

## Food Bio-test Capabilities

The prevalence of major diseases such as obesity and diabetes is increasing in the human population. Therefore, a major focus of the industry involved in the Functional Food sector is to develop food ingredients that could improve our health and reduce diseases. An important aspect of assessing such ingredients is feeding trials. Teagasc is in a position to assist companies in this process through its state-of-the-art Food Bio-test facility and related experience, based at Moorepark, by testing the food ingredients of interest *in vivo*.

### Background

As part of Teagasc's on-going commitment to improving the health of people in Ireland, a Food Bio-test facility was established with the aim of identifying bioactive nutrients, prebiotics, probiotics and their derivatives. In this facility, feeding trials are being carried out on pigs and mice in two dedicated research units. By utilisation of state-of-the-art technology, we are able to assess how each potential dietary ingredient that we test affects physiology and cellular activity.

### Benefits to Industry

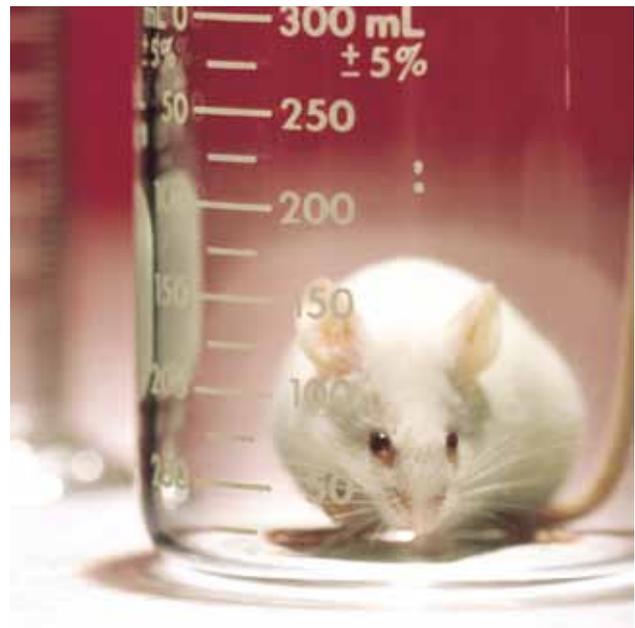
By carrying out feeding trials on behalf of clients, we can assist food ingredient manufacturers interested in functional foods in the establishment of health claims for food ingredients.

### Areas of Expertise

- Human diseases such as obesity and associated clinical conditions.
- Gut health.
- Physiology, biochemistry and molecular biology.
- Dietary challenges to mice and pigs.

### Facilities/Equipment

- Dedicated research units to perform animal trials.
- State-of-the-art technology to measure physiological parameters such as food intake, body weight, body composition and locomotor activity, circulatory factors such as hormones, cellular activity including expression of genes.



### Range of Solutions

We are able to perform either short term (days) or long term (months) trials to understand how the food ingredients may influence health over time. In addition, quantity and quality of the food ingredients could also be varied to identify the optimum dietary challenges that give rise to the most beneficial effects on health.

### Of interest to

Companies and any institute involved in the functional food sector.

### How to Proceed:

#### For further information contact:

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