Letter of intent

File number 175.2021.048
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Applicant

Title
FOODISH-db: Linking FOOD choice Determinants with nutritional Intake, Status and Health – database

Abstract
Domain: ZonMW
Disciplinecodes:
23.70.00 Voeding
23.80.00 Epidemiologie
16.40.00 Informatiesystemen, databases
40.50.00 Sociale psychologie en organisatiepsychologie

The UN sustainable development goals are planned with 2030 as horizon, and include Good health and well being, Zero hunger, Climate Action and Life on land and Life below water. More and more it becomes clear that these goals are closely intertwined and can only be achieved by consuming sustainable and healthy diets. However, our eating patterns and behavior are still way of target, and even the targets are not well defined: how to eat healthy and sustainably, taking all aspects of human and planetary health into account, is still debated. One thing is sure: the interaction between consumers, the environment and the food product is key. Available foods, physical and digital environment, social and personal environment - all affect food choice and actual intake of consumers, and thus their health. New interventions, tools and methods are urgently needed to gain insight in these complex interactions and the adaptations needed to improve intake and human and planetary health.

This can only be done by a collaborative and joint effort of experts from the the different fields and from different disciplines, within the Netherlands and within Europe. Preparatory work has shown that the lack of a dedicated e-infrastructure is seriously hampering progress in the field. Therefore, the WUR-coordinated FNH-RI (Food, Nutrition and Health RI, www.fnhri.eu) was submitted by the Ministry of OCW and evaluated for the ESFRI roadmap 2021, and received advice for further development and re-submission in the next round. The Netherlands has an excellent reputation for its research on food and consumer science, nutrition and health, based on interventions, cohorts, biobanks and metabolic chambers, and hosts the no.1 university in Agriculture and Life Sciences. FOODISH.db will accelerate the relevant collaborations within the Netherlands, and head-start the FNH-RI, by operating as its Dutch node.

FOODISH.db will enable collection and sharing of data, focusing on integration of individual-level research data on food, the consumer and the environment. This will spark multidisciplinary research, catalyze innovative surveillance and the evaluation of real-life interventions, and facilitate exploiting existing databases on e.g. purchase, preparation and consumption of foods, sensory data, food environments, environmental footprints, dietary quality and health outcomes. Using FAIR data principles, FOODISH.db will develop libraries to facilitate harmonization by data standards, ontologies and glossaries, allowing GDPR-, IPR and RRI-proof access to (meta)data. Federated and distributed learning will be an important feature. With this FOODISH.db will innovate research on food choice, eating habits and personalized nutrition as related to public and planetary health outcomes.

Scientists and groups of various Dutch universities (o.a. Groningen, Rotterdam, 4TU) and research institutes will be involved, as well as DTL (Dutch Techcenter for Life Sciences)

FOODISH-db is linked to the Roadmap GWI Group Health Sciences (Health-RI) and links with Green Life Sciences and Social Sciences will be explored further.

Organisation responsible for the application

Confirm letter of intent
With submitting this form via ISAAC I declare to have filled in this form completely and truthfully.

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