HDHL-INTIMIC non-cofunded Joint Action:

STAMIFY 'Standardised measurement, monitoring and/or biomarkers to study food intake, physical activity and health'

The STAMIFY call, the 4th HDHL-INTIMIC non-cofunded Joint Funding Action, was launched in January 2021 to support transnational research projects that develop improved methods and tools to assess and monitor diet and physical activity in order to provide better dietary and physical activity recommendations and guidelines.

Ten funding agencies from eight countries participated in this call. The six funded consortia, composed of 30 partners in total from Austria, Belgium, Czech Republic, France, Germany, Ireland and Spain, received all together 6.5M euro. Six collaborators in total are participating in the selected projects with their own budget.

BiomarKid

Biomarker signatures of diet, physical activity and sleep in children and youth

WHAT

Metabolomics and Proteomics are advanced high-performance techniques that allow to understand what is actually happening inside a human being by the interplay of diet, activity, environment, and genetic predisposition. BiomarKid aims to bring these high-performance techniques closer to the practitioners for clinical assessment of patients (children and adolescents).

WHO

The consortium includes 4 partners from 3 different countries (Spain, Germany, Austria) and 2 collaborators from Poland and Italy.

HOW

To characterize biomarkers of comprehensive dietary patterns, the balance between physical activity and sedentary behaviour, sleep habits, and the interplay between them in children and youth. Delivery of a web-based tool for interpretation of these biomarkers of diet and physical activity to end-users from research, clinical and public health settings.

FUNDING

BiomarKid receives approximately 1 M€. Project coordinator: **Joaquín Escribano** (Fundació Institut d' Investigació Sanitària Pere Virgili – IISPV-, Spain)

DIETARY DEAL

Dietary Assessment & Further Development of Biomarkers for All

WHAT

The lack of standardised dietary assessment methods remains a major obstacle to conduct region-specific research which is required to implement health promotion action plans worldwide. DIETARY DEAL aims to improve health and nutrition research with a universal standardised dietary assessment tool for surveillance, risk assessment and epidemiological studies.

WHO

The consortium includes 5 partners from 3 countries (Ireland, Spain, Germany).

HOW

To develop an open-source researcher-led dietary assessment tool, with machine learning capabilities for automatic classification, for harmonisation of dietary data across Europe and to advance on-going biomarker research in the area of nutritional status and health.

FUNDING

DIETARY DEAL receives approximately 1 M€. Project coordinator: **Janette Walton** (Munster Technological University, Ireland)

INTEGRActiv

Identification and validation of integrative biomarkers of physical activity level and health in children and adolescents

WHAT

INTEGRActiv aims to identify integrated markers reflecting both physical activity level and health in children and adolescents, which represent an important target population to address personalized interventions to improve future, life long, metabolic health.

WHO

The consortium includes 4 partners from 3 countries (Spain, Czech Republic, France) and 1 collaborator (The Netherlands).

HOW

Identification of new biomarkers by combining measures of physical activity and cardiorespiratory and muscular fitness with anthropometric measures, cardiovascular risk factors and endocrine markers, cytokines, circulating miRNA, and gene expression profile in blood cells and metabolomics profile in plasma and blood cells. Further assessment and first-step validation of promising candidate biomarkers will be carried out in an intervention study and other independent studies.

FUNDING

INTEGRActiv receives approximately 0.8 M€. Project coordinator: **Catalina Pico** (Foundation Health Research Institute of the Balearic Islands — IdISBa, Spain)

Plant*Intake*

Combining biomarker panels and dietary intake data for improved assessment of healthful/unhealthful plant food intake

WHAT

Self-reported dietary intake data is prone to measurement error and bias, and specifically for plant-based foods. PlantIntake aims to improve the dietary assessment of plant-based foods by combining self-reported intake data with biomarker data from blood and urine.

WHO

The consortium includes 5 partners from 3 countries (Germany, Ireland, France) and 1 collaborator (UK).

HOW

To derive "European plant-based diet indices", to establish a wide-coverage targeted analytical method for biomarkers of plant foods, to develop and validate multi-biomarker panels reflecting the intake of plant food groups and adherence to the European plant-based diet indices, and to explore multiple options for combining the biomarker panels and self-reported data.

FUNDING

PlantIntake receives approximately 1.3 M€. Project coordinator: **Manuela Rist** (Max Rubner-Institut – Federal Research Institute of Nutrition and Food – MRI, Germany)

VEGANScreener

Development and evaluation of a web-based diet quality screener for vegans

WHAT

Prevention and early detection of nutritional deficiencies in the diet of European individuals who have adopted mostly plant-based dietary patterns and particularly the vegan population.

WHO

The consortium includes 6 partners from 5 countries (Austria, Germany, Belgium, Czech Republic, Spain) and 1 collaborator (US).

HOW

To develop and validate a standardized and brief web- and app-based dietary screening tool to assess and monitor dietary intake among vegans, including the first steps towards end-user application. To achieve this, 400 vegans across four European countries (Belgium Czech Republic, Germany, Spain) will be newly recruited.

FUNDING

VEGANScreener receives approximately 1 M€. Project coordinator: **Eva Schernhammer** (Medical University of Vienna, Austria)

WEALTH

Wearable sensors for the assessment of physical and eating behaviours

WHAT

Combined measurement of the effects of physical behaviours (PB) on dietary or even eating behaviours (EB) is currently problematic. WEALTH will develop a web-based sensor data processing infrastructure to provide a measurement system predicting PB and EB from passive sensor data establishing the use of commercially available wearables for accurate population surveillance.

WHO

The consortium includes 6 partners from 5 countries (Ireland, Germany, Belgium, Czech Republic, France) and 1 collaborator (The Netherlands).

HOW

To link advanced processing of accelerometer data with Ecological Momentary Assessments (EMA) questioning physical behaviours and eating behaviours and their context. To maximise the use of data collected from multiple commonly available measurement devices, spanning accelerometers to commercially available wearables, by standardising data analysis and interpretation.

FUNDING

WEALTH receives approximately 1.4 M€. Project coordinator: **Alan Donnelly** (University of Limerick, Ireland)

More detailed information on the funded projects can be found at **www.healthydietforhealthylife.eu**

JPI HDHL STAMIFY Call Secretariat: ILVO (Belgium), jpihdhl.calls@ilvo.vlaanderen.be