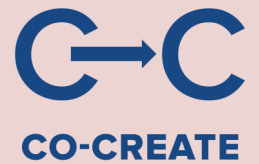


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Implementation and evaluation plans from each of the five case countries/D7.6

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Executive Summary

This report (demonstrator) is part of Objective 7.2: *To develop implementation and evaluation plans for 1-3 selected co-created obesity-related policy interventions (tools, strategies, programmes) in each of the five countries* in Work Package 7 in the CO-CREATE project, led by the University of Oslo.

Planning for implementation and evaluation of policies should be standard practice in public health in order to provide recommendations for termination, maintenance, improvements and or/scaling up of policies in a timely manner. However, lack of knowledge in and skills on how to develop and follow up on implementation and evaluation plans are potential barriers to establishing such a practice. Building capacity for this through partnerships between the CO-CREATE-partners and local stakeholders of a policy idea is one strategy to change this. The objective of this report is twofold:

- to summarize and present the implementation and evaluation plans of youth-developed childhood obesity prevention policies from the five European CO-CREATE countries.
- to reflect upon the challenges and opportunities of learning to develop such plans by applying an iterative six steps process with worksheet templates for developing logic models and writing the implementation and evaluation plans.

Applying the previously developed protocol (D7.4) for writing implementation and evaluation plans with its templates, the five CO-CREATE partners from the Netherlands, Norway, Poland, Portugal and the UK each drafted plans for one selected policy idea from their youth alliances. The process was supported by discussions in online and physical meetings of the CO-CREATE partners within and between the countries.

The result showed that the plans were developed for local policy ideas as intended, and that these were chosen mostly because they had been discussed in dialog forums and both stakeholders and youths were interested in further contributing. However, the COVID-19 situation, the hypothetical nature of these plans, as well as the lack of funding to pay the external contributors for their time were factors resulting in not forming a core team with youth and stakeholders, but rather have one designated staff and the internal team at each partner prepare the documents for them to comment on. The definition of adopters and implementers caused some discussion, but as schools was mostly the setting it was recognized that the schools as well as governing bodies of schools both would have to adopt, while schools were the primary implementers. Specifying the implementation outcomes, determinants and strategies were generally found to be challenging. The focus of the evaluations was mostly to conduct a pilot to collect process evaluation, but also some preliminary indication of effect on the target group with regards to cognitions or behaviours.

In conclusion, the protocol and templates were found useful by the CO-CREATE partners for a first attempt of making policy implementation and evaluation plans, and the plans were thought to be good starting points if the policy ideas were to actually be enacted. However, the hypothetical nature and thus lack of true process of negotiating implementation and evaluation was recognized as barriers to this task and true testing of the usefulness of the protocol. Recommendations for revisions and future use of the protocol is made.



Table of content

Executive Summary	3
List of acronyms / abbreviations	5
Introduction	6
Deliverable description	6
Background.....	7
Description of activities/methods	9
Results.....	10
Recommendations.....	23
References.....	24
Appendix	25

List of acronyms / abbreviations

CDC	Centers for Disease Control and Prevention
DF	Dialog Forum
MRC	Medical Research Council
RCT	Randomized Controlled Trial
SME	Small and Medium size Enterprises
TLM	Tearless Logic Models
UK	United Kingdom
YA	Youth Alliances
WP	Work Package

Introduction

Work package 7 (WP7) has the overarching aim to evaluate the project using process, output and impact data. This aim is broken down into three objectives with corresponding tasks. This deliverable is part of Objective 7.2: *To develop implementation and evaluation plans for 1-3 selected co-created obesity-related policy interventions (tools, strategies, programmes) in each of the five countries*, and the corresponding Task 7.3 *To develop implementation and evaluation plans for 1-3 selected co-created obesity-related policy interventions (tools, strategies, programmes) within the five countries*. This task has the following three deliverables, and involves five of the CO-CREATE-partners (UoO, UvA, LSHTM, CEIDSS, SWPS):

D7.4: A protocol for developing implementation and evaluation plans (Month 24)

D7.5: A workshop for CO-CREATE co-workers on how to apply the protocol (Month 24)

D7.6: Implementation and evaluation plans (in local languages) from each of the five case countries (Month 54)

Planning for implementation and evaluation of policies should be standard practice in public health in order to provide recommendations for termination, maintenance, improvements and or/scaling up of policies in a timely manner. This is particularly relevant when policies or the particular programs resulting from these are new/unique, high risks/costs or extensive. However, lack of knowledge in and skills on how to develop and follow up implementation and evaluation plans are potential barriers to establishing such a practice. Thus, building capacity for this through partnerships between the CO-CREATE-partners and local stakeholders of a policy idea was one way in which CO-CREATE aimed to contribute.

This deliverable contains this overarching report summarizing the implementation and evaluation plans for one policy idea from each of the five partner countries, reflecting on the experiences of using the protocol (D7.4) to conduct this work and further recommendations to improve, and the implementation and evaluation plans of each partner as individual reports in the appendices to this overarching report.

Deliverable description

In accordance with the grant agreement:

Evaluation plans were to be based on obesity-related policy evaluation frameworks developed by World Health Organization (WHO) and by Institute of Medicine (IOM/ now the: the National Academies of Science, Engineering, and Medicine (NASEM)) in the US (WHO 2008, WHO 2013, IOM 2013) aimed at collecting process, output and impact data. Implementation plans should be based on relevant theories and frameworks (i.e. Nilsen 2015, Horodyska et al 2015) applied to the local context in a systematic manner (Eldredge et al 2016). A protocol with an overall evaluation framework and a

guide on developing implementation and evaluation plans were to be developed. The CO-CREATE partners of the five countries would be trained and guided in the use of these protocols before developing implementation and evaluation plans for 1-3 selected co-created obesity-related policy interventions in their countries.

Relationship to other project activities (WP5 and WP6)

Policy ideas were developed by youth in the alliances (WP5) and discussed with the stakeholders (WP6). The ideas to be taken forward into implementation and evaluation plans should be those ideas that seem to be most feasible and receiving most support by the stakeholders in the dialog forum and are thus more likely to be enacted. The enactment of the policy is however not a requirement since that is dependent on political processes beyond the time frame and work scope of CO-CREATE.

Relationship to D7.4 (protocol) and D7.5 (workshop)

The protocol (D7.4) and the workshop (D7.5) together with continued support from WP7 were the structures put in place to enable the CO-CREATE partners to work with local stakeholders to develop the evaluation and implementation plans (D7.6). The actual use of the plans will depend on securing collaboration and additional funding beyond the task of delivering each country's implementation and evaluation plan.

Background

In order to tackle the obesity epidemic, there have been a call to move beyond interventions targeting the individual level to apply comprehensive packages of policies which address the epidemic using a systems-level approach (Roberto et al 2015, IOM 2012, WHO 2008). However, there is a well-known challenge of lack of evaluation and incomplete implementation of policies, making it difficult to judge the contribution of comprehensive policies to solving the problem. Part of the problem is that the gold standard for effect evaluation - the randomized controlled trial (RCT) - is not readily applicable for policy evaluations (IOM, 2013), and that process evaluation of the implementation processes in RCTs have usually been secondary to the main objective of assessing effectiveness of the interventions.

According to U.S. Centers for Disease Control and Prevention (CDC), the policy process consists of five domains (problem identification, policy analysis, strategy and policy development, policy enactment and policy implementation) and the two continuous processes of stakeholder engagement and evaluation (CDC, 2012). Furthermore, policy evaluation is defined as "*the systematic collection and analysis of information to make judgement about the context, activities, characteristics or outcomes of one or more domains of the policy process.*" That is "*evaluation may inform and improve policy development, adoption, implementation and effectiveness and thus build the evidence for policy interventions*". Within public health, policy development "*includes advancing and*

implementing public health law, regulations, or voluntary practices that influence systems development, organizational change and individual behavior to promote improvements in health”. An enacted policy could thus lead to one or several programs that aim to ensure that the objectives of the policy are achieved either at the national or community level. These programs would then be the objects of evaluation with regards to implementation and effectiveness.

Regarding the effectiveness of childhood obesity prevention programs, there are several reviews and meta-analysis of RCTs showing small effects on dietary behaviours, physical activity and/or anthropometric markers, as well as environmental changes (Podnar et al 2021, Chambers et al 2021, Pineda et al 2021, Woods et al 2021). However, there is also a growing recognition that programs resulting from obesity prevention policies need to be evaluated using different methods taking into consideration that these are complex interventions situated in a system (Huiberts et al 2022, Skivington et al 2021, Emmert-Fees et al 2022). Thus, the recent update of the United Kingdom Medical Research (UK MRC) Guidance on development and evaluation of complex intervention, stresses that evaluation goes beyond just asking whether the intervention works and also consider whether the research questions are useful for decision-makers (Skivington et al 2021). Furthermore, implementation should be considered throughout the process, and the implementation outcomes, strategies as well as contextual barriers and facilitators need to be considered (Skivington et al 2021). A recent review of frameworks for implementation of policies promoting physical activity and healthy diet has shown that most current implementation frameworks take into account the process, determinants and evaluation of implementation, but that few of them take a systems approach (Lobczowska et al 2022a). Furthermore, key determinants of implementation of such policies found in reviews and stakeholder documents were: cost, networking with other organizations/communities, external policies, structural characteristics of the setting, implementation climate, readiness for implementation, and knowledge/beliefs of involved individuals (Lobczowska et al 2022b). Interestingly, only three of these were the same for both diet and physical activity - cost, implementation climate, and knowledge/beliefs.

In concordance with the CDC’s thorough framework to guide program evaluation in public health (CDC, 2014) and the IOM/NASEM report on how to evaluate obesity prevention policies and intervention (IOM, 2013), the UK MRC guidelines on evaluating complex interventions recommends to consider context, develop a program theory, engage stakeholders, identify key uncertainties, refine the intervention, and include economic considerations (Skivington et al 2021).

The objective of this report is twofold:

- to summarize and present (in appendices) the implementation and evaluation plans of youth-developed childhood obesity prevention policies from five European countries.
- to reflect upon the challenges and opportunities of learning to develop such plans by applying an iterative six steps process with worksheet templates for developing logic models and writing the implementation and evaluation plans.

Description of activities/methods

The five CO-CREATE partners followed the 6 steps outlined the Protocol (D7.4) (CO-CREATE D7.4, 2020) – see Table 1 from the protocol below. In addition, the CO-CREATE partners met to share experiences and discuss issues related to the use of the protocol during the process of applying it.

Table 1 Overview of the steps, inputs and outputs for writing implementation and evaluation plans for one-three selected policies per country from the Youth Alliances in CO-CREATE.

STEPS	INPUTS	OUTPUTS
1) Select 1-3 policy ideas	<ul style="list-style-type: none"> Policy ideas from youth alliances that have been discussed at dialog forums Statements for rating the policy ideas Facilitators, Co-facilitators, youth alliances members 	<ul style="list-style-type: none"> 1-3 selected policy ideas per CO-CREATE partner
2) Assemble the core team & advisory committee <i>(consider the need for a team per policy idea selected)</i>	<ul style="list-style-type: none"> 1-3 selected policy ideas Arguments of what is in it for the members not on CO-CREATE funding A designated Core-team leader from the CO-CREATE partner Recruited stakeholders/core team members An initial joint meeting of core team and advisory committee to agree on tasks, roles and responsibilities 	<ul style="list-style-type: none"> A list of members of the core team and the advisory committee A brief outline of agreements on tasks, roles and responsibilities
3) Draw logic models for policy and for Implementation <i>(for each selected policy idea separately)</i>	<ul style="list-style-type: none"> System maps and policy forms from youth alliances Resources on why and how to draw logic models (i.e. the community tool box)/system maps (i.e. group model building) Worksheets for logic models on policy and implementation (Appendices 2 & 3) Two workshops to jointly make logic models and collect input for the implementation and evaluation plans through the worksheets Template for overall evaluation framework (appendix 1) 	<ul style="list-style-type: none"> (Systems) Logic model for policy (Systems) Logic model for implementation Worksheets with input for implementation and evaluation plans First draft of the overall evaluation framework (appendix 1) based on the logic models and worksheets
4) Write up the implementation plan	<ul style="list-style-type: none"> Implementation knowledge/expertise Logic model of implementation & Worksheets for logic model of implementation 	<ul style="list-style-type: none"> Implementation plan part of D7.6

<i>(for each selected policy idea separately)</i>	<ul style="list-style-type: none"> • Template for implementation plan (appendix 4) • Cycles of drafting, consultations and revisions between the core team leader and the rest of the team and/or advisory committee 	<ul style="list-style-type: none"> • Revised overall evaluation framework (appendix 1)
5) Focus the evaluation <i>(for each selected policy idea separately)</i>	<ul style="list-style-type: none"> • Evaluation knowledge/expertise • Logic models, worksheets and implementation plan • Template for evaluation plan (appendix 5) • Cycles of drafting, consultations and revisions between the core team leader and the rest of the team and/or advisory committee 	<ul style="list-style-type: none"> • Evaluation plan part for D7.6 • Finalized overall evaluation framework (appendix 1)
6) Finalizing the Implementation and evaluation plan (D7.6)	<ul style="list-style-type: none"> • Logic models of policy and of implementation (Step 3) • Combined evaluation framework (Step 3-5) • Implementation plan (Step 4) • Evaluation plan (Step 5) 	<ul style="list-style-type: none"> • A brief report pulling together the 5 parts of the Implementation and evaluation plan for the policy (D7.6)

Results

CO-CREATE partner discussions and other factors influencing the application of the protocol

Due to COVID-19, the wrapping up of the alliances, the transition to dialogue forums and the continued engagement of youth stretched out in time and differed by country. In the initial meeting after the deliverables D7.4 and D7.5 were submitted in April 2020, it became clear that each partner would proceed at their own pace. The task was also added to the agenda of the monthly WP6-meetings which went on for another year to support the implementation of the dialog forums.

In the CO-CREATE partner meetings, it became clear that the partners found it difficult to request time from local authorities (especially in the health and education sector, due to the consequences of the ongoing pandemic) and it was thus agreed that one policy idea per partner would be sufficient. In addition, there was a continued discussion about what to offer to stakeholders involved – both professionals and youth. For the stakeholders the capacity building and the access to the views of youth were suggested as things we could offer. For youth it was suggested that this could be relevant for their CVs. However, they were not asked about this and the solution was to simplify the process and minimize the demand on their time.

The procedure for selecting the policy idea was also discussed thoroughly in the beginning. The voting and rating procedures within the alliances were found to be too rigid/formal. However, the principles of involving the youth in the process and selecting an idea which was also supported by local stakeholders were both seen as important. It was also stressed that the youth should be part of the process if possible. Due to the uncertainty about the number of dialog forums and thus number of ideas which would actually be discussed locally, the procedure for selecting the idea was left up to the partner guided by these discussions.

Once the partners were working on writing their implementation and evaluation plans, monthly meetings were used to share experience and discuss issues encountered with applying the protocol. The major change coming out of this was a recommendation from the Polish partner to use the Tearless logic model questions (Lien et al 2011) to develop the logic models – especially in interactions with youth and stakeholders – as these require less knowledge of implementation and evaluation terminology and technicalities.

Overview of the results from the partner reports (appendix 1-5) based on the steps in the protocol

Table 2, shows that there were 5 policy ideas on nutrition and one on PA. The policy ideas were school-related except on idea on healthy shelves in supermarkets. Step 1, the selection process showed that the CO-CREATE partners made the decisions, but that this was strongly influenced by local youth and stakeholder support, except in Norway where the rationale was also based on the promotion by the CO-CREATE youth task force. Table 2, further describes that each CO-CREATE partner organized the core team (step 2) by assigning a lead person to draft the plans supported by an internal team and that the engagement with youth and other stakeholders were limited to one off meetings and/or written input on the plans. The youth involvement was a key element added to the protocol in one of the first meetings and thus followed up by most partners.

Table 2 Summary of the policy ideas, the selection process (step 1) and engagement of youth and stakeholders (step 2) in developing implementation and evaluation plans for the youth policy ideas in the five partner countries in the CO-CREATE project.

<i>Country</i>	<i>Policy idea</i>	<i>Selection process (step 1)</i>	<i>Engagement (step 2)</i>
<i>The Netherlands</i>	Canteen Take Over Youth making hot meals in the school canteen.	Team CO-CREATE UvA choose the idea. The Canteen was defined by the youth to be an important place in the environment of youth	2 meetings and a telephone interview with: - 4 youth and a facilitator - the responsible person from the Public Health services (GGD) - the policy officer of the Netherlands Nutrition center

		<p>A strong emphasis on action as the youth are themselves involved in the kitchen of the canteen.</p> <p>Several important stakeholders supported the idea in the DF. In particular as many governmental and educational bodies want more involvement with students.</p>	<p>Team CO-CREATE UvA (n=4) – one research assistant, one facilitator and two senior staff.</p>
<i>Norway</i>	<p>PA-activity groups</p> <p>In cooperation with the students, all upper secondary schools in the county of Innlandet shall ensure that each pupil has the possibility to be physical activity at least once a week outside of the school hours, but under supervision.</p>	<p>The policy idea was chosen by the lead partner/author based on being one of the policy ideas most developed in a Norwegian alliance with a focus on a local/regional level rather than a national level. Furthermore, the idea of PA once a week was also one of the four demands by the CO-CREATE Youth Task force</p>	<p>- 3 workshops to develop the logic models and get input on the evaluation. Participants were mostly from within CO-CREATE representing the youth organization, facilitators of the youth alliances, evaluation expertise, health promotion in youth research, youth obesity /physical activity research. There was also one expert in physical activity external to CO-CREATE.</p> <p>- one meeting with 2 youth alliance members to provide feedback on the logic models</p>
<i>Poland</i>	<p>Healthy shelves</p> <p>The YA's policy idea proposes that the food products identified as healthy products should be added to grocery store shelves in a visible way to increase their availability and accessibility for</p>	<p>Firstly, this idea was one of the two ideas from the alliance that was discussed during the DF</p> <p>Secondly, the representatives of youth that were involved in developing the idea were engaged in the DF and declared interest in further involvement.</p>	<p>2 meetings (online/ face to face)</p> <ul style="list-style-type: none"> - 1 stakeholder (a director of a SME providing training services and treatment in the area of dietetics and mental health) - 3 YA members <p>The Polish CO-CREATE core team (n=4) included the leader of the Polish CO-</p>

	<p>consumers. In addition, unhealthy products should be less accessible (e.g., by removing unhealthy snacks from cash registers areas). The policy idea also proposes a system of shelves and food products labeling in supermarkets (indicating the nutritional values of given products) and increasing numbers of (new) healthy food products available in stores.</p>	<p>Third, there was an agreement in the Polish CO-CREATE core team that the idea reflects the youth's views on the problem solution, has a potential to take a system perspective, is likely to be supported by the relevant stakeholders, and has a potential to be institutionalized and maintained over time.</p> <p>Lastly, the representatives of the authors of the idea were willing to cooperate in preparing a draft of the implementations/ evaluation plans.</p>	<p>CREATE and three facilitators of the Polish YAs, of which the most experienced one was assigned a role of the leader of the implementation team and coordinated the process of drafting the plans</p>
<i>Portugal</i>	<p>To include nutrition and cooking contents in the curriculum of the Citizenship/ Civic Education subject of 5th to 9th grade</p>	<p>Chosen by the Portuguese CO-CREATE team.</p> <p>This policy idea was discussed in two DF at the local and national level.</p> <p>The YA members responsible for developing this policy idea were involved in the DF and expressed their interest and motivation in engaging in further activities</p> <p>The relevance of the scope of the policy idea within the current Portuguese context and its focus on a more local level. The teachers have great</p>	<p>Written consultation followed by separate online/telephone meetings meeting about the revised versions with one stakeholder from the municipality (Dept of Health promotion, nutrition background, established relationship) and one YA member.</p> <p>The Portuguese CO-CREATE team (n=3): the project leader in Portugal, one facilitator (research assistant) of the Portuguese YA and one research assistant</p>

		flexibility to the content of Citizenship/ Civic Education	
<i>UK</i>	<p>Council Funded Cooking Classes for Young People</p> <p>This policy idea is about providing free cooking classes for young people that focus not only on technical cooking skills but also on practical skills related to eating, like budgeting and meal planning</p>	<p>Chosen by the CO-CREATE LSHTM-team.</p> <p>Most developed idea by the YA.</p> <p>Had been discussed in a DF.</p> <p>Likely to be implemented locally.</p>	<p>No meetings about the implementation and evaluation plans.</p> <p>The CO-CREATE LSHTM-team (n=3) – one YA facilitator, one researcher and one senior staff.</p>

In Table 3 the settings, adopters and implementers are described together with the anticipated outcomes of the plans for adoption and implementation. This is drawn from the logic models and implementation plans of the CO-CREATE partner reports in the appendices. As mentioned above the school is the primary setting and thus identified as both adopter and implementer. However, there are adopters above the school (or store) level are also recognized. Furthermore, the complex process of implementation is recognized by multiple implementers being listed. The anticipated outcomes of the adoption and implementation differ in their specificity, but generally indicates an outcome related to how it can be seen or measured that the adopters have actually adopted the policy, and similarly for implementation that the implementers are able to implement and that there are some clear qualitative criteria about how this is done.

