

Innovate UK

Competition for funding

Optimising food composition:
fat, sugar, salt and fibre



REGISTER BY
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2015

Collaborative R&D



Innovate UK is to invest up to £10 million in collaborative R&D projects to enhance the nutritional quality of food and drink through the reduction of sugar, salt and fats, and through an increase in dietary fibre.

The aim of this competition is to stimulate the development of new processes and products that lead to the availability of healthier food choices for consumers, and open up new market opportunities for the industry.

Proposals must be collaborative and led by a business, but may include research partners. We expect to fund mainly industrial research projects. Small businesses could receive up to 70% of their eligible project costs, medium-sized businesses 60% and large businesses 50%.

We expect projects to range in size from total costs of £250,000 to £1 million, although we may consider projects outside this range.

This is a two-stage competition that opens for applicants on **5 October 2015**. The deadline for expressions of interest is at noon on **25 November 2015**.

There will be a webinar briefing for potential applicants on **14 October 2015**. Consortium-building workshops organised by the Knowledge Transfer Network are on **15 September 2015** (Birmingham) and **17 September 2015** (Manchester).

Background

The UK agri-food supply chain contributes £103 billion to the UK economy and employs 3.8 million people. Food and drink manufacturing contributes £26.5 billion, and is the single largest manufacturing sector in the UK; it has been identified by government as a target sector for export growth.

Global food demand is expected to grow by 60% by 2050, driven by population increases and the changing diets of the growing middle classes. These changing dietary preferences can also impact negatively on health, with concerns including obesity, high blood pressure and raised cholesterol. The health profession has specifically targeted the need to reduce salt, sugar and saturated fat in food and drink. In the context of preventing cancer, there are also concerns about a lack of dietary fibre. With diet-related chronic disease accounting for 9% of total NHS spend, public health campaigns will concentrate on influencing consumer behaviour and dietary choices.

Leading businesses recognise the need to proactively offer consumers foods that are more nutritionally balanced and, at the same time, appealing to modern tastes. This competition is designed to help industry to develop innovative

products to meet and anticipate evolving consumer preferences, and to help the UK build on its reputation for safe and sustainable food production of the highest standard.

The market opportunity is broad, from niche health products to mass markets such as bread. We recognise that consumers fall into different demographic groups, influenced by a wide range of factors. For greatest economic impact, we are therefore looking for a breadth of projects, spanning a variety of food types, from improving heavily consumed, comparatively unhealthy foods to developing new, 'healthier' foods to meet increasing consumer demand.

Scope

We are inviting proposals that have the potential to significantly improve the nutritional composition of food and drink, focusing specifically on one or more of the following high-level challenges:

- reducing levels of salt
- reducing levels of sugar
- reducing levels of saturated fat and/or total fat
- increasing levels of dietary fibre

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Projects must also ensure that:

- calorific content is improved or not adversely affected
- any new ingredients are sustainably sourced
- foods remain appealing or increase their consumer appeal

This competition is open to the whole food and drink sector. Projects must improve consumer goods, but may focus on any part of the food chain, from the development of sustainably sourced raw ingredients to reformulating products to optimum compositional balance. However, proposals that take a broad supply chain approach are particularly encouraged, in order to stimulate the sharing of knowledge and resources between businesses in subsectors that would not normally work together.

Applicants may include plant and animal breeders, primary agricultural producers, food processors, food manufacturers, processing equipment companies, ingredient companies and retailers. Companies from outside the sector that may contribute novel technologies, such as precision engineering to enable new manufacturing approaches or industrial bio-technology to support new ingredient and formulation development, are encouraged to collaborate.

We expect there will be a range of approaches to these challenges, including **but not limited** to the following.

Strategies to reduce **fat, sugar and salt** or **address the consequences of reduction or removal**, and to **increase dietary fibre**, such as:

- development of alternative ingredients, novel bulking agents and enhancers
- substitution of components such as replacing fat with whole grains

- addressing changes to characteristics during processing and potential impact on consumer appeal
- potential food safety issues, where the ingredients removed provide product stability
- shelf life and product quality issues including the interaction with packaging, eg fat migration

The **development of raw ingredients**, which may include crops and livestock (including aquaculture) breeding programmes. For innovations in the early stage of the food chain, there should be tangible outcomes related to improving consumer goods, such as:

- reduced saturated fat composition of raw materials that are carried through to end products (eg meat)
- novel salad vegetables and grains that are high in fibre

Novel **reformulation, processing and manufacturing**, such as:

- new or retrofitted processing equipment, future-proofed to cope with changes in ingredients
- cooking technologies that give a 'fried' texture with a reduction in fat in the finished product
- processes that incorporate the necessary steps to control pathogens (ie hurdle technologies) so that food safety parameters can be met when traditional preservatives such as salt are reduced
- inclusion of fibre in a way that is non-detrimental to product characteristics

In addition, human biological and physiological factors and consumer behaviour that validate the efficacy and consumer appeal of the products being developed can be included, but only as work packages within the larger body of research supporting product development.

