

Newsletter

August 2012



Consumer perceptions of health and wellness

Recent research at Campden BRI will help members in planning food and drink product development strategies for the health and wellness market.

The research looked at how consumers viewed the terms 'health' and 'wellness' as applied to food and drink products, for example organic, natural, 'better-for-you', and fortified/functional foods. It also explored factors that were found to have an impact on these perceptions and the acceptance of functional food, such as food carriers and ingredients, health claims, nutritional knowledge, and sensory and non-sensory factors.

On-line survey

An on-line survey was carried out to investigate consumers' psychographic characteristics - such as attitudes, values, and beliefs - in relation to their attitudes towards and purchase motivations for 'healthy' products. Results of the survey revealed six consumer groups with distinctive lifestyle characteristics. Among them, 'Rational' and 'Adventurous' food consumers were found to place a high importance on fresh, natural and health aspects in their food and drink purchase decisions. Importantly, a third group, 'Moderate' food consumers, showed potential to be engaged in the 'healthy foods' market if appropriate strategies are applied. Strategies in engaging consumers were proposed in respect of individual consumer groups' lifestyle characteristics.

Michelle Chen +44(0)1386 842238 m.chen@campden.co.uk

For a copy of *The wellness lifestyle concept and the opportunities it presents for new product development*, send an e-mail to auto@campden.co.uk with the subject line: **send RD325**

Ingredient
functionality





Research

Reducing salt levels in bread

On-going member-funded research is investigating the production of reduced-salt white bread, with the aim of meeting demands to reduce levels in bread to 1 g/100 g final product. Both final product quality and processing difficulties are potential issues.

Substitution of sodium chloride with potassium chloride gave loaves with no significant difference in loaf volume. However, there were differences in crumb structure that resulted in the bread produced with sodium chloride appearing whiter.

In large scale processes, reducing salt levels results in dough handling issues and a decrease in efficiency. Reproducing these effects in pilot scale trials is a challenge. Although parameters such as water, temperature and mixing energy have a greater influence on dough handling and bread quality than salt does, when these are tightly controlled (as they are in plant bakeries) the effect of salt becomes important. Test baking involves producing small batches, whereas in plant baking, whilst dough is mixed in batches, the rest of the process is continuous and small adjustments can readily be made to ensure a consistent product.

Consequently protocols that more closely match industrial conditions will enable long term solutions for processing lower salt doughs.

Charles Speirs +44(0)1386 842284 c.speirs@campden.co.uk

For an electronic copy of *Technological effects of salt reduction in no-time white bread (RD326)*, send an e-mail to auto@campden.co.uk with the subject line: **send RD326**



On the podium - at the AACCI meeting

Members of our cereals and baking teams will be attending and giving presentations at the American Association of Cereal Chemists International Annual Meeting, being held in Florida at the beginning of October. We will also have an exhibitor stand at the 4-day event, which is a major event in the cereals industry calendar, and regularly attracts over 1000 delegates from the cereals industry. If you are there, then drop in and see us.

Martin Whitworth +44(0)1386 842139 m.whitworth@campden.co.uk

Training course dates

September 2012

- 3-6 Sensory evaluation workshop
- 5 HACCP - foundation
- 5-6 Supplier quality assurance - foundation
- 6 Weights and measures
- 10-14 FSMS Auditor/Lead Auditor training course (ISO 22000:2005) (Surrey)
- 11 Root cause analysis
- 11-12 Brewery microbiology - an introduction
- 11-13 Food technology for non food technologists
- 11-13 Basic microbiology
- 12-13 HACCP - intermediate (workshop)
- 14 HACCP auditing - foundation
- 17-21 HACCP - advanced
- 19-20 Food and drink labelling
- 19-20 Internal auditing - principles and practices
- 19-20 Laboratory quality systems - an introduction
- 25 Food information regulation workshop
- 25-26 Principles of pasteurisation
- 25-27 Train the trainer
- 26-27 Microbiology for non microbiologists
- 27 Beer labelling requirements

