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Allergen cleaning validation

A new guide, based on research at Campden BRI, will help companies to ensure that cleaning procedures remove allergens. The number of people with a genuine food allergy is significant - as many as 1-2% of adults and 5-8% of children. Avoidance of allergen-containing foods is the only reliable way to prevent an allergic reaction in these individuals. Preventing cross-contamination of foods with allergens is, therefore, essential. In factories where the allergen is present in some formulations but not others, this means ensuring that processing lines are properly and effectively cleaned between runs.

Validation of cleaning to remove food allergens (Guideline No. 59) looks at the steps that have to be taken to demonstrate that the cleaning mechanisms used are effective. It looks at what tests need to be done after cleaning to show that the allergen has been removed and discusses the limitations of what can be achieved. It does not discuss cleaning *per se*, as guidance on this already exists.

Research has also looked at methods for detection of allergens including, for example, detection of celery, mustard, fish and, most recently, lupin material - underpinning the technical support we offer in this area.

The broader issues of 'Food Chain Allergen Management' are being addressed through a conference on 20 May, held in conjunction with LFI and the Anaphylaxis Campaign (see www.campden.co.uk/training/conference.htm).

Technical contact: **Helen Arrowsmith**

+44(0)1386 842240 h.arrowsmith@campden.co.uk

Publications contact: **Carol Newman**

+44(0)1386 842048 pubs@campden.co.uk



Supporting SMEs

In the current economic climate, business competitiveness is vital. Small and Medium Sized Enterprises (SMEs) can often act quickly, but can also require external technical support. We work with SMEs to provide this. We have a good relationship with West Midland Manufacturing Advisory Service and Business Link, both of which can provide funding for qualifying SMEs in their regions, for this type of work.

Whether you want to scale up production, develop or reformulate products, or change packaging, our experience and facilities can assist with these types of manufacturing issues. Our advisers can also call upon the wide ranging expertise of our scientists, technologists, engineers and legislation specialists. We can visit your premises to discuss your issues and concerns, and can then provide step-by-step guidance and advice to overcome problems and assist with manufacturing.

Contact: **Alan Campbell** +44(0)1386 842081 a.campbell@campden.co.uk

Campden day - 3 June 2009

The day will provide members with an opportunity to hear Jonathon Porritt CBE, Founder Director of Forum for the Future and Chairman of the UK Sustainable Development Commission, deliver the 31st Annual Campden Lecture 'Sustainability through food security'. At this key event in the food industry calendar, held on our Campden site and attracting over 400 guests, members also acquaint and update themselves on the full breadth of services and research available at Campden BRI.

Contact: **Annalie Brown** +44(0)1386 842270 a.brown@campden.co.uk

Seafood quality

Campden BRI services for the seafood sector continue to expand as was demonstrated recently when a Seafood Advanced Seafood Quality Assessment course was held at our Campden site. This attracted delegates from processors, importers, retailers and scientific research. Some participants were new to the industry whilst others had considerable hands-on experience but no formal training in fish quality assessment.

Over five days, the topics covered included the theory and practice of quality grading schemes (Torry, QIM and EU), taste assessment and the use of taste panels, and visual scoring. Specially prepared samples of species such as cod and mackerel - some fresh, some not so fresh - were used to illustrate key aspects of quality. The course

culminated in a blind tasting of various fish samples - with the delegates proving to have become more discerning and knowledgeable in their assessment.

The work is underpinned by our growing portfolio of research and services in fish and seafood, including a number of projects funded by the Sea Fish Industry Authority who also funded the course.

Contact: **Craig Leadley** +44(0)1386 842059 c.leadley@campden.co.uk



Analysis UPDATE

Fibre and carbohydrates

European Legislation (Directive 2008/100/EC) has introduced a new definition of fibre - in essence, as carbohydrate polymers of three or more monomeric units, which are not digested or absorbed in the small intestine, which belong to certain specific categories, and which have a beneficial physiological effect.

