Overzicht Personalized Nutrition programma's in Nederland

TIFN Unravelling Biology behind perceivable consumer benefits	NWO Healthy Lifestyle Innovations	NWO/TNO/TKI Complexity Grip on Health	TKI/DLO/WU SMART FOOD INTAKE	TKI/DLO/TNO Personalized Nutrition & Health
Fundamental Research	Fundamental Research	Fundamental & Applied Research	Fundamental Research; research infrastructure	Applied Research
Extensive *phenotyping based on resilience –omics markers with focus on blood blucose as primary biomarker*. Link between blood glucose levels and **perceivable benefits** (like well-being, stress, sleep) Focus on *life sciences*. Aim to develop interventions that deliver physiological health benefits that can be perceived and enjoyed by people. Research program to unravel the mechanisms behind differences in *individual blood-glucose related responses* that can serve as basis for the development for *new biomarkers* where new personalised nutritional advice can be based on.	Development and validation of *measurement, feedback and e-coaching technology* aligning *human physiology, behaviour and neurocognitive functions* underlying choice behaviour, motivation (etc.) as well as state of the art *data* acquisition, *data* analytics and smart *data* interpretation Limit to the lifestyle aspects *healthy food consumption* and *sufficient physical activity*	Focus on *mathematically capturing human health domains as a complex system,* in order to study resilience and identify transitions between healthy and (pre)disease states. *Biopsychosocial network models* including actors and moderators, will be build; simulating interventions in the model will generate new insights and hypotheses for optimal longitudinal Quantified Self Studies and Compliance over time.	Development and validation *of a flexible, modular system based on the 2h recall* that can collect data fast and efficiently to improve the organisation and collection of reliable, accessible and up-to-date food intake data and underlying food choice motivations. Developing *an ICT backbone* (infrastructure) including data management, standardisation, protocols and **governance** to **sustain** the (data) outcomes of the cases and increase the **accessibility** for different research and commercial partners	Focus on *application and integration of existing Quantified Self health and food intake measurements in real-life settings.* Using the integrated outcome of the pluriform data for providing individual feedback, advice and coaching. Industrial partners from the consortium will contribute to the field labs. *IT, behavioral and life sciences* will be merged. Continuous application of *existing health and food intake measurement methods* to provide consumers in a personalised way the existing advices to drive health and wellbeing. Application will take place by *integration of knowledge generated in fundamental research programs*
Focus on real-life measurements; supplemented with numerous lab testing. Interventions is real life. Data collection a.o. via Quantified Self Measurements	Focus on *lab conditions.* Real-life measurements done to validate lab results	Focus on *computational network modelling*, normal mathematics and logics; iterative improvement via longitudinal integrated study advice	Validation of 2 hr methodology and customization of methodology for different (international) subpopulation groups in 2 case studies focussed on lunch and snack moments.	Focus on *real life conditions* + application + communication to consumers & business models.
500p, possibly divided in 2 groups based on medical/biological	Target group is *healthy people but at risk* of cardiovascular	No human study performed. Research on *different social*	The focus is on both *the general population* and **vulnerable high-risk**	Research in *different social target groups* (eg age, Social Economic Status,

