



We are the oldest established centre of excellence for nutrition research in the UK

We have shaped policy and research agendas for over 100 years

Our areas of research expertise include: obesity and metabolic health, gut health, healthy ageing, food security and sustainability.

We have a very successful track record of working with industry on a wide range of innovative projects



Rowett Institute of Nutrition and Health

School of Medicine, Medical Sciences and Nutrition
University of Aberdeen

Newsletter Summer 2016



New Building

In March this year the Rowett Institute entered an exciting new phase in its history as we moved into our brand-new purpose-built state-of-the-art building which is situated on the University of Aberdeen's / NHS Health Campus.

The 10,000m² building (with "Outstanding" BREEAM rating (Building Research Establishment Environmental Assessment Method) includes a clinical investigation unit, a metabolic research facility and a body composition suite, alongside extensive state-of-the-art laboratories. A key aspect of the facility is the specialist nutrition unit, where volunteers are able to take part in dietary trials and studies in modern and comfortable surroundings, while at the same time providing the facilities we need to undertake scientifically rigorous studies.

[Read more](#) or [view gallery](#)

Research

Scottish Government Funded Work



The Scottish Government funds a programme of strategic scientific research through the Rural and Environment Science and Analytical Services (RESAS) division to advance the evidence base in the development of rural affairs, food and environment policies. The Strategic Research Programme is one of the largest coordinated programmes of research in the UK supporting agri-food and environmental sciences and will run from April 2016 to March 2021. As part of the funding, the Rowett will receive £7.6M.

Our role in the project will investigate areas such as:

- how to optimise the nutritional health benefits of eating different types of crops including wild and relatively unexploited species.
- how dietary fibre consumption benefits our gut health and can contribute to healthy weight and improve metabolic health
- how the perception and preference for taste and flavour (e.g. sweetness) may be altered over the life-course
- the nature and extent of household food insecurity in Scotland

The Strategic Research Programme is one of the largest coordinated programmes of research in the UK supporting agri-food and environmental sciences and will run from April 2016 to March 2021. Effective knowledge exchange is at the heart of this research programme and a new Centre for Knowledge Exchange and Impact has been created to ensure that the research is relevant and useful to industry and that the new technologies are communicated effectively to those that can benefit from them. [Read More](#)



What your father did before you were born could influence your future

Professor Paul Haggarty had an article published in “The Conversation” about epigenetics, the chemical modification of DNA, and how a person’s nutrition could potentially affect their offspring’s health. Drawing on research from a recent publication, Paul discusses the possibility that how a father lives his life could influence the health not only of his children but also his grandchildren. [Read more](#)

[Full Article](#)



Dietary Fibre vs High Protein to Alleviate Obesity

New research from our Obesity & Metabolic Health and Gut Health themes shows that soluble fermentable fibre (pectin) may be more effective than either animal (casein) or plant (pea) protein for increasing satiety and decreasing caloric intake in an animal model. Both pectin and pea protein diets decreased the body weight, but pectin had the greater effect on significant body fat loss whereas the pea diet stopped further fat development. This suggests that perhaps a high fibre diet may be better for healthy weight loss in obesity rather than a high protein diet.

[Full Article](#)



Global cropland and greenhouse gas impacts of UK food supply are increasingly located overseas

As part of a collaboration between the University of Aberdeen, the Rowett Institute and the James Hutton Institute, PhD student Henri de Ruiter is lead author of a study investigating how much cropland is needed to produce the UK’s food and animal feed. Some of the results show that almost 70% of our “cropland footprint” is now located overseas. Similarly as the UK increasingly outsources its environmental impact to other countries, the overseas generation of greenhouse gases emitted as a result of fertilizers, cultivation and land use change has increased. [Read more](#)

[Full Article](#)



Researchers show brain differences mean women gain weight more easily

Research from Professor Lora Heisler, in collaboration with scientists from the University of Cambridge and University of Michigan has opened the door to the possibility of different treatments for obesity depending on your sex. Using animal models, the study showed the susceptibility to obesity may be gender-dependent. Professor Lora Heisler says: Currently there is no difference in how obesity is treated in men and women. However, what we have discovered is that the part of the brain that has a significant influence on how we use the calories that we eat is wired differently in males and females". [Read more](#)

[Full Article](#)



What controls hunger and satiety?

