

Question to you

Have you heard of
OnePlanet before?



= YES



= NO

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BUSINESS
NETWORKING
SOCIAL NETWORK
TECHNOLOGY
ADVERTISING
CREATIVE
ENTERTAINMENT
ENVIRONMENTAL
CULTURE
ECONOMY

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INTRODUCTION

Citizen Science

Levels of Citizen Science

Level 4 'Extreme'

- Collaborative Science – problem definition, data collection and analysis

Level 3 'Participatory science'

- Participation in problem definition and data collection

Level 2 'Distributed Intelligence'

- Citizens as basic interpreters

Level 1 'Crowdsourcing'

- Citizens as sensors

Arnstein's ladder of participation (1969)

&

Nutrition



METHODS

Study set-up



- 42 participants, inclusion criteria:
 - Living in Gelderland
 - basisonderwijs, lo, vmbo, avo, mavo AND mbo
- Sensitizer: Three questionnaires (15-30 mins), 1 each day
 - Demographics, meals & eating habits
 - Snacks, Drinks & Impulsive Eating
 - Groceries, cooking, eating out / take away, garbage and technology
- Group interviews (45-60 mins)
- Transcription and coding of interviews
- Preliminary analysis

Any questions on the methods?



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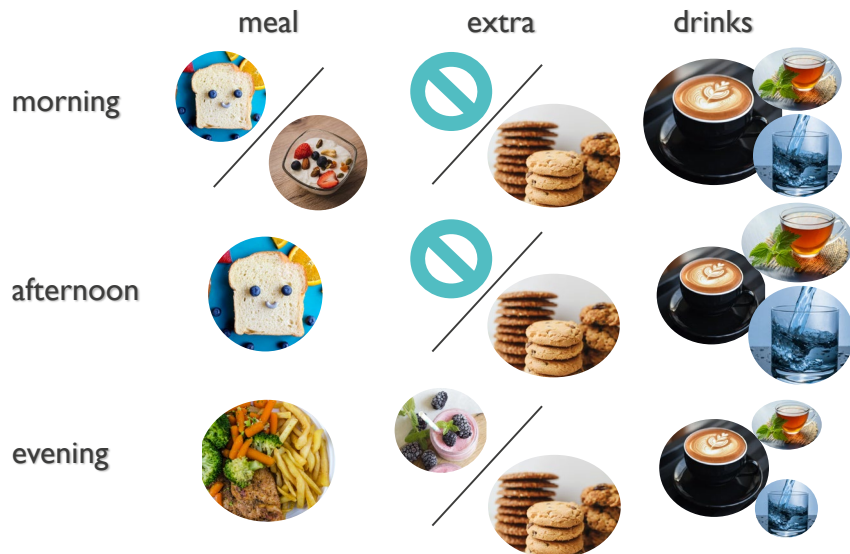
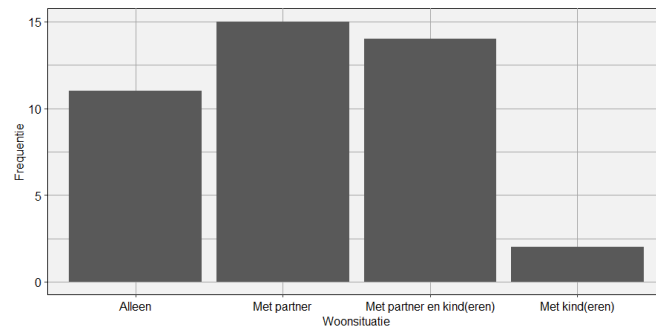
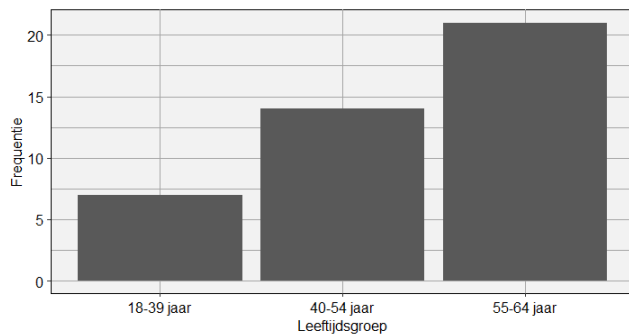

Question to you

**What challenges do you
(or your customers)
have in daily life
concerning nutrition?**

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$$\frac{16}{26}$$


KNOWLEDGE & MEASURING

■ What is healthy?

- Information provide by government
- Individual differences

■ What does food do with you?

- For what do I need to be careful?
- Being unconscious of what you eat
 - You must have the knowledge yourself

■ What is in products?

- additives, E-numbers
- Nutritional value
- Vitamins & supplements

EATING BEHAVIOUR - WHAT

- Eating too less vegetables
 - Because of laziness
 - Especially in winter
 - Vegetables are boring
- Hard to limit sugar intake
 - Often unaware
 - Cravings around 16:00 and in evening
- More fibers but no carbohydrates
 - Limited alternatives to bread
- Either very healthy, or not at all
 - Weekdays vs weekend
 - Creature of habit
- Finishing what is cooked
- Hard to cook for entire household
 - Quantities differ
 - Tastes differ

SHOPPING

■ Temptation in supermarket

- Too much sugar
- Mind the price
- Healthy food is not affordable
- Low quality

■ Too less (information on) local products

■ Unclear packaging info

■ Unclear labels

- Small letters are not readable
- What is healthy?
 - Sugar of additives?
- What do ingredients mean?
 - Where are they from?