October 2012

- 2 Good agricultural practice
- 2-3 Microbiology methods for validation
- 3 Sensory evaluation - an introduction
- 4 HACCP - refresher
- 4 Internal laboratory auditing - an introduction
- 8-12 Food safety - advanced (level 4)
- 9 Brewery microbiology - advanced
- 9-10 An introduction to food law
- 9-12 Principles of baking
- 10 Practical *Campylobacter* workshop
- 10-11 HACCP - intermediate (workshop)
- 15-16 HACCP auditing - intermediate
- 16-18 Advanced microbiology
- 16-19 Bread technology
- 16 Good hygiene practice and produce safety
- 17 Beer taint workshop
- 17 New product development
- 17-18 HACCP - validation and verification
- 22-24 FSMS Auditor Conversion course (ISO 22000: 2005)
- 23-24 Factory inspections - technical issues
- 31-Nov Cooking process validation

training@campden.co.uk +44(0)1386 842104



Environmental performance of European brewers

We have found that European brewers are becoming more water and energy efficient. The Brewers of Europe commissioned a study from us and KWA Bedrijfsadviseurs B.V. to quantify environmental key performance indicators for European breweries and to look for trends in performance over the period 2008 to 2010. Data on environmental performance were obtained from 156 breweries, representing 62% of the total beer production volume (in 2010) in the 30 European countries included in the study (EU-27, Norway, Switzerland and Turkey). Overall, the data show a continuous improvement in water and energy efficiency in the brewing industry over the period from 2008 to 2010. The full report is available at www.brewersofeurope.org/asp/publications/index.asp. If you are looking to have an independent environmental assessment of your operations, then we can help.

Gordon Jackson +44(0)1737 842255
g.jackson@bri-advantage.com

Gluten-free development conference

This event, on 30-31 October, will provide the food manufacturing sector with a comprehensive review of how the technological challenges associated with gluten-free baking have been addressed to deliver products acceptable to the coeliac sector and beyond. It will focus on understanding the issues surrounding the development of gluten-free baked goods, with four technical sessions divided into the following themes:

- Setting the scene - the need for gluten-free products, allergen control and legislation aspects
- An ingredient-based approach to gluten-free. How specific ingredients can be used to replace the functional properties provided by gluten
- Current research in gluten-free technology
- The gluten-free product manufacturing and supply chain

Daphne Davies +44(0)1386 842040 d.davies@campden.co.uk



More new kit

A new drinks carbonator and the latest in liquid chromatography provide two examples from our installation of equipment worth £1.4m

Put the fizz back in your drinks

Or keep them still if you want to! A new filler/carbonator in our process hall will enable us to help clients improve their bottled drinks. The recently installed Armfield Soft Drinks Carbonator has the facility to produce a wide range of still and carbonated beverages. Sarah Chapman, from our product innovation team, comments:

"It has a range of filling heads to accommodate a variety of bottle and can sizes - glass, metal or plastic - and is suitable for packing up to 250 units per day. A computer controlled system can be preset to carbonation levels and temperatures suitable for client requirements."

This complements our existing drinks processing expertise and facilities available for you to use, such as:

- Liquid nitrogen dosing - to reduce headspace oxygen or provide can rigidity
- Heat processing in a raining water retort to simulate a pasteurisation tunnel
- Advice on processing times/temperatures and heat penetration measurement

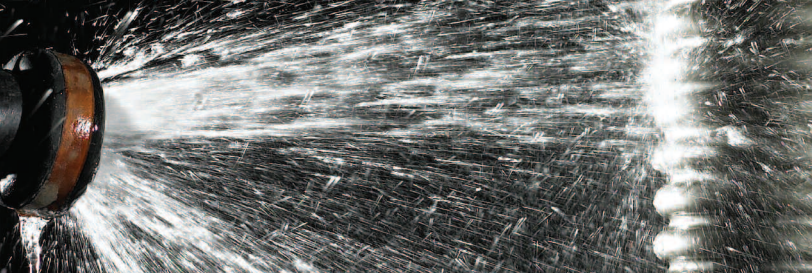
Sarah Chapman +44(0)1386 842212 s.chapman@campden.co.uk

