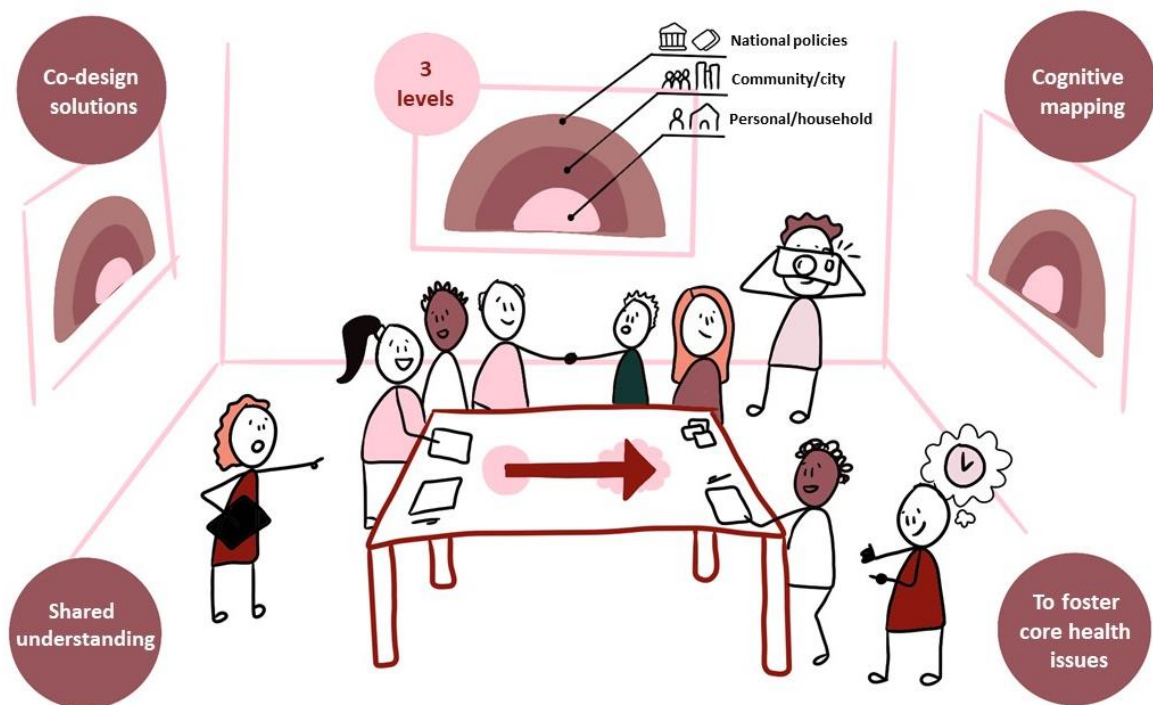


Food systems that support
transitions to hEalthy And
Sustainable dieTs

HANDBOOK

FEAST 3.3. Community co-design workshop



Version: October 2024

Authors: Leonie Barelds-Cramer¹, Käbi Vanwinkelen², Charlotte Sederel¹, Annemarie Kapteijns¹

Acknowledgements for development and design: Marieke Battjes-Fries¹, Iris Flamand¹, Femke Hoefnagels¹, Tim Smiths², Sjef Staps¹, Herman van Wietmarschen¹, Geertje van Wijk¹

¹ Louis Bolk Institute

² Department of Communication Science, KU Leuven



**Co-funded by
the European Union**

FEAST is co-funded by the European Union's Horizon Europe research and innovation programme under grant agreement number 101060536. Views and opinions expressed are those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

UK participant in FEAST (Good Food Oxfordshire) is supported by Innovate UK grant number 10041509 and the Swiss participant in FEAST (FiBL) is supported by the Swiss State Secretariat for Education, Research and Innovation (SERI) under contract number 22.00156.

Start Date 01/07/2022, End Date 30/06/2027

Cite as: *Barelds-Cramer, L., Vanwinkelen, K., Sederel, C., & Kapteijns, A. (2024). FEAST - Community co-design workshop HANDBOOK. Zenodo. FEAST project - Food systems that support transitions to hEalthy And Sustainable dieTs.*

DOI: <https://doi.org/10.5281/zenodo.15730598>



*This document is shared under Creative Commons Attribution
4.0 International License (CC BY 4.0).*

Table of contents

BACKGROUND.....	4
MODEL AS BASIS FOR CO-CREATION	5
OBJECTIVE OF THIS HANDBOOK	7
PARTICIPANTS	8
FACILITATOR / FACILITATING TEAM	9
FACILITATION GUIDELINES	10
STEP 1: PREPARATION OF THE WORKSHOP	11
STEP 2: SET UP AT THE DAY OF THE WORKSHOP	12
STEP 3: CONDUCTING THE WORKSHOP	13
Timetable	13
Introduction – 20 minutes	14
Graph over time and dream - 20 minutes	16
Bottlenecks – 20 minutes	18
Qualities – 20 minutes	20
Solutions – 60 minutes	22
Conclusion & debrief - 10 minutes	24
STEP 4: AFTER THE WORKSHOP.....	25
STEP 5: FACILITATION TIPS	26
References	27
ANNEXES.....	28
Annex 1 Information sheet participants	28
Annex 2 Survey and Informed consent.....	30
Annex 3 Cabbage Game.....	33
Annex 4 Graph over time and dream	34
Annex 5 Template model bottlenecks and qualities.....	35
Annex 6 Examples of barriers and drivers of healthy, sustainable eating	36
Annex 7 Intervention and policy types	37
Annex 8 Solutions pathway cards	38
Annex 9 Template pathway	39
Annex 10 Template action plan	40

BACKGROUND



One of the main goals of the FEAST project is to co-create innovative and effective tools, programmes and strategies with key stakeholders in Europe that support consumers in adopting healthy and sustainable diets and lifestyles. To reach this objective, it is important that we actively involve the communities for which we develop these solutions. This is why we created a guideline to conduct workshops in which Living Labs can co-design solutions that help vulnerable groups to make healthier and more sustainable food choices.

The FEAST project is co-funded by the European Union's Horizon Europe research and innovation programme under grant agreement number 101060536.

Co-design methods have their roots in participatory design and are a promising approach for engaging citizens and stakeholders in intervention and policy-making processes. It empowers participants to express their understanding and needs concerning an issue and creates opportunities to generate new perspectives, shared insights, and attitudinal or behavioural change. The stakeholders involved in this co-design process can be multiple: it is possible that the participants are the target group of the solution, but they can also be relevant stakeholders that play an essential role in shaping the diets of the target group (e.g. if the vulnerable group are children, this can be parents, teachers, school board, etc.). Co-design workshops have proven to be an effective methodology in identifying the needs of a community and co-creating (policy-based) solutions and interventions (Bason, 2016; Kim & Nam, 2022; Kimbell, 2017).

This handbook is primarily written for facilitators to support them in conducting the co-design workshop. With the outcomes of the workshop, the Living Lab can generate new insights and formulate concrete actions that could stimulate the consumption of healthy and sustainable food within the community. Within FEAST, we will collect and analyze the aggregated outcomes of the different workshops, which can serve as inspiration for other Living Labs.

MODEL AS BASIS FOR CO-CREATION

To provide participants a structured and organised approach, a fill-in model is used to get input, stimulate discussion and structure participants' input during the workshop (see Figure 1). The model uses a cognitive mapping-approach and fosters shared understanding among the participants, making the co-design workshop more structured and therefore, more efficient.