Table 3 Overview of the setting, adopters and implementers, as well as the anticipated outcomes of the implementation plans (Step 3 and 4) for selected youth policy ideas in the five partner countries in the CO-CREATE project.

<i>Country</i>	<i>Setting, Adopters and implementers</i>	<i>Anticipated outcomes of the implementation</i>
<i>The Netherlands</i>	<p>Setting: Secondary schools</p> <p>Adopters: Health school policy program and Secondary schools</p>	<p>Adoption:</p> <p>Schools that implement this policy intervention</p> <p>Getting the Canteen Take-over included in the national (RIVM's) intervention database.</p>

	<p>Implementers: Canteen employees and students in Secondary schools</p>	<p>Implementation: Pupil participation in the canteen</p> <p>Healthy, flavourful, diverse and affordable food available in the canteen</p> <p>‘Real’ ownership, rather than just assigned chores</p>
<i>Norway</i>	<p>Setting: Upper secondary schools in Innlandet county, Norway.</p> <p>Adopters: Education sector (school owner) at the county level and school leader/ management at each school</p> <p>Implementers: County level coordinator (support) and student PA groups supported by one permanent staff at each school</p>	<p>The “county” adopts the policy, allocates funding for running costs and establishes a support team at the county levels which support the PA-groups at each school and operates a network for sharing of experiences</p> <p>The school “board” adopts the policy indicated by a decision in the school board, allocation of funding for the running costs (possibly) and establishment of a PA-group</p> <p>The PA-group implements the program in three consecutive school years, and includes the use of marketing and student participation to encourage the use of and further development of the PA-activity</p>
<i>Poland</i>	<p>Setting: Grocery stores (locally)</p> <p>Adopters: Store owners</p> <p>Implementers: Retail outlets owners/ store managers</p> <p>Food product company representatives</p> <p>Local authorities’ representatives who support the implementation process</p>	<p>Adoption: Producers are interested in putting their products on a ‘healthy list’ or labelling the products as products from ‘the healthy list’</p> <p>Retail outlets taking part in the trial are perceived as socially responsible (by taking care of their consumers healthy choices)</p> <p>A local policy is enacted and a system of incentives for retail outlets is established in order to join the program</p> <p>Implementation: Implementers are able to train other staff of retail outlets and provide feedback on barriers and facilitators they identified during the trial implementation</p>

<p><i>Portugal</i></p>	<p>Setting: School with second and third cycles (grade 5-9) in one municipality</p> <p>Adopters: The Municipality and the school selected and willing to conduct the pilot project</p> <p>Implementers: CEIDSS team (researchers and nutritionists), school teachers, invited professionals from different backgrounds related to food systems</p>	<p>Adoption: The municipality expresses its interest and supports the selection process of a school (with both second and third cycles) to conduct the pilot project.</p> <p>The municipality and the school adopt the policy idea.</p> <p>Implementation: School teachers, nutritionists and professionals related to the food systems implement the policy idea as a pilot project intervention conducted in the classes of the Citizenship subject during approx. one school year directed at the students from grade 5 to 9, based on the Portuguese Health Education Framework and adapted to the age group.</p>
<p><i>UK</i></p>	<p>Setting: Secondary schools in a London borough</p> <p>Adopters: the local council (public health team)</p> <p>Implementers: schools, commissioned/employed tutors</p>	<p>Adoption: The local council will need to adopt the policy and therefore provide funding plus a base/staff from which it can be organised, or commissioned.</p> <p>Implementation: School head teachers and relevant staff (e.g. food tech) will need to be on board with the decision as they are in a position to help navigate the environment within which the policy can be implemented. They will also need to provide facilities and help recruit young people to take part in the classes.</p> <p>Staff/tutors to run courses – depending on what the council decides to do, tutors for the courses will either be hired by the council or be employed by an organisation commissioned to run the policy.</p>

Finally, Table 4 summarizes the theory of changes of each of the logic models of the policies (step3), and lists the focus of the evaluation plans (Step 5). There is a large difference between partners in the level of detail as well as the precision in writing up both the theory of change logic and the evaluation questions.

Table 4 Logic models of the selected policy ideas and focus of the evaluation plan (Steps 3 and 5) for each of the five partner countries in the CO-CREATE project.

<i>Country</i>	<i>Summary of the theory of change of the logic model of the policy</i>	<i>Focus of the evaluation of the policy</i>
<i>The Netherlands</i>	<ol style="list-style-type: none"> (1) Students have no access to tasty, varied and healthy food (2) By giving them the “keys” to the canteen, they can take the lead on making tasty, varied and healthy food (3) Youth eat unhealthy food in the current canteen, or get their lunch from elsewhere whereby they are inclined to make unhealthy choices (4) By letting the students take over the canteen and make warm and tasty dishes, it will ensure that there are healthy options in the canteen and that it is a good atmosphere in the canteen so that the students choose to eat there 	<p>To get the Canteen Take Over into the intervention database of the National Institute for Public Health and the Environment in the Netherlands, so that it can become a national policy program.</p> <p>Research questions: How effective is the Canteen Take Over Intervention in the pilot schools?</p> <p>How feasible is the implementation of the Canteen Take Over?</p>
<i>Norway</i>	<p>That providing a low-threshold and free activity organized by a PA group supported by a permanent staff in each school and a county coordinator will increase PA – especially among those who do not participate in organized sports.</p> <p>That such an activity can increase well-being and improve physical and mental health such that students do not drop out and learn better.</p> <p>That the long-term benefits will ensure a more physical active population and thereby reduce the prevalence of overweight/obesity and NCDs through young people having experienced self-efficacy and enjoyment by being physical active in an inclusive environment.</p>	<p>To evaluate the adoption and implementation of the policy with regards to reach, barriers and facilitators to implementation, cost and preliminary indications of effects on PA frequency per week and inequalities in this.</p>

<p><i>Poland</i></p>	<ol style="list-style-type: none"> 1. The prevalence of overweight and obesity may decrease based on healthier consumers choices 2. Consumers can change their choices based on the availability and accessibility of healthy products in stores 3. The availability and accessibility of healthy products in stores has a potential to raise consumers' knowledge and awareness regarding healthy diet importance 4. The opportunity to make healthier consumer choices may raise the motivation to eat healthy, thus contributing to health promotion and healthy lifestyles 5. The availability and accessibility of healthy products in stores can prompt companies to produce more healthier products 	<p>To evaluate the implementation of the pilot/trial based on HEALTHY SHELVES policy idea</p> <p><u>PROCESS EVALUATION:</u></p> <ul style="list-style-type: none"> • REACH What was the number of consumers who participate in the trial (were served/purchased food during the trial) and was this a representative sample for the local community? • ADOPTION How many retail outlets participated in the trial? <p>What was the proportion of the participating retail outlets to all this type of outlets in the city/region?</p> <ul style="list-style-type: none"> • IMPLEMENTATION What was the degree of implementation (and according to the plan)? Was the program delivered as intended? Which program activities were not completed and why? If activities changed, why and how did they change? <p>What were the barriers and challenges that affected program implementation?</p> <p>What was the cost of implementation?</p> <ul style="list-style-type: none"> • OTHER QUESTIONS: How did the community members (consumers) perceive the program? <p>How did the retail outlets staff members perceive the program?</p> <p><u>OUTCOME EVALUATION:</u></p> <p>Did the program increase knowledge or awareness the consumers?</p> <p>Did the program change attitudes or beliefs of the consumers?</p>
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		Did the program contribute to improvements in lifestyle changes among the target group (e.g., eating habits)?
<i>Portugal</i>	Empowering young people by providing knowledge and skills to increase the confidence, autonomy and awareness in terms of food choices (from the moment of purchase to the cooking method of food products), which will contribute to healthy and informed food choices since an early age that could be sustained later in life and, ultimately, prevent obesity.	<p>To evaluate the adoption and implementation of the pilot project in the school selected from the Municipality</p> <p>Evaluation question:</p> <ul style="list-style-type: none"> - What was the number of participating students in the pilot project? - What was the openness and willingness of the Municipality to adopt and accept to be on board with the pilot project? - Was the pilot project applied and delivered as planned? - Has the pilot project contributed to positive changes in the eating patterns and behaviors of the students (healthy food choices in terms of the purchase of food products and also of cooking methods)?
<i>UK</i>	<p>As per the logic model, the intended theory of change of providing free cookery classes to young people in the borough, was such that by learning technical cooking skills, as well as food budgeting and meal planning, ultimately, the young people would eat healthfully going forward. As such, the theory is that they would be more likely to maintain a healthy weight.</p> <p>Shorter-term outcomes expected are that there would be less out-of-home consumption of unhealthy food (such as take-aways), more cooking in the home and healthier and more sustainable eating habits.</p>	<p>To evaluate the implementation of and outcomes of the pilot - free cookery classes for young people in three RBG schools.</p> <p>Evaluation question:</p> <p>Were the free cookery classes successful in both their reach and achieving improvements in the participants' cookery and food budgeting skills?</p>

Reflections

Overall the process of applying the protocol and templates have been challenging. Firstly, due to the COVID-19 situation and the hypothetical nature of writing the plans which made it hard for the partners to ask for much effort and input by youth and other stakeholders. Secondly, due to not knowing what to ask for more support or training in until having been through the process once. None the less, the evaluation by the partners in the end were that the process was useful for thinking more carefully through what the policy idea entailed and what it would take to implement and evaluate it. However, they also had some thoughts on how to improve the protocol and templates, and were clear that it still remains to be tried out in a real life setting where a policy idea had been enacted.

Choice of policy ideas

The policy ideas were all chosen along the criteria that they were supported by youth and for most of them there were still YA-members eager to be involved. Furthermore, four out of five ideas had been discussed in dialog forums and attracted local support from the stakeholders involved in these. The ideas were mostly locally-based with a potential to be scaled up. These were all important criteria stressed in the protocol and/or discussed in the initial meetings with the partners. The Dutch team also pointed out that more participation from youth in school is a popular theme in the Netherlands at the moment and thus the focus of active involvement of youth in implementing their policy idea is timely.

There were four ideas related to food and nutrition, and one on PA. This mirrors the priority given to these two behaviors by the Youth Task Force in their declaration (CO-CREATE Youth Declaration, 2020), but it also means that less emphasis has been placed on thinking about how to implement PA related policy ideas. The nutrition ideas mainly related to the Youth Task Force idea about nutrition education and healthy food environment in schools, which is logical as the other two demands were on taxes and restrictions on marketing which requires national or even global implementation (CO-CREATE Youth Declaration, 2020).

Only one policy idea was aimed at food stores in the community, whereas the other four ideas were school-related. This shows the importance placed by youth on the school as a physical and social arena to reach all and thus the importance of understanding how to implement policies in the school system in particular, but it could also be that this is a result of how the alliances selected and developed their policy ideas. Furthermore, it also became clear that these ideas might be seen more as policy programs/actions within a local/community context as part of implementing a broader national policy on obesity prevention, as also acknowledged in the CDC model around the implementation of policy (CDC, 2012). This indicates that the scalability of the policy idea should be discussed both in the youth alliances in the process of developing the ideas and in the selection of the ideas to take forward to dialogue forums and for developing implementation and evaluation plans.

Finally, it became clear that the policy ideas coming from the youth were not formulated as policies and thus had to be further revised and specified which was done to various extents by the partners. Furthermore, there is a clear need to better understand the exact process of formulating and

presenting a policy in the adopting fora in each of the contexts which was not thoroughly enough explored in this exercise.

Core teams and engagement by youth /local stakeholders

The core teams consisted of the CO-CREATE partners in the respective institution/countries with mostly one person in charge of drafting the logic models and plans based on internal and external consultations. Thus, the scientific expertise was limited to what was available in these core teams as well as across the CO-CREATE partners. Across the partners, there was a wide range of expertise, whereas the internal teams were not usually able to cover all main topics – i.e. physical activity, dietary behaviours, implementation, evaluation and policy. It was recognized that it would have been good to have all this expertise in the core team as outlined in the protocol, but also found to be difficult to do due to the hypothetical nature of the task, the challenges of working during COVID and also due to applying the protocol and templates for the first time themselves.

The contributions of youth and other stakeholders were limited to single consultations for the same reasons as above, but found to be very useful and inspiring by those doing it. Especially in the Netherlands, it was found that the idea fitted very well within the existing policy plans for healthy schools. However, the technical language and unfamiliar format of the templates led the suggestion of using the TLM (Lien et al 2011) as a procedure instead of the templates in the protocol as previously mentioned, as it was found challenging to find the most efficient way to extract the relevant contextual information needed. Furthermore, it was acknowledged that repeated meetings, as outlined in the protocol, would have been good if the plans were to be developed all the way as the process was clearly iterative. The number of youths involved was low, but those involved where those being involved throughout the CO-CREATE process despite this lasting up to 2 years after the alliances finished.

Adoption and implementation plans

In the meetings with the CO-CREATE partners there were discussion about the settings and who are the adopters and the implementers. Although the school as an organization were often seen as the adopters, it was also recognized that the implementers and the youth (target group) needed to adopt the ideas in order for the policy idea to be successful. Furthermore, adopters could be at a higher level such as the local health council (UK), the county as a school owner (Norway), a chain of grocery stores (in Poland), or a national body (i.e the Netherlands Nutrition Center). Thus, it did become clear that separate logic models for adoption and implementation was needed and also that these might again need to be split by the targeted entity.

The separate logic model templates for implementation (and adoption) were good for thinking more in-depth about the adoption and implementation processes, but there is an overlap with the overall evaluation framework template of Leeman et al (2012). Furthermore, the factors (determinants) influencing the adopters and implementers are not really specified in the logic model templates, whereas the implementation plan template does ask about which factor the activities/implementation strategies are targeting. Including this would align the exercise more with published implementation frameworks (Nilsen et al, 2015) as well as intervention planning guidelines (Eldridge et al 2016). Finally, all suggested activities for implementation of the policy ideas, but only Poland listed the barriers and facilitators to implementation and used this to align it with

implementation strategies. Thus, it was acknowledged that none of the partners really applied the thinking around implementation strategies referenced in the protocol (Proctor et al 2013; Leeman et al 2017).

Furthermore, in Poland it was recognised in the process that the Healthy shelves policy idea might be broken down into multiple policy ideas or a package of several ideas that all need to be planned for stepwise. This would then require iterative revisions of the implementation plan based on experience and science. This is well aligned with the CDC policy analysis model where policies could lead to multiple interventions/programs and actions (CDC, 2012) and the recommendations of focus on the implementation in the recent update of the UK MRC Guidance on development and evaluation of complex intervention (Skivington et al, 2021),

Evaluation

All partners ended up with suggesting a local pilot study with the primary evaluation focus on implementation (i.e. reach, feasibility, acceptability, cost), but also including the short term outcomes from the policy logic model templates. Hardly any had concrete suggestions for measurement tools despite being prompted about this in the templates for the logic models in the protocol, but some had very clear indicators that they wanted to be able to measure. However, evaluating a policy also with regards to the strength of the language in the enacted policy (must versus should) was not specified in the protocol and thus not in the plans either. This underlines the need for knowledge of good practices for evaluating policies in a given context and asking relevant evaluation questions (Skivington et al, 2021). However, with regards to the latter, it was recognized that this lacked the true input of the adopters/implementers due to the hypothetical nature of developing these plans.

Similar to the templates for logic models of adoption and implementation, the logic model of the policy was missing the factors influencing the targeted behaviours - or it was implicit in the short and intermediary outcomes. Thus, for instance in the Norwegian case, a brainstorming session was made about what might be the barriers and facilitators of youth participating in an after-school PA-activity once a week, and this was used to propose certain attributes of the activity (i.e. inclusiveness, fun). The Dutch partner also recognized that there might be other factors than the food offered in the canteen which makes the youth eat unhealthy during lunch. Developing logic models with the most important determinants (Eldridge et al, 2016) or full system maps of all the determinants of the behaviours might thus be useful.

The alternative template of the TLM used to develop the logic model of the policy idea was found very useful by the partners using it with external stakeholders as well as among the CO-CREATE partners in Norway. In Norway, the questions were posed on slides in an online meeting, and answers were brainstormed on the slide which the lead partner filled into the templates and circulated to the participants after the meeting. Revisiting this input in the form of the logic model in the following meeting was found to be very useful. Others found that the time between meetings with various stakeholders made it difficult to stay on track and balance all the different inputs while also staying true to the original policy idea by the youth. Only the Polish partner filled everything into the Overall evaluation framework template from Leeman et al (2012) and found this to be the most useful together with the templates for the implementation and evaluation plans. Some partners

added the TLM questions to the templates for developing logic model of the policy, which ensured that the idea was still contextualised and the theory of change was spelled out as this was embedded in the original templates and not in the TLM.

