

# Newsletter



# www.campdenbri.co.uk

## Producing gluten-free beer

ed.wray@campdenbri.co.uk +44(0)1737 824245

We were asked to produce a gluten-free beer that is suitable for coeliacs using a novel raw material, the African grain *Teff.* It is native to Ethiopia and Eritrea, where it is mainly used to make injera flatbread.

### The challenge

The challenge in this project was that the grain is less than 1 mm in diameter, which made it difficult to handle, and malting and brewing methods had to be adapted to cope with this.

The Teff was malted in our pilot maltings. Water uptake during steeping was very rapid because of the small size of the grain. In the pilot brewery a 100% Teff grist was used to produce a beer. The grain size meant that it had to be milled finely. This resulted in some processing problems, and the collected wort was cloudy, but we succeeded in producing a beer with an initial gravity of 1.039.

Its aroma and flavour was predominantly malty, with sweet cream toffee, caramel, biscuit and vanilla notes. These combined with subtle notes of mango and other fruits, including citrus, with some grainy and worty notes also detected.

Given its distinctive natural flavours, our Teff beer could be used as an adjunct with other grains.

Your partner for raw materials and product quality

November 2014

# Help with the 'day job'

In all areas of the food industry, problems can arise from time to time that require urgent or specialist help, for example troubleshooting product or packaging problems. Or help might be needed to validate a process, develop or reformulate products, implement safety assurance or find out what consumers think.

One of our main roles is to help you with this and to deliver commercially relevant solutions. Sometimes the help we provide is based on guidance or advice - on other occasions we draw on our extensive pilot plant areas for heat processing, chilling, freezing, malting and brewing, filling and riddling, soft drinks, milling and baking, as well as for emerging technologies. We also have dedicated areas for hygiene testing and packaging evaluation as well as a stateof-the art sensory and consumer suite and product development kitchens. We also frequently carry out work at clients' premises. You can access all these bespoke services on an on-going or ad hoc basis.

We are always happy to talk - and sometimes this in itself can solve the problem. And don't forget if you are a member, you will benefit from a discount on our services and you can also use your member service allowance to offset the cost. For more information, please email our Information team to put you in touch with the most appropriate expert - information@campdenbri.co.uk.

Steven Walker Director General

## Contents

- 2 Help with the 'day job'
- 2 Raw materials and product quality
- 3 News
- 3 Feature: Oats methods
- 4 Flour functionality in non-bread products
- 4 Pea starch for dietary benefit
- 5 FIC it's nearly here!
- 5 Out and about
- 6 Training and events
- 7 Member zone
- 8 New members

# Raw materials and product quality

www.campdenbri.co.uk/sectors/raw-materialsproduct-quality.php



Are your packaging specifications suitable? Blog by Lynneric Potter www.campdenbri.co.uk/blog

### Project: Food authenticity: development of 'next generation' analytical technologies to protect the food industry from fraud

Non-targeted screening methods are being sought by the food industry since these are not generally available. *www.campdenbri.co.uk/authenticity* 

### Structure and physical properties of foods

We offer a wide range of methods for the characterisation of the texture of food and food ingredients. www.campdenbri.co.uk/properties

Pasteurisation of dried ingredients video www.campdenbri.co.uk/pasteurisation



## FoodDrink Europe Chair

András Sebők, General Manager of our Hungarian unit, has been elected as chairman of the R&D Expert Groups of FoodDrinkEurope.

FoodDrinkEurope (FDE) is the trade body representing the European food and drink industry. Its mission is to facilitate the development of an environment in which all European food and drink companies, whatever their size, can meet the needs of consumers and society, while competing effectively for sustainable growth. It coordinates the work of more than 700 experts through its Committees and Expert Groups around the themes: food and consumer policy (food safety and science, nutrition and health), environmental sustainability and competitiveness.

András's role is to lead and coordinate the work of the R&D expert group to provide input for FDE on contributing to the HORIZON 2020 priorities together with the European Technology Platform (ETP) Food for Life. In addition, he will facilitate the involvement of companies, sector groups and national organisations in EU research and innovation programmes, with particular attention to SMEs' needs, to follow R&D activities at EU and national level, and to promote industry competitiveness (skills, funding schemes, technology transfer tools, etc.).

## Tony Skrimshire

It is with great sadness that we learned that Tony Skrimshire passed away on 12 September. Tony worked at Heinz and was a strong supporter of Campden BRI in all its incarnations. He was a member of the Research Committee (now STC) and chaired this from 1983-1986. He was a member of Council from 1983-1996 and chaired Council from 1990-1993. Over this period he was actively involved in the Heinz Travelling Scholarship award.