For the purpose of this workshop, the creators designed a model that is inspired by the *Bolk model for Positive Health and Living Environment* ([see website](#)). The Bolk model is developed at the Louis Bolk Institute (van Wietmarschen et al., 2022) and is inspired by the Health Field concept developed by Lalonde (1974) and the Ecological Systems Theory of Bronfenbrenner (1979). It introduces bottlenecks and qualities of the physical and social environment in our understanding of health choices, and structures the spheres surrounding an individual or a case, spanning from the microsystem (immediate surroundings) to the macro system (broader, collective context).

The workshop incorporates elements of Group Model Building (GMB). However, since the GMB methodology can be quite complex, challenging for participants, and time-consuming—making it less suitable for the more practical approach of living labs— a slightly adapted method has been developed. While still using some key elements (such as graphs over time and cognitive mapping), the focus shifts toward a more human-centered design. The co-design technique applied in this round is based on an exercise from a previous HORIZON project (FIT4FOOD2030), which has proven to be an effective tool for co-creating food policy (Wagner, 2020). We have adapted it and incorporated broader intervention types based on Michie et al.'s (2011) Behaviour Change Wheel, to support the creation of both policy-based solutions and interventions.

During this workshop, we use the model to map different elements that influence healthy and sustainable food choices for a specific target group — across the three levels; micro (personal, household), meso (community, city) and macro (national policies). In order to enhance creative thoughts and unbiased input, this model (unlike the Positive health model) contains no dimensional classification (e.g. access, skills, preferences, etc.). However, when using this model during the workshop, it is important that the facilitator keeps the different dimensions in mind. This way, the facilitator can ensure that no perspectives are overlooked. This will further be explained in the relevant sections in this handbook.

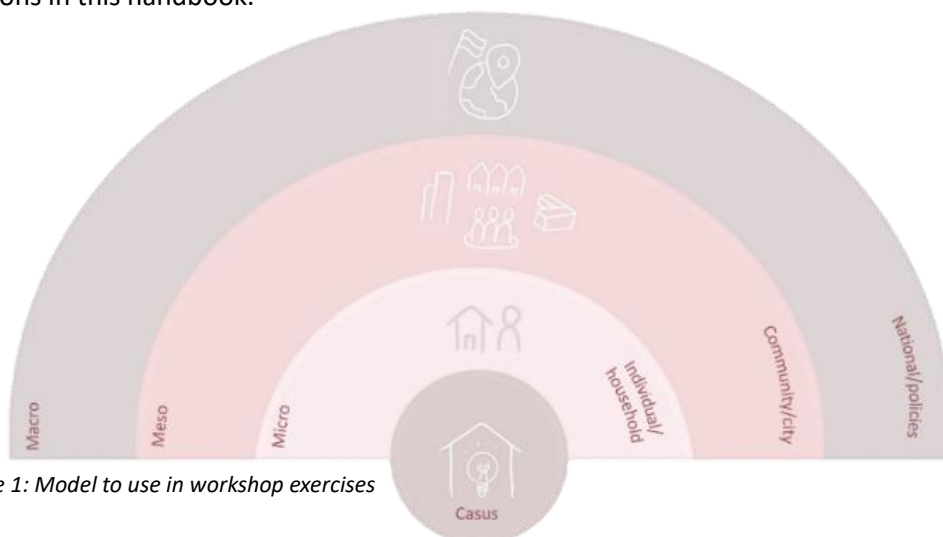


Figure 1: Model to use in workshop exercises

After an introduction to the topic, participants will explore bottlenecks and existing qualities for the identified challenge in different rounds. In the first round they focus on bottlenecks that make it difficult to choose healthier and more sustainable food products. In the second round they explore existing qualities that support the desired behaviour. Thinking about qualities will facilitate a more positive way of thinking which is essential for the last phase of the workshop, in which the group will co-design actual solutions based on the inputs from these models.

OBJECTIVE OF THIS HANDBOOK



This handbook is created to guide the facilitating team through the process of co-designing solutions that assist the communities in making healthier and more sustainable food choices. It contains an explanation of the different steps that need to be taken, from the preparation of the workshop until the finalisation and implementation. The handbook consists of six sections in total: four of them are directly related to conducting the workshop, while the last two provide supportive background information.

1. Preparation of the workshop
2. Set-up at the day of the workshop
3. Content of the workshop
 - a. The objective of each phase of the workshop
 - b. A detailed description of the different steps the facilitators should take
4. To-do after the workshop
5. Facilitation tips
6. Annexes with supportive background information

PARTICIPANTS

The workshop is ideally conducted with a group of **6-12 participants**. There are two possible types of participants who, depending on the specific workshop case, can be invited separately or jointly for the workshop:

1. Vulnerable community group (main focus of the Living Lab). These vulnerable individuals have a higher risk of insufficient healthy and sustainable food intake.
2. Stakeholders that have a certain interest and influence on the dietary behaviour of the vulnerable group. These stakeholders are interested in stimulating more sustainable and healthy food choices. For example, in case the vulnerable group are children, you can conduct the workshops with parents, teachers, policy makers, school board members, etc.



As the workshop is developed to co-create solutions with the vulnerable groups, it is essential that the target group or community members who can represent them (e.g. in the case of children: parents or caretakers) partake in the workshop. As stakeholders might also have a role in implementing (one of) the solutions created in the workshop, it might be relevant to invite both the target group and stakeholders. In case you would like to focus solely on input from the target group itself, it is possible to include other stakeholders at a later stage.

FACILITATOR / FACILITATING TEAM

Depending on the total number of participants and the composition of the group, at least one facilitator and one assistant is needed to conduct the workshop.

The facilitator doesn't have to be familiar with the topic or community members, but has to be comfortable in guiding the participants during the workshop in conducting the exercises to come to concrete and useful results at the end. The facilitation tips at the end of this guideline can support in finding a suitable facilitator and facilitating team.

In addition, we would like the outcomes to be useful for other Living Labs as well. Therefore, we will analyse the aggregated outcomes of the different workshops. To be able to look at the outcomes, it's important that the insights will be collected carefully. Therefore, we have the following instructions for the facilitating team:

- ✓ Make notes of what participants mention during each exercise
- ✓ Take photos of the actual outcomes:
 - Model with graph over time and dream
 - Two models with post-its (bottlenecks and qualities)
 - Pathway of solutions
 - Zoom in on post-its if you cannot read them properly on the overview photo
- ✓ Take photos of the room while participants are working on the exercises, if they've given permission, and preferably a shot in which individuals are not recognizable

FACILITATION GUIDELINES



STEP 1

Preparation of the workshop

STEP 2

Set up at the day of the workshop

STEP 3

Conducting the workshop

STEP 4

After the workshop

STEP 5

Facilitation tips

STEP 1: PREPARATION OF THE WORKSHOP

STEP 1

- ✓ Schedule a meeting with the community partners / coordinator Living Lab
- ✓ Determine goal of the workshop if it needs to be more specific than healthy and sustainable food choices (e.g. supporting primary school children in the community to eat more fruit)
- ✓ Identify relevant participants
- ✓ Select a facilitator or facilitating team
- ✓ Send invitation letters with information sheet (see example in Annex 1) to the participants
- ✓ Confirm a date and time slot with participants
- ✓ Book a room (keep in mind the number of participants) and check available equipment
- ✓ Complete and, if necessary, translate the questionnaire and informed consent which collects a few sociodemographic information of the participants that are important for the interpretation of the results
- ✓ Collect the materials, check if all is present in the toolbox you received
- ✓ Prepare the icebreaker activity “cabbage game” (step 3 Part A, see annex 3)
- ✓ Give participants a short outline of the workshop to set expectations
 - Tell them that in this workshop, we will map everything that either impedes or helps them in making healthy food choices. The main goal of the workshop is creating solutions that would help them and the community in making better food choices. It is also important to inform them that we will use the input to make real changes within the community (e.g. by creating an intervention or through policy change)