Overzicht Personalized Nutrition programma's in Nederland

TIFN Unravelling Biology behind perceivable consumer benefits	NWO Healthy Lifestyle Innovations	NWO/TNO/TKI Complexity Grip on Health	TKI/DLO/WU SMART FOOD INTAKE	TKI/DLO/TNO Personalized Nutrition & Health
characteristics (eg prediabetic or metabolic syndrome versus healthy) followed for a year	disease (e.g., hypertension) or diabetes	*target groups* in healthy and pre-disease states (eg prediabetic and pre-alzheimer).	**groups.** One of the case studies in the general population and one in a high-risk group.	health-motivational factors)
Relevant scientific topics: -Relationship perceivable benefits and physiological processes -Effect lifestyle interventions on both - Systems approach to data	***Relevant scientific topics:*** monitoring food intake and physical activity; feedback and motivate by feeling of being thoughtfully guided, sustainable change in lifestyle	***Relevant scientific topics:*** capturing health as multidomain complex system, dynamic network biomarker analyses; dealing with missing data, heterogenous data, and robustness (resilience); transfer of modelling expertise	***Relevant scientific topics:*** **(1)** development of the new methodology to collect food intake and motivational data, and the integration between the two; **(2)** direct link between food intake and motivations, related to specific contexts, contributes to a deeper understanding of (context-specific) food consumption patterns	***Relevant scientific topics:*** personal data collection, personal data locker, food data, personal health and nutrition services including automated dietary advise and consumer motivation, business modelling
4-year program; results alone the line Multidisciplinary teams, with specialists, AIOs and Post-docs	5-year program, results along the line, AIOs and Post-docs	4-year program; results along the line. Industry, TNO, AIOs and Post-docs in one program	4-year program; results alone the line Multidisciplinary teams, with specialists, AIOs and Post-docs	1-3y program; results after 1y. FBR, LEI and TNO researchers combined with R&D from Industry.

Overzicht Personalized Nutrition programma's in Nederland

De onderlinge positionering van de Nederlandse R&D programma's:
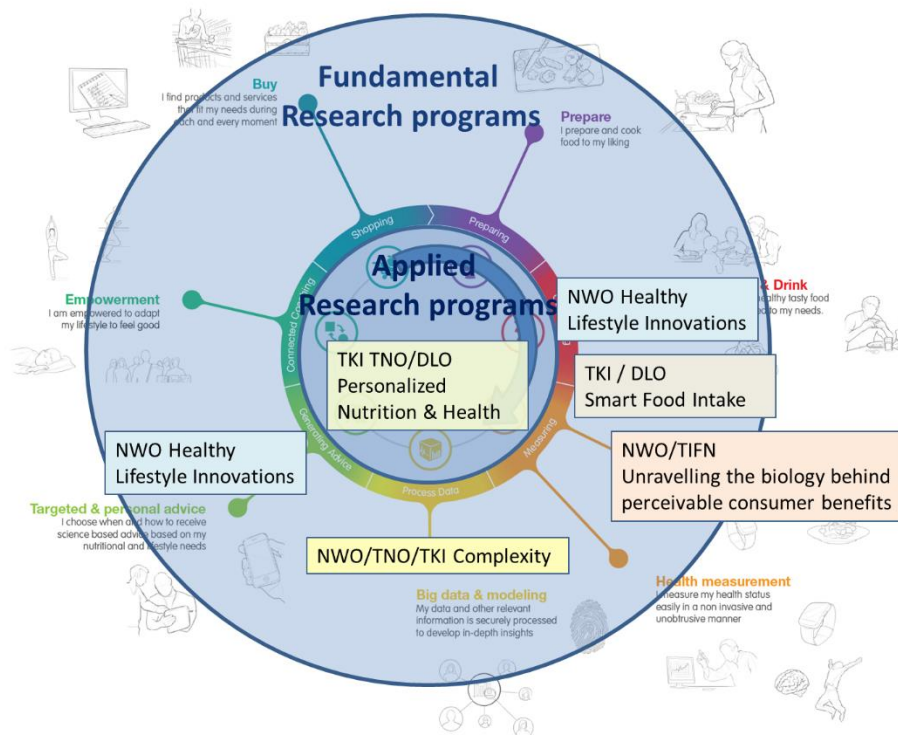
Europese Healthy Lifestyle netwerken

Deze Europese netwerken brengen de stakeholders samen die interesse hebben in delen faciliteiten, middelen, services die onderzoek ondersteunen, om antwoord te geven op de maatschappelijke uitdagingen in voedsel en gezondheid. Een selectie van drie projecten:
- EuroDISH www.eurodish.eu
- DISH-RI; a European overarching research infrastructure that is specific for studying food in relation to nutrition and health and that connects the currently fragmented pieces of research on determinants, intake, status and health (DISH).
- H2020 RICHFIELDS www.richfields.eu; which aims to design a consumer-data platform to collect and connect, compare and share information about our food behaviors.