

NutriTech Partners

The project started on 1 January 2012 and is intended to run for 54 months until June 2016.

TNO innovation
for life

Technische Universität München **TUM**

Imperial College
London

 **UiO** : University of Oslo

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BIOTECHNOLOGIE AVANCEE

 **WAGENINGEN UNIVERSITY**
WAGENINGENUR


MEDICAL UNIVERSITY
ROF. DR. PARASKEV. STOFANOV
VARNA

International Agency for Research on Cancer


UCD
DUBLIN


NuGO

 World Health
Organization

 **ILSI**
Europe
International Life
Sciences Institute


UCO

PAPR

 **VITAS**
ANALYTICAL SERVICES

 **Biqualy**
The Advanced Analysis Company


CSIRO

 **TMIC**
The Metabolomics Innovation Centre


UNIVERSITY OF
TORONTO

 **BIOCRATES**
LIFE SCIENCES
The Deep Phenotyping Company


THE UNIVERSITY OF AUCKLAND
NEW ZEALAND

 **institute
idea
food**

 **Tufts**
UNIVERSITY

NutriTech is a large-scale integrating project carried out with financial support from the European Commission, under the Seventh Framework Programme (FP7) for research, technological development and demonstration, Contract Number: FP7-KBBE-2011-5.



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 **CEB 2015**
Experimental Biology
BOSTON
March 29 - April 1 • Boston Convention and Exhibition Center


NutriTech

NUTRITECH WORKSHOP PHENOTYPIC FLEXIBILITY

01 April 2015

9.00 am – 12.30 pm, Room 151AB
Boston Convention and Exhibition Center
Boston, US

Visit
NutriTech
at booth #565

Contact

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Session organised by the European Commission-funded project NutriTech
(Application of New Technologies and Methods in Nutrition Research
– The Example of Phenotypic Flexibility)

Background

Diet, foods and food components are prime environmental factors affecting the genome, transcriptome, proteome and metabolome. This life-long interaction largely defines the health or disease state of an individual. The adaptive capacity of the body to alterations in dietary conditions is called 'phenotypic flexibility' and is key to maintenance of overall homeostasis and consequently, health and healthy ageing.

Nutrition research has only recently performed more mechanistic studies by assessing the effects of nutrients and non-nutrient components of foods on gene and protein expression and metabolic outcomes. By adopting new

methodologies, nutrition research has moved into the core of the life sciences by studying the effects of the most important environmental factor – the diet – on mammalian organisms and their health status.

However, approaches in nutrition research are not yet sufficiently standardised – neither within the European research arena nor when worldwide research efforts are taken into account. A growing number of studies are being performed using similar, rather than identical technologies and procedures, making it difficult or impossible to compare results.



Phenotypic Flexibility

Physiology maintains a well-orchestrated rhythm to adapt to the continuously changing environment of the body, of which diet takes a major share. This adaptive capacity called 'phenotypic flexibility' is key maintaining overall homeostasis and therefore, health and healthy ageing.

About NutriTech

NutriTech is a European Commission funded FP7 research project (2012-2016). NutriTech is a consortium of 23 partners, from 16 countries including 6 non-EU groups. Together, they will disseminate the harmonised and integrated technologies on a global scale and by providing an integrated and standardised data storage and evaluation platform.

Objectives of the project

- To quantify the effect of diet on 'phenotypic flexibility'.
- To evaluate the use of cutting-edge analytical technologies (so called 'omics' technologies) and methods to study the diet-health relationship.
- To critically assess their usefulness for the future of nutrition research and human wellbeing.

Programme

01 April 2015

Phenotypic Flexibility as key mechanism in nutrition related health

Dr Ben van Ommen, TNO Quality of Life, NL

The beauty of challenge tests

Prof. Hannelore Daniel, Technical University of Munich, DE

Influence of genetics in phenotypic flexibility

Prof. Jose Ordovas, Tufts University, USA / IMDEA Food Institute, ES

From phenotypic flexibility to the next generation of health claims: Research with Industry

Dr Suzan Wopereis, TNO Quality of Life, NL

NutriTech results: Contribution to assessing food intake

Dr Lorraine Brennan, University College Dublin, IE

NutriTech results: Intervention study – Overview

Prof. Gary Frost, Imperial College London, UK

The programme may be subject to changes without prior notice in case of unexpected cancellations.