Materials (in toolkit and annexes)

- ✓ Handbook with timetable and script
- ✓ Questionnaire (+ informed consent)
- ✓ The cabbage game
- ✓ Template for the graph over time and dream (A0 format)
- ✓ Two printed templates of the model (A0 format)
- ✓ Printed cards (instruments & stakeholders) for the solutions
- ✓ Template pathway solutions
- ✓ Post-its (3 different colours: red - green - blue/purple/yellow, etc)
- ✓ A pen for each participant
- ✓ Name stickers
- ✓ Markers
- ✓ Tape
- ✓ Camera
- ✓ Optional: Bingo sheet (back-up icebreaker activity)
- ✓ Optional: blank sheets of paper (A4)

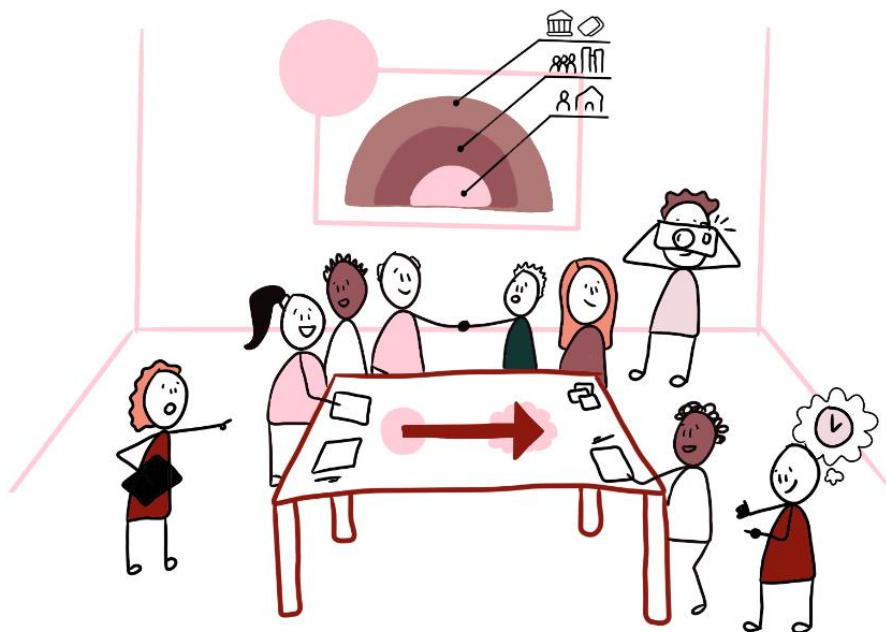


STEP 2: SET UP AT THE DAY OF THE WORKSHOP

STEP 2

Set up of the room (30 minutes)

- ✓ Arrange the room in a comfortable setting
 - All participants are able to see each other and the facilitator
 - Participants have space to write their input
 - Setting in round tables and no table heads (to avoid any implicit hierarchy in the group)
- ✓ Hang the two models for everyone to see at a wall
- ✓ Leave the solution table sheet somewhere on the side for later use
- ✓ Distribute post-its, pens or markers at the tables
- ✓ Select a timekeeper and photographer (can be the same person)
- ✓ Arrange water/ drinks, fruit or other (healthy) snacks
- ✓ Lay out the survey (+ informed consent) for every participant (see annex 2)
- ✓ Lay out name stickers for every participant



STEP 3: CONDUCTING THE WORKSHOP

STEP 3

Timetable

	Time	Activity	Goal	Description	Materials
A	20 min	Part A Introduction	Build rapport & explain purpose of workshop	Inform the participants, gather demographic information, introduction, icebreaker activity	Pens Survey Name stickers Cabbage game Optional: bingo sheet
B	20 min	Part B Graph over time and dream	Enhance the understanding of the challenge	Visualise development of the issue over time with related factors and dream	Template graph over time/dream Pen Marker
C	10 min	Break	Relax		
	20 min	Part C Bottlenecks	Map bottlenecks	Visualise all factors hampering reaching the dream	Template of the model Blank post-its Post-its filled in with barriers (back-up)
D	20 min	Part D Qualities	Map qualities	Visualise what is existing and supportive to the dream	Template of the model Blank post-its Post-its filled in with qualities (back-up)
E	20 min	Break	Relax		
	60 min	Part E Co-design solutions	Create solutions	Co-design solutions with the participants through an exercise	Template of the pathway Cards Template of the behaviour change wheel Explanation of instruments
F	10 min	Part F Conclusion & debrief	Thank participants	Participants are thanked for their time.	

Table 1: Timetable for conducting the workshop. Note: total amount of time is 3 hours.



Note: If less time is available, you can either split the workshop in two parts, preferably A-D and E-F, or you can save time on some elements if the information is already available. Suggestions for this are mentioned at the different elements.

A

Introduction – 20 minutes

20

!! Before you start with the introduction, make sure that every participant fills in the survey that contains the informed consent and write down their name on a sticker (annex 2).

Objective

The objective is to welcome all and that participants get to know each other. The icebreaker activity is designed to enhance a sense of connection and familiarity among participants, to break down social barriers, and encourage interaction and engagement in the exercises. Implementing an icebreaker at the beginning of the workshop helps create an informal, positive atmosphere between the participants (Health Outreach Partners, 2013). The icebreaker used in this workshop ('Cabbage game') offers the facilitator the opportunity to capture the group climate and to identify the more docile and dominant group members (Kilanowski, 2012), which can support the facilitator(s) in managing the group.

Participants listen to the introduction given by the facilitator and get to know each other by briefly introducing themselves.

Steps

The facilitator gives an introduction that contains the following points:

1. Thank the participants for joining
2. Introduce the facilitators
3. Describe that we will take a look at the prevalent issue of unhealthy and unsustainable diets.
 - Despite the negative impact on our health and the environment, we still eat too much (and too often) unhealthy and unsustainable food products, which is most often not an individual's choice, but a consequence of the current food system and environment we live in.
4. Explain that in this workshop, we will try to co-design (policy) based solutions that support the target group in making healthier and more sustainable food choices.
5. Explain that the workshop consists of 6 parts
 - Getting to know each other with an activity
 - Introduction to the topic, and develop a graph over time and shared dream
 - Looking into existing bottlenecks to reach this dream
 - Thinking of existing qualities which are supportive to reaching the dream
 - Co-creating solutions to support healthier and sustainable food choices in this community
 - Conclusions and debrief
6. Ask participants to quickly introduce themselves by mentioning their name.

A

20

- Any other presentation of personal information is not necessary, as this may hinder the creation of a relaxed atmosphere due to the possible stress of presenting themselves in front of the whole group. They will further get to know each other in the next parts of the workshop.

Part 2: Icebreaker activity

Participants listen to the explanation of the cabbage game. One participant receives the cabbage from the facilitator, peels off a leaf, reads the question written on the layer of the cabbage and answers it. After this, the participants throw the cabbage to another group member, who peels off a leaf, reads the question, and answers it. The game goes on until all participants have received the cabbage one time.