Writing up the evaluation plans were found difficult by some partners who due to the hypothetical nature of the task, felt that they could not be too specific about what the intervention/program/policy action might contain in the setting and rather put development of the intervention as activities in the implementation plan.

Recommendations

In conclusion, the protocol and templates were found useful by the CO-CREATE partners for a first attempt of making policy implementation and evaluation plans, and the plans were thought to be good starting points if the policy ideas were to actually be enacted. However, the hypothetical nature and thus lack of true process of negotiating implementation and evaluation was recognized as barriers to this task. For this process to be done adequately would require an iterative process that would allow for the necessary buy in, but not stretch out too far in time to lose those committed to the idea.

For revisions of the protocol and templates, and training in their use, the following recommendations were made:

- Revisit the internal consistency between the templates, consider whether all are needed and consider incorporating the TLM in the templates to ensure the language is suitable for all kinds of stakeholders.
- Having one trained staff designated to drive the process while consulting with others as needed, might be the most efficient way of developing the plans, but the iterative aspect of this process should be honoured.
- Asking simple questions (ref TLM) rather than presenting the logic model in the first meeting might be better for involving stakeholders.
- System maps of factors influencing the behaviour of the target group and the barriers and facilitators of the adopters and implementers would be good to have a complete understanding of what is important
- Having examples of filled-in templates for a few policy ideas from the beginning would have been helpful and this could also be given at local, regional and national level
- Implementation and evaluation expertise is needed, but also skills to elicit and incorporate the views of relevant stakeholders in a balanced way.
- The templates are still very linear thus systems approaches to eliciting and depicting the logic models remain to be explored

References

- Centers for Disease Control and Prevention. *Overview of CDC's Policy Process*. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services; 2012.
- Chambers, T., Segal, A., Sassi, F. Interventions using behavioural insights to influence children's diet-related outcomes: A systematic review. *Obesity Reviews* (2021).
- CO-CREATE D7.4: A protocol for developing implementation and evaluation plans. April 2020. https://www.fhi.no/globalassets/dokumenterfiler/studier/co-create/7_co-create-deliverable-7.4-final.pdf
- CO-CREATE Youth Declaration: Time to Act and Ensure Good Health for All. November 2020. <https://www.fhi.no/contentassets/0a74196d35c64da89d337e25af982f5f/co-create-youth-declaration-on-ending-childhood-and-adolescent-obesity.pdf>
- Eldredge LKB, et al. *Planning Health Promotion Programs: An Intervention Mapping Approach* (4th ed). USA: Jossey-Bass, 2016.
- Emmert-Fees K, Capacci S, Sassi F, Mazzocchi M, M. L. & on behalf of the PEN Consortium. Estimating the impact of nutrition and physical activity policies with quasi-experimental methods and simulation modelling: An integrative review of methods, challenges, and synergies. *Eur J Public Health*. 2022. Forthcoming.
- Horodyska K, et al. Implementation conditions for diet and physical activity interventions and policies: an umbrella review. *BMC Public Health* 2015, 15.
- Huiberts, I., Singh, A., van Lenthe, F.J. *et al.* Evaluation proposal of a national community-based obesity prevention programme: a novel approach considering the complexity perspective. *Int J Behav Nutr Phys Act* 19, 31 (2022). <https://doi.org/10.1186/s12966-022-01271-7>
- Institute of Medicine 2012. *Accelerating progress in obesity prevention: Solving the weight of the nation*. Washington, DC: The National Academies Press.
- Institute of Medicine 2013. *Evaluating obesity prevention efforts: A plan for measuring progress*. Washington, DC: The National Academies Press.
- Leeman J, et al. An Evaluation Framework for Obesity Prevention Policy Interventions. *Prev Chronic Dis* 2012; 9: 110322.
- Leeman J, et al. Beyond “implementation strategies”: classifying the full range of strategies used in implementation science and practice. *Implementation Sci* 2017; 12: 125.
- Lien, A. D., Greenleaf, J. P., Lemke, M. K., Hakim, S. M., Swink, N. P., Wright, R., & Meissen, G. (2011). Tearless Logic Model. *Global Journal of Community Psychology Practice*, 2(2), 1-12. Retrieved 24 May 2022, from (<http://www.gjcopp.org/>)
- Lobczowska K, Banik A, Romaniuk P, Forberger S, Kubiak T, Meshkovska B, et al. Frameworks for implementation of policies promoting healthy nutrition and physically active lifestyle: systematic review. *Int J Behav Nutr Phys Act*. 2022a; 19:16.
- Lobczowska K, Banik A, Brukalo K, Forberger S, Kubiak T, Romaniuk P, et al. Meta-review of implementation determinants for policies promoting healthy diet and physically active lifestyle: application of the Consolidated Framework for Implementation Research. *Implement Sci*. 2022b; 17:2.

- Nilsen P. Making sense of implementation theories, models and frameworks. *Implementation Sci*, 2015; 10, 53.
- Pineda, E., Bascunan, J., Sassi, F. Improving the school food environment for the prevention of childhood obesity: What works and what doesn't. *Obesity Reviews* (2021).
- Podnar, H., Jurić, P., Karuc, J. *et al.* Comparative effectiveness of school-based interventions targeting physical activity, physical fitness or sedentary behaviour on obesity prevention in 6- to 12-year-old children: A systematic review and meta-analysis. *Obesity Reviews* (2021).
- Proctor EK, et al. Implementation strategies: recommendations for specifying and reporting. *Implementation Sci* 2013; 8: 139.
- Roberto CA et al. Patchy progress on obesity prevention: emerging examples, entrenched barriers, and new thinking. *Lancet* 2015; 385: 2400-2409.
- Skivington K, Matthews L, Simpson S A, Craig P, Baird J, Blazeby J M et al. A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance *BMJ* 2021; 374 :n2061 doi:10.1136/bmj.n2061
- Woods CB, Volf K, Kelly L, Casey B, Gelius P, Messing S, et al. The evidence for the impact of policy on physical activity outcomes within the school setting: A systematic review. *Journal of Sport and Health Science*. 2021;10(3):263-76. [Link](#).
- World Health Organization. *WHO global strategy on diet, physical activity and health: a framework to monitor and evaluate implementation*. 2008.
- World Health Organization. *WHO evaluation practice handbook*. 2013.

Appendix

1. CO-CREATE D7.6 The Netherlands
2. CO-CREATE D7.6 Norway
3. CO-CREATE D7.6 Poland
4. CO-CREATE D7.6 Portugal
5. CO-CREATE D7.6 UK



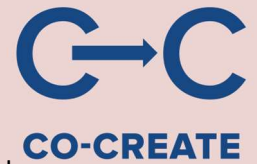
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Back

Implementation and evaluation plan from Netherlands /D7.6

University of Amsterdam
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Executive Summary

This document contains an implementation and evaluation plan for the ‘Canteen Take-over’, an intervention devised by a small group of secondary school pupils during the CO-CREATE project. The idea combines pupil participation with a previously existing policy programme (the Healthy Canteen). During the ‘Canteen Take-over’, the pupils take over the canteen. They come up with their own recipes, which are in keeping with the Healthy Canteen guidelines, and sell the meals to their fellow students. The adolescents in question and several policy officers from relevant organisations have assisted in the creation of this implementation and evaluation plan. Three separate consultations were held for this purpose. The plan consists of three steps: pilots at a number of schools, an evaluation of those pilots and the further implementation by means of RIVM’s implementation database. The further elaboration of these steps can be found in the various appendices to this report.

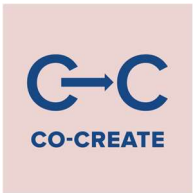


Table of contents

Executive Summary	3
List of acronyms / abbreviations	5
Introduction.....	6
Background.....	7
Procedure	8
Results	9
Reflection	12
Conclusion	13
References.....	14
Appendices	16

List of acronyms / abbreviations

CEIDSS – Centre for Studies and Research in Social Dynamics and Health

EAT – non-profit foundation for food system transformation

EBRB – Energy Balance Related Behaviour meaning dietary, physical activity and sedentary behaviour.

PAR – Participatory Action Research

NOURISHING – framework developed by the World Cancer Research Fund International

WP – Work package

YPAR – Youth Participatory Action Research

Introduction

The CO-CREATE-project is a five-year EU-funded research project aimed at preventing childhood obesity through taking a systems approach to understanding and solving the problem and engaging adolescents in policy development (1). The project was conducted in the Netherlands, Norway, Poland, Portugal and the UK.

The engagement of adolescents (16 to 18-year-olds) was based on Youth-led Participatory Action Research (YPAR) and to be organized as Youth alliances (3 per country of 15-20 youth in each). The youth alliances were engaged in activities (such as system mapping, data collection methods, advocacy training) and provided with tools (such as Photovoice, the policy forms) and resources (such as funding) to systematically develop their policy ideas (2). The policy ideas were discussed with relevant stakeholders in online or face-to-face Dialogue forums (3). As part of the research process, data on the running and outcomes of the alliances and dialogue forums were collected through online questionnaires, field notes and structured reports.

CO-CREATE is an example of *Participatory Action Research* (PAR), in which the target group is an active partner in conducting the research. CO-CREATE is a long-term interdisciplinary research project that includes various work packages. The 'alliances' with adolescents fall under the fifth work package (WP5). The ideas that have been developed in this package offer input for the implementation and evaluation plans of the seventh work package (WP7), which has yielded this report. This implementation and evaluation plan has been drawn up based on (1) a logic model of the policy idea, (2) a logic model for implementers and adopters, (3) an implementation plan and (4) an evaluation plan.

From 2019 to July 2020, 38 adolescents took part in this project in the Netherlands. They worked on these policy ideas in three different alliances from two cities. The adolescents in these groups formulated a total of 14 policy ideas. One of these policy ideas is the 'Canteen Take-over'. To ensure that the policy ideas can be adopted, this document focuses on a policy implementation and evaluation plan (WP7.3). The content of this document is therefore hypothetical in nature. After all, the policy cannot be adopted in a local project within the timeframe of an EU project. That being said, it is still a useful exercise to consult local policymakers to gauge their interest in this plan. And if they are interested, it is useful to explore ways to put the plan into practice. The report from those consultations is included here.

In addition to the appendices intended for WP7 (Appendices 1 through 5), the original policy plan drafted by the adolescents can be found in Appendix 6.

Background

The policy idea is the 'Canteen Take-over', which was devised by six adolescents from a Dutch pre-vocational secondary school. The idea is that adolescents will invent recipes for hot meals and prepare them in the school canteen. The adolescents in this group expressed disappointment that the canteen sells nothing but cheese toasties, despite having earned the Healthy Canteen¹ quality mark from the Netherlands Nutrition Centre. Not only do the adolescents find the food on offer to be unhealthy, they also feel it is unappetizing. This gave the adolescents the idea of 'taking over' the school canteen. They would then come up with their own recipes and prepare warm food with vegetables in the canteen. These recipes would be evaluated to make sure they meet the Healthy Canteen guidelines. The adolescents would then sell the dishes they made themselves to their fellow pupils at an affordable price. The next step would be to compile the popular recipes into a cookbook so that young people at other schools can prepare the dishes at their schools as well. By using this cookbook, they will be able to offer varied meals every day.

The Healthy Canteen programme proved successful in promoting a positive living environment in Dutch schools (Mensink et. al., 2012). The Canteen Take-over could be a valuable addition to the Healthy Canteen programme. This would increase the chances of implementation. That being said, scientific evidence to support the effectiveness of pupil participation in the school canteen is not available at this time. This document and the implementation and evaluation plan contained in it offer opportunities for further research.

The adolescents in this group felt that the '*System Maps*' and '*Photovoice*' activities were not enjoyable and not useful. After a number of sessions, they suggested cooking in the school canteen. To their minds, the current range of foods on offer is neither tasty nor healthy. Whereas in their first year of secondary school, they were able to purchase appetizing, well-seasoned and mostly-healthy meals at a low price, their options were now limited to cheese toasties (which were also more expensive than before). As a result, pupils were choosing to purchase their lunches somewhere else, such as in the shopping centre, which made them more likely to make unhealthy choices. The adolescents in this group come from diverse cultural backgrounds and wanted to see this reflected in the foods offered in the canteen.

We in Team Amsterdam (UvA) chose this idea for a variety of reasons. First of all, the idea expresses the view that the canteen is an importance place in the young people's living environment. Secondly, it has a strong emphasis on action, as the adolescents are actively involved in the kitchen, and therefore has an activating effect. And lastly, a number of important stakeholders indicated interest in this idea during the Dialogue Forum (WP6). This is particularly true because a growing number of government and educational institutions are eager to invest in pupil participation.

The pupils devised recipes that could be prepared on a rotating basis and consulted with the teachers who are responsible for the canteen. The recipes they had invented were adjusted to meet the Healthy Canteen guidelines. Via CO-CREATE, the pupils were provided with a budget to purchase

¹ <https://gezondeschoolkantine.voedingscentrum.nl>

ingredients. Next, they cooked in the canteen three times and sold the following dishes: 1. *Spicy chicken wraps and veggie pizzas*; 2. *Shrimp tacos*; 3. *Tuna wraps and chicken pita pockets*.

At a certain point, the canteen was closed due to COVID-19, which brought the project to a halt. The adolescents did indicate that their fellow pupils considered the canteen to be a big success. They briefly attempted to continue the project online, but discontinued it after a few such attempts. A possible explanation for this is the fact that, during the pandemic, many young people were having to spend so much time sitting at their computers that they were fully saturated. In creating this deliverable, we (Team UvA) were able to speak with several pupils from the group. However, a relatively long period of time passed between the project and those interviews. In fact, by the time we spoke to them, the pupils had already completed their education at the secondary school where they came up with the intervention.

Procedure

The implementation and evaluation plan from WP7 adheres to the logic of CDC's programme evaluation. This is made up of five components: problem identification, policy analysis, strategy and policy development, policy adoption and policy implementation. WP7 focuses on the evaluation and implementation of these aspects. The procedure was conducted based on the D7.4 protocol. This protocol consists of multiple steps (selecting policy ideas, choosing a 'core team', developing the logic models, writing the implementation plan, writing the evaluation plan and compiling these into a document).

Team UvA chose the Canteen Take-over. At that point, we approached various people in the field to see if they were willing to help us think about how to draft an implementation and evaluation plan. These stakeholders work for relevant institutions that concentrate on health-related and local policy. We also chose to invite the adolescents from the alliance to this meeting, since it was their idea after all and empowerment is one of CO-CREATE's key objectives.

The following step was to identify potential partners to help us devise this plan. We decided to do so with the adolescents who came up with the idea and relevant policymakers. The first session was organised on that basis. The session was attended by four of the adolescents who envisioned the policy intervention and a facilitator from the alliance. Unfortunately, the two employees from the local organisation who had been invited had to cancel at the last minute. This called for a bit of improvisation on our part. Rather than filling in the logic models together, which was originally the plan, we decided to ask questions derived from those logic models. This would then provide us with a basis for completing the logic model. The adolescents were given a €20 gift card for bol.com in exchange for participating in the session.

Based on these interviews, a rough draft of the logic model was set out. A second appointment was scheduled with the representatives from the Municipal Health Service. The draft of the logic model

was presented during that meeting. The main gist of the feedback was that the difficulties in this plan should be more clearly formulated as problems. We needed to more effectively identify potential obstacles. The researcher also shared tips from other organisations that are working on similar plans.

Next, a phone interview with a policy officer from the Netherlands Nutrition Centre was held in March 2022. Most of the questions we asked in that interview were chosen because they might help to create an implementation plan. This interview provided sufficient insight into the policy context of the Healthy Canteen programme. During this interview, the employee indicated that the Netherlands Nutrition Centre is interested both in pupil participation in general and in this project as a specific example. The implementation plan was drawn up based on this interview.

Throughout the process, monthly virtual meetings were held with the deliverable leader Nanna Lien (University of Oslo) and the other country partners. Excluding the design of this deliverable, Nanna Lien monitored the process during this period and provided tips and inspiration by sharing examples of how colleagues in other countries dealt with potential problems that could arise.

Results

Logic model(s)

The appendix contains a description of the policy idea based on three different *logic models*. The purpose of a logic model is to facilitate a systemic approach to policy. First of all, this kind of model identifies the context and need of the target group. In this case, the adolescents indicated that they had no access to tasty and affordable meals; that the food did not reflect their own preferences; and that, while there were assigned chores, there was no real pupil participation in the canteen. The logic model also sets out what is needed to develop and adopt policy (*inputs*), including (1) cooperation with schools, (2) participating schools and (3) food purchasing. Secondly, the actions (steps) that must be undertaken in order to put the policy into practice are described under *activities*. The results of these steps are in turn described under *outputs*.

These lead to three different outcomes, i.e., the changes in the environment in the short, medium and long terms. These are described under (1) *short-term outcomes*, including the changes in awareness (adolescents who participate in the canteen teach each other to prepare dishes, etc.); *medium-term outcomes*: the changes in behaviour (changes in the adolescents' obesogenic environment, etc.); and finally, the intended changes in the long term: *impacts* (healthy lifestyle, etc.).

Nevertheless, it is important to mention that this plan rests on various assumptions (or a theory of change). (1) Pupils do not have access to tasty, varied and healthy food options. (2) Giving them the keys to the canteen, as it were, lets them take charge of making their own varied and appetizing meals. (3) Other adolescents either eat an unhealthy lunch in the existing canteen or buy their lunch elsewhere, which means they tend to pick unhealthy options. (4) By allowing pupils to take over the canteen and cook hot, tasty dishes there, it is possible to ensure that there are enough healthy options and that the canteen is a welcoming place where pupils enjoy eating lunch.

Lastly, the model also stipulates relevant external influences/factors. These factors can impede the implementation of the policy idea. During a consultation meeting, one stakeholder said that it is paramount to emphasise this in a logic model. An example of this is that some schools have outsourced their canteen to other service providers, or that their purchasing is conducted through (sometimes long-term) contracts. Another external influence that may make the idea more difficult to realise is the adolescents' motivation to take part in this initiative.

In addition to the generic logic model, there are also two separate logic models for *implementers* (policymakers) and for *adopters* (the schools themselves). These are largely based on the interviews with the pupils and the previous documents they drafted, which can be found in Appendix 6.

Implementation and adoption plan

For the implementation plan, we contacted a stakeholder from the Netherlands Nutrition Centre. They indicated that most of the challenges in this project lay in figuring out how to make the programme viable in the long term and how to integrate it into existing structures. From this perspective, it is wise to link this to the Healthy School programme, seeing as this is also a long-term plan with a large group of participating schools and a permanent budget from VWS.

