

# Newsletter

June 2011





Your partner for science and technology

### How effective is this disinfectant?

Ensuring that factories are cleaned and disinfected effectively and in a timely manner is a fundamental prerequisite in the production of safe and wholesome foods. This involves decisions on when to clean, how to clean and what chemicals to use. Our expertise is used both by disinfectant manufacturers and the food and drink industry to ensure that formulations are effective and that appropriate products are used in specific situations.

The manufacturers of both disinfectant formulations and active ingredients must be able to substantiate the claims they make on the efficacy of their products. This involves submission of technical dossiers detailing their product's performance in recognised, standardised laboratory tests. We carry out many of these tests for disinfectant companies and are involved in the development of the tests at both UK and International level.

### Effective formulations

Different formulations are effective in different situations, and against different microorganisms. Amongst the many questions that users ask are: what organisms is the formulation effective against? does the product work under chilled and/or ambient conditions? and how effective is it? We work with disinfectant-producing companies and disinfectant users to ensure that the claims made on the container are correct and can be substantiated. We can then support the food and drink industry, advising them on what type of disinfectant and cleaning approach would be most suitable for their particular circumstance.

**Lawrence Staniforth** +44(0)|386 842042 | l.staniforth@campden.co.uk



### Service...

# Nutrition labelling getting tighter?

The nutritional composition of food is of major significance to the consumer - and to the authorities - and so it is important to know what is in your products. Although not mandatory in all cases, the labelling of food products with basic nutritional information is now widespread - and expected by the customer. In some cases (for example, if you are making a health claim on the label), it is necessary to declare not only the basic energy, fat, protein and carbohydrate content, but also the level of sugars, saturated fat, fibre and sodium. The requirements for nutrition labelling are also likely to become more stringent with the Food Information Regulation.

It may be possible to calculate the nutritional composition of your product from literature values and knowledge of the recipe and level in starting materials, but it can only be verified by actual chemical analysis. We have an extensive analytical capability in this area - covering the basic nutrients, but also extending to vitamins, minerals, specific fats (e.g. omega-3 and trans fats), antioxidants and alcohol. We can also analyse for specific carbohydrate types (e.g. inulin and polyols), and salt, and can help you calculate meat content in products.

Richard Butler +44(0)1386 842070 r.butler@campden.co.uk

The chemical analysis is backed up by our legal advisers, who can help you through the maze of legislation relating to food labelling, and nutrition and health claims regulations.

legislation@campden.co.uk

## Find us on the latest social media

You can now keep in touch with the latest news from Campden BRI on Twitter: you can find us at twitter.com/campdenbri. We are also on YouTube - subscribe to our channel at www.youtube.com/user/campdenbri

This is in addition to our presence on iTunes, where you can find our series of podcasts.

## Does your product look and taste as it should?

...or do you get sensory related customer complaints? And do your products match up to competitor brands?

If you're unsure about the answer to these, then we can help you with bespoke sensory training - so you can produce a product which complies with its specification and be confident that it looks, smells and tastes as it should. Education and training in sensory science not only encourages pride in production, but also instils confidence in the product and processes. Ultimately you get happy employees and happy consumers. And we can go further, with advice and consultancy on specific sensory and related issues.

Sue Purcell +44(0)1386 842167 s.purcell@campden.co.uk



## How good will your new product be?

The product development process is time consuming and costly and many products either fail to make it onto the market or only last for a few weeks. Our NPD and benchmarking workshop, which is next being run on 12-13 October, is designed to provide product developers with the tools they need to innovate new ideas, screen product concepts and manage the development process, thereby improving the likelihood of success. The course will look at the reasons for developing new products, the innovation process itself, and market and consumer research issues. It will also address the important areas of legislation, specifications, safety and shelf life, and discuss the principles, importance, and benefits of benchmarking. And the real fun begins when delegates get the hands-on chance to develop a new product!

Sarah Chapman +44(0)1386 842212 s.chapman@campden.co.uk

### Clare's tips

#### Visit us

Members tell us that taking the time to come and visit and being



given a site tour helps them to remember the many and varied services available to them as members of Campden BRI. We also encourage new members to come and have introductory meetings with the departments and staff that they are most likely to be working with. Some member companies are also incorporating a visit to Campden BRI into their induction programmes for new Technical / Quality / Production staff. This ensures that as many of your personnel as possible are aware of the benefits of membership and know how best to use us.

To arrange your personalised site tour, whether you are a new member or long standing one, who just hasn't been for a while, contact:

Clare Brett +44(0)|386 842|25 c.brett@campden.co.uk

### This product tastes off!

There has been an increasing incidence of taints in food and drink in recent years, which has created problems for parts of the industry. The presence of a taint in a product is a significant cost to industry, creating large amounts of waste from spoiled products, and can present a potential health hazard to consumers.

There are three major sources of food taints - environment (e.g. direct contamination via exposure to a range of airborne chemicals, chlorinated cleaning fluids, phenols and solvents), packaging (e.g. migration or scalping), and microbial (microbial action on food components to produce taints, e.g. trichloroanisole, skatole, ethyl acetate).

