

FOOD MATTERS

AT LOUGHRY

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Focus on health at CAFRE

Welcome to Food Matters

This edition, also available online, provides a flavour of the knowledge, technology transfer and training support services available at Loughry Campus.

I am delighted that so many people, across all sectors of the agri-food industry have visited our new Innovation Centre and the feedback has been very positive. If you would like to see around the new facility please don't hesitate to contact me.

In this edition, we will continue to highlight how we can support your business. We recognise the importance of partnerships and the benefits obtained from working collaboratively with others. This issue demonstrates how we integrate knowledge and technology transfer into all our programmes.

This edition focuses on health and well-being and the business opportunities in this area. We also introduce our Food Innovation team and showcase the services they provide.

Further details on our support services can be found at www.cafre.ac.uk

If you have any comments on the information provided in this issue or wish to suggest topics for editions, please contact me.

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Health and well-being

Did you know?

- The Health Food and Drink Market is worth £20bn in UK and £300bn globally
- Northern Ireland has targets to reduce the level of obesity in adults by 4% by 2022 and in children by 3% by 2022

Key market drivers from Mintel (*Attitudes to Healthy Eating – UK: February 2015):

- Free from
- Naturalness
- Sustainability
- Snacking
- Protein
- Fibre
- Targeting seniors
- Weight management
- Energy
- Home cooking

The National Diet and Nutrition Survey for Northern Ireland compared Northern Ireland Consumers to UK Consumers and found the following:

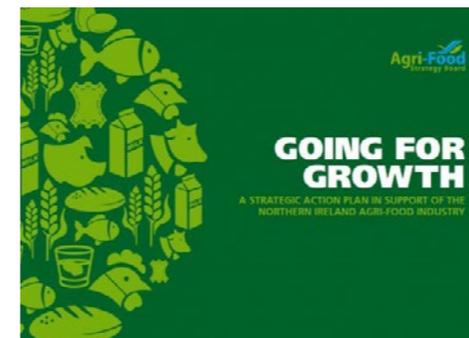
Northern Ireland consumers have a lower intake of:

- Fruit and vegetables
- Fibre
- Oil rich fish
- Iron
- Folate
- Vitamin D

Northern Ireland consumers have a higher intake of:

- Red and processed meats
- Chips and other fried foods and
- Males consume more sugary, fizzy drinks.

Health and well-being support – Northern Ireland context



The Agri-Food Strategy Board launched the report Going For Growth in May 2013. This report includes 118 recommendations aimed at accelerating the growth of farming, fishing and food and drink processing in NI to 2020 and beyond.

The Going for Growth Report has two key recommendations under 'Healthy Eating':

Recommendation 21:

Research Centres must develop the capability to support:

- Development of healthy eating alternatives to processed food ingredients.
- Research and development necessary to deliver improved human health through developments in animal nutrition.

Recommendation 27:

- The Agri-Food industry must grasp the opportunities that healthy eating offers and work with public health nutritionists, policy makers and the local research base for healthier, moderate portion size products that respond to consumers' demand for healthy eating.

This has resulted in the formation of a Healthy Eating Liaison Group. The group, comprising QUB, UU, AFBI, Food Standards Agency, DHSSPS, NIFDA and QUEST Agri-Food Competence Centre is chaired by CAFRE. The purpose of the group is to consider opportunities for businesses to maximise the opportunity that healthy eating offers as highlighted in the report. The aim is to have a farm to fork approach ensuring university research priorities are matched to the needs of local industry.

Knowledge and Technology Transfer

Effective knowledge and technology transfer is central to the development and growth of a profitable, competitive agri-food sector. It is one of the key pillars of the work of CAFRE. It has many definitions but involves the transfer of skills, knowledge, technologies and methods of manufacture between academic institutions and industry.

Within CAFRE success is measured by not merely the transfer, but by the successful adoption of technology, which involves contextualisation to fit the needs of individual companies.

At Loughry we tailor our technology support programmes to meet the needs of individual businesses and the sector as a whole. We have a great combination of highly skilled, commercially orientated food technologists and fantastic facilities which include the Food Technology Centre, the Food Business Incubation Centre and the new Food Innovation Centre. We are here to help meet the needs of businesses in the NI agri-food sector, to assist you develop and grow new market opportunities.

