery processes in terms of energy and water usage at individual process steps was carried out. Specifically, two process steps were identified and surveyed: wort boiling and the cleaning of fermenter vessels after use.

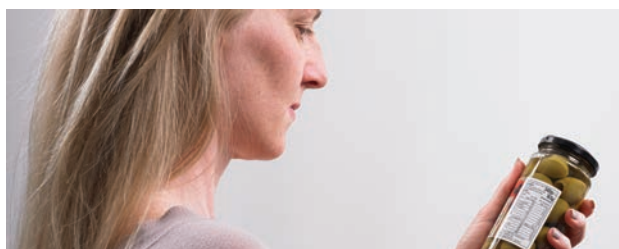
**The effect of added bran on water addition and bread quality** (R&D Report 392) (members only)

Fibre addition affects bread quality, and can result in a number of problems such as reduced bread volume, decreased dough strength, high water absorption, sticky dough, dark crumb colour and a more bitter taste. This study investigated these problems with a view to developing strategies to solve them. Key to this is a clear understanding of the impact of bran components on dough water absorption and gas cell stability.

**Encouraging positive consumer attitude/behaviour change towards sustainable foods: online, direct and indirect measurements of consumers' responses to food logos** (R&D Report 393) (members only)

The significant increase in the number of logos being displayed on food products in recent years has generated some confusion amongst consumers. In the consumption environment, where the notion of a healthy and sustainable diet has gained momentum, the evolving regulation of food labelling has provided an opportunity to re-assess the importance given to on-pack labelling of sustainability-related issues and what these represent to consumers.

For a free electronic copy of these reports, send an e-mail to [auto@campdenbri.co.uk](mailto:auto@campdenbri.co.uk) with the subject line: **send RDxxx** where xxx is the number of the report



Entries from 2014



## Record entry for Ecotrophelia

Student teams from Cardiff Metropolitan University, University of Nottingham, PepsiCo and Leeds Trinity University are competing at the final of Ecotrophelia UK - an annual competition to encourage food technologists of tomorrow to think creatively.

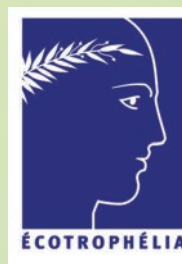
This year saw record entries, so the competition was high. They were carefully reviewed and shortlisted by a panel of industry experts. The teams pitched their ideas to the 'dragons' - a distinguished panel of food experts including representatives from M&S, Coca-Cola, PepsiCo, Defra, Tesco, Sainsbury's, and Warburtons - to compete for £3,500 in prize money and the chance to represent the UK at Ecotrophelia Europe in October.

The UK winning team will be announced on Campden BRI Day on 3 June 2015 - see [www.campdenbri.co.uk](http://www.campdenbri.co.uk) for details of the winning entry.

The five finalists and their products were:

- Cardiff Metropolitan University - KAYS  
Paprika flavour savoury baked snack made with banana peel and wholemeal flour, high in fibre and potassium.
- Leeds Trinity University - Cauliflower Style Rice  
100% cauliflower, shredded and packed into recycled pot. Rice alternative. High fibre, 1 of 5 a day.
- PepsiCo placement students - Medeina  
Cocoa, coconut, raisin and seed bites, rolled in freeze-dried fruit and desiccated coconut.
- University of Nottingham - Duffles  
An eco-friendly, healthy alternative to chocolate truffles - can be consumed both cold and warm.
- University of Nottingham - Seafood linguine  
High protein ready meal utilising cricket flour and sustainable fish.

Teams from the universities of Sheffield, Swansea, Leeds, Liverpool John Moores and Reading also took part.





## UKAS accreditation for enhanced metals analysis services

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To help food companies ensure that their products are compliant with legislative requirements for toxic metal species, we have invested heavily in metals analysis.

Following the purchase of a Perkin Elmer NexION 350D inductively coupled plasma mass spectrometer (ICP-MS), which provides exceptional analytical performance for all food and drink matrices across nearly all elements, we have now been awarded UKAS accreditation for our upgraded metals analysis service.