Steps

1. Explain the cabbage game (annex 3)
 - In the cabbage game, the leaves of the cabbage contain different 'get to know you' questions related to the topic. Everyone can peel off one question and answer it from their own perspective.
2. Facilitator starts and reads out the first question and answers it from their own perspective.
3. Ask if anyone has any comments or questions and throws the cabbage to a member of the group.
4. Every participant should have received the cabbage one time.
5. During the game, the facilitator pays attention to the participation levels of the participants and tries to identify the more dominant and docile participants.



Back-up

In case the cabbage game does not work out, the facilitator can opt for another icebreaker activity:

- Human bingo

Give participants a small bingo sheet and tell them to look for someone who checks the box (e.g. find someone whose favourite fruit is x; whose favourite vegetable is x; who is vegetarian/vegan/flexitarian; who has eaten cereals for breakfast, who has a home garden, etc.)

B

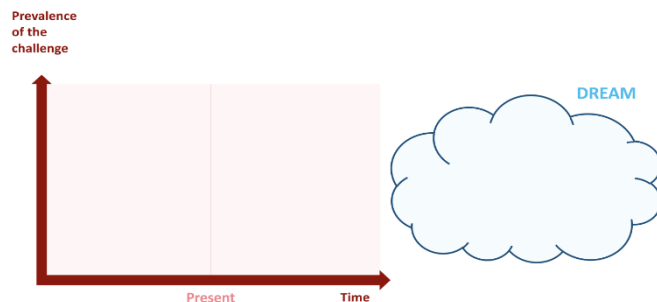
Graph over time and dream - 20 minutes

20

Objective

Introducing the topic for easy transition and triggering reflections about the topic as preparation for the key part of the workshop. Create a common understanding of how healthy, sustainable eating has evolved during time for this vulnerable group and what the main goal regarding eating habits would be. Sketching graphs over time can assist participants in shifting their thinking in the form of isolated factors, to thinking dynamically about the problem in terms of its evolution over time (Gerritsen et al., 2020; Richardson & Andersen, 2019). The tool records the community's perceptions of the variables that can influence the problem and how those would impact the issue over time. Moreover, it gives participants the opportunity to share stories related to the impact these factors have on the issue. It is necessary that the variables and the content of the stories shared by the participants during the graphs over time exercise are taken into account during the next exercise to ensure that participants' effort is used optimally. Implementing this exercise in the workshop can make it easier to brainstorm about the bottlenecks and qualities in phase C and D, and as a consequence, boost the input they will have in these phases.

The participants work together to sketch a graph over time in which they elaborate on the evolution of eating patterns throughout time. More specifically, how did the adoption of healthy, sustainable food choices evolve throughout the past among the vulnerable group? How will the consumption of healthy and sustainable foods evolve throughout the future?



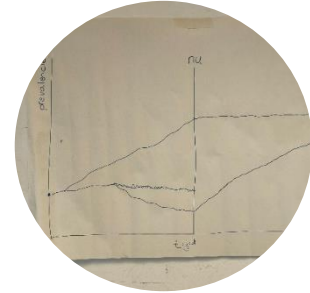
If there is a more specific challenge this group would like to zoom into, you can focus in the graph on the development of this specific issue (e.g. fruit and veggie consumption of school kids or general food offered in restaurants in a neighbourhood). On a poster they find a vertical and horizontal time axis and the word "now" in the middle of the horizontal axis. They sketch a graph that represents how the challenge has evolved over time and how it will develop in the near future (e.g. in the next six years - 2030). When the graph over time is finished, the participants can quickly discuss the different factors that (1) have caused the challenge to develop in the past, and (2) will influence the evolution of it in the future.

Finally, the participants brainstorm on their ideal situation or dream and discuss it in the group. It is not necessary for each participant to give a clear, individual answer, but ideally they do interact with others and agree on the formulated dream and challenge underneath.

Steps

1. For this exercise you can use the poster with the graph over time and dream (annex 4).
2. If the group is large or contains a few dominants participants, the facilitator can decide to split the group and first develop a graph within a sub group and then discuss overlap and differences.

3. If possible, the facilitator can provide input from previous research conducted in the Living Lab so that every participant in the workshop has the same input to start with. This can be, for example, data on current dietary patterns of the target group.
4. Explain what the axes of the graph over time represent.
 - Horizontal axis represents the time
 - Vertical axis represents the adoption of healthy, sustainable food choices
5. Ask participants to reflect on the food habits that were common in their parents' generation. Did they eat healthy and sustainable food? How has this evolved? Is there a difference with current food consumption patterns?
6. Once the participants finished this part of the graph over time, the facilitator can quickly discuss with the group what might have caused the eating habits to develop like this.
7. Now, ask them to think about their future and kids' future. How do you think our eating habits will evolve if we do not interfere? Will our kids eat more healthy and sustainable food or more unhealthy foods? Discuss with them which factors will cause the eating patterns to develop in that way.
8. Ask the participants what the ideal situation regarding these dietary habits would be. How would we want the eating patterns to develop in the future? What would be the ideal eating habits of our children in a couple of years? In other words, what is our 'dream' or 'ambition' regarding food consumption for the specific community group.
9. The facilitator tries to stimulate the creation of a joint view on a dream and writes it down on the poster, so the group can consult it throughout the workshop. With a clear view on the challenge and the dream it's easier to define the relevant bottlenecks, qualities and think of solutions later in the workshop.
10. The facilitator makes notes of the different variables mentioned by the participants as these can be useful input during phase C and D of the workshops.



Back-up

If participants find it difficult to come up with their dream or ideal situation, you can provide some examples (see below) and ask them to reflect on that for their own situation. Which example do they recognize, to what extent is it different from their own situation, etc.

Examples dreams:

- Tasty, healthy and sustainable food is normalized, fun and socially accepted, especially at schools
- At least half the food offer in our neighbourhood, in restaurants, supermarkets, public spaces is healthy and sustainable
- The percentage children who consume at least one piece of fruit every day is increased to ...%

C

Bottlenecks – 20 minutes

20

Objective

Various factors may impede individuals within a community from effectively carrying out the desired behaviour. Understanding these bottlenecks is crucial for devising effective solutions to the overarching challenge of promoting healthy and sustainable food choices. As these bottlenecks can each contribute systematically to the issue, sub-solutions can be developed for each barrier. To enable participants to identify these barriers at various levels of community structure, it's essential to shift their focus from isolated factors to the interconnectedness within the entire community. Using cognitive mapping can facilitate this shift, as it supports the gradual understanding of the causes of an issue and helps develop the skills needed to tackle an issue from a systems perspective (Gerritsen et al., 2020). In this exercise, participants think about what causes the target group to **not** eat sufficiently healthy and sustainable food on different levels of the community (micro, meso and macro) by mapping variables on the adapted Bolk model template (annex 5).

Part 1: Brainstorming bottlenecks - 10 minutes

In the first part of this exercise, participants individually write on post-it's all factors that they can think of which relate to the identified challenge to eating more healthy and sustainable food. They can write down as many as they can think of. In the second part of this exercise, participants stick the post-its on the appropriate level of the model. To stimulate participants to think of factors related to all the different levels of the model, we already briefly explain the model here.