As the EU Framework 7 [Full4Health](#) project comes to an end, Tehmina Amin and Julian Mercer report on selected new findings which shows the importance of understanding the basic mechanisms underpinning hunger and satiety control and their potential for beneficial application.

[Full Article](#)

Policy



Policy lab for Early Career Researchers on Sustainable Nutrition

Earlier this year, Dr Jennie Macdiarmid was invited to speak about sustainable nutrition at a policy lab for early career scientists organised by the BBSRC. The workshop was for postdoctoral researchers, 14 of whom were selected from across the UK to attend. The attendees will write a report based on the outcomes of the workshop which will be sent to government departments by the BBSRC Global Food Security programme. [Read more](#)



Dr Janice Drew at the European Parliament

At the beginning of the year, Janice Drew got the chance to be paired with an MEP in Brussels as part of a European Parliament initiative to bring scientists and policy-makers together. In her time there she gave a short interview.

Speaking about her research into diet, nutrition and human health, she describes how using molecular biological techniques it is possible to identify markers of signal deregulation that can provide indications of health status and allow monitoring of responses to diet and lifestyle interventions to restore and maintain health. Janice is hoping that her work can help create a molecular profile of health status that could indicate early changes leading to the onset of disease.

To hear more you can view this [video](#)



Good Food Champions

The Rowett has been a collaborative partner in a new General Teaching Council-accredited training programme organised by Royal Highland Education Trust RHET. This year-long course has given teachers the opportunity to engage with all levels of the food, farming, cookery and manufacturing chain and to become “Good Food Champions”. The course has included a farm visit, manufacture visit, hands on cookery, investigating soils and finding more about food security. The learners on the course will then share their knowledge and expertise with others in their teaching community.

Other partner organisations include Soil Association Scotland, Scotland’s Rural College (SRUC), Scottish Food and Drink Federation, Focus on Food, the National Museum of Scotland and Quality Meat Scotland.



University of Aberdeen’s May Festival

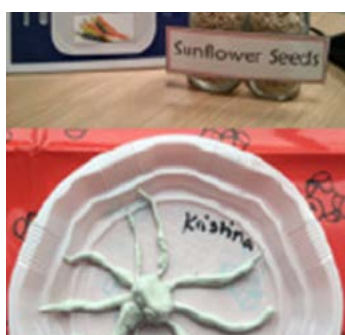
For MayFest 2016 we offered two types of tour around our new building. The first tour allowed members of the public to see our fantastic Human Nutrition Unit as well as the state-of-the-art labs and the fully equipped meeting rooms.

The second tour was rather more tongue in cheek as artists from The Center for Genomic Gastronomy (here as part of a Leverhulme “Artists in Residence” grant) led a “Microbiotour” detailing their view of what the achievements of nutrition research could be 20 years in the future.



Scotland Food & Drink Excellence Awards 2016

On Thursday 2nd June Glasgow-based healthy pizza creators Eat Balanced won the Rowett-sponsored Commitment to Health award at the annual [Scotland Food & Drink](#) Excellence awards.



Edinburgh International Science Festival

As part of the Edinburgh International Science Festival at the Royal Botanic Gardens Edinburgh Dr Wendy Russell and colleagues ran a “Back to the Future Food” workshop. Participants had the opportunity to design what they thought would be on their plate in the future, as well as sculpting their ideas of future food and discussing alternative proteins sources. The event was very well attended and many interesting discussions were had.

For more information visit our [website](#)

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