■ Taking the same based on habit

Any questions on the results?



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Question to you

What solutions do you think of concerning these daily life nutrition challenges?



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Oneplanet research center

Technology for a better tomorrow

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Technology for healthy and sustainable nutrition

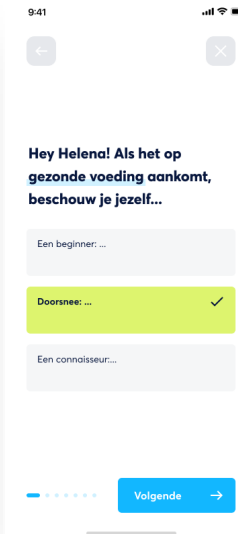
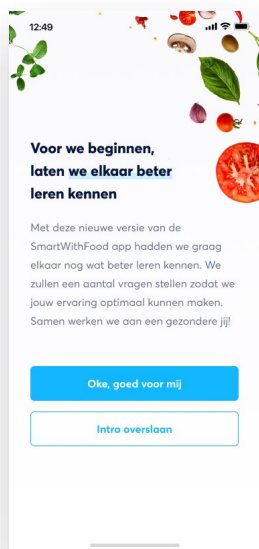
From crop to... well... soil



Smart agriculture



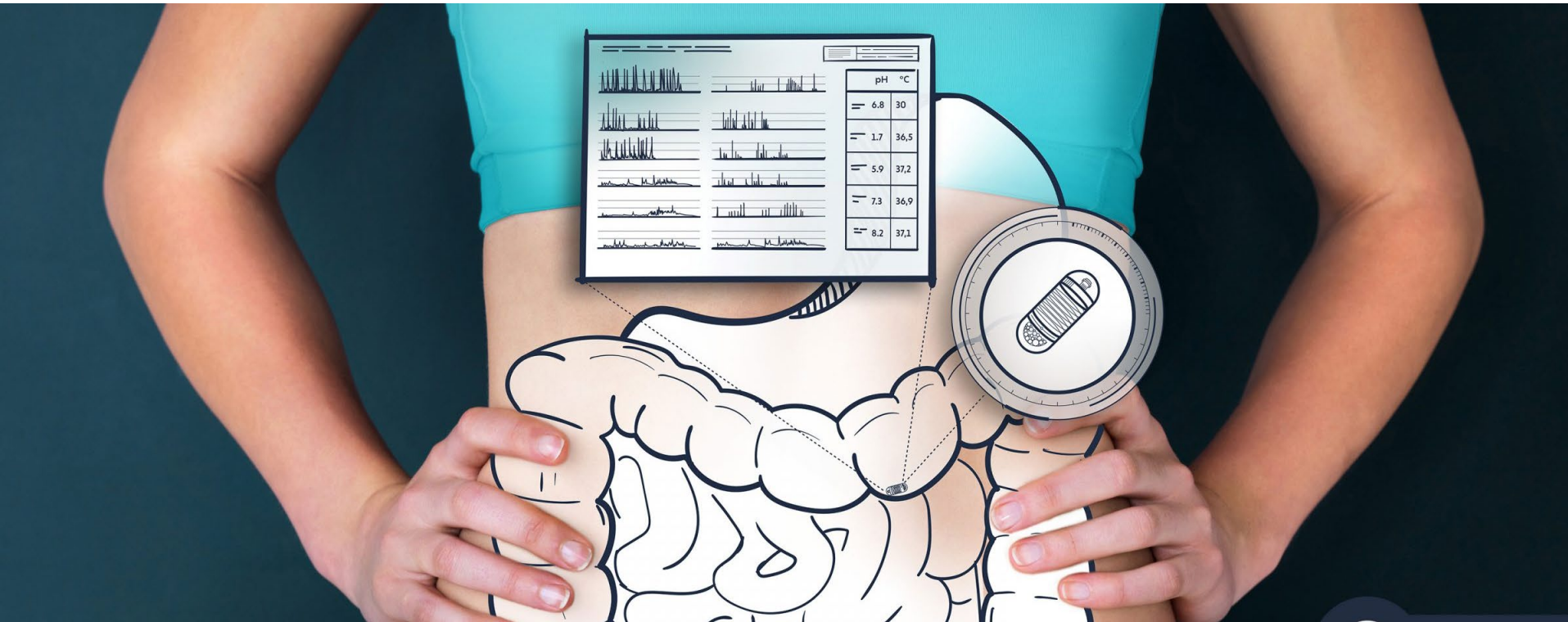
Supporting healthy eating: planning, shopping, preparation



Supporting healthy eating: biofeedback & digital twins



ingestible Sensing



Smart Bathroom



Any remaining questions?



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Question to you

Do you have any new suggestions for solutions based on these ideas?



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Taking part

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