Steps

The facilitator gives the following explanation and instructions to the participants:

1. Explain to the participants that in order to develop solutions for the identified challenge in your community, the workshop first contains two exercises that help generate possible solutions.
2. Ask the participants to brainstorm on the bottlenecks within their community that prevent reaching the dream that they developed. Which factors do they think contribute to the fact that the diet of the vulnerable group is insufficiently healthy and sustainable?
3. Encourage each participant to identify at least three factors.
4. Ask them to write each barrier they can think of on a separate post-it individually.
5. Explain the model briefly, you can use the poster in annex 5 for this, on which they will position their post-its in the second part:

C

20

“In the centre of these circles, you can see the main goal: healthy and sustainable diets or a more specified dream among the vulnerable group in the community. Surrounding this ideal situation, there are three different circles which represent distinct levels of our food environment - essentially, the varying contexts in which we encounter food. The innermost circle closest to the main goal, is the micro level, which relates to the personal or household level. Moving outward, we have the meso level, which encompasses settings such as schools, neighbourhoods, or municipalities. The outer circle represents the macro level, comprising broader influences such as national policies, the economic situation, cultural influences, etc.”



Part 2: Mapping bottlenecks - 10 minutes

Steps

6. Ensure that the participants understand the different levels of the model.
7. Ask the participants to stick the bottlenecks to the level of the model that is the best fit. If there is discussion on where to put a specific item, try to understand the argumentation and determine as group what would be the best level
8. The facilitator tries to map related bottlenecks together if they more or less mention the same bottleneck or topic.
9. Ask if the group is satisfied with the output or whether they would like to add an extra bottleneck that has not been mentioned yet.
10. It is important to keep in mind the different bottlenecks identified in other studies (annex 6). This way, the facilitator can ensure that no perspectives are overlooked.

Back-up

If the participants are not active enough or do not have sufficient inspiration to complete the task successfully, we can provide them with some input (see annex 6). As FEAST has already taken a deep dive into these barriers, we can provide the participants with examples of barriers of different levels (and dimensions). The participants should put a marker behind the barriers they agree with. This should be done anonymously to avoid bias through socially desirable answers.

Note: You can save about 15 minutes with this exercise when you have recent information about bottlenecks regarding the challenge from the vulnerable group available. Write these down on post-its and stick them on the poster before the workshop starts. You can present the insights to the group during the workshop and ask if they can think of any missing items relevant to include for the workshop and add these on the poster.

D

Qualities – 20 minutes

20

Objective

The community or food environment may already possess certain qualities that promote healthy and sustainable food choices among the vulnerable group. We will explore these qualities to ensure that participants are in a positive and constructive mindset when designing solutions for the Living Lab's issue. Moreover, this can help them perceive their influence to be stronger than they initially expected. Once more, we will employ the same variant of the cognitive mapping exercise used in part C. During this phase of the workshop, participants will consider the elements of their food environment that contribute to addressing the identified challenge.

Part 1: Brainstorming qualities - 10 minutes

Participants individually write on post-its the qualities they can think of which already exist in their community and can support in solving the specific challenge to help the vulnerable group in eating more healthy and sustainable food. They are encouraged to write down as many as they can think of.

Steps

1. The facilitator gives the following instructions to the participants:

“We will use the same model as we used in the previous exercise, but with a different focus. In this exercise, we ask you to think about existing qualities (factors, materials, places, organisations, persons, equipment, knowledge or anything) within your community that promote healthy and sustainable food choices among the target group. Please write down each quality or facilitator you can think of on a separate post-it.”



Part 2: Mapping qualities - 10 minutes

The participants stick the post-its on the right level of the model (you can use the poster in annex 5 for this) and brainstorm on some extra qualities if necessary.

Steps

1. Ask the participants to stick the facilitating factors to the level of the model that is the best fit. Again, if there is discussion on where to put a specific item, try to understand the argumentation and determine as group what would be the best level
2. The facilitator tries to map related qualities together if they more or less mention the same topic.
3. Ask if the group is satisfied with the output or whether they would like to add an extra quality that has not been mentioned yet.



D

20

Back-up

Again, if the participants are not active enough or do not have sufficient inspiration to complete the task successfully, the facilitator can provide them with some input as in exercise C, see annex 6.

Note: You can save about 15 minutes with this exercise when you have recent information about qualities regarding the challenge from the vulnerable group available. Write these down on post-its and stick them on the poster before the workshop starts. You can present the insights to the group during the workshop and ask if they can think of any missing items relevant to include for the workshop and add these on the poster.

E

Solutions – 60 minutes

60

Objective

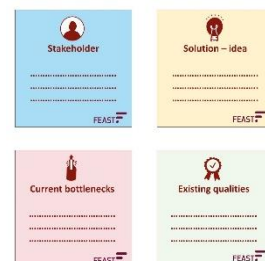
In the last part of the workshop, we will look into solutions that can support the target group in consuming more sustainable and healthy food. The Group Model Building tools (graphs over time and cognitive mapping) which we used in the first rounds are very supportive to create the right mindset. However, in order to develop actionable, specific co-design techniques are necessary (Gerritsen et al., 2020). The co-design technique that we use in this round is based on an exercise of a previous HORIZON project (FIT4FOOD2030) that has proven to be an effective tool in the co-creation of food policy (Wagner, 2020). We adapted it and added broader intervention types based on the Behaviour Change Wheel of Michie et al. (2011) to enhance the creation of both policy-based solutions and interventions.

Participants will brainstorm on solutions that can support the target group in eating healthier and more sustainable food products. By discussing these proposed solutions, the participants create one pathway of solutions to reach their main goal: healthy and sustainable food consumption among the target group. This pathway contains the solution itself, necessary stakeholders and targeted bottlenecks and qualities.

Steps

1. Divide participants in two/three groups of 4-6 participants. Make sure that if you have different stakeholders, each group contains a mix of those stakeholders.
2. Ask each group of participants to create possible solutions (as many as they can think of) that facilitate healthier and more sustainable food choices among the vulnerable group, while using different types of instruments. All created solutions need to be written down on separate post-its.
3. If you have the idea that the participants need some inspiration, you can walk them through some of the examples of interventions and policies from the table in annex 7.
4. Give them a timeslot of 15 minutes or until each group has five solutions. Then, tell the participants to stop working in their smaller groups and inform them that for the next step, they need to work together as one large group.
5. Give the group the set of cards (see annex 8) and place the pathway sheet on the table (annex 9). Put the post-its with solutions above the template of the pathway.
6. The facilitator asks the whole group of participants to select the solutions that they think are most effective in creating impact and seem most feasible to implement. These solutions can be written down on the instrument cards.

Pathway supporting cards



E

60

7. With the selected solutions the facilitator asks the participants to create a pathway that would be most efficient and effective in solving the challenge and reaching the main goal you decided on in the previous phases of the workshop.

8. Next, ask the participants to write down on cards the societal stakeholders that should be engaged in the implementation of the pathway on stakeholder cards (see annex 8). Moreover, these solutions can target one or more of the bottlenecks they identified, but can also reinforce the qualities that already exist. Ask participants to indicate the bottlenecks that these solutions would tackle or the qualities that would help implementation of these solutions.

The pathway should consist of four elements: their solutions, the stakeholders that should be involved and the relevant barriers or qualities that the solutions would target. This can be placed on the pathway table sheet and indicates the strategy that can be implemented to enhance the consumption of healthy and sustainable food among the vulnerable group.

CHALLENGE

DREAM

timeline



Back-up

If the facilitator notices that the creativeness of the participants needs a boost, they can incorporate a brainstorming technique that improves out-of-the-box thinking. In the random word technique, for example, the facilitator gives the groups a word as a prompt to generate new and creative ideas. Tell the participants that they can use their random word in three different ways:

1. Associating the word itself with the problem. How can we use the word to solve the problem?
2. The random word can bring up other associations that can be related to the problem. (ex. Flower can make us think of gardens, and local city gardens can be a way for the vulnerable group to plant their own vegetables and thus consume more healthy food)
3. The characteristics of the object/word and reapplying them to your own problem. Think of how you can apply the characteristics to the problem.