On leaving Council, Tony became a Campden Pension Trustee and chaired the Trustees from 1998-2004 and was a FMBRA Trustee from 1998-2001. Council made Tony an Honorary Member of Campden BRI in 1998. Since this time, Tony had been a regular at Campden BRI Day. His involvement in the food industry will be missed.



mervin.poole@campdenbri.co.uk +44(0)|386 842287

Our Cereals and Cereal Applications Testing Working Group (CCAT) has expanded its scope to include oats in its new methods and method revalidation. This is part of our increased activity in oat science and technology. We asked Mervin Poole about CCAT and the expansion of research into oats.

### So what does CCAT do?

Oats

methods

"CCAT validates cereal-testing methods for their accuracy and precision. It runs its own proficiency schemes to support the application of the methods, and it provides a forum to discuss and establish best practice. It recently published a method for the determination of ergot in cereals. With oats in the scope of the method it becomes a valuable tool for the oat community."

### And who is in CCAT?

"CCAT is open to all of our members - typically plant breeders, millers, processors and equipment manufacturers. It's a very good example of how we bring together primary producers and processors with their suppliers. Its work has been supported by member-funded research projects for over a decade. It next meets on 12 November."

# And how does this fit in with Campden BRI's interest in oats?

"A recent investment in a dehuller completed our state-of-theart oat processing facilities, meaning that we can now hull, heat treat and flake oats. We also provide a lipase and peroxidise testing service to support the validation of oat stabilisation by heat treatment.

Our dynamic image analysis system can measure the particle size and shape of both oat flakes and fines in a single process. This allows fine tuning of the performance of oats and oat processes at a level not previously possible.

In 2013, we ran a hugely successful oats seminar, which brought the entire supply chain together in one forum."



# Flour functionality in non-bread products

gemma.chope@campdenbri.co.uk +44(0)|386 84224|

Ingredient specifications for traditional bread products are well documented and understood. However, more than one third of all flour produced in the UK is used for non-bread applications. These include an increasingly wide range of products, including crackers, wafers, doughnuts, and batter coatings, for which the ingredient specifications are not fully understood. In addition, a wider range of bread-based products such as flat breads and tortillas are increasing in popularity. Methods for modifying raw ingredients to improve performance in processing and end product quality are of wide interest.

This on-going member-funded research project is focusing on improving the understanding of the functionality of raw ingredients in the final product. A basic flat bread product is being used as a model product. This product has a lean recipe and so relies heavily on the functionality of the raw ingredients. The first experiments with this model are investigating the effect of different starch sources (i.e. potato, cassava, rice, wheat) on product quality.





### Pea starch for dietary benefit

simon.penson@campdenbri.co.uk +44(0)1386 842280

In a Diet and Health Research Industry Club (DRINC) project, partially funded by the BBSRC, we are collaborating with the John Innes Centre, Glasgow University and the Institute of Food Research in a 3-year Imperial College project, led by Prof. Gary Frost, investigating the effect of pea starch on blood glucose levels and metabolism. The project is focussing on resistant starch from the wrinkled pea mutant, which is not digested in the gut.

We will be using our newly acquired dehuller (see feature on page 3) and particle analysis system to produce pea flours of different particle sizes for use in the research. It will also allow product development and scale-up avenues to be explored.

Good quality food and drink products start with good quality raw materials and ingredients. Our understanding of the chemical and physical characteristics of raw materials can help you manage quality related issues

## FIC - it's nearly here!

stephen.spice@campdenbri.co.uk +44(0)1737 824265

Well, very nearly three years after its publication, we are at last into the final furlong of the main transition period of the Food Information to Consumers Regulation. For those of us that have been following proceedings through various committees and EU Parliament readings, it has been an interesting experience to say the least!

We have learned a lot about lower case 'x' height, collagen/protein ratio of minced meat, fortification of British wheat flour, allergen boxes, sunset clauses for alcohol, cheese and cream, new rules for what needs to be shown on a website and many other delights as well! If you are a food business operator and you haven't yet made the changes required of you to your labels, now might be a good time to push that infamous red panic button and get in touch! If you are responsible for importing food into the UK, remember you might very well have responsibility for the legality of the labels and will need to ensure that the necessary changes are made. Our team of expert Food Law Advisors are on hand and will be pleased to help you with advice or assist by checking your labels for compliance.