Included over the next few pages are just a few of the ways we support research institutions and individual food companies to develop, evaluate, adopt new and existing technologies.

We can provide one to one commercial in confidence advice and support services, across a range of topics.

- Product innovation
- Sensory analysis
- Factory design
- Quality systems – HACCP/BRC
- Process equipment selection
- Process development

Support work can be carried out either at Loughry or at your factory site – whichever is most appropriate. Support is provided across all commodity sectors and to companies of all sizes.

Supporting Research Institutions



At Loughry we are keen to enhance food research by adding our unique food processing and technology transfer skills to assist industry adoption of research findings.

An example of research support is demonstrated by our association with the recently formed Agri-Food QUEST Competence Centre, hosted at Queen's University Belfast. The formation of this Centre is a response to a Going for Growth recommendation.

Agri-Food QUEST is a membership-based, industry-led Innovation Centre for agri-food businesses in Northern Ireland. The Centre is focused on increasing the level of collaborative research activity to support the agri-food industry growth strategy and help its competitiveness as defined by the Agri-Food Strategy Board in the Going for Growth report.

As a member of Agri-Food QUEST, companies take part in a research-industry networking platform and have the opportunity to develop proposals for funding research by our university partners.

For further details contact:

Stephane Durand,
Agri-Food QUEST Manager
Email: s.durand@qub.ac.uk

Research partners within Agri-Food QUEST are



Loughry supports companies producing healthier products

Consumers are often advised that by making small diet changes they can experience big rewards. The same principle can be applied to food production and processing.

Here are some examples of where local companies made small subtle changes to their products resulting in healthier food choices for their consumers.



Demand for 'free from' foods

Gerard Quinn of The Sauce Company, Dungannon was awarded an Invest Northern Ireland Innovation Voucher which he used at the Food Technology Centre. Working with Food Technologist, Alan Johnston they made some ingredient substitutions in the range of chilled sauces making them all gluten free. This has resulted in increased market opportunities and a healthy food choice for consumers.

Demand for healthy convenience



Elaine Quinn, Manager at Quinfresh, Coalisland has worked with Food Technologist, Deborah Whinnery to provide her consumers with fresh and nutritious vegetable products in convenient ready-to-use packages. Ready meals offer significant opportunities for reformulations and contribute towards health promotion.

Increasing mineral and vitamin values



Seaweed, a readily available indigenous raw material can be added to a range of products to enhance the vitamin and mineral profiles.

Food Technologists at Loughry can assist you to incorporate various seaweed varieties into a range of products. These can include confectionary, bakery, soups, stews, meat-based products and beverages.

Reducing saturated fat



Primacy Meats, a Bangor based farm shop has recently worked with Food Technologist, Dessie Brady to produce a range of high quality processed meat products, now sold with a low fat health claim.

Not only does Northern Ireland's rapeseed oil have a unique appearance and flavour, it is also a great product to use to substitute saturated fats. Christine Shaw at Moditions who recently substituted fats in her bakery products with rapeseed oil, is now producing healthier cakes!

Promoting clean labels



Many companies are keen to remove or reduce artificial emulsifiers, flavorings and colorings from their products, so that consumers have healthier choices. We are currently partnered with LacPatrick in a FUSION project focusing on these issues.

Salt reduction



The UK wide salt reduction targets for 2017 are providing opportunities for food companies to invest in new product development. The targets apply to 76 categories of food. Our meat technology team has been working closely with sausage and burger manufacturers to adapt their products. For example, Seamus Doherty of Doherty Meats, has reformulated his traditional recipes to comply with the new challenging targets.

Demand for 'brain' food



The increasing consumer demand for brain food has resulted in the development of Omega 3 enriched products. We have been involved in collaborative projects with AFBI investigating the fortification of cheese and yogurt products with Omega 3.