F**10**

Conclusion & debrief - 10 minutes

In the final part of the workshop, the facilitator thanks the participants and discusses the next steps.

1. The facilitator tells the participants that they came up with great ideas. Thank them for their active participation and praise their hard work.
2. Inform them that if they are interested, we can provide them the complete overview of the outcomes and written report by mail.
3. Inform them how their input will be used in the Living Lab. How will the results of the workshop be implemented? What will the facilitator/Living Lab do with their created solutions?
4. Tell the participants that they can receive an update in a few months on the steps you took as a Living Lab. Which concrete actions did you take as a result of this workshop? You can propose to update them by mail or meeting.
5. If they are interested in a follow up with the group to further work on implementing one of the developed solutions, you can support them with selecting an appropriate time and place.
6. If they are interested it can be helpful to create an action plan to further concretize and implement the solutions in their Living Lab. If they are interested, they can use the template (annex 10) to develop this action plan.

STEP 4: AFTER THE WORKSHOP

After the workshop, the participants need to stay activated on the work that they developed in this workshop. Make sure that someone collects all materials with the outcomes of the session and shares this in a comprehensive way with the participants who indicated that they wanted to be informed of the results. If the group is open to it, you can schedule a follow up meeting to discuss if and how the workshop has already changed their food choices and to develop action plans on how the solutions will be implemented in the Living Lab. Try to keep the participants posted on the actions you undertake as a result of the workshop.

!! Reminder. As mentioned on page 7, please collect and share the outcomes and insights carefully. You can send them to the FEAST WP3.3 team via: l.barelds@louisbolk.nl

In addition, we would like the outcomes to be useful for other Living Labs as well. Therefore, we will analyse the aggregated outcomes of the different workshops. To be able to look at the outcomes, it's important that the insights will be collected carefully. Therefore, we have the following instructions for the facilitating team:

- ✓ Make notes of what participants mention during each exercise
- ✓ Take photos of the actual outcomes:
 - Model with graph over time and dream
 - Two models with post-its (bottlenecks and qualities)
 - Pathway of solutions
 - Zoom in on post-its if you cannot read them properly on the overview photo
- ✓ Take photos of the room while participants are working on the exercises, if they've given permission, and preferably a shot in which individuals are not recognizable

STEP 5: FACILITATION TIPS

The facilitator has a crucial role in engaging the participants during the workshop while making them feel comfortable. In addition, the facilitator has an important role to ensure that everyone feels comfortable in providing their input and that everyone respects each other's opinion. In order to help you in facilitating the workshop efficiently, we give the following tips (Hovmand, 2014):

1. Don't be in a rush to fill in silence
2. Use physical space
3. Stay neutral & balanced
4. Enjoy the group facilitator role
5. Do not discount anyone's concerns about an activity
6. Respect the choices of participants

How to handle possible problems?

During the different steps of a co-design workshop, the facilitators can come across different problems. In this part of the guide, the most common problems are listed together with how to handle the situation.

Recruiting participants

Recruiting participants for the workshop can be difficult. Try to collaborate as much as possible with stakeholders and local partners that are in direct contact with possible participants. These stakeholders can help you connect with possible participants and can benefit from the results of the workshop.

Time management

There are different steps that need to be taken in the workshop and there is just a certain amount of time. Participants might be really interested in the topic and very active in discussing content. On the other side you need to respect their time and try to round off within the mentioned time slot. In this guidance the time you may spend on an exercise is mentioned at the start of each element. This helps you to keep track on time. Try to stay within the time mentioned for an element. You can explain to participants if it's needed that you would like to move on to be able to finish on time and write down the discussion on a note which you can check at the end again to see if all is captured during other exercises.

Participation

Although participation is essential for the workshop to be effective, forcing group members to participate in an activity could severely reduce its effectiveness. Instead, the group facilitator should encourage all group members to engage actively while emphasising that they have the right to abstain from any activity that they perceive as uncomfortable. Regardless of if a participant decides to participate actively or not, emphasise that it is their choice and that you respect their decision.

If a participant is less active or shy to provide input during the workshop, the facilitator can actively involve participants for example by specifically asking them to explain the input they've written down on their post-it.

References

- Bason, C. 2016. Design for Policy. Abingdon: Routledge.
- Bronfenbrenner, U. (1979). The ecology of human development. Cambridge, MA: Harvard University Press.
- Cuppen, E. (2012). Diversity and constructive conflict in stakeholder dialogue: Considerations for design and methods. *Policy Sciences*, 45, 23-46. <https://doi.org/10.1007/s11077-011-9141-7>
- Gerritsen, S., Harré, S., Rees, D., Renker-Darby, A., Bartos, A. E., Waterlander, W. E., & Swinburn, B. (2020). Community group model building as a method for engaging participants and mobilising action in public health. *International Journal of Environmental Research and Public Health*, 17(10), 3457. <https://doi.org/10.3390/ijerph17103457>
- Health Outreach Partners. (2013). Outreach reference manual (ORM). <https://outreach-partners.org/wp-content/uploads/2019/05/ORM-2nd-edition.pdf>
- Hovmand, P. S. (2014). Group model building and community-based system dynamics process. In P. S. Hovmand (Eds.), *Community Based System Dynamics* (pp 17-30). Springer Science+Business Media New York. https://doi.org/10.1007/978-1-4614-8763-0_2
- Kilanowski J. F. (2012). Breaking the ice: A pre-intervention strategy to engage research participants. *Journal of Pediatric Health Care*, 26(3), 209–212. <https://doi.org/10.1016/j.pedhc.2012.01.001>
- Kim, C., & Nam, K. Y. (2022). Policy Puzzle Game: Making policy ideas feasible and acceptable in policy co-design. *CoDesign*, 18(4), 448–465. <https://doi.org/10.1080/15710882.2021.1995440>
- Kimbell, L. (2017). Design in the Time of Policy Problems. *Annual Review of Policy Design*, 5(1), 1–14. <https://doi.org/10.21606/drs.2016.498>
- Lalonde, M. (1974). A New Perspective on the Health of Canadians. Department of Supply and Services: Ottawa, ON, Canada. Retrieved 12 february 2024, from <https://www.phac-aspc.gc.ca/ph-sp/pdf/perspect-eng.pdf>
- Richardson, G. P., & Andersen, D. F. (2019) Systems thinking, mapping and group model building. *In Handbook of Group Decision and Negotiation* (pp 1-18).
- van Wietmarschen, H. A., Staps, S., Meijer, J., Flinterman, J. F., & Jong, M. C. (2022). The Use of the Bolk Model for Positive Health and Living Environment in the Development of an Integrated Health Promotion Approach: A Case Study in a Socioeconomically Deprived Neighborhood in The Netherlands. *International Journal of Environmental Research and Public Health*, 19, 2478. <https://doi.org/10.3390/ijerph19042478>
- Wagner, P. (2020). Co-designing pathways for food system transformation. FIT4FOOD2030 tool. Retrieved 12 february 2024, from https://knowledgehub.fit4food2030.eu/wp-content/uploads/2020/11/FIT4FOOD2030_Tool_Pathways.pdf

ANNEXES



Annex 1 Information sheet participants

Dear participant,

We are a research team at conducting a study on ... (e.g. healthy and sustainable eating behaviour in children (3-12 years)). We would like to invite you to participate in the study.