Metal contaminants arise from environmental and anthropogenic sources, including soil, food contact materials, and packaging. Typical metals analysis screens include lead, cadmium, mercury and arsenic, and more recently nickel has become a target. There is an obligation on food companies to ensure that their products meet the regulatory requirements of the countries in which they sell. If you require assistance in this area, including risk assessment of your products, please contact us.



## Improved contaminant detection capabilities

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To ensure that we can achieve the ever lower limits of detection required for contaminants in food and drink, we have also invested in improved LC/MS/MS instrumentation. The new instrument (AB Sciex 6500) is currently used for analysis of mycotoxins and packaging migrants, but will be extended to enhance our services for many other target analytes such as pesticides, illegal dyes and vitamins.

The launch of new instrumentation with greater sensitivity and resolving power enables us to help the food and drink industry remain resilient to ever changing external pressures.

# Additives, flavourings and colours - your questions answered

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The use of additives in food and drink can be controversial; for instance, aspartame was recently reassessed by the European Food Safety Authority and once again declared to be safe for use as a sweetener, but there are many blogs, tweets, Facebook pages and YouTube videos that show a strong public perception that it is highly dangerous. It can be these views that inform brand owners when making formulation decisions.

Queries about additive legislation are regularly dealt with by our Regulatory Affairs team. They can be about almost any aspect; for instance, whether or not an additive is allowed in a certain foodstuff or country (we can also answer international queries), or explaining what carryover additives, reverse carryover additives and processing aids are - and why the differences matter! We are also holding a seminar on additives and flavourings on the 3 July - see page 6 for details.



## Do you supply retailers?

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If you do, we will be able to help you with packaging art work checks! Many retailers require that their suppliers routinely carry out a regulatory check on packaging art work for their own-brand products. This might be just a simple reconciliation between approved pack copy/final artwork and actual labels, to make sure that there are no changes after sign-off – but it still needs to be performed by competent and experienced staff. Any post-approval changes, such as removing or altering an allergen declaration, could have serious consequences. Our regulatory affairs team are very experienced at doing this kind of specific check, and can help you avoid simple, but costly, mistakes.

And, of course, we can help with other checks that retailers require, such as:

- Simple sensory analysis to ensure that the product delivers against the product description
- Chemical testing to ensure that nutrition is correct and any notable hazards are taken into account
- Microbiological testing for spoilage and pathogenic organisms

Our information team ([information@campdenbri.co.uk](mailto:information@campdenbri.co.uk)) will help you find the right contact here.





## Training events

### July 2015

- 3 Hot topics in additives and flavouring legislation seminar
- 7-8 HACCP - validation and verification
- 9 Building safety in
- 14-15 HACCP - intermediate (level 3)
- 16-17 HACCP auditing - intermediate

A full list of 2015 scheduled courses is available on our website [www.campdenbri.co.uk/training.php](http://www.campdenbri.co.uk/training.php) or by requesting a booklet from [training@campdenbri.co.uk](mailto:training@campdenbri.co.uk) +44(0)1386 842104

## Additives and flavourings seminar

[daphne.davies@campdenbri.co.uk](mailto:daphne.davies@campdenbri.co.uk) +44(0)1386 842139

Are you up to date with the changing legislation relating to additives and flavourings in foods, and are your products legal?

With the amalgamation of several EU Directives on food additives, and the changes in the food categorisation system, our seminar on 3 July could be what you need. It will focus on understanding the legislation and its regular amendments, and provide practical scenarios in which to apply the legislation.

[www.campdenbri.co.uk/hot-topics-seminar.php](http://www.campdenbri.co.uk/hot-topics-seminar.php)

[www.campdenbri.co.uk/training.php](http://www.campdenbri.co.uk/training.php)

## Training course helps Pukka Pies reduce pastry waste by 40%

A group from the production and technical departments of Pukka Pies attended a Campden BRI training course on pastry technology. During the wastage reduction part of the pastry processing module, the Pukka Pies team mentioned that they consistently create a significant amount of scrap dough during their production processes.

Following subsequent discussions with Campden BRI, Pukka Pies invested in an extensive internal work programme on waste reduction, resulting in very significant reduction in waste and increasing their efficiency.