A recent podcast available on our website

(www.campdenbri.co.uk/exporting) addresses importing food and drinks into the UK and the things you need to be aware of.

And don't forget our Food Information Update seminar on 2 December.



# Out and about

### Girls on tour

Members of our Innovation and Insights Section have recently been out on the road presenting research findings from a range of projects:

- Michelle Chen presented Encouraging UK young mums' purchasing and consumption of frozen fish - An intervention study at the 2nd International Scientific Symposium on Innovation in Marine Products and Food Industry in Vigo, Spain on 16 September;
- Marleen Chambault talked about 'Analysis of sensory data: making the case for digging deeper' at Sensometrics 2014 (Chicago) and the European Sensory Network (ESN) Seminar 2014
- Sarah Thomas presented 'Combined use of implicit and explicit methods to understand how consumers respond to health and nutrition claims relating to sugar replacement' at Eurosense: A Sense of Life, on 8 September

You can catch Sarah presenting 'Confusion or credibility: consumers' understanding of health and nutrition claims' within the session entitled Marketing healthier options: the business and health benefits at Food Matters Live at Excel, London.

## Food Matters Live

**Stand 630**. To make an appointment in advance of the show, email daphne.davies@campdenbri.co.uk, or just drop by and see us.

As well as Lab Innovations Expo in Birmingham, and the Dubai Food Safety Conference, we will be at Food Matters Live at the Excel Arena in London's Docklands on 18-20 November. Featuring 'Eye Tracking Technology' and 'Meet the expert'.

Peter Burgess will demonstrate how eye tracking technologies, along with other implicit based testing approaches, can support effective new product and packaging developments that meet consumers' increasingly discerning and exacting requirements.

Steve Spice will be on hand to discuss any food legislation queries you might have - particularly good timing should you have any last minute concerns about food labelling as the transition date for new legislation in December fast approaches.

## Spreading the word on TACCP

Richard Leathers will be speaking at the Institute of Food Safety Integrity and Protection (IFSIP) Food Crime conference in London on 25 November. See www.ifsip.org/events.html

# knowledge



### FSA Master Vendor

bertrand.emond@campdenbri.co.uk +44(0)1386 842062

We have been designated Food Standards Agency (FSA) Master Vendor for the provision of specialist training courses. We manage the programme and, with other external experts, deliver the courses, which are designed to strengthen the competencies and knowledge of Local Authority Officers.

Under the scheme, between January and July 2014, around 2,500 delegates attended 117 different courses covering 27 different subjects, including auditing food safety activities and processes, HACCP assessment, allergens labelling, food information for consumers, food standards, factory inspection, vacuum and modified atmosphere packing, and sous-vide.

Bertrand Emond, Head of Membership commented:

"The partnership has been extremely successful: we have trained over 8,000 delegates since being appointed by the FSA four years ago. Both the number of courses delivered and subjects covered have increased by 45%, including an increasing number of e-learning courses, and there has been a 40% rise in the number of local authority officers trained.

We have continually developed the training programme to ensure that it remains relevant and matched to the needs of local enforcement officers. We were delighted that our contract was recently extended by the FSA to the end of March 2015 and we look forward to continuing working closely together in future."

### Training events

### December 2014

- I-5 HACCP advanced (level 4)
- 2 Food information update seminar
- 3-5 Practical microbiology specialist
- 3-4 Supplier quality assurance foundation
- 9-10 HACCP intermediate (level 3)
- II Salt reduction targets for bakers

### January 2015

- 19-23 Food safety advanced (CIEH level 4)
- 20-21 Internal auditing principles and practices
- 27-28 HACCP intermediate (level 3)
- 29 Consumer research for product development

A full list of 2014/15 scheduled courses is available on our website *www.campdenbri.co.uk/training.php* or by requesting a booklet from training@campdenbri.co.uk +44(0)1386 842104

# New salt reduction targets for bakery products - seminar

graham.duckworth@campdenbri.co.uk +44(0)1386 842475 www.campdenbri.co.uk/salt

The Responsibility Deal Food Network has set new targets for salt reduction in 2017, which will significantly affect bakery goods. Meeting these targets will require a lengthy reformulation exercise. To assist the industry, we are holding a seminar on 11 December focusing on aspects of salt levels, what they mean in terms of issues raised, and how ingredients suppliers and our specialists can assist you in achieving the new targets.