Richard Butler, Food Composition Laboratory Manager, comments: "Fibre analysis is an extremely important part of the technical support we provide to companies. We are UKAS accredited and our performance in proficiency tests demonstrates our status as leaders in this field. We also analyse for specific carbohydrates such as inulin, fructans and beta glucans, as well as providing a full range of compositional analyses such as protein, sodium, fats and fatty acids."

Vitamins

Improved methods for the analysis of the B vitamins thiamine, riboflavin, niacin, pantothenic acid and pyridoxine are available through the latest techniques (liquid chromatography - mass spectrometry). Amanda Foster, of our Chemistry Department, explains: "Historically some of these have been difficult to analyse in foods, requiring separate sample preparation and analysis. We have developed a new approach to analyse them simultaneously and more quickly - in products as varied as cereals, vegetables, dairy products and snacks. We can look at their stability during processing and through shelf-life - for example, as affected by packaging and storage conditions - as well as for



Microbiology - international training

Working with Development Solutions Europe, Campden BRI has won a repeat contract with EU DG Trade to provide microbiology training for laboratory technicians from twenty developing countries. The two week course will be held in August to cover both the theory and practice of microbiological analysis. It will look at laboratory operations such as media preparation, culture maintenance, biosecurity, accreditation and auditing, as well as predictive microbiology, challenge testing, legislation and microbiological criteria. We are delighted that it will include a tour of the production and laboratory facilities of Noon Products, who will also be providing some industrial input.

Most delegates attend by invitation, but there are a few additional spaces available. Please enquire about these or our other bespoke microbiology training at a venue to suit you.

Contact: **Leonie Watson** +44(0)1386 842218 l.watson@campden.co.uk



HACCP training in Europe

Campden BRI has been awarded a fourth successive EU DG SANCO contract to deliver a series of nineteen 5-day HACCP workshops across Europe. Workshops will be held in France, Germany, Hungary, Portugal and the UK. This programme of events is part of the European Commission initiative *Better Training for Safer Food*, aimed at organising a training strategy in the areas of food and feed law, animal health and welfare rules together with plant health rules. The HACCP programme is mainly for EU Member State public authority staff who are responsible for controls of food and feed businesses. Workshops will either cover the development, implementation and maintenance of HACCP based systems or the detailed auditing needed to verify the implementation of HACCP based systems by food and feed business operators.

This builds on our extensive range of activities which include scheduled and customised training and the recent release of new guidelines on HACCP in manufacturing and agriculture (Guidelines 42 and 10 respectively). Two podcasts discussing recent developments in HACCP are also available - visit <http://www.campden.co.uk/podcasts.htm>

Contact: **Robert Gaze** +44(0)1386 842080 rgaze@campden.co.uk

Sustainable brewing

Prof. Richard Sharpe was invited to deliver a lecture on 'Sustainability in the Brewing Industry' at the Institute of Brewing and Distilling (IBD) African section convention (Drakensberg, South Africa). This discussed various aspects of sustainability for brewers including the BRI international energy benchmark survey 2008, the Campden BRI energy saver and water saver software tools for brewers, the BRI/IBD website on energy saving measures, and how we are building on Campden BRI's work on carbon footprinting.

Contact (Nutfield site): **Richard Sharpe** +44(0)1737 822272 r.sharpe@bri-advantage.com



fortification studies, product development and supporting claims."

Metals

Analysis of many metals in food, to demonstrate due diligence and compliance with legislation, also now harnesses the power of mass spectrometry (ICP-MS), as Ken Grey of our Chemistry Department explains: "The new approach, for which we have UKAS accreditation, can detect much lower levels and offers members significant cost savings for metals such as cadmium, arsenic, mercury and lead. It is applicable to many foods and drinks, including alcoholic beverages, vegetables, herbs and spices, canned fish and dairy products. We can tailor the service to target specific metals or look at a wide range of them."