Food Innovation Team

I lead a team of Food Technologists dedicated to promoting innovation within the agri-food industry. Support is delivered through many different channels as we continue to raise awareness about the strategic importance of innovation, to maximise market opportunities. In recent years we have partnered with Invest NI to deliver a series of Food Innovation 'Food for Thought' events.



Fiona Ferguson
Senior Food Technologist

It is recognised that the process of food innovation can be expensive and high risk. These events have been developed to highlight market opportunities and to showcase both the business and technical support available to help manage the risk.

Horizon scanning is an integral part of our work. This work identifies emerging themes and technologies of benefit to our industry.

My innovation team oversees the Food Enterprise Development Programme and manages the Food Business Incubation Centre.

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Dr Roisin Lagan
Food Technologist



Caroline Hammond
Food Technologist

Innovation pathway at Loughry



Fusion success

A FUSION project between CAFRE, Loughry Campus and Co. Donegal based Gallagher's Bakery was awarded a prestigious 'InterTradelreland FUSION Project Exemplar' – an award presented this year to only five companies across the island of Ireland. The 'Project Exemplar' award recognises exceptionally high levels of innovation and collaboration between a firm, their graduate and an academic as part of the InterTradelreland FUSION programme.



Alan Morrow (InterTradelreland), **Roisin Lagan** (CAFRE), **Sorcha Sweeney** (Gallagher's Bakery) and **Annette Ferguson** (FUSION Graduate)

Current Fusion and KTP Partnerships



Inishowen Country Kitchen Ltd. produce a range of ready to eat foods, and have recently partnered with CAFRE on an 18 month FUSION project to develop a range of 'free from' products.



Following a successful Enterprise Ireland Innovation Voucher, Gilligan Meats have embarked upon an 18 month FUSION, new product development project with CAFRE.



LacPatrick, Monaghan have commenced an 18 month FUSION project with CAFRE, to embed a culture of innovation and new product development.



Kestrel Foods Ltd, Craigavon provides a range of dried fruit, nuts and seeds. They are partnered with CAFRE on a KTP new product development project.

Celebrating the Year of Food and Drink



At Loughry we are delighted to support the Northern Ireland Year of Food and Drink.

We have been working closely with many of our wonderful food producers and processors so that they can showcase the range of delicious products crafted here in Northern Ireland.

We are proud to support our food heritage in this the Year of Food and Drink.

Each month in 2016 is themed and at Loughry, we are, where possible, celebrating each theme. For example, in February at the Bakery and Snacks Innovation Support Seminar delegates enjoyed a 'Love Local' lunch.

Why not choose a theme relevant to your business and create your own celebration?

January	Breakfast month
February	Love local
March	Heritage and traditions
April	Brewing and distilling
May	Landscape and places
June	Love dairy
July	Seas, rivers and loughs
August	Love NI meat
September	Bread and baking
October	Harvest
November	Legacy and learn to...
December	Christmas and premium foods

www.tourismni.com

Food Innovation Centre visitors

We have welcomed over 1000 visitors to the Food Innovation Centre (FIC) during the past six months. If you would like an opportunity to find out what the Centre can offer your business, please contact Joy Alexander at joy.alexander@dardni.gov.uk

Here are a few examples of recent visitors:



The FIC provided the venue for Henderson's Food Service annual in-house Taste Academy. Tom McKenzie from Henderson's said: *"Without hesitation I would recommend using the facility. It delivered everything we needed from a training perspective. The support staff were extremely helpful, nothing was too much bother. The kitchen facilities are exceptional."*



Invest Northern Ireland continue to use the Food Innovation Centre for their food industry events which included an Export Seminar.



Wrap Northern Ireland used the FIC as the venue for a Waste Prevention Event.



The Food Standards Agency use the FIC as a venue for information seminars with the food industry. We were particularly delighted to welcome the Northern Ireland Food Advisory Committee.



Professor Paul Ross, Head of College, University College Cork visited the FIC. On his visit he discussed the opportunities in Research and Development in dairy food research.



Safe Food and the Institute of Global Food Security jointly hosted a workshop entitled 'Develop a risk register for the pork and poultry meat sectors' in the FIC.



Rural Support and the Ulster Farmers' Union jointly hosted a conference in the FIC. The conference aimed to highlight and address the increasing challenges facing service users in rural areas.



