

Newsletter

December 2013



Reducing fat content of baked goods

A member funded study has developed a way to reduce the fat content of bakery products. Cakes and biscuits necessarily contain fat, which has a functional role and contributes to product quality. For example, the short dough biscuit recipe used in our study has a total fat content of about 22%, and the standard yellow or high ratio cake recipe studied has a total fat content of about 16%.

Novel approach

An approach based on modified water-in-oil emulsions was followed, where a gel replaced the water in a reduced fat spread. Biscuits containing the gel-in-oil emulsion showed a decrease of 21% in total fat and a significant decrease of 41% in saturated fat, potentially enabling a claim of 'reduced saturated fat' to be made. Cakes containing the emulsion with a 50% shortening reduction have a saturated fat reduction of over 30%, again enabling a claim to be considered.

There are drivers to reduce the total fat and also the saturated fat content of our diet, and this novel approach to reformulation can help manufacturers work towards the targets of the public health responsibility deal, and the saturated fat reduction pledge in particular.

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For electronic copies of *Development of reduced fat cakes* (RD352) or *Development of reduced fat biscuits* (RD353), send an e-mail to auto@campdenbri.co.uk with the subject line: **send RD352** or **send RD353** (as appropriate)

Your partner
for new product
development





Research

How crisp is your cracker?

We have combined the capture and analysis of sound and force data in order to develop an objective method for assessing the crispness of products.

Crispness is a key quality parameter in some food products that has been difficult to determine instrumentally because of the complex way in which it is perceived, as a combination of touch and sound. Currently the most effective way of measuring crispness is by using a trained sensory panel. Although instrumental methods to assess firmness of food products are currently widely applied, a measurement which also incorporates sound information is currently lacking. Using ten different commercially available crackers we compared results of sensory analysis with a number of instrumental measures of both force and sound. A new test was developed using the ratio of force to sound energy achieved by breaking the cracker under controlled conditions. This showed better correlation with sensory analysis than could be achieved by either force or sound data alone.

Test sensitivity was good, and it is applicable to a wide range of products with crispy properties. The method developed provides a useful instrumental measure for assessing products with crispy properties for product development.

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For an electronic copy of *Assessing the use of co-ordinated force and sound measurements in products with crispy properties to determine crispness (RD343)* send an e-mail to auto@campdenbri.co.uk with the subject line: **send RD343**



Events and training

A full list of courses is available at www.campdenbri.co.uk/training.php

January 2014

- 15-16 HACCP - intermediate (workshop)
- 20-24 Food safety - advanced (level 4)
- 21-22 HACCP intermediate course for wine makers
- 28-29 Internal auditing - principles and practices
- 29-30 Sourdough technology

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EU organic farming training

Following a recent successful bid to the EU, we have been selected to join the tutor team in a new European training project on organic farming and food legislation. This two year programme is part of the Better Training for Safer Food initiative, and will provide competent authorities in the EU Member States with training in legislation and control of organic farming and food production. The training is designed to keep those involved in control activities up to date in all aspects of the EU organic sector and will ensure more consistent and rigorous implementation of legislation across the EU. We are part of an international tutor group, delivering the comprehensive 4 day training course. The ten training sessions began in Warsaw, Poland in October 2013 with over 30 delegates from across the EU in attendance. Training will continue during 2014 and 2015 in the UK, Poland and Bulgaria.

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New product development

The pivotal role of the pilot plant blog by Emma Hanby
www.campdenbri.co.uk/blogs/pilot-plant-facilities.php

Sweeteners and fat replacers for reducing calorie content of food and beverages - project page
www.campdenbri.co.uk/research/sweeteners-fat-replacers.php

Beer and food matching - video
www.campdenbri.co.uk/videos/beer-food-matching.php

New product development course/workshop
www.campdenbri.co.uk/training/wp-development.php

More information at

www.campdenbri.co.uk/sectors/product-development-quality.php

www.campdenbri.co.uk

Extra date

Food labelling seminar

The transition period from current food labelling rules to comply with the new EU Regulation on the Provision of Food Information to Consumers now has only 12 months to run. From 13 December 2014 all food and drink manufacturers will be required to comply with the new labelling rules. From our enquiries, it is clear that there is still much confusion.

As the original event is now fully booked, we have put in an extra date for our 11th Annual Food Labelling Seminar - on 30 January 2014. We have once again assembled a team of experts to explain and discuss the significance and commercial implications of changes to labelling legislation and related initiatives. Learn the most up-to-date developments through a varied programme including presentations and Q&A sessions.