The mission of the Healthy School – a multi-year plan that provides advice to schools – is to promote a healthy lifestyle among children and young people ages 0 to 24. It is a partnership between the Netherlands Nutrition Centre, the Education Councils, the Municipal Health Service (GGD) and the National Institute for Public Health and the Environment (RIVM). The nationwide Healthy School programme is funded by the Ministries of VWS, OCW, SZW and LNV. The programme plan for 2017-2021 was used by 17% of schools, and has now been extended in the 'Healthy School 2021-2024' project. A central aim of the project is the structural embedding of programmes among both staff and pupils. The plan also strives for a *whole school approach* which is quite similar to the *systems approach* applied in the CO-CREATE project.

Recently, the Healthy School project began focusing on youth participation as well; it now offers online workshops on that theme. The project staff often share real-world examples during these workshops. The policy officer stated that Canteen Take-over could be considered for integration into this workshop, so that it could serve as an example for other schools. However, they are unable to provide support and guidance. There is also a possibility of appearing on the Healthy School website (gezondeschool.nl), under the heading 'Inspiration and real-world examples'.

It is additionally important to see which lessons we could potentially learn from the adolescents' idea for an action. The success of the Canteen Take-over, for instance, is due in part to the fact that they received such effective guidance and support from the co-facilitators at CO-CREATE. It came to light that the teachers who work with the canteen struggled with the idea of a take-over by pupils. During our interview, the adolescents said they did not really feel like the teachers trusted them at first. Thanks to the efforts of the CO-CREATE staff, however, they were eventually given the 'keys to the canteen'. From that perspective, therefore, guidance will be needed to provide sufficient support to

the adolescents so that they can exert an influence in the canteen. This guidance will take the form of an 'internal implementation team' at every school.

There are two different ways to obtain these resources: locally and regionally.

Option 1: Nationwide 'Healthy School': an incentive scheme from the Ministry, managed by RIVM

Option 2: Regional 'Healthy School adviser'. This adviser distributes incentives from the scheme as a 'Healthy School Agent'. In such cases, there is usually a policy officer who focuses on awarding the grants. The Healthy School adviser provides schools with recommendations, support and guidance to make their efforts to promote a healthy lifestyle as effective as possible.

With that in mind, we propose an implementation plan made up of three phases. In phase one, a pilot will be conducted at a number of schools. Budgetary resources for this can be allocated locally via the Healthy School Agent. This budget could potentially be used for staff support in order to, on the one hand, cultivate support among teachers, and on the other hand, to support the pupils who are carrying out the project. A portion of the budget could also be used to 'subsidise' the meals so that they can be offered at a lower price. This will make it easier for pupils to buy the lunches.

In phase two, an evaluation of these pilots will be conducted. A description of this evaluation has been included in Appendix 5 and in the section marked *Evaluation plan*. The evaluation offers an opportunity to explore the extent to which use is being made of the Canteen Take-over, how effective it is and whether the policy intervention is creating enough positive change in the pupils' living environment.

The third and final phase will be aimed at getting the Canteen Take-over included in the RIVM's intervention database. This database contains evidence-based policy interventions and is a cornerstone of the Healthy School programme. As a result, there is an opportunity to implement the plan more widely, so that it can eventually become a nationwide programme. To make this possible, it will first be necessary to assess the effectiveness of the plan.

Evaluation plan

The evaluation plan can be found in Appendix 5. The purpose of the evaluation plan is to assess the effectiveness of the plan, along with the potential secondary effect of having the Canteen Take-over added to the RIVM intervention database. This will make it possible to scale up the pilot if it proves successful. For this reason, we decided to focus the evaluation on the following research question: 'How effective is the Canteen Take-over in promoting a healthy living environment?'

The research method will be *mixed methods*. Firstly, we chose this because this option is appealing on its own merits: a properly set up mixed methods study enables you to sufficiently evaluate both the quantitative and qualitative aspects of policy. Secondly, there was a pragmatic consideration as well. In the context of a canteen, it is easy to measure the number of users (consumers) of the Canteen

Take-over products. This can then be compared to the number of sales before the plan. In terms of the ethical use of data, this is what is known as aggregate data, which cannot be traced back to individual pupils. This means that, from an ethical perspective, it is all right to use this data for the policy evaluation.

The qualitative portion of the evaluation was aimed at the extent to which the pupils themselves felt that the programme was valuable. To that end, we must define two different groups.

- (1) *The pupils who prepare hot food in the canteen (participating adolescents).*
- (2) *The pupils who eat the food served in the canteen (consumers).*

In doing so, the key concern with the former group is determining whether they received sufficient support from the staff at the school. This means the extent to which it was advantageous for them to accept this task. For the latter group, on the other hand, the key concern is the extent to which they want to use the canteen and what their motivations might be for doing so (or not).

Reflection

One notable aspect in the CO-CREATE project was that in other countries in the project, unlike the Netherlands, hot meals are traditionally served for lunch. This plan, developed by adolescents, combines this with pupil participation. The resulting plan is appealing to schools where there are already assigned chores in the canteen, but where pupils have no input in what foods are actually served. Yet at the same time, it is important that the component of *pupil participation* be preserved when the project is being carried out. This requires a great deal of support and help from involved teachers and other school employees. Something else worth noting is the risk that although the plan is based on a systemic perspective, there are other factors that might contribute to having unhealthy foods in the canteen, such as the role of the caterers and their (sometimes long-term) contracts.

This document is part of the CO-CREATE research design. Because YPAR is a relatively new form of research, it is also important to critically reflect on this aspect of the project. As we previously mentioned, the goal of this paper is to convert the policy ideas from WP5 into a plan for implementation and evaluation. On one hand, this has proved to be a useful exercise. First of all, we have been able to speak with multiple local stakeholders who were able to shed some light on the current policy context. It is remarkable in this regard that the set-up of the current implementation and evaluation plan closely mirrors the logic of local policy plans (Healthy School 2021-2024). On the other hand, the hypothetical nature of this part of the project gave rise to some confusion. As a result, some policymakers found it too difficult to find the time to work with us. This is a shame, as there was definitely interest in the project. Because of this, it became more complicated to complete step 2 of the protocol (assembling an advisory team).

Conclusion

The purpose of this report is to facilitate the design of an implementation and evaluation plan for the 'Canteen Take-over'. The Take-over is a plan devised by secondary school pupils during the CO-CREATE project. A year after finishing the project, a number of the adolescents involved in the project were still willing to speak with us about their experiences. This plan was developed based on those interviews and several additional sources. During that process, we also received advice from relevant local stakeholders. The plan consists of several steps which have been adjusted to fit the local policy context. Several local and nationwide policy plans are important in this regard, including the 'Healthy School 2021-2024' programme.

The resulting implementation plan consists of three phases: (1) pilot phase, (2) evaluation phase and the (3) scale-up phase. These plan phases can be found in the following five appendices. As a supplement, the original policy idea has been included in Appendix 6.

In conclusion, on behalf of CO-CREATE, we want to express our sincere thanks to everyone who was involved in the creation of this document, particularly the adolescents who were part of the Canteen Take-over for their valuable input and enthusiasm.

References

Klepp K-I, Helleve A, Brinsden H, Brøer C, Budin-Ljønsne I, Harbron J, Knai C, Lien N, Luszczynska A, Nesrallah S, Oldridge-Turner K, Rito A, Samdal O, Savona N, Stensdal MK, Allender S, Hoelscher DM, Rutter H. *Overweight and obesity prevention for and with adolescents: The "Confronting obesity - Co-creating policy with youth"*. *Obesity Reviews* – forthcoming.

CO-CREATE D5.1b: Protocol for youth engagement. April 2019.

https://www.fhi.no/contentassets/0a74196d35c64da89d337e25af982f5f/co-create-deliverables-5.1_engagement-protocol.pdf

CO-CREATE Dialogue forum tool. <https://eatforum.org/initiatives/co-create/>

CO-CREATE D7.4: A protocol for developing implementation and evaluation plans. April 2020.

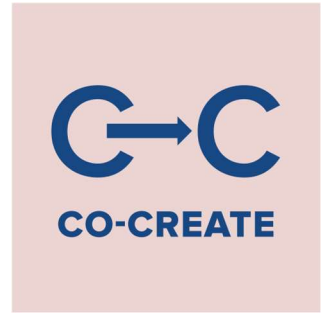
https://www.fhi.no/globalassets/dokumenterfiler/studier/co-create/7_co-create-deliverable-7.4-final.pdf

CO-CREATE D7.5: A workshop for CO-CREATE co-workers on how to apply the implementation and evaluation protocol. April 2020. https://www.fhi.no/globalassets/dokumenterfiler/studier/co-create/7_co-create-deliverable-7.5-final.pdf

Healthy School. (2020, 20 September). *Healthy School Programme plan 2021-2024*. Consulted on 15 September 2022, at <https://www.gezondeschool.nl/documenten/programmaplan-gezonde-school-2021-2024>.

Mensink, F., Schwinghammer, S. A., & Smeets, A. (2012). The Healthy School Canteen programme: a promising intervention to make the school food environment healthier. *Journal of environmental and public health*, 2012.

RT Center. (2022). *TRT Center*. Consulted on 15 September 2022, at <https://centertrt.org>





Appendices

Appendix 1 Logic model for the Policy idea

Appendix 2 Logic model for Adopters

Appendix 3 Logic model for Implementers

Appendix 4 Implementation plan

Appendix 5 Evaluation plans

Appendix 6 Policy idea: ‘Adolescents invent recipes for hot food and cook in the school canteen’



Appendix 1 Logic model worksheet for the Policy idea (based on Appendix H of the CDC Evaluating Violence and Injury Prevention Policies Briefs, <https://www.cdc.gov/injury/pdfs/policy/Appendices-a.pdf>)

<p>Context/need: Adolescents: Tasty, inexpensive and healthy meal options for lunch.</p> <p>Adolescents: Food that reflects their own preferences.</p> <p>Adolescents: Genuine participation in the canteen (ownership).</p>	<p>Assumptions/Theory of Change (logic model)</p> <ol style="list-style-type: none"> 1. Pupils do not have access to tasty, varied and healthy food options. 2. Giving them the keys to the canteen, as it were, lets them take charge of making their own varied and appetizing meals. 3. Other adolescents either eat an unhealthy lunch in the existing canteen or buy their lunch elsewhere, which means they tend to pick unhealthy options. 4. By allowing pupils to take over part of the canteen and cook hot, tasty dishes there, it is possible to ensure that there are enough healthy options and that the canteen is a welcoming place where pupils enjoy eating lunch. 			<p>External influences (Other contextual factors which could influence these outcomes - systems model. Any potential unintended consequences?)</p> <ol style="list-style-type: none"> 1. Schools’ willingness to participate. 2. Adolescents’ willingness to participate. 3. Some schools have signed a contract with an external caterer. This could make the idea more difficult to adopt. 4. Competition from outside the school (shopping centre, etc.) 		
	<p>Inputs</p> <p>(1) Cooperation with schools who want to participate (2) A canteen kitchen that includes the necessary equipment for cooking (3) Pupils who want to take over the canteen (4) Cooperation with GGD/Netherlands Nutrition Centre ‘Healthy Canteen’ quality mark</p>	<p>Activities</p> <p>(1) Before ‘taking over’ the canteen, the adolescents had to invent meals to cook. (2) They also had to supply a list of the ingredients to be bought.</p>	<p>Outputs</p> <p>(1) Healthy food is available in the canteen (2) The pupils were involved in the canteen (3) Adolescent s gain experience</p>	<p>Short-term outcomes</p> <p>1) Adolescents who participate in the canteen teach each other to prepare recipes. 2) The canteen as a welcoming, pleasant place and a good alternative to supermarkets/fast food chains</p>	<p>Intermediate outcomes</p> <p>(1) Positive change in the adolescents’ obesogenic environment</p>	<p>Impacts</p> <p>(1) Healthy lifestyle</p>



	(5) <i>Experiential</i> feedback from pupils (which foods were tasty/what works well/cooking-related experiences) (6) Purchasing (grocery store versus wholesaler)	This was possible via the school's purchasing department, but the adolescents also did their own shopping in the supermarket. (3) The lunches had to be prepared. (4) Someone also needed to sell the lunches. (5) When different schools take part, they can exchange recipes and compile these into a cookbook.	with preparing fresh foods (4) Recipes that are shared among the schools (5) Pupil participation in the canteen (6) Healthy, flavourful, diverse and affordable food available in the canteen (7) 'Real' ownership, rather than just assigned chores	3) Adolescents have access to a healthy canteen		
	Indicators	Indicators	Indicators	Indicators	Indicators	Indicators
	(1) An agreement between schools and policy implementation aimed at putting the idea into practice	(1) Number of pupils who participate (as opposed to just sign up) (n)	(1) Number of recipes in the cookbook (2) Evaluation research	(1) Qualitative evaluation of the canteen	N/A	N/A



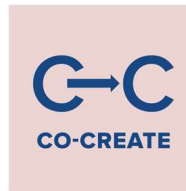
	<p>(2) Grants (?) (who is going to pay for this?)</p> <p>(3) The number of pupils who sign up (n)</p> <p>(4) The number of participating schools (n)</p>	<p>(2) Number of lunches sold (comparison to previous figure?) (n)</p>	<p>into the quantitative participation of pupils.</p>			
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Appendix 2 Logic model worksheet for Adopters

Fill in one worksheet per type of adopter (funding, administration)

<p>Setting: Policy setting</p> <p>Context/need: Plans to make schools a healthier living environment.</p> <p>Adopter: - Nationwide 'Healthy School' programme; healthy school intermediary. - VWS, OCW, SZW & LNV - Municipal Health Services (GGDs) in the region</p>	<p>Assumptions/Theory of Change (logic model) <i>(Barriers and facilitators of adoption in the inner and outer context)</i></p> <p><i>Facilitators:</i></p> <ul style="list-style-type: none"> - Structural embedding of the plan within an existing policy programme (Healthy School) that has a wide reach. - Support from local governments (Regional Municipal Health Services/Healthy School Agent). - Enthusiasm among schools <p><i>Barriers:</i></p> <ul style="list-style-type: none"> - Management? - Money - Schools 			<p>External influences <i>(Other contextual factors which could influence these outcomes - systems model. Any potential unintended consequences?)</i></p> <ul style="list-style-type: none"> - Schools' willingness to participate - Other expectations held by schools - Budget constraints 			
	<p>Inputs</p> <ul style="list-style-type: none"> - Cooperation with schools who want to participate. - Cooperation with GGD/Netherlands Nutrition Centre 'Healthy Canteen' quality mark 	<p>Activities</p> <ul style="list-style-type: none"> - Preparing for the programme by offering a 'manual' - Cultivating enthusiasm at schools that have a need for/interest in the programme - Supporting interested school 	<p>Outputs</p> <ul style="list-style-type: none"> - A policy intervention based on pupil participation, included in the intervention database 	<p>Short-term outcomes</p> <ul style="list-style-type: none"> - Number of schools that implement this policy intervention 	<p>Intermediate outcomes</p> <ul style="list-style-type: none"> - Contributing to the key goal of Healthy School programme: to promote a healthier living environment and actively 	<p>Impacts</p> <ul style="list-style-type: none"> - Secondary and other schools become a healthier living environment 	



		with funding/preparation for the programme			involve pupils in those efforts	
	Indicators	Indicators	Indicators	Indicators	Indicators	Indicators
	- How many schools indicate interest (n)	- Evaluation based on interviews with various Healthy School Agents	- How many schools are implementing this intervention?	N/A	N/A	N/A



Appendix 3 Logic model worksheet for Implementers

Fill in one worksheet per type of implementer (who will be carrying it out)

<p>Setting: Schools</p> <p>Context/need: A healthy school canteen</p> <p>Implementer: - Secondary school - Party responsible for canteen (teacher/concierge)</p>	<p>Assumptions/Theory of Change (logic model) (Barriers and facilitators of implementation at the personal and inner context)</p>		<p>External influences (Other contextual factors which could influence these outcomes systems model. Any potential unintended consequences?)</p> <ol style="list-style-type: none"> 1. Schools' willingness to participate. 2. Adolescents' willingness to participate. 3. Some schools have signed a contract with an external caterer. This could make the idea more difficult to adopt. 4. Budget constraints (schools) 5. Work, school and other activities that pupils may feel are more important. 			
	Inputs	Activities	Outputs	Short-term outcomes	Intermediate outcomes	Impact
	<ul style="list-style-type: none"> - A canteen kitchen that includes the necessary equipment for cooking - Pupils who want to take over the canteen - Cooperation with GGD/Netherlands Nutrition Centre 'Healthy Canteen' quality mark - <i>Experiential</i> feedback from pupils (which 	<ul style="list-style-type: none"> - Before 'taking over' the canteen, the adolescents had to invent meals to cook. - They also had to supply a list of the ingredients to be bought. This was possible via the school's purchasing department, but 	<ul style="list-style-type: none"> - A healthy canteen offering a variety of meals that are aligned to the pupils' preferences and have been invented and prepared by pupils 	<ul style="list-style-type: none"> - Pupil participation in the canteen - Healthy, flavourful, diverse and affordable food available in the canteen - 'Real' ownership, rather than just assigned chores 	<ul style="list-style-type: none"> - The canteen as a welcoming, pleasant place and a good alternative to supermarkets/fast food chains 	<ul style="list-style-type: none"> - The policy will become a permanent part of many schools.