Food Technologists, Hayley O'Neill and Alan Johnston recently welcomed Waitrose Meat Buyers to discuss a project where they evaluated the eating quality of turkey meats provided by the Waitrose Turkey Producer Group.



NIFDA held their 2016 AGM in the FIC, at which Declan Billington, Chief Executive of John Thompson and Sons was elected Chair.



Exploring food vulnerability

Loughry Campus launched a new one-day training programme on Exploring Food Vulnerability, otherwise known as TACCP (Threat Analysis and Critical Control Points) and VACCP (Vulnerability Analysis and Critical Control Points).

The issue of vulnerabilities in the supply chain is increasingly significant. Therefore a systematic approach to this specialised risk assessment is essential. Furthermore food vulnerability is included in the BRC Global Standard for Food Safety. The programme includes:

- HACCP and TACCP comparison – preparing for assessment
- Conducting a TACCP and VACCP study
- Horizon scanning techniques
- Assessing threat impact and vulnerability
- TACCP implementation and review of the system
- A raw material vulnerability assessment

Our new training programme explains the methodologies which combine TACCP and VACCP and delegates are supplied with assessment templates.

Professor Chris Elliott, Pro-Vice Chancellor, Faculty of Medicine, Health and Life Sciences, Queen’s University Belfast gave a presentation explaining the importance of food vulnerability assessment throughout the entirety of the food chain. Professor Elliott proposed eight pillars, published in his Elliott Review into the integrity and assurance of food supply networks.

Professor Elliott’s Eight ‘Pillars’ for Food Safety

1. Consumer first	2. Audit
3. Zero tolerance	4. Government support
5. Intelligence gathering	6. Leadership
7. Laboratory tests	8. Crisis management



Professor Chris Elliott
Pro-Vice Chancellor, Faculty of Medicine, Health and Life Sciences, Queen’s University Belfast



Deborah Whinnery, hosts a break-out group to review TACCP templates



Lorraine Finlay,
QuinFresh **Deborah Whinnery**, Food Technologist, CAFRE, and **Claire Charles**, Linwood’s Bakery.



Dessie Brady, hosts a break-out group to explore horizon scanning techniques



Dessie Brady, Food Technologist, CAFRE;
Joy Alexander Head of Food Technology, CAFRE;
Professor Chris Elliott, QUB and **Deborah Whinnery** Food Technologist, CAFRE.



If you require more course information or advice on this area please contact **Deborah Whinnery**

Email: deborah.whinnery@dardni.gov.uk
or Tel: 028 8676 8197

Bakery and Snacks businesses encouraged to grow through innovation

At a seminar jointly hosted by Invest NI and CAFRE in the Food Innovation Centre at Loughry Campus, Northern Ireland's bakery and snacks sector were encouraged to explore innovation to support business growth.

The bakery and snacks sector is a very strong contributor to agri-food in Northern Ireland and includes the production of bread, bread products, biscuits, buns, pies and pastry as well as hand-held snacks and food-to-go products. The delegates discussed the importance of product innovation, market trends and seasonal opportunities. The group also got an overview of the support available from Invest NI, as well as viewing the technical facilities provided in the Food Innovation Centre.



Joy Alexander from CAFRE and John Hood, Invest NI, joined the speakers at the innovation seminar for producers from Northern Ireland's bakery and snacks sector.

Pictured (right) is Ronan McNamee, co-founder of Cuisine De France Ltd and founder of BFree Foods Ltd and (sitting left-right) Keri Cummings, Category Marketing Executive at Macphie of Glenbervie and Lisa Boswell, Trade Marketing Manager, CSM Bakery Solutions.

Thank you to local companies, Andrew Ingredients and Finlay Foods for supporting this event.



John Hood, Invest NI; **Sarah-Jane Allen**, Linwoods, **Simon Dougan**, Yellow Door, Portadown and **Joy Alexander**, CAFRE.



John Hood, Invest NI; **Anna Taggart**, Yummy Bakes NI and **Valerie Finlay**, CAFRE.