Details and registration at
www.campden.co.uk/food-labelling-seminar.php
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Revised food quality specifications

We have been involved in the production of food quality specifications for canned and quick frozen primary products for over 40 years. Written by manufacturers and retailers from the industry, these cover product colour, flavour, and texture, as well as tolerances for specific defects.

Recent revisions include:

Quick frozen raspberries (L16); Quick frozen shredded cabbage (L21); Canned peach slices (L24); Canned peach halves (L25); Canned apricot halves (L33); Canned cherries (L45); Canned rhubarb (L62)

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ri.co.uk/news.php

Feature

Promoting healthy product innovation in Scotland



We are leading the Food & Health Innovation Service (FHIS), a £4.4M project funded by Scottish Enterprise and Highlands and Islands Enterprise to stimulate and support product innovation in Scottish food manufacturing companies. This collaborative project, involving The University of Aberdeen (Rowett Institute of Nutrition and Health), Interface and SAOS (Scottish Agricultural Organisation Society), is now in its third year. Emma Hanby explains some of the achievements so far:

"We have so far provided support to 194 companies, and over 400 delegates have attended FHIS events. Many companies have taken forward the ideas contained in the innovation plans by teaming up with universities or working more closely with other companies within the FHIS community. A number of product innovation related case studies have been developed to show how Scottish food companies have benefited from the service."

Links with Campden BRI

Philip Richardson, Head of Food Manufacturing Technologies comments: "A key part of the food innovation arena in Scotland is the Scotland Food & Drink organisation. We have now established good links with them, resulting in easy access for them to our facilities and support, and providing us with business opportunities. The Scottish food industry has ambitious plans for growth and FHIS is a key part of delivering these targets. This is one of a number of initiatives in Scotland supporting the food industry and funded from different parts of the Scottish Public Sector. We are also part of the steering group for one of these initiatives, led by Interface Food & Drink, which aims to link universities with food companies to deliver innovative solutions outside the diet and health focused area."

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For more details on the information and opportunities available from FHIS, visit
www.foodhealthinnovation.com



Your vote counts again!

With around £2M funds available, members recently voted for the research projects they want us to carry out through 2014 and beyond. The following projects, which start in January 2014, complement about 50 other projects in our ongoing research programme:

- Food authenticity - development of 'next generation' analytical technologies to protect the food industry from fraud
- Assuring the quality and safety of cereal-based food products and ingredients for the food industry
- On-line technologies for food process control
- Improving the effectiveness of washing and cleaning using small, micro- or nano-scale air bubbles
- Determination of the shelf life of food and drink products - 'forcing' as an approach to accelerated shelf life testing
- Intelligent process and product design using new predictive tools
- Food allergens - providing guidance for compliance and resolving analytical challenges
- Food safety plans: a holistic approach to risk management

More details on these and on-going projects will be available in our Research Programme 2014 document in January. Members can also access summaries of existing projects on our website at www.campdenbri.co.uk/research/summary.php.

Welcome to new members

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

Aqualution Systems Ltd - manufacturer of infection control and sanitation products

Craze Foods - producer of healthy snacks and drinks

Empire World Trade Ltd - fruit importer, distributor and supplier

Lynn's Country Foods Ltd T/A Finnebrogue - specialist in deer meat processing and production

Paarman Foods T/A Ina Paarman's Kitchen (Pty) Ltd - manufacturer of sauces, bake mixes, seasonings and stock powders

Petri Wolfson Ltd - producer of a beverage intended to reduce hangover symptoms

PT Sriboga Flour Mill - miller of flour and other ingredients

Southern African Grain Laboratory - cereals analytical laboratory

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

Members



This page highlights the latest news and information for our members.

Visit [Member Zone](http://www.campdenbri.co.uk/memberzone.php) to access privileged member information and services: www.campdenbri.co.uk/memberzone.php

MIG webinar

Full members of Campden BRI are eligible to participate in our Member Interest Groups (MIGs). These groups provide you with a variety of benefits, including the opportunity for networking and early access to our research results. The MIG meetings are free to attend and consist of a range of internal and external presentations, and discussion groups, as well as tours of facilities and practical demonstrations where appropriate.

To find out more about how you can benefit from these meetings, why not sign up for a free member-only webinar on Tuesday 7 January. Lasting for around 30 minutes, it will cover:

- What a MIG meeting is and what it aims to achieve
- The context of the MIG system within Campden BRI
- The benefits of attending (for both you and your company)
- How to join a group

Please note that you will need to have a telephone and a computer with internet access in order to take part. Joining details are available from:

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