	<p>foods were tasty/what works well/cooking-related experiences) - Purchasing (grocery store versus wholesaler)</p>	<p>the adolescents also did their own shopping in the supermarket. - The lunches had to be prepared. - Someone also needed to sell the lunches. When different schools take part, they can exchange recipes and compile these into a cookbook.</p>				
	Indicators	Indicators	Indicators	Indicators	Indicators	Indicators
	<p>The number of pupils who sign up (n)</p>	<p>Number of pupils who participate (as opposed to just sign up) (n) Number of lunches sold (comparison to previous figure?) (n)</p>	<p>Number of recipes in the cookbook.</p>	<p>Evaluation research into the quantitative participation of pupils.</p>	<p>Qualitative evaluation of the canteen.</p>	<p>N/A</p>

Grant Agreement number 774210 – CO-CREATE



Appendix 4 Implementation plan



IMPLEMENTATION PLAN			
IMPLEMENTATION PLAN <i>Canteen take-over</i>			
<p>Adoption support system members and responsibilities:</p> <ul style="list-style-type: none"> - VWS, OCW, SZW & LNV: financial support - National Healthy School - Regional Healthy School adviser <p>Implementation:</p> <ul style="list-style-type: none"> - Secondary schools <p>Purpose:</p> <ul style="list-style-type: none"> - To offer the Canteen Take-over as a policy intervention for schools who want to create a healthier living environment within the school <p>Setting:</p> <p>Two different settings.</p> <ul style="list-style-type: none"> - Adoption setting: (policy setting): Institutional field of policy officers - Implementation setting: (practical setting): secondary-school canteens <p>Adopters and implementers:</p> <p><i>Implementers: Policy officers at the national/regional/local level</i></p> <p><i>Adopters: Secondary schools</i></p>			
IMPLEMENTATION PLAN			
Activities/Implementation strategies	Targeting which factors?	Who is doing this?	When and where?
Activity 1			
Finding pupils who would be willing to take part in this project.	Finding participating adolescents.	Involving teachers/concierges who	Time: N/A

		want to make their school a healthy environment	Location: The school in question
Activity 2			
Assigning tasks: who thinks up which recipe, who is responsible for grocery shopping, who will prepare the recipe?	Any preparatory work before the actual activity can begin	The adolescents themselves, possibly with supervision from the Healthy School programme	Time: N/A Location: The school in question
Activity 3			
Purchasing ingredients for the dishes to be prepared.	Resources needed so that the Take-over can actually happen	Adolescents can do the shopping or it can be done externally via a wholesaler. In the latter case, there will	Time: N/A Location: The school in question
Activity 4			
Preparing (cooking) the recipes in the canteen.	Preparing the meals.	The adolescents; own division of tasks.	Time: N/A Location: The school in question
Activity 5			
Selling the prepared recipes to fellow pupils.	Distributing healthy food. By doing so, earning money that can be used to prepare meals during the next Canteen Take-over.	The adolescents; own division of tasks.	Time: N/A Location: The school in question
Activity 6			
Evaluating with teachers, planning cooking for the next time. Start over with step 1, as in a cycle	Making sure the process goes smoothly.	Supervisors (teachers) and adolescents together	Time: N/A Location: The school in question

ADOPTION PLAN			
Activities/Implementation strategies	Targeting which factors?	Who is doing this?	When and where?
Activity 1 – Pilot			
Conducting a pilot at a number of schools. Budgetary resources for this can be allocated locally via the Healthy School Agent. This budget could potentially be used for staff support in order to, on the one hand, cultivate support among teachers, and on the other hand, to support the pupils who are carrying out the project. A portion of the budget could also be used to 'subsidise' the meals so that they can be offered at a lower price, making them more attractive for pupils to buy.	<ul style="list-style-type: none"> - Interest from secondary schools (adopters) - Interest from local policymakers (e.g., Healthy School Agents) - Support from the Netherlands Nutritional Centre's Healthy School programme 	<ul style="list-style-type: none"> - Local policymaker (Healthy School Agent, etc.). 	Month 1/2/3/4
Activity 2 – Implementing the pilot			
The second step of the programme will then consist of actually conducting the pilot, or in other words, the implementation.			Month 1/2/3/4
Activity 3 – Evaluation			
In phase two, an evaluation of these pilots will be conducted. This is described in Appendix 5. The evaluation offers an opportunity to	Sufficiently convince gatekeepers as to the effectiveness of the plan.	Municipal Health Service (GGD) researchers	Month 3/4/5/6



<p>explore the extent to which use is being made of the Canteen Take-over, how effective it is and whether the policy intervention is creating enough positive change in the pupils' living environment.</p>			
<p>Activity 4 – Canteen-Take-Over in the intervention database</p>			
<p>The third and final phase will be aimed at getting the Canteen Take-over included in the RIVM's intervention database. This database contains evidence-based policy interventions and is a cornerstone of the Healthy School programme.</p>	<p>- Other schools who can adopt the programme (through widespread support for the programme, it may be possible to make it a nationwide initiative)</p>	<p>Nationwide Healthy School</p>	<p>Month 3/4/5/6</p>

Grant Agreement number 774210 – CO-CREATE



Appendix 5 Template for writing evaluation plans (based on the Center TRT’s evaluation plan examples <http://centertrt.org/>)



EVALUATION PLAN		
Name of policy		
<p>Evaluation team members and responsibility: Local GGD teams, assuming these are familiar with policy evaluation? If not, they could receive support from researchers affiliated with the nationwide Healthy Canteen.</p> <p>Purpose: To earn a place for the Canteen Take-over in the RIVM intervention database, so that it can become a national policy programme.</p> <p>Evaluation question: - 'How effective did the Canteen Take-over prove to be in achieving a healthy living environment at the pilot schools?' - How feasible is the implementation of the canteen take-over?</p> <p>Ethics/data handling approval procedure: - The extent to which it is necessary to seek approval from an ethics committee will depend on the requirements for obtaining funding. That being said, some indicators do border so closely on the personal lives of pupils (health) that seeking such approval seems like an obvious choice. - Interviews will be rendered anonymous so that quotes cannot be traced back to individual pupils.</p> <p>Design: <i>Pre-post 'Mixed methods' evaluation at four schools.</i></p> <p>Data collection (incl. available measurement tools): See below.</p>		
PROCESS EVALUATION		
Evaluation questions	Data to be collected	Data collection method
Reach (aimed at target group):	(N) how many schools participate; (n) how many pupils take over the canteen	Quantitative. Counting the number of schools that sign up.

Research question: How many pupils has the Canteen Take-over reached?	(aggregate data); (n) how many lunches are sold (aggregate data)?	For the sales data, it is important that schools make this administrative data available for the evaluation.
Adoption: Research question: 'What does the Healthy Canteen procedure at schools look like?'	(n) how many pupils take over the canteen; (n) how many lunches are sold? Evaluation based on brief interviews with the pupils involved Evaluation based on brief interviews with the schools involved In particular, look at the extent to which pupils are supported by the staff at their schools.	The same as for 'reach', except per school. Semi-structured interviews Semi-structured interviews Ibid.
Implementation: Research question: 'What does the procedure look like on the policymakers' end?'	Evaluation based on interviews with various Healthy School Agents	Counting the number of sign-ups, no. of consultations.
OUTCOME EVALUATION		
Evaluation questions	Data to be collected	Data collection method
Healthy living environment		
- Did the Canteen Take-over contribute to a healthy/healthier canteen? - Is the canteen sufficiently accessible and appealing and is the food on offer	The content of the menus. The adolescents' experiences.	Nutritional analysis of the menus. Pupil survey.



<i>sufficiently aligned to the adolescents' preferences?</i>		
Participation		
<i>- Does the Canteen Take-over create pupil participation?</i>	The adolescents' experiences.	<p>Semi-structured interviews with adolescents who (1) cooked in the canteen; (2) adolescents at the school (target group/customers).</p> <p>Descriptive quantitative statistics (number of sign-ups).</p>



Appendix 6 Policy idea: ‘Adolescents invent recipes for hot food and cook in the school canteen’

Source: Policy ideas for achieving a healthy living environment from adolescents in the Netherlands.

Relevant to

The Healthy Canteen, the Netherlands Nutrition Centre, school boards, schools, catering companies, JOGG, the Amsterdam Healthy Weight task force (AAGG) and the Almere Healthy Weight task force (AGGA)

Introduction

The school canteens designated as Healthy Canteens sell cheese sandwiches and toasties. The adolescents in this group felt these foods were neither healthy nor delicious. There are many other cold and hot dishes you can make with vegetables and herbs and they feel that the food in the canteen should be tasty and healthy for young people. ‘Not everyone likes cheese sandwiches and who says they are healthy?’ The adolescents brought with them skills and experience gained at home, both in terms of cooking and in terms of different countries’ cuisines. They wanted to share this at school and start their own ‘restaurant’ in the school canteen.

Idea

Adolescents came up with their own tasty and healthy recipes for hot meals and prepared and sold these meals in the school canteen. Other schools can adopt this idea and the recipes for their own canteens. The recipes will be bundled in a cookbook (or on a website). The adolescents in this group can go cook at different campuses of the school to spread the idea. They could teach cooking lessons for other young people who do not know how to cook.

Procedure

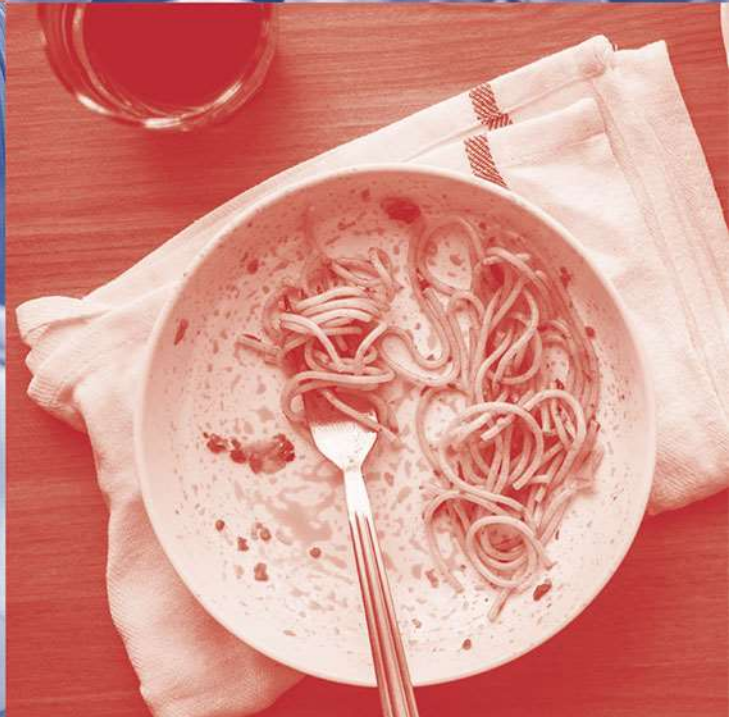
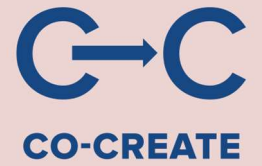
The adolescents from this group felt the training sessions within the project (looking at the system maps, taking pictures of their observations in the environment, elaborating their idea) were an unnecessary distraction. After a few weeks’ time, they began to assert that they, the adolescents, were supposed to be in charge of the project and they just wanted to start cooking. It was surprising how quickly they were able to transform their criticism of the school canteen into action. They divided the tasks among themselves, deciding to take turns coming up with recipes so that there would be variety in the meals they cooked. They spoke with the teachers who were involved with the school canteen and cooking, with hospitality and with the rules of The Healthy Canteen and asked them how they



could ensure their recipes met the guidelines. They made a shopping list, requesting funding from the CO-CREATE project, did the shopping and met in the morning before school to prepare the food and cook in the kitchen. They wrote the dishes that could be ordered on the menu board in the canteen and noted that people could pay with cash (rather than the school card) so that they could use the money to do the shopping for next time. Next, they sold their food in the canteen during the first break in classes (at 10:00). The adolescents cooked three times: spicy chicken wraps and veggie pizzas; shrimp tacos; and tuna wraps and chicken pita pockets. In between, they spent time evaluating, getting feedback from teachers (payments and agreements did not immediately go as desired) and planning the next time they would cook and how to expand their plan to multiple schools.



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Implementation and evaluation plan from Norway/D7.6

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Executive Summary

This report is part of the Objective 7.2: *To develop implementation and evaluation plans for 1-3 selected co-created obesity-related policy interventions (tools, strategies, programmes) in each of the five countries* in Work package 7 in the CO-CREATE project.

Planning for implementation and evaluation of policies should be standard practice in public health in order to provide recommendations for termination, maintenance, improvements and or/scaling up of policies in a timely manner. However, lack of knowledge in and skills on how to develop and follow up implementation and evaluation plans are potential barriers to establishing such a practice. Building capacity for this through partnership between the CO-CREATE-partners and local stakeholders of a policy idea is one contribution to changing this.

To facilitate this a protocol was developed outlining how to select the 1-3 policy ideas of those developed in the Youth Alliances, establish a core team, draw logic models for implementation and evaluation, write up the implementation plan and focus the evaluation before summarizing it all in one implementation and evaluation plan.

This report contains implementation and evaluation plans for the policy idea of free physical activity (PA) once a week for students in lower secondary schools in Innlandet county in Norway, as the action of PA activity groups. Furthermore, it describes the process of developing the plans based on templates for logic models, three meetings with a working group and input from youth on the logic models. Finally, reflections on the usefulness of the protocol and its templates are provided.

Based on the experience, recommendations are drawn for the revision of the protocol and templates on how to write implementation and evaluation plans, as well as the need for better examples for training purposes.

Table of content

Executive Summary	3
List of acronyms / abbreviations	5
Introduction.....	6
Background of policy idea	6
Description of process.....	8
Results	9
Reflections.....	13
Recommendations	14
References.....	15
Appendices	17

List of acronyms / abbreviations

- PA physical activity
- PE physical education
- WHO World Health Organization

Introduction

The CO-CREATE-project is a 5 year EU-funded research project aimed at preventing childhood obesity through taking a systems approach to understanding and solving the problem and engaging adolescents in policy development (1). The project was conducted in the Netherlands, Norway, Poland, Portugal and the UK.

The engagement of adolescents (16-18 year olds) was based on Participatory Action Research/ Youth-led Participatory Action Research and to be organized as Youth alliances (3 per country of 15-20 youth in each). The youth alliances were engaged in activities (such as system mapping, data collection methods, advocacy training) and provided with tools (such as Photovoice, the policy form) and resources (such as funding) to systematically develop their policy ideas (2). The policy ideas were discussed with relevant stakeholders in online or face-to-face Dialog forums (3). As part of the research process, data on the running and outcomes of the alliances and dialog forums were collected through online questionnaires, field notes and structured reports.

The CO-CREATE project could not promise enactment and implementation of the policy ideas of youth. However, planning for implementation and evaluation of policies should be standard practice in public health in order to provide recommendations for termination, maintenance, improvements and or/scaling up of policies in a timely manner. Thus, building capacity for this through partnership between the CO-CREATE-partners and local stakeholders of a policy idea is one contribution to changing this. This work was conducted based on a CO-CREATE protocol and internal workshop on developing implementation and evaluation plans (4,5).

In Norway, there were two youth alliances involving 38 youth who came up with 32 policy ideas, of which 5 were fully developed and one were discussed in two dialog forums. The alliances were facilitated by researchers from the Department of Nutrition, University of Oslo and co-facilitators from youth organizations. In this report the implementation and evaluation plans of the policy idea of free physical activity once a week is further specified based on the CO-CREATE protocol on writing such plans (4) and reflections on the usefulness of the protocol and the templates are provided.

Background of policy idea

Physical activity (PA) is known to promote health and contribute to reduce mortality (6). However, it is also well known that the proportion of inactive adolescents is high (7) and that there are social inequalities in PA (8). Individual factors, as well as social and physical environment are facilitator as well as barriers to adolescents PA (9-11), and access to gym during after school hours has been shown to positively promote their PA (11).

Globally, this has led to policy documents such as the Physical activity strategy for the WHO European Region 2016–2025 (12) followed by the Global action plan on physical activity 2018–2030: more active people for a healthier world (13). In Norway, these documents have been followed-up in public health policy through the most recent action plan on PA for 2020-2029 *Together for active lives* (14). It builds on a several PA specific white papers on sports organization, outdoor recreational

PA, a national bicycling strategy as well as public health white papers and the first action plan on PA in Norway from 2004 (15).

Leisure time sports activities for youth in Norway are organized through local chapters of national sports organization (football, handball and skiing being the most common). These local chapters are to a great extent run by voluntary work of parents as board members and coaches for the youngest, and there is a strong focus on including all children regardless of their PA abilities, at least up until the children are age 12-13.

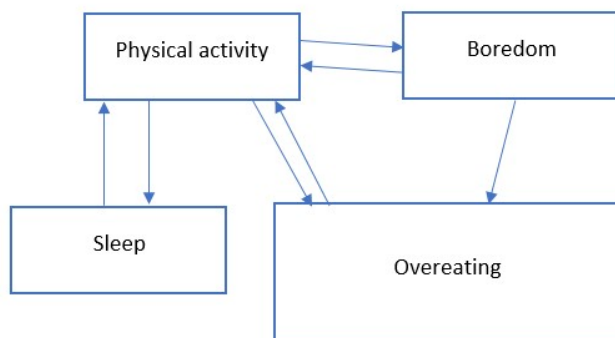
Despite the positive situation where 9 out of 10 children have taken part in organized leisure time sports during their childhood in Norway, it is well known that there is a struggle to keep them in the activity - especially as they transition from lower to upper secondary schools (16). Furthermore, it is shown that children of higher socio-economic status parent are more likely to remain in the activity (17). Yet, the action plan focuses on developing support for the lower secondary schools and below, and they see the local gyms more as a collaborator in promoting strength training for the adults and the elderly than an offer to the adolescents in upper secondary schools (14). It is, however, noted that physical education (PE) teachers in upper secondary schools are more likely to be professional PE teachers (14).

The policy idea was developed by a youth alliance in a rural community in Innlandet county. Their policy goal, specific objectives, part of the system map addressed and rationale for doing it is described here directly translated from the Policy form of the group.

Policy goal: Cheaper gym membership, better opportunities to exercise at upper secondary schools in Norway. We want more upper secondary schools in Norway to provide guidance and offer strength training at the school's gym. Several schools have a weightlifting room that have space for several students.

Specific objectives: We can create a survey where we ask students about what is keeping them from purchasing a gym membership. Young people at upper secondary schools may lack access to opportunities to exercise at gym facilities.

Relevant part of system map:



Why is it important:

PA is important for all of us to feel in shape, and to maintain a good mental state. Therefore, we believe that it is important that students have the opportunity to exercise at their school (if the school has equipment or plans to obtain it). Because this gives students the opportunity to exercise.

Description of process

The policy idea was chosen by the lead partner/author based on being one of the policy ideas most developed in a Norwegian alliance with a focus on a local/regional level rather than national level. Furthermore, the idea of PA once a week was also one of the four demands by the CO-CREATE Youth Task force (18). The templates for the Tearless logic models (19) were used instead of the logic model templates included in the CO-CREATE protocol (4) based on the recommendation from one of the CO-CREATE partners.

The logic models were drafted in Norwegian in a series of three online workshops each lasting 1.5 h, and about three weeks apart. The workshops were prepared and led by the main author of this report. The participants were mostly from within CO-CREATE representing the youth organization, facilitators of the youth alliances, evaluation expertise, health promotion in youth research, youth obesity /physical activity research. There was also one expert in physical activity external to CO-CREATE.

The first workshop introduced CO-CREATE and how to develop implementation and evaluation plans before focusing on further specifying the policy idea of the youth using the Tearless logic model template (19). Before the second meeting the logic model of the policy was refined based on the input and circulated for comments. In the second meeting, the logic model of the policy idea was briefly revisited for reminder and for discussion of inputs given, before proceeding to the adoption and implementation logic models based on Tearless logic models (19). Before the third meeting the logic models of the adoption and implementation were refined based on the input and circulated for comments. In the third meeting, the logic model of the policy idea was briefly revisited before discussing the input on the adoption and implementation logic models, and then there was a discussion of the focusing of the evaluation plan.