John Hood, Invest NI; **Jill Morton**, Jill's Cakes; **Deborah Irvine**, Scott's Bakery and **Christine Haydock**, CAFRE.



John Hood, Invest NI; **Neil Doherty**, Wafer Ltd; **Brian McErlain**, Genesis Crafty and **Joy Alexander**, CAFRE.



John Hood, Invest NI; **Jackie Kirk**, Hovis; **Amy French**, French Village Bakery and **Joy Alexander**, CAFRE.

Dairy Intensification



CAFRE, Loughry Campus in association with the Society of Dairy Technology recently hosted a 'Dairy intensification - implications for water demand and waste treatment' seminar. Milk processors and producers attended the event to find out more about potential options for treating waste water and effluent.

Speakers on the day included: Chris Johnston, AFBI; Dr Sean Tuohy, 2e Technical Development Ltd and Mr Terry O'Flynn, Banks Douglas Associates.

After the formal programme the group visited an anaerobic digester and waste water treatment plant at LacPatrick Dairies Ltd. where they welcomed Nigel Kemps, Deputy Chief Executive.

If you require further details about this area please contact Gary Andrews

Email: gary.andrews@dardni.gov.uk or
Tel: 028 8676 8270



Terry O'Flynn, Bank Douglas Associates,
Rosemary McKee, CAFRE; **Chris Johnston**, AFBI;
Sean Tuohy, 2e Technical Development Ltd; **Gary Andrews**, CAFRE; **Stephen Gilkinson**, CAFRE.



Artisan Dairy Programme

In recent years the production of artisan foods has been a growing sector of the Northern Ireland agri-food industry. To support small enterprises or those new to the area of milk processing, Loughry Campus will be hosting an Artisan Dairy Programme for those diversifying into the manufacture of artisan dairy products.

The programme will focus on the manufacture of ice cream and cheese at which the participant will have the opportunity to gain hands on experience of making these dairy products. As well as focusing on the manufacture, the programme will also cover aspects of: business planning, financial considerations and legislative requirements.

Introduction to artisan ice cream

5th October 2016

Introduction to artisan cheese

12th October 2016

Business start-up

19th October 2016

All participants should attend the Business start-up workshop and can choose to attend either the ice cream or cheese workshop, or indeed, attend both. CAFRE technologists will lead the practical processing workshops. The Business start-up workshop will be supported by the Environmental Health, FSA and Invest NI.

If you would like to receive further information or to book a place on the programme please contact Dr Rosemary McKee

Email: rosemary.mckee@dardni.gov.uk
or Tel: 028 8676 8163



Loughry News

Loughry supports the Northern Ireland Potato Festival

Loughry staff joined with a host of local food producers to support Good Food NI and the National Trust at their annual celebration of the humble spud at the Giant's Causeway.



Food Technologists, **Victoria Shiels** and **Valerie Finlay**, with **Ivor Ferguson**, Deputy President NFU.

Dr Raymond Martin welcomed back to Loughry

Dr Raymond Martin has been appointed to the post of Senior Meat Technologist at Loughry. Raymond joined CAFRE 20 years ago and for the first six years was involved in the delivery of the degree programmes at Loughry Campus. In recent years Raymond was based at Greenmount Campus where he delivered various other education programmes. Raymond can be contacted at:

Email: raymond.martin@dardni.gov.uk or
Tel: 028 8676 8133



Student exchange

Alize McCalm and Claire Wilson, BSc Food students travelled to Michigan State University (MSU) as part of the MSU/CAFRE student exchange programme. They spent the autumn semester in MSU studying modules relevant to their degree.



Loughry staff wish Dr John Fay, OBE a happy retirement.



On behalf of all Loughry staff, Joy Alexander, Head of Food Technology Development and Derek McDowell, Head of Education at Loughry, wish Dr John Fay OBE, Director of CAFRE a well earned, long and happy retirement.

Appointment of Martin McKendry, CAFRE Director



Congratulations to Martin McKendry following his successful appointment as CAFRE Director.

Bursary success for Loughry food students

Loughry Campus would like to thank the 14 businesses who provided Higher Education food students with a bursary in the 2015-2016 academic year.



