

Me, My Health and My Food profiling Finland

Personalized eating solutions, ecosystems and export

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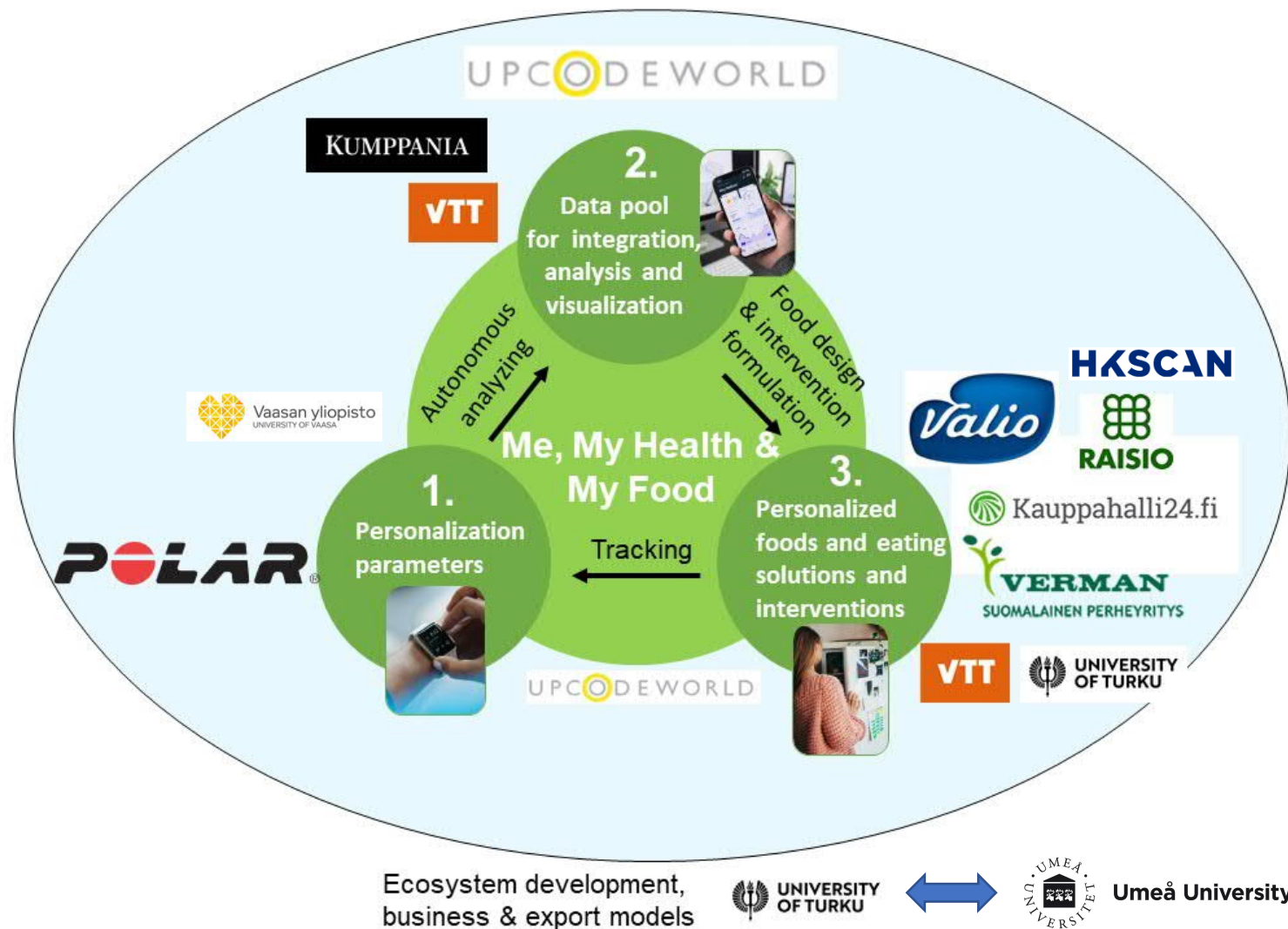


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MeHeFo concept and ecosystem partners



In

'Me, My Health and My Food' we
pave the way for creating
personalized food and eating
solutions

We explore and develop
personalised eating solutions
and services with high consumer
interest and business potential
for Finnish companies.



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Personalized nutrition - Background

Even identical twins respond the same food differently*.

PN, based on dietary intake, is more effective than general dietary advice in changing dietary behaviour and in weight reduction**.

So, why force a one size fits all approach to our eating and diet?

*Based on a large-scale nutrition research project ('PREDICT'), utilizing a registry with 14,000 twins with a 25-year investigation of health and lifestyle at King's College London.

Berry et al. 2020. Human postprandial responses to food and potential for precision nutrition. Nature Medicine 26, 964-973.

**Based on a large Food4Me EU-funded study (several publications).



Personal data enables personalized nutrition/eating/food solutions - Examples

Plenty of personal health and wellbeing data, in different sources



Physical activity



Sleep pattern



Diet/allergies/intolerances



Medical diagnoses



Values and preferences



Blood, saliva, stool analyses
(biochemistry, genetics, microbiome)



anthropometric measures

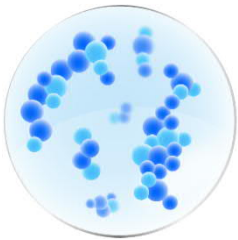


Purchase data

Personal data is used for different solutions and services



Nutritional strategies to impact gut microbiota & immune system: the biotics



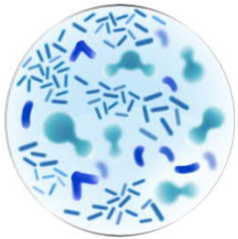
PREBIOTICS:

Substrates that are selectively utilised by host micro-organisms conferring a health benefit



PROBIOTICS:

Live micro-organisms, which when administered in adequate amounts, colonise the gut and exert beneficial biological effects on the host



POSTBIOTICS:

Inactivated microbial cells and bioactive compounds produced by micro-organisms during a fermentation process

SYNBIOTICS
Fermented
foods

Adapted from Aguilar-Toalá JE *et al.* (2018) Trends Food Sci Technol 75:105-114.

References: Gibson GR, *et al.* Nat Rev Gastroenterol Hepatol, 2017;14:491-502. Binns J. International Life Sciences Institute (ILSI) Europe. ilsilife.org/europe/wp-content/uploads/sites/3/2016/05/Prebiotics-Probiotics.pdf. Hill C, *et al.* Nat Rev Gastroenterol Hepatol, 2014;11:506-14.



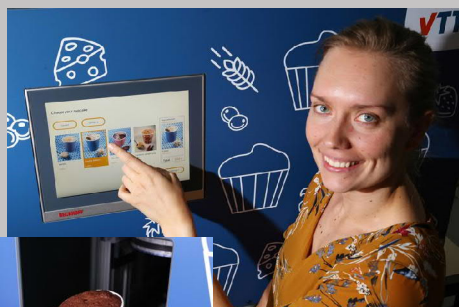
Solutions to be demonstrated by VTT

VTT

Use case 1:
FOOD
MADE FOR I



Use case 2:
FOOD
RECOMMENDED
FOR ME



Targeted food production based on health promoting ingredients (plant-based proteins, dietary fibres, pro-, pre-, synbiotics).



DATA MODEL WITH API INTERFACES

Decision support algorithms

Application



Personal profile based on personal data from different sources

recommendation request with personal profile data



recommendation

Project platform



Knowledge database



MeHeFo ECOSYSTEM



Thank you!

On behalf of the
Me, My Health & My
Food consortium

VTT



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