The study consists of a workshop (\pm 3 hours) in which we aim to develop solutions with different relevant stakeholders such as (e.g. teachers, school management, etc.) that lead to (e.g. healthier and more sustainable eating behaviour in children). This study is part of the FEAST project that is funded by the European Commission.

In the workshop, we will first ask you to fill in a short questionnaire in which we collect some personal data. After this, we will ask about possible bottlenecks and supporting elements in your food environment that have an influence on ... (e.g. the eating behaviour of children). Finally, we try to develop some solutions that can (e.g. promote the eating behaviour of children).

Data processing

This study has been approved by the Ethical Committee of (include name and document details). In the context of this study, we will collect personal data such as age, gender and contact details. We will process your data in accordance with the General Data Protection Regulation (GDPR).

During the workshop, photos will be taken of the creation process. Although these photos are not specifically aimed at the participants, they show the creation process and you could therefore be visible in a photo. We only use the images for documentation and reporting of the workshop. The photos will not be distributed publicly. If you prefer not to be photographed, you can report this to the researcher at the start of the workshop.

We only collect and process personal data that are necessary for the purposes of this research. Data that can identify you, such as an e-mail address, will be disconnected from other research data and replaced by a unique, random code. In this way, data cannot be directly related to a specific person. Only the researcher can link the data back to a specific person via the unique code. However, this will only happen in exceptional cases, for example if you invoke your right to inspect or rectify your data. You will also not be identified in the scientific output of this research, such as publications. This research contributes to the general interest by leading to an increase in knowledge and insight that benefits society (directly or indirectly). If you stop participating, previously collected data can still be used and do not have to be deleted by ... (insert organisation).

Contact persons

Insert contact name and contact details (email, phone number)

Annex 2 Survey and Informed consent

Informed consent

Research title: Promoting consumption of healthy and sustainable food among [vulnerable group]

Principal investigators:

[Insert Living Lab contact]

Leonie Barelds, Louis Bolk Institute, e-mail : l.barelds@louisbolk.nl

Käbi Vanwinkelen, KU Leuven, e-mail: kabi.vanwinkelen@kuleuven.be

Introduction:

We are conducting workshops in which we create solutions that help promote healthy and sustainable eating behaviour among [vulnerable group]. You have been selected to participate in the study because you are [relevance].

We would like to invite you to participate in the study. In the survey, we will first collect some personal data (age, gender...) using a questionnaire. After this, we will start a workshop in which we will investigate which bottlenecks and stimulating elements in our food environments contribute to current eating behaviour of [vulnerable group]. After this, based on an exercise, we will develop solutions that can promote healthy, sustainable eating behaviour among [vulnerable group].

Duration of participation: The workshop will last ± 3 h.

- I understand what is expected of me during this study.
- I know that there are minimal risks or discomforts associated with my participation:
There might be questions that make me feel uncomfortable. However, I can skip all questions that I do not feel comfortable answering.
- I know that my participation in this study may not be of direct benefit to me, but researchers and policymakers can learn new things that will help others. I can also be informed of the results after the study is completed.
- I understand that my participation in this study is voluntary and I can choose not to participate in this study. I have the right to skip any question I do not wish to answer and go to the next question. I can also stop my participation at any time. I do not have to give a reason for doing so and I know that no harm can come to me.

- The results of this study may be used for scientific purposes and may be published. My name or other identifying information will not be published and my information will be numerically coded, and measures will be taken so that answers cannot be linked to individual respondents. Anonymity and data confidentiality are guaranteed at every stage of the study.
- I would like to be informed about the results of this study. For this purpose, the researcher can contact me at the following e-mail address: [\[insert email of LL contact person\]](#)
- If I have any further questions about this study, I know that I can contact Leonie Barelds via e-mail: l.barelds@louisbolk.nl or Käbi Vanwinkelen via e-mail: kabi.vanwinkelen@kuleuven.be or [\[insert LL contact person\]](#)
- For any complaints or other comments about the ethical aspects of this study, I can contact the Ethics Committee: [\[insert email address of local ethics committee that gave approval for the workshop\]](#)

I have read and understood the above information and received answers to all my questions about this study. I agree to participate in this study.

Date:

Name participant

Signature participant

Questionnaire

[Gender]

I identify as

- ☐ Male
- ☐ Female
- ☐ Non-binary
- ☐ I'd rather not say

[Age]

How _____ old _____ are _____ you?

...

[Current occupation]

What _____ is _____ your _____ current _____ occupation?

....

[Subjective SES]

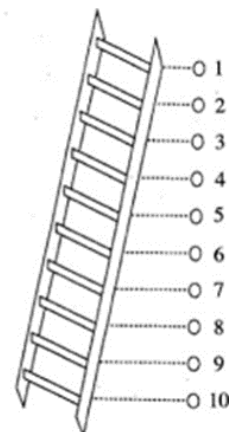
Imagine that this ladder depicts the position of people in **[insert country]**.

At the top of the ladder are people with the most money, highest education and best jobs.

At the bottom of the ladder are people with the least money, the lowest education or no education, and the worst jobs or no job.

On which rung of the ladder would you place yourself?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10



Annex 3 Cabbage Game

Preparation cabbage game

Take the green sheets of paper (various sizes of ovals, going from small to large). Write the questions listed below on individual sheets of paper, one question for each sheet. Make a ball out of the questions, starting with wrapping the smallest sheets of paper around the cabbage centre. Crumple the larger sheets over the smaller ones so the cabbage becomes larger with each leaf. At the end, all sheets of paper must be attached to the centre, so that it resembles a cabbage.

Examples of questions (number of questions = number of participants + 1 or 2):

- True or false: "Healthy food is not necessarily sustainable"
 - True (fruits or veggies that need a lot of transportation or chemicals to grow more efficiently)
- True or false: "More than 50% of Europeans eat at least one piece of fruit a day."
 - True, 56%³
- Can you give a reason why it would not be good to eat red meat?
 - The environment (lots of greenhouse gases, water use); health (higher chance at cardiovascular diseases, diabetes, cancer...); animal cruelty
- True or false: "In Europe, around 25% of the population is overweight."
 - False: 56% is overweight⁴
- True or false: "Food production is responsible for up to 30% of global greenhouse gas emissions."⁵
 - True
- Where do you find cooking inspiration or recipes?
- What is your favourite meal?
- What is your favourite veggie?