The final drafts of the logic models from the working group were discussed with two of the youth from one of the Norwegian youth alliances. The invitation was sent out through the messenger group of all who had participated in the Norwegian alliances. Two positive responses were obtained and a time agreed upon. Four days prior to the meeting, the document and the instructions to read it to see if it was true to the youth's idea and whether there were things that were unclear, missing or could be deleted was posted in the messenger group together with the time for the meeting. The zoom link for a one hour meeting was posted on the same day of the meeting and encouraging anyone to participate. In the meeting, one of the youth shared the document s/he had commented in and the other added the comments s/he had made in the chat. Based on this we went through the document and contextualized the input. A summary was made afterwards by the lead

partner/author and verified by a research assistant present in the meeting. The logic models were revised based on their input as described in the result section.

Furthermore, the logic models were updated based on the notes taken by one of Youth task force members during the discussion of this policy idea in the last session at the CO-CREATE Youth Conference, at Sundvollen, Norway, March 2022.

The implementation and evaluation plans were drafted in English by the lead partner/author based on the logic models and above input.

Results

1. The policy idea

In cooperation with the students, all upper secondary schools in the county of Innlandet shall ensure that each pupil is offered physical activity at least once a week outside of the school hours, but under supervision.

The focus of the original policy idea was broadened from a focus on exercise/access to gyms to PA in general using whatever facilities most relevant to the activities planned. This was a result of the description of the demand for weekly PA by the Youth Task force as well as the process in the working group and input from the two youth on the logic models. The action resulting from the policy idea was therefore called **PA-activity groups** throughout the logic models and implementation and evaluation plan.

This PA-activity should be free of charge to the students, which is in accordance with the original idea and the demand from the Youth Task Force.

The causal loop of the original idea (figure 1) was interpreted as when youth are bored they overeat and then they do not feel like doing PA and when PA is reduced they are even more bored, and so a vicious cycle starts. Thus, the fun aspect of the PA activity was considered important as it also is in the Youth Task Force declaration. Furthermore, the inclusion of all aspect was added as an important premise from the Youth Task Force declaration and the youth group discussing this idea at Sundvollen. The latter also underlined the importance of calling it PA and not sports as many youth are not doing sports, but yet they are active and do exercise.

The working group developed the PA-activity as an after school activity run by a PA-group of engaged students supported by one permanent employee at the school to ensure continuity. Furthermore, the need for PA expertise guidance to exercise in a healthy way as well as supervision to ensure the activity was a safe space was recognized by the working group, the two Norwegian youth and the youth group discussing this idea at Sundvollen. However, as

can be seen on the input received by the Norwegian youth on the logic models below this might have to be left more open as there are pros and cons to how this should be best organized depending on both general organization of education and sports/PA in Norway, as well as local variations at the municipality level. Similarly, in the youth group discussing this idea at Sundvollen it was suggested that in order to form a habit it should perhaps be once daily rather than once a week and that it should be a free hour within the school day to do whatever activity each choose.

In Norway, the county is the owner of the upper secondary schools and thus the county level was chosen as the level of policy adoption/enactment, but also seen as having a key role in supporting the implementation both through funding, technical support and facilitating a network for experience sharing between schools implementing the PA-activity.

The youth input on the policy idea as a background for the logic models was that the transition from exercise to PA and the system map should be better explained, which is integrated in the description in this subchapter.

2. The logic models

The working group developed four logic models included in appendix 1. In accordance with the original plan there were one overarching logic model for the policy idea (Table 1) and one for implementation at school level (table 5), but the one for adoption was spilt in two (the county and school level) (tables 3 and 4). Furthermore, during the development of the overarching logic model a need for also understanding the factors influencing PA in general was discovered, resulting in table 2.

The Tearless logic model structure followed in the powerpoint based discussion of the Policy idea triggered good discussion in the first meeting of the working group. This led to the first draft which was further tweaked in the two following meetings, especially with regards to the target group (all versus those with low PA), making it a youth led activity to ensure buy in from youth and thinking about outcomes also relevant for the school (i.e. lower drop out rates), along with a lot of detailed thinking about all that would be needed, who to collaborate with and how it could be evaluated.

There was originally one logic model for adoption and one for implementation, but the second workgroup meeting made it clear that adopters would firstly be at the county level and secondly at the school level thus two logic models were made. The need for continued support from the county and school level to those who actually were implementing it, as well as need for continuity and collaborators for running the activity was recognized. This led to the proposal of the county level support person and network of implementing schools and the one permanent staff to support the PA group of organizing youth in each schools. The local collaborations were left up to each PA-group.

The youths originally proposing the idea, did not respond to the invitations in the messenger group to review the document, and those responding were not from the county of Innlandet. Thus, the input should be interpreted in light of this. There were some general inputs about explaining non-communicable diseases and using only Norwegian words if intended for a Norwegian audience. The former was taken into account, but the latter was not as we choose to rather have the document translated into English for the report.

The main inputs from the two Norwegian which were incorporated in the logic models were:

- Table 1 Intro to Logic model of the policy
 - External influences: Extra duties of school staff might lead to overtime payment. Stadiums/gym halls/outdoor sport facilities are often fully booked by organized sports
 - Possible undesired consequences: Activities proposed by the school often receive a poor reputation / few participate as it can be reminiscent of school subjects / compulsion. It can lead to an extension of the school day. Use of stadiums/gym halls/outdoor sport facilities might also make it seem like an organized sport.

- Table 2 Determinants
 - Changed the positive outcome expectation about PA for looks to Better self-image
 - Added
 - Increased quality of life (positive outcome expectations)
 - Excessive focus on weightlifting/calories (negative outcome expectations)
 - Can be embarrassing to even show up the first time (Social Barriers)

- Table 3 Logic model of adoption county level
 - Added based on a comment about inclusion of youth with handicap and the need for having the skills and knowledge on how to do this.
 - ACTIVITIES: Explore how to plan for activities which can include all students (also those with handicaps)
 - OUTPUTS: Resource/tool box for how to involve all kind of students (also those with handicaps)

- Table 5 Logic model of implementation
 - Intro – based on comment about many youth being motivated by health rather than the PA activity itself.
 - External influences: Youth are motivated for PA by different reasons (the activity /PA, for their health and for being social) and this should be communicated in the marketing activities to avoid it becoming only a PA-activity.
 - Added – based on a comment about the importance of a thrust worthy system for reporting harassment.

- ACTIVITIES: Establish an independent and reliable system for notification of bullying or sexual harassment etc
- OUTPUTS: Actions taken on any bullying etc
- Revised/added – based on a comment about the importance of the PA-group regularly doing surveys to assess needs, not only at the beginning.
 - OUTPUTS: Regular user evaluations surveys (at least once every year)
 - SHORT TERM OUTCOMES: The PA-group knows the needs and perceptions of the activity by the students in their school.
- Added the parenthesis below – based on a comment about the importance of overlap in the PA-group to ensure continuity.
 - ACTIVITIES: Establish a routine for knowledge-transfer in the transition to the next school year (i.e. ensure overlap between old and new members)

Also from the youth, there were multiple concrete inputs related to how to organize the PA-activities which we were not able to include in the general logic models, but which none the less could be important to consider for those who are going to implement this policy.

The amount of PA included in the curriculum for each student depends on the study program the student follows, and in some schools PA is also offered as an elective which could be so popular that not all students can get it. This indicates that there might be room for increasing the PA opportunity within the school hours. Long travelling distances between school and home, as well as other activities taking priority in the afternoons also points to the importance of including it within the school day. However, the danger of this becoming yet another physical education class and not a youth organized, fun and inclusive activity need to be considered. Furthermore, in some remote places the upper secondary schools might be run online so this PA-activity might need to include also lower secondary school students.

There are various study programs specializing in sports/PA in at least some schools in each county. It was discussed that these could have a role training or acting as instructors of the PA-activity. Other possible instructors could be teachers or personal trainers (PTs) from local gyms. It was noted that whomever should be an instructor needed to be skilled in instructing PA activities to avoid injuries.

A final point was about how to get the PA-group students involved by providing some incentives. This could be organizational experience or training courses to put on their CV, as well as funding for some food at the meetings of the group.

3. The implementation and evaluation plans

The adoption and implementation plan, as well as the evaluation plans can be found in Appendix 2. The plans outline the activities needed to get the county level and schools level to adopt the PA-group activity action and the activities needed to implement them in each school for a pilot period of 3 years. The evaluation plan this primarily outline how to collect data on how the PA-activity was implemented in each school including reach of schools and

students, dose delivered of both promoting activities and PA-activities, acceptability to the students, feasibility and costs. Furthermore, a simple online questionnaire to all students in Innlandet and a control county will track the PA-level by socio-demographic factors.

The working group provided input for the writing of the adoption/implementation and evaluation plans in the third and final meeting. They especially stressed the need for the evaluation data to be used for adapting the PA-group activity to local needs and as it was implemented since there were no local needs assessment data input used in our planning. It was agreed that knowing who participated and whether those who are least active were reached and social inequalities in PA were evened out was important. The evaluation should also take into account the effect of the PA-activity as a social meeting place. It would be important to set clear success criteria for the 3 year pilot to determine whether to continue or not.

Reflections

The **policy idea** was chosen by the lead partner/author for both pragmatic reasons as being the most developed local/regional policy idea with a national potential and strategically as it was one of the four policy ideas in the Declaration of the Youth Task Force (18). Unfortunately, the youth involved in developing it did not stay engaged long enough to organize a dialogue forum and was also not engaged in the process of writing these plans. Through the process in the working group the idea was further specified into an action the PA-activity groups with a lot of assumptions with regards to whom it should be targeted, the purpose of it beyond obesity prevention and the required involvement of youth engagement in running it. However, the logical models were reviewed by two Norwegian youth and checked against the notes from the discussions of this policy idea at the CO-CREATE youth conference. The idea is broadly supported in the scientific literature (11) and global and national action plans on PA (13,14) for the need for PA opportunities for adolescents, but there is a gap in the recent Norwegian action plan on PA in regards to targeting the older adolescents and the possibilities of using existing facilities (i.e. gyms, schools). Yet, a thorough review of the evidence for the policy idea nor the determinants for such activities was not conducted.

The **engagement of youth and local stakeholders** in the core team was not executed as outlined in the protocol, as it was found difficult to ask them to contribute to this exercise in the middle of the COVID 19 pandemic when they had not developed the idea nor discussed it in a dialog forum. The development of the implementation and evaluation plans was thus primarily conducted by the lead partner/author and the mostly internal working group in CO-CREATE. However, the broad background of the working group ensured that many practical, strategical and scientific aspects were brought up in the processes of the three meetings. Also, checking the logic models with youth and against the notes from the youth conference was seen as ways to verify that we did not stray from the ideas, but rather made it more specific and thus more implementable and possible to evaluate. Yet, discussing it with representatives for the county and the upper secondary schools in Innlandet as

well as current researchers in PA who might want to evaluate such an intervention would have improved the realism of the plans a lot.

The **adoption and implementation logic models** were very relevant for writing the respective plans, but it became clear that the logic model template had not helped specify the factors to be targeted by the activities in the plans. Furthermore, the activities of the logic models were not checked against the strategies for implementation (20). Making separate logic models for each level of adoption and implementation was found to be needed in order to be specific enough about the activities and outcomes of them. However, the idea to make such logic models in addition to the logic model of the policy proved to be challenging as it was not always clear which belonged where. Furthermore, the more long term outcomes did not seem so relevant in the logic models for adoption and implementation, unless this should be related to (long term) maintenance of the PA-activity groups which we did not address as we ended up aiming for a 3 year pilot. Trying to understand through public sources how decisions are made at county and upper secondary school level was an interesting experience, as the information was not easily available on the web.

The **focusing of the evaluation** followed naturally from the logic model of the policy and the adoption and implementation plans. This plan did not include the factors which were missed in the step from logic models to plans for adoption and implementation, but these factors - or potential determinants - were missed in the development of the logic model for the policy. As they are only listed as short term or intermediate outcomes the mechanisms and interdependencies become less clear, and thus it could have been good to also have worked further on developing a systems map for this specific policy idea.

All in all, the process and templates used were useful for taking the policy idea and making it more specific and thus one step closer to being implementable and possible to evaluate. However, it is not possible to say if the original templates of the logic models (4) would have worked better or as well as the Tearless logic models (19) applied. Also, more true collaboration with youth and stakeholders would probably have led to even more realistic plans and to also reach the aim of capacity building.

Recommendations

Based on the above reflections, the following recommendations can be made for the protocol and the templates:

- Step 2 of the protocol should probably be revised to a core person/team with the expertise in implementation and evaluation who systematically consult both the science and the practice (icl. the target group) in an iterative process.
- There should be a step of making a system map of the idea to clearly understand how the behaviour addressed is situated in the larger system
- The templates for logic models should be re-evaluated based on the experiences with the Tearless logic models, but also the alignment between the logic models for the policy idea, the adoption and the implementation to ensure they do not overlap, but also that the link between them is clear.

- The literature on strategies for implementation could be better described and more clearly incorporated in the logic models.

Furthermore, for the training of the use of the protocol with the templates there should be examples of filled forms of a policy ideas to help the core person /team make decisions about what belongs where and the level of details needed, as well as how to think of who to consult with.

For those wanting to take the plans further they need to be discussed with the relevant persons at the county level, the upper secondary schools and potential collaborating partners to be adapted to the real world. In addition, a university/college with the expertise in implementing and evaluating such an action should verify/strengthen the evidence-based part of the plans through current literature and future evaluation.

References

- 1) Klepp K-I, Helleve A, Brinsden H, Brøer C, Budin-Ljøsne I, Harbron J, Knai C, Lien N, Luszczynska A, Nesrallah S, Oldridge-Turner K, Rito A, Samdal O, Savona N, Stensdal MK, Allender S, Hoelscher DM, Rutter H. Overweight and obesity prevention for and with adolescents: The "Confronting obesity - Co-creating policy with youth. *Obesity Reviews* – forthcoming.
- 2) CO-CREATE D5.1b: Protocol for youth engagement. April 2019.
https://www.fhi.no/contentassets/0a74196d35c64da89d337e25af982f5f/co-create-deliverables-5.1_engagement-protocol.pdf
- 3) CO-CREATE Dialog forum tool. <https://eatforum.org/initiatives/co-create/>
- 4) CO-CREATE D7.4: A protocol for developing implementation and evaluation plans. April 2020.
https://www.fhi.no/globalassets/dokumenterfiler/studier/co-create/7_co-create-deliverable-7.4-final.pdf
- 5) CO-CREATE D7.5: A workshop for CO-CREATE co-workers on how to apply the implementation and evaluation protocol. April 2020.
https://www.fhi.no/globalassets/dokumenterfiler/studier/co-create/7_co-create-deliverable-7.5-final.pdf
- 6) Ekelund U, Tarp J, Steene-Johannessen J, Hansen BH, Jefferis B, Fagerland MW, Whincup P, Dose-response associations between accelerometry measured physical activity and sedentary time and all cause mortality: systematic review and harmonised meta-analysis. *BMJ*. 2019 Aug 21;366:l4570. doi: 10.1136/bmj.l4570
- 7) Guthold R, Stevens GA, Riley LM, Bull FC. Global trends in insufficient physical activity among adolescents: a pooled analysis of 298 population-based surveys with 1.6million participants. *Lancet Child Adolesc Health*. 2020;4(1):23-35.
- 8) Stalsberg R, Pedersen AV. Effects of socioeconomic status on the physical activity in adolescents: a systematic review of the evidence. *Scand J Med Sci Sports*. 2010;20(3):368-83
- 9) Cortis C, Puggina A, Pesce C, Aleksovska K, Buck C, Burns C, et al. Psychological determinants of physical activity across the life course: A "DEterminants of Diet and Physical ACTivity" (DEDIPAC) umbrella systematic literature review. *PLoS One*.2017;12(8):e0182709

- 10) Jaeschke L, Steinbrecher A, Luzak A, Puggina A, Aleksovska K, Buck C, et al. Socio-cultural determinants of physical activity across the life course: a 'Determinants of Diet and Physical Activity' (DEDIPAC) umbrella systematic literature review. *Int J Behav Nutr Phys Act.* 2017;14(1):173.
- 11) Carlin A, Perchoux C, Puggina A, Aleksovska K, Buck C, Burns C, et al. A life course examination of the physical environmental determinants of physical activity behaviour: A "Determinants of Diet and Physical Activity" (DEDIPAC) umbrella systematic literature review. *PLoS One.* 2017;12(8):e0182083.
- 12) Physical activity strategy for the WHO European Region 2016–2025 WHO Regional Office for Europe. Available from: http://www.euro.who.int/data/assets/pdf_file/0014/311360/Physical-activity-strategy-2016-2025.pdf?ua=1
- 13) Global action plan on physical activity 2018–2030: more active people for a healthier world. World Health Organization. Available from: https://apps.who.int/iris/bitstream/handle/10665/272722/9789241_514187-eng.pdf
- 14) The Norwegian Ministries. Together for active lives. Action plan for physical activity 2020–2029. (Sammen om aktive liv. Handlingsplan for fysisk aktivitet 2020-2029. Available from: <https://www.regjeringen.no/no/dokumenter/sammen-om-aktive-liv/id2704955/>
- 15) The Norwegian Directorate of Health. Strategies and interventions to increase physical activity in the society. <https://www.helsedirektoratet.no/tema/fysisk-aktivitet/strategier-og-tiltak-for-a-oke-fysisk-aktivitet-i-samfunnet> (Accessed 25.09.22)
- 16) Bakken, A. (2019). Ungdata. Nasjonale resultater 2019, NOVA Rapport 9/19. Oslo. NOVA, OsloMet. Available from: <https://tidliginnsats.forebygging.no/Rapporter/Ungdata-2019-Nasjonale-resultater/> (Accessed 25.09.22)
- 17) Heradstveit O, Haugland S, Hysing M, Stormark KM, Sivertsen B, Bøe T. Physical activity, non-participation in sports and socioeconomic status: a large population-based study among Norwegian adolescents. *BMC Public Health.* 2020;20(1):1010
- 18) The CO-CREATE Youth Declaration: Time to Act and Ensure Good Health for All. November 2020. <https://www.fhi.no/contentassets/0a74196d35c64da89d337e25af982f5f/co-create-youth-declaration-on-ending-childhood-and-adolescent-obesity.pdf>
- 19) Lien, A. D., Greenleaf, J. P., Lemke, M. K., Hakim, S. M., Swink, N. P., Wright, R., & Meissen, G. (2011). Tearless Logic Model. *Global Journal of Community Psychology Practice*, 2(2), 1-12. Retrieved 24 May 2022, from (<http://www.gjcpp.org/>)
- 20) Powell BJ, et al. A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project. *Implementation Sci* 2015; 10: 21

Appendices

Appendix 1

- Table 1: Logic model of the policy – PA Activity groups in upper secondary schools
- Table 2: Factors that can influence whether students in upper secondary schools try out and continue to use the PA-activity which must be considered when planning the activity and the marketing plan.
- Table 3 Logic model of adoption – County
- Table 4 Logic model of adoption – The school management at the individual upper secondary school
- Table 5 Logic model of implementation - at each school

Appendix 2

- Appendix 2A Adoption and implementation plans for PA-activity groups in Innlandet county, Norway
- Appendix 2b Evaluation plan for PA-activity groups in Innlandet county, Norway

Table 1: Logic model of the policy – PA Activity groups in upper secondary schools

Objective: In cooperation with the students, all upper secondary schools in the county of Innlandet shall ensure that each pupil is offered physical activity at least once a week outside of the school hours, but under supervision.