Contacts:
Fibre and compositional analysis: **Richard Butler** +44(0)1386 842070 r.butler@campden.co.uk

Vitamins: **Amanda Foster** +44(0)1386 842102 a.foster@campden.co.uk

Metals: **Ken Grey** +44(0)1386 842021 k.grey@campden.co.uk

Legislation: **John Hammond** +44(0)1386 842138 j.hammond@campden.co.uk

Contact

Campden BRI

Station Road
Chipping Campden
Gloucestershire • GL55 6LD • UK
Tel: +44(0)1386 842000
Fax: +44(0)1386 842100
www.campden.co.uk

Nutfield site:

Centenary Hall
Coopers Hill Road
Nutfield
Surrey • RH1 4HY • UK
Tel: +44(0)1737 822272
Fax: +44(0)1737 822747
www.bri-advantage.com

Convenience foods

- ingredients, packaging and microwaving
Conference, 9-10 July 2009
Campden site

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

Visit us at:

**European Brewing Convention
Congress**
Hamburg, 10-13 May. Booth 9

IFT Food Expo
Anaheim, CA, 6-9 June
Stand 1319

Ingredients corner

Starch as an ingredient

Starch is an important ingredient in many formulated products. We have considerable experience and offer various resources to support members in the use of starches, including clean label forms. For example, the starch handbook '*Cereal and tuber starches: their nature and performance in foods*' (Review 51) provides considerable background information on the technology and uses of starches, whilst two R&D Reports (Nos. 242 and 252) detail investigations into clean label starches. Meanwhile, New Technologies Bulletin No. 35 includes a review of clean label ingredients, including clean label starch. The R&D Reports and Bulletin are available free to members by automated e-mail reply. Send an e-mail to auto@campden.co.uk with the appropriate subject line (without quotes): 'send R&D242', 'send R&D 252' or 'send NTB35'. A separate request is required for each item.

Contacts:

Technical (Cereal & Bakery): **Charles Speirs** +44(0)1386 842284 c.speirs@campden.co.uk
Technical (Other foods): **Sarah Chapman** +44(0)1386 842212 s.chapman@campden.co.uk
Publications: **Carol Newman** +44(0)1386 842048 pubs@campden.co.uk

Tomato paste quality

Recent months have seen an increase in tomato paste samples requiring analysis for Howard Mould Count - a key indicator of paste quality. Dr. Mike Edwards, Microscopy Section Manager, comments "Tomato paste is a key ingredient in a wide range of food products, so it influences the final quality of many of them. If weather conditions are poor prior to or during harvest, then mould levels can increase, adversely affecting quality and potentially exceeding regulatory limits. We offer this analysis to help companies check the quality of their tomato paste ingredient and final product."

Contact: **Mike Edwards** +44(0)1386 842017 m.edwards@campden.co.uk

WELCOME TO NEW MEMBERS

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

A J & R G Barber Ltd - a cheesemaker

BioSystems Engineering Ltd - an Irish solution provider to technological and engineering issues

Bunge Alimentos SA - a Brazilian agribusiness and food company, fully integrated including a range of grains, oils and fats, flour and pre-mixed products

Buxton Spa Bakery Ltd - a producer of bakery and flour confectionery products

Hale & Hearty Foods Ltd - a supplier of gluten-free healthy and nutritious foods

HG Molenaar & Co (Pty) Ltd - a South African manufacturer, engineer and equipment supplier

Interal SA - a Spanish producer and packer of broths, soups, sauces and other meal products

O'Kane Poultry Ltd - a Northern Irish company operating feed mills, hatcheries and poultry processing plants

Papa Johns UK - a pizza delivery and take-away business

Refined Food Company - a Saudi Arabian manufacturer of ready mixes, improvers, and concentrates for pastry and bakery products

Smart Food UK Ltd - a supplier of a range of products including pasta, wraps, pizzas and drinks

SPA Seafood Products Association - a US trade association

Ushers Bakery - a master baker

Valid Nutrition - a supplier of a range of highly fortified nutritional pastes ideally suited to the treatment and prevention of malnutrition.

Vertupak Ltd - a Welsh manufacturer of compostable and biodegradable packaging made from renewable raw material

Contact: Bertrand Emond
+44(0)1386 842062
membership@campden.co.uk

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