Key areas to be covered include:

- An overview of the new levels and relevant labelling changes
- Possible solutions for manufacturers of fermented and powder raised goods from ingredients suppliers
- Effects on texture and flavour
- Comment from industry representatives, retailers and producers
- Our work in this area

### www.campdenbri.co.uk/training.php

## Visit Member Zone

### www.campdenbri.co.uk/memberzone.php

to access privileged member information and services

### Save the date!

Campden BRI Day 2015 will be on Wednesday 3 June.

To register early interest, please contact annalie.brown@campdenbri.co.uk +44(0)1386 842270

### Visits and venues

Come and see us. Use our extensive meeting facilities for your own events at very preferential rates, use one of our experts as part of your meeting, or ask for a personalised tour of either the Chipping Campden or Nutfield site.

### Visiting Campden BRI

If you are visiting our Chipping Campden site, you are welcome to use the coffee shop and seating area off Reception before, between and after meetings with staff, or to meet with other members in a neutral, informal environment.

### Key benefits:

- Easy access to experts
- Member service accounts
- Networking
- Discounts
- Research
- Keeping up to date

## Logging in

All change - in September we implemented a new way to log in to www.campdenbri.co.uk. Members who are registered on our database can now log in using an individual username and password based on their company email address.

To set up your username and password go to: www.campdenbri.co.uk/register.php

We have now turned off the shared company accounts. If you experience any problems please contact us at membership@campdenbri.co.uk.

### Latest research reports

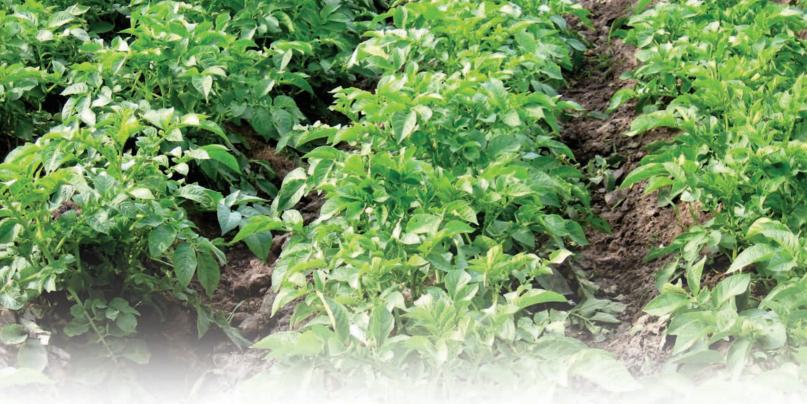
Two R&D reports have been recently published, giving extensive details of the results of member-funded research, exclusively for members.

Cold atmospheric plasma: a feasibility study (RD377)

Evaluation of the doughLAB 2500 (RD378)

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





### Welcome to new members

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

Aston Foods AG Ltd - manufacturer of vacuum cooling systems

Cakers Foods LLC - manufacturer of bread/pastries, sweets, cocoa and chocolate

Cofresco Frischhalteprodukte GmbH & Co KG - manufacturer of household packaging

Daregal Gourmet Ltd - supplier and processor of quick frozen herbs

Denise's Delicious Gluten Free Bakery - specialising in gluten-free goods

Donworth Investments Ltd - manufacturer of salads, soups and dips

Stratford on Avon District Council - Local Authority

Thanet Earth Marketing Ltd - fruit packer

Zaytoun CIC - Importer of fairtrade branded products

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

Please notify the Membership Department of any name or address changes to allow us to keep our records up to date.

### Social media



**Facebook** - find out more about our history and our lighter side <a href="http://www.facebook.com/campdenbripage">www.facebook.com/campdenbripage</a>

**Twitter** - regular tweets to keep up to date with our latest news and activities *https://twitter.com/campdenbri* 

YouTube - a range of videos providing an insight into the science and technology underpinning food and drink production www.youtube.com/campdenbri

LinkedIn - company updates providing our latest news www.linkedin.com/company/campden-bri

iTunes - subscribe to our podcasts

#### Campden BRI

Station Road, Chipping Campden, Gloucestershire, GL55 6LD, UK. +44(0)1386 842000 Fax: +44(0)1386 842100 information@campdenbri.co.uk

Nutfield site, Campden BRI, Centenary Hall, Coopers Hill Road, Nutfield, Surrey, RH1 4HY, UK +44(0)1737 822272 Fax: +44(0)1737 822747 information@campdenbri.co.uk

### www.campdenbri.co.uk