

News Release

Immediate release: 31 January 2019

National charity Coeliac UK and Innovate UK announce £750k boost to research that unlocks gluten free challenges

Coeliac UK, the national charity for people who need to live gluten free, has combined forces with Innovate UK, the UK's innovation agency, to drive improvements worth £750,000 in the food technology, diagnostics and digital care industries.

The funding will support projects based in Birmingham, Newcastle and Edinburgh and is part of Innovate UK's partnership with the third sector on health research projects, bringing direct benefits to both patients and UK businesses.

The UK has been at the forefront of the most dynamic growth area in free from food retailing and Coeliac UK is the world's largest support organisation for people with coeliac disease. This collaboration will build on these strengths by supporting research advances in food technology, diagnostic techniques and digital care.

Sarah Sleet, chief executive of Coeliac UK said: "Coeliac UK is a world leader on coeliac disease, supporting research that makes a real world impact. This new research to create a different diagnostic test could help unlock a worldwide problem for millions of people without a proper diagnosis of coeliac disease, while the research on innovative gluten free ingredients will keep the UK ahead in the food industry's expansion into gluten free. Meanwhile our third funded project could offer real savings to the NHS in the management of the lifelong autoimmune condition that is coeliac disease providing a service model for the many other chronic long term conditions in the UK."

Dr Kath Mackay, Director of Ageing Society, Health and Nutrition at Innovate UK, said: "Stimulating innovation in our food and health sectors are crucial components of the government's industrial strategy. By working with Coeliac UK we will be able to offer funding that results in improved quality of life for people with this condition and support and stimulate our vibrant health care and food technology sectors."

The three projects reflect the key challenges of living with coeliac disease and a gluten free life:

New test to provide a less invasive way of diagnosing coeliac disease - Nonacus Ltd, Birmingham

The average time to gain a coeliac disease diagnosis is 13 years and there are half a million people in the UK undiagnosed – and in the tens of millions worldwide. Nonacus Ltd, working with researchers at the University of Cambridge led by Dr Elizabeth Soilleux, will together develop a test for coeliac disease. Current tests only work if patients are still eating gluten. The new test will rely on a proprietary laboratory test in conjunction with a patented computer algorithm. It's a completely new way of looking at the immune cells and can identify patients with coeliac disease by predicting how likely immune cells are to be responding to gluten. It aims to develop a coeliac disease test for people who have already adopted a gluten free diet, as well as an improvement on the current method of analysing biopsy samples. This will not only save considerable patient suffering but will also provide savings to the NHS speeding up diagnosis journeys.

Development of three new plant proteins to help improve the ingredients used in gluten free bread - Nandi Proteins Ltd, Scotland

To improve gluten free bread by developing revolutionary new ingredients. Nandi Proteins Ltd (a protein technology company), Genius Foods (gluten free food manufacturer) AB Mauri (distributor of bakery ingredients) and Agrii (a plant science and technology company) will join researchers at Heriot Watt University to develop three kinds of new plant proteins. The proteins will be derived from crops which are underused in the UK: rapeseed cake, faba beans and naked oats. These new ingredients could replace the expensive egg and dairy based ingredients currently used, improve the nutrient profile, taste and texture of gluten free bread and reduce the need for E number additives. Development of these new ingredients will also open up new markets for UK grown crops and add value to the UK economy. Overall consumers could see cheaper and better quality gluten free products.

Software innovation to help in the ongoing management of coeliac disease - Cievert Ltd, Newcastle

Software will be developed to better manage coeliac disease. Working with leading researchers from Sheffield University, the goal is to find patients with coeliac disease that need more support, compared to those who are living well. The software, when developed, will let people receive the assurance of being clinically followed up without the inconvenience, time and cost of hospital appointments. Whilst those who need additional care will be identified quickly and easily so that they can access crucial support when they need it most. This could be technology that is applied to other conditions in the future resulting in substantial savings for the NHS.

Ends

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- 1) Coeliac UK is the national charity for people who need to live without gluten, whether due to coeliac disease or another medical condition requiring a gluten free diet.
- 2) Coeliac UK has already committed over £2 million to research projects since 2005 including groundbreaking discoveries such as identifying genes associated with coeliac disease and other autoimmune conditions related to gluten. And, has also funded research towards a vaccine to restore immune tolerance to eating gluten.
- 3) Coeliac UK which celebrated its 50th Anniversary in 2018, partnered with Innovate UK to offer researchers and businesses a share of the funding for three priority themes, with grants ranging from £50k to £250k to help fuel innovation in food and health sectors.
- 4) Coeliac disease is a serious illness where the body's immune system reacts to gluten found in food, making the body attack itself.
- 5) Symptoms include diarrhoea, vomiting, stomach cramps, mouth ulcers, fatigue and anaemia.
- 6) In undiagnosed, untreated coeliac disease there is a greater risk of complications including anaemia, osteoporosis, neurological conditions such as gluten ataxia and neuropathy, and although rare there's an increased risk of small bowel cancer and intestinal lymphoma.
- 7) 1 in 100 people in the UK has coeliac disease
- 8) Average time to diagnosis is 13 years.
- 9) 1 in 4 people diagnosed with coeliac disease had previously been diagnosed with IBS.
- 10) Gluten is a protein found in wheat (including spelt), rye and barley. Some people are also sensitive to oats. Obvious sources of gluten include breads, pastas, flours, cereals, cakes and biscuits. It is often used as an ingredient in many favourite foods such as fish fingers, sausages, gravies, sauces and soy sauce.
- 11) Coeliac UK has a Helpline on 0333 332 2033 and further information can be found at www.coeliac.org.uk

About Innovate UK:

Innovate UK is part of UK Research and Innovation, a non-departmental public body funded by a grant-in-aid from the UK government. For more information visit www.ukri.org.

Innovate UK drives productivity and economic growth by supporting businesses to develop and realise the potential of new ideas, including those from the UK's world-class research base.

We connect businesses to the partners, customers and investors that can help them turn ideas into commercially successful products and services and business growth.

We fund business and research collaborations to accelerate innovation and drive business investment into R&D. Our support is available to businesses across all economic sectors, value chains and UK regions.