

newsletter

INSIDE THIS MONTH

Red leg day

An opportunity to help solve 'red leg' quality problems in poultry products.

Carbon footprints

A new service, seminar and standard to help companies with carbon footprint calculations.



Hear it here

Campden BRI podcasts on topical issues - download or listen on-line

Food chain needs

Needs of the supply chain published following extensive industry consultation

Mapping food composition

A powerful imaging technique has been applied to food analysis in a unique way and for the first time, at Campden BRI. It will find applications with a range of products in which quality depends on gradients of components such as fat and moisture.

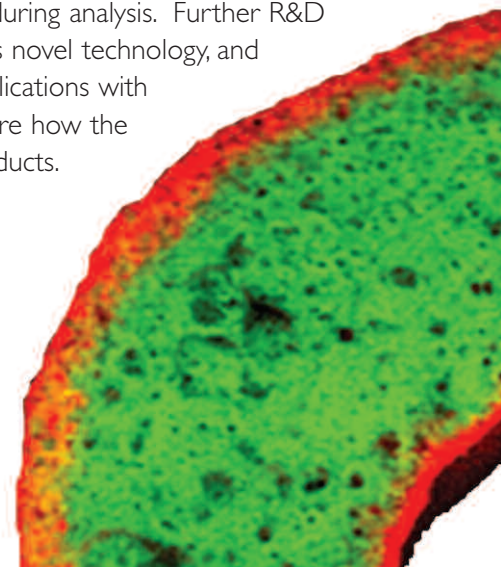
The imaging system uses near infrared (NIR) to map the distribution of these components pixel-by-pixel, to produce highly visual interpretations of food composition. For example, it has been used to assess fat uptake in fried foods (see bottom right) - an important aspect of nutritional and sensory quality. Unlike 'bulk assessment' of fat, the approach offers a unique solution for product developers seeking to reduce fat uptake while maintaining the characteristic texture and flavour of fried foods.

It has also been used to map changes in moisture distribution in baked products during storage - a major determinant of the period for which products remain acceptable to consumers.

Crucially, image acquisition takes just a few seconds, thus ensuring that sample properties do not change during analysis. Further R&D is under way into other uses of this novel technology, and we are keen to discuss specific applications with companies who may wish to explore how the system can be applied to their products.

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Right: False colour image showing regions higher in fat (orange) and moisture (green) in a doughnut



'Red leg' day: addressing poultry product quality



A technical meeting is being held at Campden BRI to pool information and identify approaches to solving problems with 'red leg' discoloration in poultry products. Exclusive to Campden BRI members, this free morning of discussion led by Liz Mulvey and Helen Brown will help

generate ideas and formulate the work programme of an existing member-subscription funded project.

"Our project 'Meat as an ingredient' is addressing a range of issues of importance to the meat and poultry sector - including better colour specifications, apparent off-odours, anomalous nitrogen factors and reducing the fat content of meat products - but this meeting will focus specifically on red leg" comments Liz Mulvey. "We are keen to gather as much industry input as possible at the ideas stage, so that we can target the research most effectively. We would urge any member involved in the poultry chain, from producer and manufacturer through to retailer or caterer, to come along and have their say."

The meeting is on Friday 27 February at the Chipping Campden site, concluding with lunch.

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Seafood quality - free training

Free courses in advanced seafood quality assessment are available. The courses will train seafood quality managers in the principles of fish quality assessment so that they can deliver their own training, set up their own company-based quality teams or even develop new quality scales for use 'in-house' to assess new species.

Each 5-day programme includes around 8 hours of theory and over 20 hours of practical work and covers quality assessment schemes such as EU EAB, TORRY and the Quality Index Method. In addition to the course at Campden BRI (Chipping Campden) on 9-13 February, other locations include London, Grimsby and Fraserburgh.

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Service FEATURE

Calculating carbon footprints

Provision of methods for the reliable and standardised measurement and comparison of the carbon footprint of production systems was high on the list when we consulted our members on their most pressing scientific and technical needs (see back page). We therefore developed a service to support members in the calculation of carbon footprints, following our involvement in the development of a new British 'standard' (PAS 2050*) for this. Dr. Gary Tucker of our Food Manufacturing Technologies Department explains further:

"We worked on a series of Defra-funded projects to calculate greenhouse gas emissions for products such as cheese, bread and beef cottage pie. Our partners, ADAS, focused on emissions up to the farm gate and we concentrated on the subsequent manufacturing operations."

Calculation of carbon footprints is by no means simple, but going through





the process can be extremely valuable. It can help identify, for example, which particular steps in a production system offer the greatest potential for reducing carbon footprints. Through the projects we acquired considerable experience that we are keen to put to use helping members target improvements and avoid anomalies that can arise."

> Seminar

A one-day seminar will be held at our Chipping Campden site on Tuesday 24th February, on *Carbon footprint assessment and technical solutions: how to reduce the climate impact of your operation*.