Context / needs: Physical activity (PA) is important for everybody in order to feel in shape and to maintain a good mental state. PA can prevent overweight, obesity and non-communicable diseases (NCDs) such as diabetes, cardiovascular disease and diabetes. Adolescents commonly stop to participate in organized sports during lower secondary schools, and even though they can become a member at a gym when they are 15-16 years old, it is often expensive.

Assumptions (Theory of change): That providing a low-threshold and free activity will increase PA – especially among those who do not participate in organized sports. That such an activity can increase well-being and improve physical and mental health such that students do not drop out and learn better. That the long-term benefits will ensure a more physical active population and thereby reduce the prevalence of overweight/obesity and NCDs through young people having experienced a self-efficacy and enjoyment by being physical active in an inclusive environment.

External influences: The school is owned and run by the county. There are rules for use / rental of the school's property outside of school hours. Use of premises (gym, indoor court, locker rooms) and equipment will lead to an increase in wear and tear and increased need of cleaning. Extra duties of school staff might lead to overtime payment. Stadiums/gym halls/outdoor sport facilities are often fully booked by organized sports. Partnership with sport clubs, other voluntary organisations or municipal sectors are possible opportunities to explore locally.

Possible undesired consequences: That the activity is used only by those who already participate in organized sports, or that it gets a negative reputation to be only for those who are not physical active. That participation causes injuries due to incorrect use of equipment or weightlifting techniques. That participation lead to bullying or unwanted sexual attention. That the activity becomes too narrowly focused /does not appeal to everyone. Activities proposed by the school often receive a poor reputation / few participate as it can be reminiscent of school subjects / compulsion. It can lead to an extension of the school day. Use of stadiums/gym halls/outdoor sport facilities might also make it seem like an organized sport.

TARGET POP	INPUTS	ACTIVITIES	OUTPUTS	SHORT TERM OUTCOMES	INTERMEDIATE OUTCOMES	LONG TERM OUTCOMES	ANTICIPATED IMPACTS
<i>Who will directly benefit?(those we serve)</i>	<i>Resources dedicated to or consumed by our effort (what do we need?)</i>	<i>What can we do – in quantifiable terms? (what must be done)</i>	<i>Direct products of our activities (what can be measured)</i>	<i>Initial changes in the condition, knowledge, attitudes, beliefs, skills (in those we serve)</i>	<i>Resulting behaviour change (in those we serve)</i>	<i>Changes in policies, programs and practices (what rules need to change?)</i>	<i>Longer term indicators of impact (10-20 yrs from now)</i>
<p>All students in upper secondary schools</p> <p>(especially important to engage those who are less physical active / not at all physically active)</p>	<ul style="list-style-type: none"> - Access to school's premises that is suitable for PA at times that is suitable for the students. - A committed student group to run the activity - One user survey at each school (in regards to need, time, type of activity) - Partnership with sport organisations / committed parents - Budget for establishing and running the activity (salary, marketing, 	<ul style="list-style-type: none"> - Negotiate an agreement with the schools - Establish a student group at each school - Clarify and agree on the involvement of other partners - Establish an operating plan / org. model - Planning of the PA-activity adjusted to needs / wishes 	<ul style="list-style-type: none"> - Agreement with schools - Student groups - Operating models - Weekly schedule to let everyone participate once a week - Amount of funding for running costs - Person(s) to geode/monitor the activity is employed 	<p>Generally:</p> <ul style="list-style-type: none"> - positive attitudes towards having such an activity (perceived need) - Knowledge about the existence of such an activity - Ownership to establishing and running such an activity <p>Among users:</p> <ul style="list-style-type: none"> - Perceptions enjoyment/master y for PA - perceptions of social community 	<p>Students at upper secondary school in Innlandet:</p> <ul style="list-style-type: none"> - An increase in times per week students are physical active - Reduced inequalities between groups (sex/gender, social status, ethnicity, weight status) regarding number of times per week of PA - Increased proportion of students who enjoys being at school / have good 	<p>Upper secondary schools in Innlandet:</p> <ul style="list-style-type: none"> - The schools have routines to facilitate that their premises are used for a low-threshold PA-activity, run by students in collaboration with the school, and which is free for the students <p>All students can participate in PA once a week</p> <p>Students at upper</p>	<p>Young adults (20-40 years old)</p> <ul style="list-style-type: none"> - An increase in times per week of PA - Reduced inequalities between groups (sex/gender, social status, ethnicity, weight status) regarding number of times per week of PA <p>Upper secondary schools in Norway:</p>

	<p>equipment / maintenance)</p> <ul style="list-style-type: none"> - overview of possible sources to apply for funding from - A person with professional knowledge to guide the activities, as well as monitor the social interactions - Marketing plan /- activities - Clarify need of transportation / possibilities to adjust to public transport 	<ul style="list-style-type: none"> - Apply for funding for running costs - Hire / train the person who will guide activity/ monitor social interactions - Write the marketing plan / develop marketing activities 	<ul style="list-style-type: none"> - Equipment in place - Marketing activities targeting students conducted - Overview of the established PA-activity at each school and number of users per time 	<ul style="list-style-type: none"> - Perceptions of increased energy - Positive attitudes towards PA as an important part of life, both now and later - less concerned about body shape / image as a goal of PA 	<p>life quality / low amount of stress</p>	<p>secondary school appreciate and uses the activity, as well as contribute to make it an inclusive activity</p>	<ul style="list-style-type: none"> - Schools, students, and possibly parents or local partners collaborate in running a low-threshold PA-activity on school premises outside of school hours, and which is free for the students
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Table 2: Factors that can influence whether students in upper secondary schools try out and continue to use the PA-activity which must be considered when planning the activity and the marketing plan.

	Outcome expectations	Social environment	Physical environment
Prior <ul style="list-style-type: none"> - Knowledge of recommendations - Skills - Self-efficacy - Physical (body) limitations/pain 	Positive <ul style="list-style-type: none"> - Becomes happy - More energized/can do more - Better self-image - Increased quality of life - In better physical shape (strength / cardio) - Better health - Less absence - Sleeping better - Less overeating - Less boredom 	Facilitators <ul style="list-style-type: none"> - Support from friends - Support from family - Support from coach 	Facilitators <ul style="list-style-type: none"> - Right timing of the day/week - Right types of activity - Access to appropriate facilities for physical activity / equipment - Access to locker room / showers
Reinforcing <ul style="list-style-type: none"> - Enjoyment - Mastery - Social norm / practice 	Negative <ul style="list-style-type: none"> - Tired / out of breath - Body aches/stiffness in muscles - Sweat - Less time for homework / duties - Less time for other social / fun activities - Negative comments regarding body or PA skills - Excessive focus on weightlifting / calories 	Barriers <ul style="list-style-type: none"> - Bullying (verbally / physical) - Exclusion - Unwanted sexual attention - Other activities are more fun / more popular - Can be embarrassing to even show up the first time 	Barriers <ul style="list-style-type: none"> - Transport - Cost regarding personal clothing and equipment

Table 3 Logic model of adoption – County

Objective: That Innlandet county adopts a PA-activity for a trial period of 3 years and allocate funding for running costs, as well as establish a support team at the county level to support the PA-groups at each school and run a network for sharing of experiences

Context / needs: The schools are owned by the county, so to establish a PA-activity at all upper secondary schools in the county, we need that they adopt the activity, some funding and technical support.

Assumptions (Theory of change): That if the relevant county leadership is informed about the activity, have positive attitudes to the outcome and experiences the proposed model as realistic, reversible, in accordance with the school's purpose (compatibility) and low risk, then they will be able to support an adoption of a 3 year-long pilot project.

External influences: Scarcity of resources in upper secondary schools. Other challenges in upper secondary schools: high dropout rate, mental health problems have increased after COVID-19 and possibly the need for receiving Ukrainian refugees. Upper secondary schools in Innlandet are organized under Competencies and dental health, whereas sports is organized under Culture and public health is under the County Governor (statsforvalteren) which is a representative of the national government, independent from the political and administrative governance of the county. May require intersectorial collaboration to obtain the resources that are needed. Life mastery which is now an interdisciplinary topic in schools can be an opportunity.

Possible undesired consequences: That the activity will draw resources from other important / popular student activities or activities for vulnerable groups.

TARGET POP	INPUTS	ACTIVITIES	OUTPUTS	SHORT TERM OUTCOMES	INTERMEDIATE OUTCOMES	LONG TERM OUTCOMES	ANTICIPATED IMPACTS
<i>Who will directly benefit?(those we serve)</i>	<i>Resources dedicated to or consumed by our effort (what do we need?)</i>	<i>What can we do – in quantifiable terms? (what must be done)</i>	<i>Direct products of our activities (what can be measured)</i>	<i>Initial changes in the condition, knowledge, attitudes, beliefs, skills (in those we serve)</i>	<i>Resulting behaviour change (in those we serve)</i>	<i>Changes in policies, programs and practices (what rules need to change?)</i>	<i>Longer term indicators of impact (10-20 yrs from now)</i>
- County (education, public health, sports/culture)	A policy group of students, researchers, and a PA expert	<ul style="list-style-type: none"> - Talk with school owner about possible benefits - Conduct a needs assessment among students at all upper secondary schools in Innlandet - Explore how to plan for activities which can include all students (also those with handicaps) - Examine costs and possible financing models 	<ul style="list-style-type: none"> - Information sheet with benefits (for the school) / what needs the PA-activity responds to? - Information regarding costs (money, personell) and practical consequences (reversibility, compatability, risks) - Plan for the establishment of the support team and the network 	<ul style="list-style-type: none"> Relevant employees at the county level have: Knowledge of the policy proposal (PA-activity) Positive attitudes towards the policy proposal (PA-activity) being; - compatible with school activities - Important for the student’s learning and prevention of drop-out - feasible in terms of access to resources (money, personnel, facilities) 	<ul style="list-style-type: none"> That the “county” adopts the policy that upper secondary schools should be able to have a PA-activity for a trial period of 3 years. That the county allocates funding for running costs That the county establishes a support team at the county levels which support the PA-groups at each school and operates a network 	That the activity after the 3 years-long trial period becomes a permanent policy	That the well-being among the students has increased and that the dropout rate has decreased

		- Explore opportunities for a permanent support team at the county level which also operates a network of schools with the PA-activity	- resource/tool box for how to involve all kind of students (also those with handicaps)		for sharing of experiences		
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Table 4 Logic model of adoption – The school management at the individual upper secondary school

Objective: That the school management adopts a PA-activity for a trial period of 3 years and allocates funding for running costs, as well as establishing a PA-group (consisting of students and at least one permanent staff) to implement the PA-activity.

Context / needs: External support / influence is needed to adopt a PA-activity, but due to schools having different facilities and profile of the student body, the activity must be designed locally. It is important that it is the students who own / run the activity at the individual school, but with a representative from the school for continuity and administrative responsibility.

Assumptions (Theory of Change): That a strong normative pressure from a decision in the county municipality combined with financial and technical support to establish the activity at the schools, in addition to knowledge of and positive attitudes towards the activity and its implementation locally, will lead to an adoption by the school board.

External influences: Scarcity of resources in upper secondary schools with regards to allocating funding and personell time (possibly overtime pay might come into play). Other challenges in upper secondary schools: high dropout rate, mental health issues have increased after COVID-19 and possibly reception of Ukrainian refugees.

Possible undesired consequences: That the activity will draw resources from other important / popular student activities or activities for vulnerable groups.

TARGET POP	INPUTS	ACTIVITIES	OUTPUTS	SHORT TERM OUTCOMES	INTERMEDIATE OUTCOMES	LONG TERM OUTCOMES	ANTICIPATED IMPACTS
<i>Who will directly benefit? (those we serve)</i>	<i>Resources dedicated to or consumed by our effort (what do we need?)</i>	<i>What can we do – in quantifiable terms? (what must be done)</i>	<i>Direct products of our activities (what can be measured)</i>	<i>Initial changes in the condition, knowledge, attitudes, beliefs, skills (in those we serve)</i>	<i>Resulting behaviour change (in those we serve)</i>	<i>Changes in policies, programs and practices (what rules need to change?)</i>	<i>Longer term indicators of impact (10-20 yrs from now)</i>
School boards for upper secondary schools	<ul style="list-style-type: none"> - Policy / adoption from the county - A support team in the form of a project group at the county level which also run a network for sharing of experiences among the schools 	<ul style="list-style-type: none"> - Talk with school management / leaders about possible benefits - Examine costs and possible financing models at the school level - Identify possible local partners (sports organisations, voluntary organisations, municipal sectors) 	<ul style="list-style-type: none"> - Information sheet with benefits (for the school) / what needs the PA-activity responds to? - Information about funding from the county and costs (money, personnel), as well as practical consequences (reversibility, compatibility, risks) - Support letters from partners - Information about support from the support team in the process of establishing / running the activity 	<p>The School Board have:</p> <ul style="list-style-type: none"> Knowledge of the policy proposal Positive attitudes towards the policy proposal being: <ul style="list-style-type: none"> - compatible with school activities - important for the students learning and prevention of drop-out - feasible in terms of access to resources (money, personnel, facilities) 	That school board adopts the policy of having a PA-activity as indicated by a decision in the school board, allocation of funding for the running costs (possibly) and establishment of a PA-group (consisting of students and at least one permanent staff) to implement the activity for a trial period of 3 years.	That the activity after the 3 years-long trial period becomes a permanent activity	That the well-being among the students has increased and that the dropout rate has decreased

Table 5 Logic model of implementation - at each school

Objective: That the PA-group implement and continuously evaluates the PA-activity for at least three school years at each school that have adopted the policy to have the PA-activity.

Context / needs: To offer a PA-activity at the upper secondary school, there must be someone responsible who can tailor the PA-activity based on student needs and the schools facilities / opportunities. Additionally, they must continuously evaluate the PA-activity in order to continuously develop the activity so it fits the students as good as possible and thus improve the PA-activity during the three years.

Assumptions (Theory of Change): With technical support and some funding from the county, a group of students together with a permanent employee will be able to establish, run, and further develop an inclusive PA-activity, free of cost to the students.

External influences: Academic pressure and participation in other activities can make recruitment to the PA-activity difficult. Pressure on the use of the facilities, where other internal activities / external tenants have priority. Youth are motivated for PA by different reasons (the activity /PA, for their health and for being social) and this should be communicated in the marketing activities to avoid it becoming only a PA-activity.

Possible undesired consequences: That the PA-group plan for activities they prefer and do not consider the wishes of the other students.

TARGET POP	INPUTS	ACTIVITIES	OUTPUTS	SHORT TERM OUTCOMES	INTERMEDIATE OUTCOMES	LONG TERM OUTCOMES	ANTICIPATED IMPACTS
<i>Who will directly benefit? (those we serve)</i>	<i>Resources dedicated to or consumed by our effort (what do we need?)</i>	<i>What can we do – in quantifiable terms? (what must be done)</i>	<i>Direct products of our activities (what can be measured)</i>	<i>Initial changes in the condition, knowledge, attitudes, beliefs, skills (in those we serve)</i>	<i>Resulting behaviour change (in those we serve)</i>	<i>Changes in policies, programs and practices (what rules need to change?)</i>	<i>Longer term indicators of impact (10-20 yrs from now)</i>
The PA-groups that	- A support team at the county level which provides	Develop an operating plan	Operating plan	The PA-group has the knowledge and skills to plan, operate	That the PA-group implements the program in three	That there is a PA-activity that is	That the PA-activity becomes a

<p>will run the PA-activity</p>	<p>training / introduction to support material / resources and continuous support,</p> <p>- Budget for running costs</p> <p>- Established PA-group of students and at least one permanent staff</p>	<p>for the PA-activity</p> <p>Develop a plan for marketing activities</p> <p>Follow up the operation / collect feedback</p> <p>Establish an independent and reliable system for notification of bullying or sexual harassment etc</p> <p>Establish a routine for knowledge-transfer in the transition to the next school year (i.e. ensure overlap between old and new members)</p>	<p>Appointments of employees</p> <p>Partnership - agreements</p> <p>Marketing activities (type, frequency)</p> <p>Regular user evaluations surveys (at least once every year)</p> <p>Actions taken on any bullying etc</p> <p>Description of routines for recruitment and training of new members of the PA-group</p>	<p>and improve the PA-activity</p> <p>The PA-group knows the needs and perceptions of the activity by the students in their school.</p>	<p>consecutive school years, and includes the use of marketing and student participation to encourage the use of and further development of the PA-activity</p>	<p>implemented with high quality and adapted in accordance with changes in students' needs</p>	<p>part of the identity/image for the school.</p>
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Appendix 2A Adoption and implementation plans for PA-activity groups in Innlandet county, Norway

ADOPTION AND IMPLEMENTATION PLAN

PA-activity groups in upper secondary schools

Implementation support system members and responsibilities:

Group A: Members: A small group of students, a staff representative from an upper secondary school/the education sector at the county level and a researcher from CO-CREATE. Responsibility: to prepare the adoption at the county level

Group B: Members: Student groups supported by one permanent staff at each school. Responsibility: Implement in their own school. Feedback support to other schools through county network.

Group C: Members: A county coordinator and a network of participating schools. Responsibility: Facilitate knowledge sharing between schools and provide support on general/cross-school issues related to implementation.

Purpose: To get the policy idea adopted by the education sector at the county level and by each of the upper secondary schools in the county of Innlandet, and implemented as a pilot project for 3 school years starting in 2023/2024.

Setting: Innlandet county administration for education and all upper secondary schools in Innlandet.