A new member subscription-funded project is identifying causes for taints and developing strategies for their minimisation in food and drink, and is focusing initially on halophenols and haloanisoles. The aim is to have clearly defined methods for the detection of taints in a range of sample matrices by the end of the year, and to follow this up with guidance on taint formation, toxicity, how to avoid taint issues, and implications when contamination has occurred.

Danielle Sweeney +44(0) | 386 842022 d.sweeney@campden.co.uk

## Research update

# Further expansion of our scientific knowledge

Since the last newsletter, we have issued four more research reports, in which we detail our findings and, importantly, explain their significance:

## Growth characteristics of Listeria monocytogenes (RD313)

When challenge testing to see if *Listeria* could grow in a product, there are many factors that might affect the result. This research has shown that growth is not affected by the initial level of *Listeria*, nor is there significant strain variation. However, the presence and growth of spoilage organisms appeared to moderately suppress *Listeria* growth. These findings can be used to design simpler, but more accurate challenge testing protocols.

### Assessing the shelf-life of cakes (RD312)

The shelf life of cakes is governed by the time for which they remain mould free and retain their eating quality. In low ratio cakes, sugar and fat have the greatest impact on shelf life. Failure early in the shelf life is usually caused by texture issues rather than mould. With high ratio cakes, sugar, fat and storage temperature again affect shelf life, but mould growth is the more significant issue. These findings will help manufacturers to define and extend shelf life.

### Water as an ingredient (RD311)

The aim of this project was to provide a greater understanding of the rate of moisture uptake by and migration within food materials, and to develop approaches that can be used to study these processes. A chamber was constructed to study these aspects under controlled humidity conditions. These approaches were demonstrated for model materials, and are applicable to a wide range of food materials and finished products.

### Fungal behaviour at high temperatures (RD310)

Both practical and literature research into the response of fungi to high temperatures suggests that prevention of food and drinks spoilage requires the use of good quality raw ingredients and the removal of these fungi from the processing environment through stringent cleaning practices.

Members can receive free electronic copies of these by sending an e-mail to auto@campden.co.uk with the subject line: **send RDxxx** where xxx is the number of the report. For a full list of reports and other documents available send an e-mail with the subject line: **send index** 





This year sees the 50th anniversary of the announcement of the Chorleywood Bread Process (CBP). Developed by the British Baking Industries Research Association, one of the fore-runners of Campden BRI, the commercial uptake of this process had a dramatic effect on bread production in the UK and elsewhere. Compared with the earlier bulk fermentation process, the CBP was able to use lower-protein wheat and produced bread at a much faster rate. It did this by introducing an initial period of intense mechanical working of the dough using high-speed mixers.

The CBP is now used to make 80% of the UK's bread, and helped to dramatically increase the market for UK-grown wheats.

Gary Tucker +44(0) | 386 842035 g.tucker@campden.co.uk

### Microbiology laboratory design

Make sure that your microbiology laboratory is designed to be safe for those working there and to facilitate the provision of reliable results

Guidelines for the design and safety of food microbiology laboratories (Guideline 66) covers design concepts and safety requirements needed for UK-based food microbiology laboratories up to and including Containment level 2, and includes industry best practice and guidance on legal requirements. It provides a point of reference for the design and safety of food microbiology laboratories and will facilitate the identification of key considerations relating to the legislation and best practice for new buildings, updating existing buildings, moving to a different facility and decommissioning.

Carol Newman +44(0) | 386 842048 pubs@campden.co.uk



#### Campden BRI

Station Road, Chipping Campden, Gloucestershire, GL55 6LD, UK

Tel: +44(0) | 386 842000 Fax: +44(0) | 386 842100 www.campden.co.uk info@campden.co.uk

#### Nutfield site:

Centenary Hall, Coopers Hill Road, Nutfield, Surrey, RH I 4HY, UK

Tel: +44(0) | 737 822272 Fax +44(0) | 737 822747 www.bri-advantage.com insights@bri-advantage.com

### Welcome...

### to new members

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

Divine Chocolate Ltd - a Fair-trade chocolate supplier

**Dovecote Park Ltd** - beef processor and manufacturer of burgers and meatballs

**Griffith Laboratories Ltd - Thailand -** manufacturer of food ingredients

James Caterers Ltd - a catering company

**Karsten UK Ltd** - distributor and marketer of fruit imported from South Africa

 $\mbox{\sc Kinetika SA}$  - manufacturer of innovative enzymes for the food industry

**Phaseolus Ltd** - distributor of individually quick frozen cooked beans and pulses

**Red Lion Foods -** supplier of a range of everyday food products, with profits going to UK forces charities

Swizzels Matlow Ltd - a traditional confectionery manufacturer

Clare Brett +44(0)1386 842125 membership@campden.co.uk

Please notify the Membership Department of any name or address changes with respect to our mailing list.