Identifying organic contaminants

A significant investment in analytical equipment will help us provide clients with an even better organic contaminant analysis service. The new improved suite of liquid chromatography-mass spectrometry (LCMS) instruments allows us to expand our analyses for mycotoxins, agricultural contaminants, and low levels of pesticides, as well as melamine and acrylamide. Nick Byrd, chromatography section manager, commented:

"This array of instruments is very versatile. We can also determine levels of vitamins, and are developing assays for low levels of packaging contaminants (down to 10ppb), and for the specific peptide sequences associated with allergens."

Nick Byrd +44(0)1386 842187 n.byrd@campden.co.uk



Factory cleaning seminar

Ensuring that factories are cleaned and disinfected effectively is a fundamental prerequisite in food and drink production. However, a number of issues are coming to the fore, such as BRC 6, validation of prerequisites, environmental monitoring, and cross contamination control. There has also been much media interest regarding disinfectant resistance.

Our seminar on 19 October will look at several aspects of cleaning validation, including allergen control, as well as examples of whole room disinfection, and will attempt to disentangle the facts from the myths surrounding disinfectant resistance.

Daphne Davies +44(0)1386 842040 d.davies@campden.co.uk

Panel dates for 2012-13

Our Technical Advisory Panels are open to all full members of Campden BRI. Take the opportunity to discuss with peers the topics that are of importance to you, and guide our research. If you have never been to a panel, give it a go!

Panel	Autumn 2012	Winter 2013	Spring 2013	Autumn 2013
Agri-Food	21 Sept ¹	6 Feb	29 May	26 Sept
Cereals, Milling and Baking	9 Oct	14 Feb	15 May	8 Oct
Chilled and Frozen Foods	2 Oct	29 Jan	9 May	12 Sept
Food and Drink Science	26 Sept	22 Jan	1 May	11 Sept
Food Service	27 Sept ²	31 Jan ³	14 May ³	24 Sept
Heat Preserved Foods	4 Oct	7 Feb	30 May	1 Oct
Manufacturing Technologies	13 Sept	24 Jan	8 May	19 Sept
Meat and Poultry	27 Sept ²	30 Jan	22 May	18 Sept
Microbiology	25 Sept	5 Feb	16 May	25 Sept
Packaging	3 Oct	13 Feb	21 May	3 Oct
Quality and Food Safety Management	12 Sept	23 Jan	2 May	17 Sept
Sensory and Consumer	18 Sept	12 Feb	23 May	2 Oct

All meetings will be held at the Chipping Campden site unless otherwise indicated

¹ NFU Stoneleigh; ² Joint meeting; ³ Off-site

Richard Powell +44(0)1386 842233 r.powell@campden.co.uk

Campden BRI

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

Tel: +44(0)1386 842000 Fax: +44(0)1386 842100
www.campden.co.uk info@campden.co.uk

Nutfield site:

Centenary Hall, Coopers Hill Road,
Nutfield, Surrey, RH1 4H, UK

Tel: +44(0)1737 822272 Fax: +44(0)1737 822747
www.bri-advantage.com enquire@bri-advantage.com

Welcome... to new members

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

Australian Wholefoods - manufacturers of ready meals

Blenders - producers of mayonnaise, dressings, sauces, powders and pastes

Cawingredients Ltd - a soft drinks manufacturer

Dolav UK Ltd - producers of plastic and metal waste containers

Doronwell Ltd - supplier of detergents to the food and brewing industry

Johnson Matthey plc - a speciality chemicals company

Market Fresh Ltd - suppliers of snacking deli lines to supermarkets

Rivermill Ltd - a food licensing agency

SPAR (UK) Ltd - international food retail chain

Spread the Happiness Ltd T/A England Preserves - manufacturer of jams and preserves

Think Stothard Ltd - provider of colour measurement instruments

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.

