

newsletter

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Campden BRI - Your Complete Microbiology Service - quality results, first time, every time

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Tie-ups with Brazil, China and Canada.



A satiating experience or not?

The findings from a feeding trial to determine the satiating effect of a specially formulated smoothie-type product will help industry in their efforts to produce hunger-reducing foods and drinks.

The trial involved young males being fed a mid-morning strawberry smoothie - either the test smoothie containing inulin and guar gum or a control product containing starch, designed to taste the same and provide the same amount of energy. They were later fed a buffet style lunch, and instructed to 'eat until comfortably full'. They could request any number of extra items from the buffet 'menu'. At various times they were also asked to fill in a questionnaire about their appetite.

There were no differences in the liking of the two smoothie products, confirming that any satiating effects were not due to differences in liking between the two samples. There were some significant differences in the self-reported appetite ratings. For example, participants felt significantly less hungry 30 minutes after consuming the test smoothie than after consuming the control smoothie. Despite this and other positive appetite findings, this did not lead to a reduction in the amount of food consumed in the subsequent buffet meal - either in terms of weight of food or energy content.

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Will botulinum grow in baked goods?

Although regarded as an anaerobic bacterium (grows in the absence of oxygen), there is some evidence that *Clostridium botulinum* can grow under conditions where oxygen is present. Baked products appear on the market in aerobic and anaerobic (Modified Atmosphere Packaged) formats. In a Club-funded project, the ability of proteolytic *C. botulinum* to grow and produce toxin in UK-produced baked goods (e.g. white and wholemeal bread, naan bread and muffins) under aerobic and anaerobic conditions will be investigated.

Manufacturers and retailers of bakery products (and other interested companies) are invited to participate in the Club.

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Removing sulphite from products

Do you want to reduce or remove sulphites from your products? If so, please get in touch. We are looking for expressions of interest from food manufacturers, retailers, ingredient suppliers and academics in developing a UK based collaborative R&D programme on potential approaches to minimise sulphite use.

The scope of the project and potential approaches are likely to be dictated by the types of industrial partners that register an interest, but any outputs from the work would complement existing, on-going studies in our EU-funded project SO2SAY.

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Auditors get fast tracked to ISO 22000

In a joint initiative between Campden BRI and Lloyds Register Quality Assurance, those with auditing experience are being offered specialist training in order for them to be qualified to audit against the ISO 22000 standard - which has become the principal standard for safety management systems in the food industry. This shortened conversion course is for those who have already achieved qualifications for auditing against standards such as ISO 9000, 14000 and 18000.

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Service FEATURE

Microbiology

Microbiological contamination of food products is a major concern to the industry. The presence of some microorganisms in certain products may be of no consequence, whilst others, even at extremely low level, could result in a real risk to the consumer. Understanding which microorganisms are of concern, in what products and how they may be controlled is the role of our microbiologists.

Roy Betts, Head of Microbiology, explains: *“One of the areas where we are often called upon to advise, is whether a particular organism or group of organisms might be a problem in a specific foodstuff. This will depend primarily on two factors: whether the organisms are likely to gain access to the food (e.g. are they part of the natural microflora, or are they a common contaminant?), and whether they will be able to grow in the foodstuff. We can advise on whether a particular organism is regularly associated with a food, and use a range of mathematical models to predict likely growth under different sets of conditions. The latter is particularly useful when developing new products with different formulations, such as reduced salt, sugar and preservative levels: the models help to screen out formulations that are likely to be a problem. We can also carry out challenge testing - a technique whereby the specific organisms are inoculated into the food to see whether and how quickly they grow.”*

> Processing

Of course, much food is processed in order to inactivate organisms, and our microbiologists can offer advice on the optimum types of process needed to achieve a stable food, on many occasions doing on-site process validations to prove the efficacy of a process to give the desired antimicrobial effect.



> Specifications

Once the food has been produced and packed, it is usually tested against a specification to verify that the controls used during manufacture have worked. Helping companies set realistic microbiological specifications has long been a role of Campden BRI. Our extensive research on microbiological test methods also means that good advice can be given on the best test methods to use to obtain reliable results in the fastest possible time.

Methods only work if they are used correctly, and obtaining reliable results is key to understanding the microbiology of the product and manufacturing process. We can help in two ways: our extensive service laboratories can analyse samples for a range of organisms, giving clients access to fast quality results, whilst companies with their own laboratories can make use of the Campden Laboratory Accreditation Scheme (CLAS) to assure themselves that these laboratories are operating to the highest standards.

