

RESEARCH AREA 2

## DIET AND FOOD PRODUCTION

JOINT ACTION:

### **Biomarkers for Nutrition and Health**



## **FOODBALL**

### *The Food Biomarker Alliance*

#### WHAT

Biomarkers covering several foods and food components provide an objective measure of actual intake and status and are an important and urgently needed adjunct to classical food consumption assessments. However, only a few foods are currently covered by validated intake biomarkers. The Food Biomarker Alliance (FOODBALL) proposed to carry out a systematic exploration and validation of biomarkers to obtain a good coverage of the food intake in different population groups within Europe.

## WHO

The FOODBALL consortium included 22 partners from 11 countries (Belgium, Canada, Denmark, France, Germany, Ireland, Italy, Norway, Spain, Switzerland and The Netherlands). A partner from New Zealand was an observer in the project.

The FOODBALL project management was under the responsibility of a coordination team: Edith Feskens (NL) was elected as coordinator.

## HOW

Through a systematic exploration and validation of biomarkers, the FOODBALL project aimed to obtain a good coverage of the food intake in different population groups within Europe by: applying metabolomics to discover biomarkers; exploring the use of easier sampling techniques and body fluids; revising the current dietary biomarker classification and developing a validation scoring system; applying these on selected new biomarkers; and exploring biological effects using biomarkers of intake.

The development and validation of biomarkers is very costly and knowledge-intensive. FOODBALL provided a unique platform for sharing knowledge and resources between members of the scientific community, both within and beyond the project.

The consortium had wide access to samples and data from large cohorts and dietary interventions with specific foods. The FOODBALL project, combined with other initiatives within JPI HDHL, enabled access to 54 human intervention studies on > 14 000 men and women from 8-95 years of age, all with biobanks accessible to FOODBALL. This allowed the consortium to create a whole new toolbox for dietary assessment.

Consolidation of resources and knowledge may be accomplished through JPI HDHL Joint Action ENPADASI (see relevant JPI HDHL factsheet for further information).

The main results and outputs are available on the FOODBALL portal:

<http://foodmetabolome.org/.eu>

## WHEN

The FOODBALL consortium ran for three and a half years from December 2014 to July 2018.

## FUNDING

FOODBALL was part of the JPI HDHL Joint Action Biomarkers for Nutrition and Health and was funded through a virtual common pot model. It received approximately 4.4 M € from funding organisations in Belgium, Canada, Denmark, France, Germany, Ireland, Italy, Norway, Spain, Switzerland and The Netherlands. Besides FOODBALL, the consortium MIRDIAET was also funded through the JPI HDHL Joint Action Biomarkers for Nutrition and Health (see relevant JPI HDHL factsheet for further information).

Coordinator: **Prof.dr.ir. Edith Feskens** (WUR, the Netherlands)



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