*PAS2050 - Specification for the assessment of the life cycle greenhouse gas emissions of goods and services

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Lighter packaging

Researchers at Campden BRI and the University of Bath are leading a half-million pound project to create a new high speed environmentally-friendly packaging process that will use recycled materials and reduce the amount of plastic used. The project focuses on improving the 'form-fill and seal' type of packaging, used for products such as rice, pasta and crisps. By designing a more efficient way of sealing the packaging, the project could help reduce the amount of material used by around 13%, saving an estimated 39,000 tonnes per year of landfill waste.

The project consortium also includes HayssenSandiacre Europe, Amcor Ltd and United Biscuits with funding by the Department for Environment, Food and Rural Affairs (Defra).

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Campden BRI podcasts

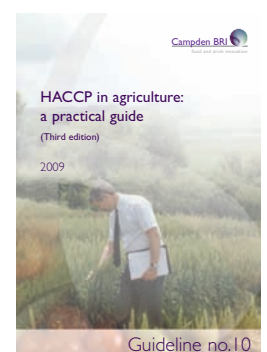
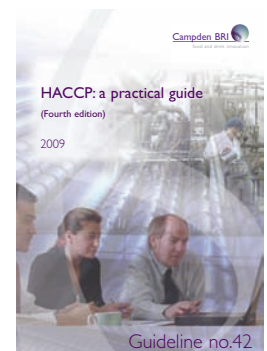
Several short Campden BRI podcasts are available at www.campden.co.uk/podcasts.htm. They feature interviews with Campden BRI specialists on topical issues such as working with ingredients, the significance of new EU nutrition and health claims legislation, and developments in HACCP. Two shorter podcasts answer some frequently asked questions about the panel system and outline the context of the new publication 'Needs of the agri-food chain' (see back page). We are keen to receive feedback from members on the usefulness of this approach.

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HACCP new guidance available

New guidance on HACCP for all stages of the food and drinks supply chain has been published by Campden BRI. 'HACCP in agriculture' (Guideline 10) focuses on the application of HACCP to crop and livestock production operations, whilst 'HACCP: a practical guide' (Guideline 42) is aimed at manufacturers, processors, retailers and food service operations. The guides take into account the increased emphasis on prerequisite programmes and, for manufacturing, the increasing role of risk assessment in gauging the likelihood and severity of hazards. Two interviews with Campden BRI HACCP specialists are available as podcasts at www.campden.co.uk/podcasts.htm. The guides are priced at £50 per copy (members) and £75 (non-members).

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Events

Water for food production

5 February 2009

Food additive legislation:

the developing European controls
27 February 2009

Honey and honeybees:

food industry update
26-27 March 2008

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Needs of the agri-food chain

A new version of 'The scientific and technical needs of the agri-food chain' has been published, following an extensive year-long consultation with members. This document provides valuable insight into the challenges facing food, drinks and allied companies. It is used by us to help plan our scientific and technical activities - such as R&D, technical services and training activities. It is also sent to government departments and funding bodies to raise awareness of industry's needs.

As with previous editions, there is a continued emphasis on assuring product safety, managing quality, encouraging innovation and maximising production efficiency. However, other themes that emerged particularly strongly in this version include:

Security of food supply - such as the need to ensure availability of raw materials in the face of climate change and the changing world economy

Sustainability-driven needs - including tools for more rigorous and standardised assessment of environmental impact

'Deskilling' in industry - especially the need to develop highly skilled and experienced people to replace those leaving industry through retirement

Consumer awareness - for example, of food and food production, of impact of diet on health, of sustainability issues, and of consumer 'responsibilities' in the supply chain

A short podcast is available (www.campden.co.uk/podcasts.htm) outlining the background and use of the document. The document itself is available in hard copy from the publications office or as an electronic copy by automated e-mail reply - simply send an e-mail to auto@campden.co.uk with the subject line: send needs

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WELCOME TO NEW MEMBERS

We are delighted to welcome the following new members who joined in November 2008:

C&D Foods Ltd - an Irish manufacturer of petfood products

Cerebos (Australia) Ltd and **Cerebos Gregg's Ltd** - an Australian and New Zealand sauce, spice and coffee manufacturing organisation

Higgidy Ltd - a baker and specialist maker of hand made pies

Johnstone's Bakers Ltd - a Scottish producer of a range of classic and luxury cakes including caramel shortcake and toffee crisp cake

Millipore SAS - a French life science company providing technologies, tools, and services for bioscience research and biopharmaceutical manufacturing

OMYA UK Ltd - a supplier of calcium carbonate, white minerals and chemicals

Pure Organics Ltd and **Additive Free Ltd** - a manufacturer of a wide range of organic and additive-free frozen foods

REVTECH - a French supplier of Joule effect tube heating systems including an electric technology for heat treatment of bulk solids and an in-line high temperature heater for fluids

Traceall Ltd - a Scottish provider of tracking and traceability solutions

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Come and visit

Our research has shown that members who visit us, to tour the site and talk to the staff, get much more from their membership! Have you visited us yet? Please get in touch so that we can organise a personalised visit and site tour.

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