Phil Smith, Operations Manager at Pukka Pies said: *"With the help of Campden BRI we were able to train 10 employees in pastry technology. With a new understanding of pastry and the science behind it we were then able to re-design our production processes and reduce our pastry waste by around 40% on one particular product. Investment in new machinery and technology and investing in our people in the form of focused and meaningful training has played a major part in our continued success. The bespoke training that Campden BRI was able to offer us has been invaluable and will continue to help move our business forward in the future."*



## Visit Member Zone

[www.campdenbri.co.uk/memberzone.php](http://www.campdenbri.co.uk/memberzone.php)

to access privileged member information and services



## BBSRC seminar - free

We are jointly organising a free event with BBSRC to disseminate the work of two of their research programmes (Diet and Health Research Industry Club and the Crop Improvement Club). This will take place on the afternoon of Weds 8 July. For more details e-mail [training@campdenbri.co.uk](mailto:training@campdenbri.co.uk)

## Research Summary Sheets – quick access to all current research findings

Research Summary Sheets (RSSs) provide concise overviews of individual R&D projects. These projects directly benefit industry, underpinning the skills and knowledge needed to help industry innovate and resolve problems. They also demonstrate how new science can be converted to technology - which can be transferred to provide our members with a competitive edge.

The RSSs are essential in communicating the results of our R&D. They enable members to rapidly identify the developments of most interest to them.

[www.campdenbri.co.uk/research/summary.php](http://www.campdenbri.co.uk/research/summary.php)

## MoU signed with Thailand NFI

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As part of a visit of scientific researchers from Thailand on 20th April, we have signed a Memorandum of Understanding to cover future collaboration between us and the Thai National Food Institute. Amongst the areas that the visitors thought could be potentially beneficial were research mobility and secondment of PhD students at Campden BRI. NFI already carries out HACCP auditing of food production facilities against our HACCP Auditing Standard.

## Campden BRI at Lab Innovations

Once again Campden BRI will be heavily involved in events at the Lab Innovations exhibition, which takes place on 4-5 November, at The Pavilion, NEC, Birmingham. Campden BRI members are eligible for an exclusive £200 discount off the cost of an exhibition stand.

For more information or to book, please contact Mauricio Montes +44 (0) 2088438829 [mauricio.montes@easyfairs.com](mailto:mauricio.montes@easyfairs.com)

<http://bit.ly/1EiXs0o>







## Welcome to new members

Campden BRI is delighted to welcome the following members who joined recently:

Biotech International Ltd - manufacturer of disinfectants

Boortmalt – maltster

Brewdog plc – brewery

Cotteswold Dairy Ltd - producer of milk and cream products

DCZ Sorbaj Enterprises Ltd – producer of halal organic baby food products

Gastronomy Plus Ltd t/a Sousvidetools - importer and trainer for sous vide and vacuum packing equipment

Global Bakery Solutions Ltd - manufacturer of industrial bread and bun process plant and equipment

Illumina Cambridge Ltd - provider of genomics technologies

Meantime Brewing Company Limited – brewery

Ozone Purification Ltd - electrolysed water solutions for use in food hygiene and processing

Petrow Food Industries - supplier of a range of dried fruit products

Southern Regional College - Further Education college

The Fabulous Bakin Boys Ltd - baker

**Clare Brett** +44(0)1386 842125 [membership@campdenbri.co.uk](mailto:membership@campdenbri.co.uk)

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

## Social media



**Facebook** - find out more about our history and our lighter side [www.facebook.com/campdenbripage](http://www.facebook.com/campdenbripage)

**Twitter** - regular tweets to keep up to date with our latest news and activities <https://twitter.com/campdenbri>

**YouTube** - a range of videos providing an insight into the science and technology underpinning food and drink production [www.youtube.com/campdenbri](http://www.youtube.com/campdenbri)

**LinkedIn** - company updates providing our latest news [www.linkedin.com/company/campden-bri](http://www.linkedin.com/company/campden-bri)

**iTunes** - subscribe to our podcasts

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