CAFRE's Award Winning Training Team



CAFRE Food Industry Training Team: **Rosemary Brennan, Clare Millar, Leona Hawkes and Catherine Devlin.**

2015 was an extraordinary year for the training team at Loughry campus.

In the space of a few weeks it won not one, but two top awards for the delivery of training to the food industry. The team were awarded the Chartered Institute of Environmental Health (CIEH) Top Centre Award for Food Safety Training, with Clare Millar as their top trainer and the Royal Society for Public Health Top Centre Award for HACCP and Rosemary Brennan was their top trainer.

The team deliver a range of accredited technical qualifications designed to meet the needs of food companies and their customers.



Top candidate in UK

Deli-lites' Quality Manager, Cathal O'Donnell is the Royal Society for Public Health's (RSPH) top candidate in HACCP in the UK.

HACCP is the quality management system used by manufacturers to ensure food is safe. Cathal completed the Level 4 Award in HACCP for Food Manufacturing at Loughry Campus which was also awarded the RSPH's top centre for HACCP. Cathal received the recognition for his achievement at an Awards Ceremony at The King's Fund in London.

Continued demand for short course training

Northern Ireland food companies continue to use our Award winning Food Industry Training Team to deliver short courses in the critical areas such as food hygiene, food safety and auditing.



Allingham Transport staff who completed the CIEH Level 2 Food Safety for Logistics.



Fane Valley Feeds staff completed a Refresher Level 2 HACCP programme.



Candidates from The Foyle Food Group who completed the CIEH Level 3 Training Principles and Practice course.



Adelie (Ireland) staff who completed the Highfield Level 3 Award in Auditing and Inspection programme.

If you would like details on Food Short Course Training opportunities please contact **Catherine Devlin, Tel: 028 8676 8114 Email: catherine.devlin@dardni.gov.uk**

Autumn course dates

Level 4 Award in Food Safety Management for Manufacturing

Chartered Institute of Environmental Health

Date Wednesdays: 5th, 12th, 19th, 26th October & 2nd November.

Exam Monday 14th November

Assignment Thursday 17th November

For managers working within the food processing sector

Level 3 Award in Food Safety Supervision in Manufacturing

Chartered Institute of Environmental Health

Date Thursdays: 6th, 13th & 20th October.

Exam Thursday 17th November

For supervisors working within the food processing sector

Level 2 Award in Food Safety in Manufacturing

Chartered Institute of Environmental Health

Date Monday 26th September

For anyone working within the food processing sector

Level 4 Award in HACCP Management for Food Manufacturing

Royal Society Public Health

Date Tuesdays: 27th September, 4th, 11th, 18th, 25th October & 1st November

Exam Monday 7th November

For managers and HACCP team leaders and members. (A sound knowledge of HACCP is essential)

Level 3 Award in HACCP for Food Manufacturing

Royal Society Public Health

Date Tuesday 22nd & Wednesday 23rd November

Exam Tuesday 29th November

For managers and HACCP team members (A knowledge of HACCP is essential)

Food safety course

Auditing course

HACCP course

Other course

Foundation Certificate in HACCP

Royal Society Public Health

Date Monday 10th October

For all HACCP team members

Level 3 HACCP Refresher

Royal Society Public Health

Date Thursday 3rd November

Level 3 Award in Auditing & Inspection

Highfield Awarding and Inspection

Date Tuesday 15th & Wednesday 16th November

For supervisors and managers preparing companies for internal and external audits

Level 3 Award in Training Principles and Practice

Chartered Institute of Environmental Health

Date Wednesday 9th & Thursday 10th November.

Assessment Wednesday 30th November or Thursday 1st December

For those with Level 4 Food Safety or Health and Safety qualifications who wish to become recognised trainers

Level 2 Award in Health & Safety in the Workplace

Chartered Institute of Environmental Health

Date Monday 7th November

For everyone involved health and safety in the workplace

Level 2 Award in Food Allergen Awareness

Chartered Institute of Environmental Health

Date Monday 24th October

For anyone working within the food processing sector

**For more
information
please get
in touch**

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