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Beer labelling review service

Campden BRI has expanded its international beer labelling declaration service with the appointment of Eugenia Choi at the Nutfield site. Eugenia, who has a background in food legislation, will be running Campden BRI's beer label review service as well as expanding the beer labelling database (www.beerlabelling.com), which has been developed in conjunction with BSI - British Standards. The database currently covers the labelling requirements for 39 countries worldwide. Eugenia will also be adding the labelling requirements for New Zealand, Australia and Canada to the database.

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Campden BRI trainee gets top award

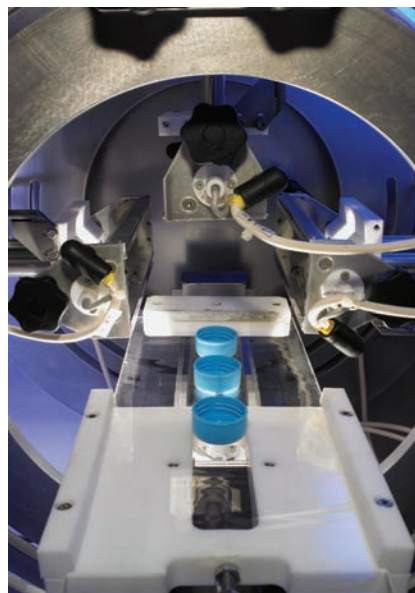
Martin Signy of Heinz Frozen and Chilled Foods, who attended our Advanced HACCP training course, has been awarded First Prize by the Royal Society for Public Health for the highest achievement in the RSPH Advanced HACCP qualification. We offer our congratulations to Martin, who received his prize at an Award Ceremony in London on 15 September.

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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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Pulsed light equipment used in current research

Vote vote vote

If you have not yet voted for the research that you want us to carry out next year, time is running out. Voting closes on 22 October. Each year, around £2 million of member funds is allocated to research, across 6 strategic themes, that you vote for. Please contact us if you want to know more about how the voting system works.

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Chinese visit

As part of our growing links with China, we were delighted to welcome Madam Meng Suhe, the Vice President and Secretary General of the Chinese Institute of Food Science and Technology (CIFST). As part of her visit in August, she received presentations on topics ranging from advanced image analysis to molecular diagnostics and aspects of food chemistry. She also discussed various aspects of training available at Campden BRI that would be of benefit to the Chinese food industry.

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International links

Brazilian Minister signs Memorandum of Understanding

In an initiative facilitated by our subsidiary company, International Agri-Technology Centre Ltd, Brazil's Fisheries Minister, Mr Altemir Gregolin, visited the UK on Sunday 23 August to sign an aquaculture Memorandum of Understanding of potentially significant value to the UK aquaculture industry. The agreement covers requirements in aquaculture expertise and technology to help develop his country's marine finfish and shellfish farming industry.

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Campden BRI training goes to Canada

In a collaboration with the Guelph Food Technology Centre in Canada, we will be taking our latest and most comprehensive training programs to North America. Three courses specifically earmarked for 2010 are Microwave Heating, Shelf-life Evaluation of Chilled Foods, and Aseptic and Thermal Processing.

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International microbiology training course a resounding success

Delegates from fifteen countries recently visited us to participate in Microbiology Training for Technicians - which was organised under an EU DG Trade funded project. The 2-week training event covered microbiology testing in lecture and practical based sessions, providing hands-on experience of key pathogen testing, as well as laboratory accreditation, microbiological criteria, legislation, environmental sampling and thermal processing considerations. Also included was a very successful and industrial visit to Noon Products Ltd in Southall.

All of the training content given is also available in our standard and tailor-made courses, for which enquiries are always welcome.

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WELCOME TO NEW MEMBERS

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

Branscan Ltd - a specialist supplier of image analysis systems

Cake Decor Ltd - a Scottish specialist supplier of cake-decorating icings in easy-squeeze tubes

Carrs Foods International Ltd - a distributor of European manufactured ambient packaged bread, morning goods and cakes

Dina Foods Ltd - a producer of a range of Mediterranean and Ethnic bread

Food Revolution Limited - a mail order and internet retailer of organic and fine foods

Gilberts Foods Ltd - a manufacturer of pasteurised meat products

Rayware Ltd - a supplier of a wide range of homewares

Rectory Foods Ltd - a business involved in the international sourcing, marketing, storage and supply of poultry, red meat, vegetables and food ingredients

Trustwater Ltd - an Irish manufacturer of disinfectant systems

Watson - Marlow Pumps - a specialist in peristaltic pumping

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