Out of scope

Similarly, proposals may be deemed out of scope where:

- the primary focus of the work is human allergens or other nutritional enhancements outside of the competition aims
- substantial novel ingredient regulatory approval is likely to be required – where this is an expected outcome, applicants should contact us to check the project is eligible for funding
- approval for a 'health' claim (as opposed to 'nutrition' claim) is likely to be required from the European Food Safety Authority

Funding allocation and project details

We have allocated up to £10 million* to fund collaborative R&D projects that address the technical challenges outlined in the scope.

Successful applicants can attract grant funding towards their eligible project costs. The percentage of costs that we pay varies, depending on the type of research being carried out and the type of organisation involved.

For this competition, projects must be business-led and collaborative. They may last up to 3 years. We are primarily seeking

Looking for partners to work on your project?
Go to **_connect**
<https://connect.innovateuk.org>

Each partner in a project can receive funding towards their project costs – the funding is a percentage of the total eligible project costs and varies, depending on the size and type of organisation and the type of research. For general guidance see: <https://interact.innovateuk.org/funding-rules> or watch our video (<https://www.youtube.com/watch?v=cExDpxTL8JY>)



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to fund industrial research, but projects may include research partners. Small businesses could receive up to 70% of their eligible project costs, medium-sized businesses 60% and large businesses 50%. The total proportion of all research partner costs should not exceed 30% of total project costs. Proposals led by or involving small and medium-sized companies are particularly encouraged.

We expect total project costs to range in size from £250,000 to £1 million. We may consider larger projects but applicants should contact us directly before making their application to discuss further.

To find out if your business fits the EU definition of an SME, see: http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/index_en.htm

* Please note that Innovate UK funding is subject to the result of the Government Spending Review in autumn 2015.

Application process

This is a 2-stage competition that opens for applicants on **5 October 2015**.

Stage 1 – applicants submit an expression of interest which is assessed.

Stage 2 – we invite selected applicants to submit an application.

The deadline for expressions of interest is noon on **25 November 2015**. The second-stage deadline for invited applications is noon on **10 March 2016**.

Applications are assessed on individual merit by an independent panel of experts.

There will be a webinar briefing for potential applicants on **14 October 2015** to highlight the main features of the competition and to explain the application process. **Applicants are strongly recommended to attend this webinar.**

Key dates

Competition opens	5 October 2015
Competition webinar briefing	14 October 2015
Registration deadline	noon 18 November 2015
Expressions of interest (EOI) deadline	noon 25 November 2015
Stage 2 opens for invited applicants	8 February 2016
Deadline for invited applications	noon 10 March 2016

Consortium-building workshops organised by the Knowledge Transfer Network are on **15 September 2015** (Birmingham) and **17 September 2015** (Manchester). For more information and to register, see <https://www.eventbrite.co.uk/d/local/optimising-food-composition-innovate/>

Note: All deadlines are at noon.

More information

For more information and all the documents you need to read before you apply, including the *Guidance for Applicants*, go to the web page for this competition at <https://interact.innovateuk.org> or watch our applications process video (<https://www.youtube.com/watch?v=S-rnSpIMiPc>)

To apply you must first register with us through the competition page on the website. Registration opens when the competition opens and closes a week before the deadline for expressions of interest.

Get help to understand the future market for your innovation before you apply at: <http://horizons.innovateuk.org>



Help for SMEs to grow faster

Small businesses that combine the funding they receive from us with additional business support are more likely to grow faster. If you are an SME and receive funding through this competition, you will automatically gain access to a growth workshop, an online diagnostic and a growth expert to help you develop a growth plan. This may include coaching, mentoring and entrepreneurial skills training.

Publicity

As part of the application process all applicants are asked to submit a public description of the project. This should adequately describe the project but not disclose any information that may impact on intellectual property, is confidential or commercially sensitive. The titles of successful projects, names of organisations, amounts awarded and the public description will be published once the decision to offer an award has been communicated to applicants by email. Information about unsuccessful project applications will remain confidential and will not be made public. E-mail pressoffice@innovateuk.gov.uk with any queries.

Innovate UK is the new name for the Technology Strategy Board – the UK's innovation agency. We know that taking a new idea to market is a challenge. We fund, support and connect innovative businesses through a unique mix of people and programmes to accelerate sustainable economic growth.

The Technology Strategy Board is an executive non-departmental public body sponsored by the Department for Business, Innovation and Skills, and is incorporated by Royal Charter in England and Wales with company number RC000818. Registered office: North Star House, North Star Avenue, Swindon SN2 1UE.

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