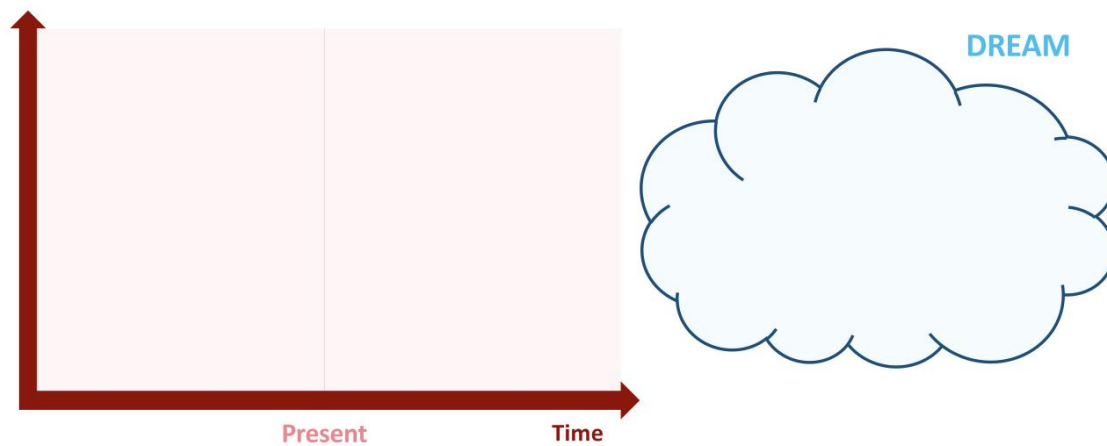
³ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Nutritional_habits_statistics&oldid=572524

⁴ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Overweight_and_obesity_-_BMI_statistics

⁵ [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31788-4/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31788-4/fulltext)

Annex 4 Graph over time and dream

Prevalence
of the
challenge



Annex 5 Template model bottlenecks and qualities



BOTTLENECKS

Factors that hinder a community in realizing the desired behaviour



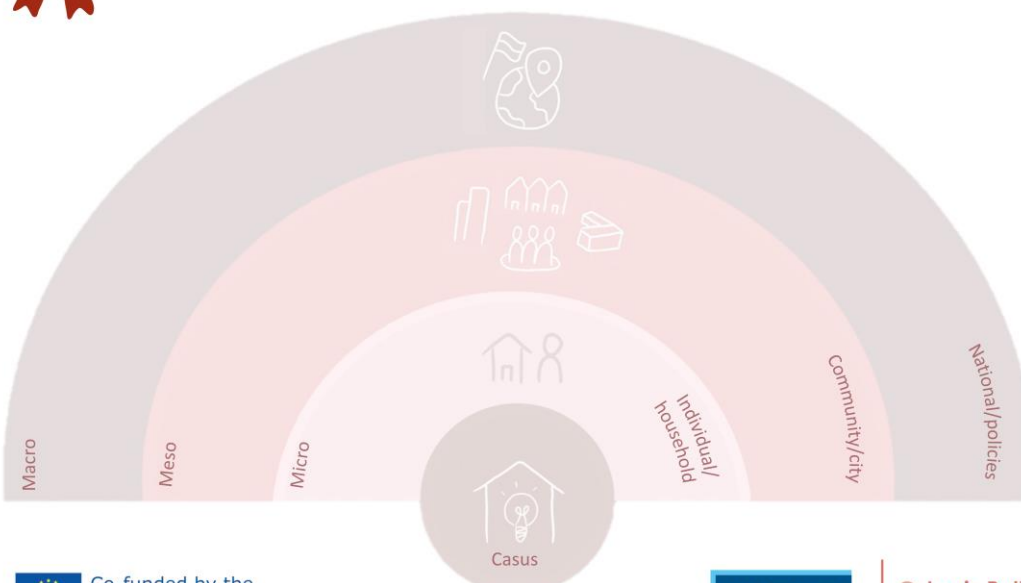
Co-funded by the
European Union

KU LEUVEN



QUALITIES

Factors that currently support the community in realizing the desired behavior



Co-funded by the
European Union

KU LEUVEN



Annex 6 Examples of barriers and drivers of healthy, sustainable eating

- **Barriers⁶⁷**

- Parent's cooking skills
- Children's preference for unhealthy food
- Peer pressure to eat unhealthy food
- Marketing of unhealthy food
- Price of healthy food
- Too little time
- Knowledge about the right food & quantity
- Social media
- Convenience
- Familiarity
- Confidence in oneself to cook healthy & sustainable food
- Motivation

- **Qualities**

- Cooking skills
- Label on food packaging
- Practical tools (apps etc.)
- Guidelines on healthy, sustainable food
- Ingredients list on packaging
- Healthy eating habits of family, friends
- Websites with recipes
- Government websites with information
- Possibility of workshops in the neighborhood
- Information sessions in the community

⁶ https://knowledgehub.fit4food2030.eu/wp-content/uploads/2020/06/FIT4FOOD2030_Tool_CitizenConsultationWorkshop-1.pdf


⁷ Gerritsen S, Renker-Darby A, Harre ´ S, Rees D, Raroa DA, Eickstaedt M, et al. (2019) Improving low fruit and vegetable intake in children: Findings from a system dynamics, community group model building study. *PLoS ONE* 14(8): e0221107. <https://doi.org/10.1371/journal.pone.0221107>

Annex 7 Intervention and policy types

Interventions	Explanation	Example
Education	Increasing knowledge or understanding	A lesson on the risks of alcohol consumption
Persuasion	Using communication to induce positive or negative feelings or stimulate action	Influencers promoting sport by elaborating on the advantages.
Incentivisation	Creating expectation of reward	Cheaper ticket prices for 10 train journeys than single journey
Coercion	Creating expectation of punishment or cost	Raising the cost of cigarettes
Training	Imparting skills	Advanced driver training to increase safe driving
Restriction	Using rules to reduce the opportunity to engage in the target behaviour (or to increase the target behaviour by reducing the opportunity to engage in competing behaviours)	Smoking ban in public places
Environmental restructuring	Changing the physical or social context	Alcohol achter de kassa plaatsen in plaats van in de rekken
Modelling	Providing an example for people to aspire to or imitate	Using TV drama scenes involving safe-sex practices to increase condom use
Enablement	Increasing means/reducing barriers to increase capability or opportunity	Creating fun learning materials to encourage children to actively participate in the classroom
Policies	Explanation	Example
Communication / Marketing	Marketing via print, digital or mass media	Campaigns via social media, influencer marketing
Guidelines	Creating documents that recommend or mandate practice. This includes all changes to service provision	Protocol during the COVID-pandemic
Fiscal	Using the tax system to reduce or increase the financial cost	Increasing duty on alcohol
Regulation	Establishing rules or principles of behaviour or practice	No alcohol in children programs
Legislation	Making or changing laws	Prohibiting the sale
Environmental/social planning	Designing and/or controlling the physical or social environment	Placing fitness equipment in a city to encourage physical activity
Service provision	Delivering a service	Establishing support services in workplaces, communities etc.

Annex 8 Solutions pathway cards

Pathway supporting cards



Stakeholder

.....

.....

.....

FEAST



Solution – idea

.....

.....

.....

FEAST



Current bottlenecks

.....

.....

.....

FEAST



Existing qualities

.....

.....

.....

FEAST

Annex 9 Template pathway

Pathway of solutions to stimulate
consumption of healthy and sustainable food



Annex 10 Template action plan

Goal: (Identified goal you are addressing with this strategy)

Pronged Strategy: (Create an action plan for each strategy in your Positive School Discipline Plan)

ACTION STEPS	PERSON(S) PARTNERS RESPONSIBLE	RESOURCES NEEDED INTERNAL/EXTERNAL	PROGRESS INDICATED AT BENCHMARK	COMPLETION DATE	EVIDENCE OF IMPROVEMENT
What you'll need to do to implement the strategy	Who is responsible for carrying out each action step	What resources you'll need both internally and externally to complete each action step	How you know that you have made progress on each action step	When you expect to complete each action step	The result of completing each action step

The action plan contains 6 things:

1. Action steps (what)

These are the solution(s) created by the participants that are part of the pathway

2. Persons, partners needed (who)

These are the stakeholders mentioned in the pathway

3. Resources needed (how)

What resources would we need if we wanted to implement this solution?

4. Date (when)

When would we need to implement this solution?

5. Location (where)

Where would we need to implement this solution?

6. Improvement (why)

Why would we need to implement this solution, what progress would this make?

Good luck!