Adopters and implementers:

Adopters: Education sector (school owner) at the county level and school leader/management at each school

Implementers: County level coordinator and student groups supported by one permanent staff at each school

ADOPTION

Activities	Targeting which factors?	Who are doing this?	When and where?
Activity 1			
Talk with school owner about possible benefits	Beliefs/knowledge/attitudes about the policy idea. Support from school owner	Group A	Fall 2022, County administration/online meeting
Activity 2			

Conduct a needs assessment among students at all upper secondary schools in Innlandet	Documenting needs and wishes. Support from students	Group A	Fall 2022, online through students councils at each school
Activity 3			
Explore how to plan for activities which can include all students (also those with handicaps)	Accessibility to all students Skills to include all students in PA activity	Group A	Fall 2022, online meetings with relevant organizations/experts
Activity 4			
Examine costs and possible financing models	Costs/financing	Group A	Fall 2022, online meetings and searches to define cost and find opportunities
Activity 5			
Explore opportunities for a permanent support team at the county level which also operates a network of schools with the PA-activity	Technical support	Group A	Fall 2022, County administration/online meeting
Activity 6			
Present the model to the main committee for education (Hovedutvalg for utdanning) at the county level and County board (Fylkestinget) for adoption	All of the above	Group A	Winter 2023, County administration
Activity 7			
Talk with school management / leaders about possible benefits for their school/municipality	Beliefs/knowledge/attitudes about the policy idea. Support from school management	Group B	Winter/spring 2023, Each upper secondary school
Activity 8			
Examine costs and possible financing models at the school level	Costs/financing	Group B	Winter/spring 2023, Each upper secondary school
Activity 9			

Identify possible local partners (sports organisations, voluntary organisations, municipal sectors)	Skills and costs/financing	Group B	Winter/spring 2023, Each upper secondary school
Activity 10			
Present the model to the school management of each school for adoption	All of the above for activities 7-9	Group B	Winter/spring 2023, Each upper secondary school
IMPLEMENTATION			
Activities/Implementation strategies	Targeting which factors?	Who are doing this?	When and where?
Activity 1			
Establish an independent and reliable system for notification of bullying or sexual harassment etc	Inclusion of all	Group C	Spring 2023, county level coordinator
Activity 2			
Develop and execute an operating plan for the PA-activity	Technical and organizational support	Group B, supported by Group C	Spring 2023, early fall 2023, Each upper secondary school
Activity 3			
Develop and execute a plan for marketing activities	Student awareness of and attitudes towards the activity	Group B, supported by Group C	Spring 2023, early fall 2023, Each upper secondary school
Activity 4			
Follow up the implementation / collect feedback	Audit/feedback. Adaptation to needs of students.	Group B	2023/2024, Each upper secondary school
Activity 5			
Establish a routine for knowledge-transfer in the transition to the next school year (i.e. ensure overlap between old and new members of Groups B and C)	Technical and organizational support Maintenance	Group B, Group C	Spring 2024, Each upper secondary school

Appendix 2b Evaluation plan for PA-activity groups in Innlandet county, Norway

EVALUATION PLAN

PA-activity groups in upper secondary schools

Evaluation team members and responsibility:

Members:

1. Professor and master students at the Norwegian School of Sport Sciences or other relevant universities/colleges.
Responsibility: Design study, get ethical approval, develop questionnaires, conduct qualitative interviews
2. Student group at each upper secondary school (Group B in adoption/implementation plan). **Responsibility:** Log the promotion and PA-activities, log number of participants at each PA-activity, write reports on feedback from students and adaptations made.
3. Student councils (Elevrådet) at each upper secondary school. **Responsibility:** Distribute the survey at the beginning and end of each school year through their class representatives to be conducted during the weekly Hour of the class (Klassens time).
4. County level coordinator (group C in adoption/implementation plan). **Responsibility:** Report on number of complaints about harassments etc. Minutes from network meetings including barriers encountered and solutions to this.

Purpose: To evaluate the adoption and implementation of the policy with regards to reach, barriers and facilitators to implementation, cost and preliminary indications of effects on PA frequency per week and inequalities in this.

Evaluation question:

- a) What was the adoption rate of the schools, and which barriers and facilitators were likely influencers of this?
- b) Was the policy implemented as planned in each school?
- c) What was the rate and diversity of students participating (reach) in the PA-activities, and which barriers and facilitators were likely influencers of this?
- d) What were the costs of implementing the policy idea and how was the funding secured/who paid?
- e) Did the PA-activity increase the times per week students are physically active and reduce inequalities in this?

Ethics/data handling approval procedure: If the Norwegian School of Sport Sciences (or others) run the evaluation as a research project, they will have to secure ethical approval of the study including data handling procedures.

Design: Mixed methods, quasi-experimental design with a comparable county as control group.

Data collection (*incl. available measurement tools*):

Logs from activities, reports on feedback from students and adaption to activity, budgets and economic reports, interviews with adopting/non-adopting schools

Online questionnaire survey about PA at the beginning and end of every school year (including process evaluation questions for those in Innlandet)

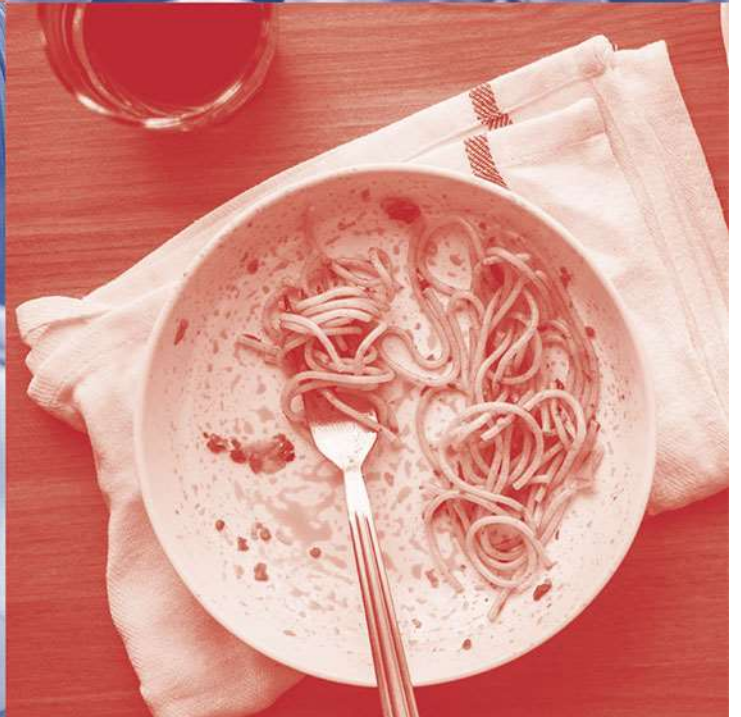
PROCESS EVALUATION

Evaluation questions	Data to be collected	Data collection method
Reach		
What was the rate and diversity of students participating (reach) in the PA-activities, and which barriers and facilitators were likely influencers of this?	<ul style="list-style-type: none"> - Total number of students per school, by gender and grade - Number of students at each PA-activity, by gender and grade - Frequency of attending PA-activity - Socio-demographics – gender, grade level, family affluence scale - Barriers & facilitators 	<ul style="list-style-type: none"> - From school records - Logs at each activity - End of school year survey to each student, closed and open questions
Adoption		
What was the adoption rate of the schools, and which barriers and facilitators were likely influencers of this?	<ul style="list-style-type: none"> - Total number of schools, by type of school (general, general with sports, vocational), location (rural, urban), size - Number of schools adopting, by type of school, location, size - Barriers & facilitators 	<ul style="list-style-type: none"> - From county education statistics - Log of county coordinator - Individual interviews with those making the decision to adopt/not adopt
Implementation		
Was the policy implemented as planned in each school?	<ul style="list-style-type: none"> - Dose delivered - Dose delivered 	<ul style="list-style-type: none"> - Logs of promotion activities - Logs of PA-activity

	<ul style="list-style-type: none"> - Acceptability - Feasibility - Dose received/acceptability 	<ul style="list-style-type: none"> - Bi-monthly Reports summarizing student feedback and adaptation - Logs of obstacles and solutions - End of school year survey to each student, closed and open questions
What were the costs of implementing the policy idea and how was the funding secured/who paid?	<ul style="list-style-type: none"> - Costs and sources of financing 	<ul style="list-style-type: none"> - Budget and financial reports at the end of each school year
OUTCOME EVALUATION		
Evaluation questions	Data to be collected	Data collection method
Outcome 1		
Did the PA-activity increase the times per week students are physically active and reduce inequalities in this?	<ul style="list-style-type: none"> - Overall PA (frequency per week) - Frequency of participating in the PA-activity - Socio-demographics – gender, grade level, family affluence scale - Perceived importance of the PA activity to physical and mental health, social connectedness and academic achievement 	<ul style="list-style-type: none"> - Survey at the beginning and end of every school year in both Innlandet and the control county
Outcome 2		
Did the control county implement similar activities likely to influence the PA-level of the students?	<ul style="list-style-type: none"> - PA initiatives through school or in the municipalities in the control county 	<ul style="list-style-type: none"> - Telephone interviews at the end of each school year to each school



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Implementation and evaluation plan from POLAND/D7.6

SWPS University of Social Sciences and Humanities
27.09.2022



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Executive Summary

This report is part of the Objective 7.2: *To develop implementation and evaluation plans for 1-3 selected co-created obesity-related policy interventions (tools, strategies, programmes) in each of the five countries in Work package 7 in the CO-CREATE project.*

Planning for implementation and evaluation of policies should be standard practice in public health in order to provide recommendations for termination, maintenance, improvements and or/scaling up of policies in a timely manner. However, lack of knowledge in and skills on how to develop and follow up implementation and evaluation plans are potential barriers to establishing such a practice. Building capacity for this through partnership between the CO-CREATE-partners and local stakeholders of a policy idea is one contribution to changing this.

To facilitate this a protocol was developed outlining how to select the 1-3 policy ideas of those developed in the Youth Alliances, establish a core team, draw logic models for implementation and evaluation, write up the implementation plan and focus the evaluation before summarizing it all in one implementation and evaluation plan.

This report contains implementation and evaluation plans for the policy idea called 'Healthy Shelves' that proposes a change in the way the food products are placed and introduced to the consumers at local food shops/retail outlets in one of the city districts in Poland (appendix 1-5). Furthermore, it describes the process of developing the plans and reflects on the usefulness of the protocol and templates.

Based on the experience the following recommendations could be drawn for the protocol and for the further development of the implementation and evaluation plans for policy idea respectively: the implementation plan should be revised continuously throughout the process of implementation, based on insights from previous steps in the implementation process, scientific knowledge, and experience gained after each step of implementation is performed. Also, the complexity of the policy idea and the complexity of policy goals may influence the implementation plans. In particular, more complex goals, such as those captured in "Healthy selves," may require the development of several (separate but interlinked) sub-plans and/or prioritizing which of these goals should be addressed as the first.

Table of content

Executive Summary	3
List of acronyms / abbreviations	5
Introduction.....	6
Background of policy idea	6
Description of process	8
Results	11
Reflections	12
Recommendations.....	13
References	13
Appendixes	14



List of acronyms / abbreviations

DF – Dialogue Forum;

TLM – Tearless Logic Model;

YA – youth alliance

Introduction

The CO-CREATE-project is a 5 year EU-funded research project aimed at preventing childhood obesity through taking a systems approach to understanding and solving the problem and engaging adolescents in policy development (1). The project was conducted in the Netherlands, Norway, Poland, Portugal and the UK.

The engagement of adolescents (16-18 year olds) was based on Participatory Action Research/ Youth-led Participatory Action Research and to be organized as Youth alliances (3 per country of 15-20 youth in each). The youth alliances were engaged in activities (such as system mapping, data collection methods, advocacy training) and provided with tools (such as Photovoice, the policy form) and resources (such as funding) to systematically develop their policy ideas (2). The policy ideas were discussed with relevant stakeholders in online or face-to-face Dialog forums (3). As part of the research process, data on the running and outcomes of the alliances and dialog forums were collected through online questionnaires, field notes and structured reports.

The CO-CREATE project could not promise enactment and implementation of the policy ideas of youth. However, planning for implementation and evaluation of policies should be standard practice in public health in order to provide recommendations for termination, maintenance, improvements and or/scaling up of policies in a timely manner. Thus, building capacity for this through partnership between the CO-CREATE-partners and local stakeholders of a policy idea is one contribution to changing this. This work was conducted based on a CO-CREATE protocol and internal workshop on developing implementation and evaluation plans (4,5).

The policy idea for which the implementation and evaluation plans templates were prepared is based on the results of activities that were structured and performed within one of the Polish youth alliances (YA). The Alliances were established in three locations, two rural-urban communes and one urban commune. A commune is the lowest administrative level in the country, with local government responsible for developing and implementing local policies (including, education, health, social development and equity-related policies). In each location, schools were chosen as the local organization supporting the Alliances. Schools were chosen for participants' safety, due to legal regulations (being minor until 18 years old; a legal requirement is to obtain an active parental consent for activities of youth younger than 18 years old), sustainability potential, and the Institutional Ethics Board recommendations. In each alliance (including 21-22 recruited members each) a number of 6 to 8 meetings was conducted with activities structured (such as group model building or photovoice) in order to allow the members of the alliances to create their own policy idea tackling the drivers of healthy lifestyle. This report provides information on further development of the policy idea considering possible implementation and evaluation plans of the one of six fully-developed Polish YAs policy ideas.

Background of policy idea

The idea proposes a change in the way the food products are placed and introduced to the consumers at food shops/retail outlets (for details see Summary of the policy idea in Logic model/system map of a policy – Appendixes 1a-5). The YA's policy idea (called 'Healthy Shelves') proposes that the food products concerned as healthy products should be exposed in a visible way to increase their availability and accessibility for consumers and that unhealthy products should be less accessible (e.g., by removing

unhealthy snacks from cash registers areas). The policy idea also proposes a system of shelves and food products labeling in supermarkets (indicating the nutritional values of given products) and increasing numbers of (new) healthy food products available in stores. Youth first came up with the idea after Group Model Building exercise, during which they were asked to share their views on factors contributing to healthy life style (please see Appendix 1a for the overview of the logic model of the policy) and was revised accordingly through several activities during the course of the CO-CREATE project (described briefly below). The policy idea targets large supermarkets to reorganize food products in the store shelves and identify specific criteria that divide products into healthy (unprocessed) and unhealthy (processed, containing saturated fat, high in sugar and salt, etc.) foods. The policy idea considers the importance of establishing regulations and demanding the necessity of involving local authorities. This policy idea was developed for the local level, targeting local authorities in the Lower Silesian province with the possibility of expanding to the national level in Poland.

The policy form was drafted by youth in cooperation with facilitators and co-facilitators throughout the YA meetings over the period of November 2019 – April 2020. Each meeting was set up around specific tasks that were designed to help young people to develop and refine their idea (e.g., using group model building exercise or the SMART method).

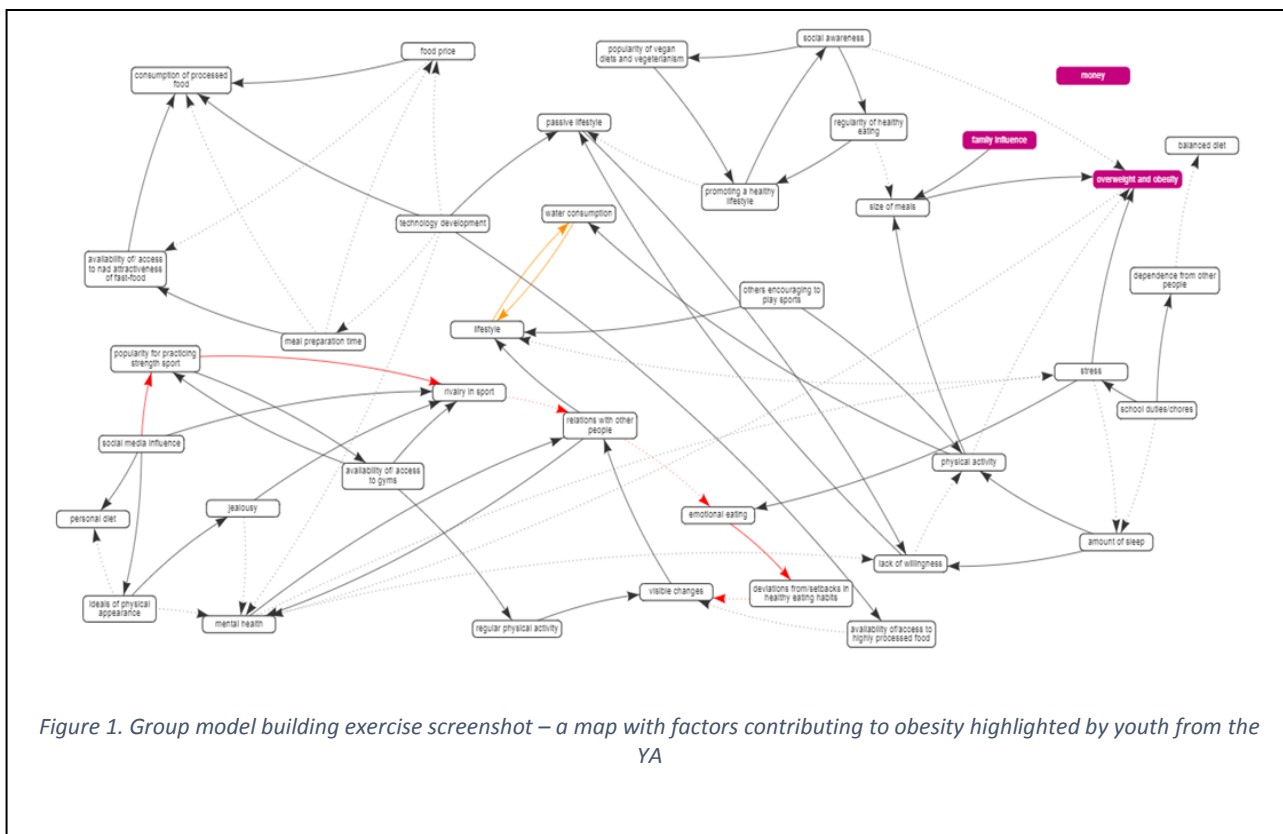


Figure 1. Group model building exercise screenshot – a map with factors contributing to obesity highlighted by youth from the YA

In particular, the process of filling in the policy idea form included several steps: first the YA members were asked to develop a system map with factors (and relationships between them) that in their opinion contribute to low physical activity and poor diet among adolescents (see Figure 1). Next, based on

relationships between the factors they were asked to develop a policy idea that would address the paths of factors contributing to young people's physical activity and healthy diet.

Another stage leading to the formation of implementation/evaluation plans was organizing a digital Dialogue Forum (DF; 6) with stakeholders (July 2020) in order to further discuss the policy idea and facilitate the process of policy idea development and refinement. Two representatives of the YA participated in the digital DF together with three invited stakeholders: an expert in the field of physical activity (a president of an NGO, aiming at the promotion of activities related to a healthy lifestyle and physical activity), a director of a small-to-medium sized enterprise (SME) providing training services, consulting and treatment in the area of dietetics and mental health, and a representative of local authorities. As a result of the DF the participants suggested new ideas to improve the policy idea, such as organizing an educational campaign in the local community regarding the policy idea and healthy food choices, making an effort to introduce a law petition based on the policy idea or starting to work on a list of food products that could be considered as 'healthy food products' (see Figure 2 for an outline of the DF canvas used during the online meeting with stakeholders).

The policy idea was inspired and partially informed by the existing solutions of using systems of nutrition labels for pre-packed food products, such as color coding or traffic lights system (e.g., the Front of Pack nutrition labeling scheme from UK or The Health Star Rating from Australia) (7,8). In particular, the assumption that an easy and comprehensible way of placing and labeling the food products would trigger healthier choices among consumers was taken up by the youth and informed their policy idea.

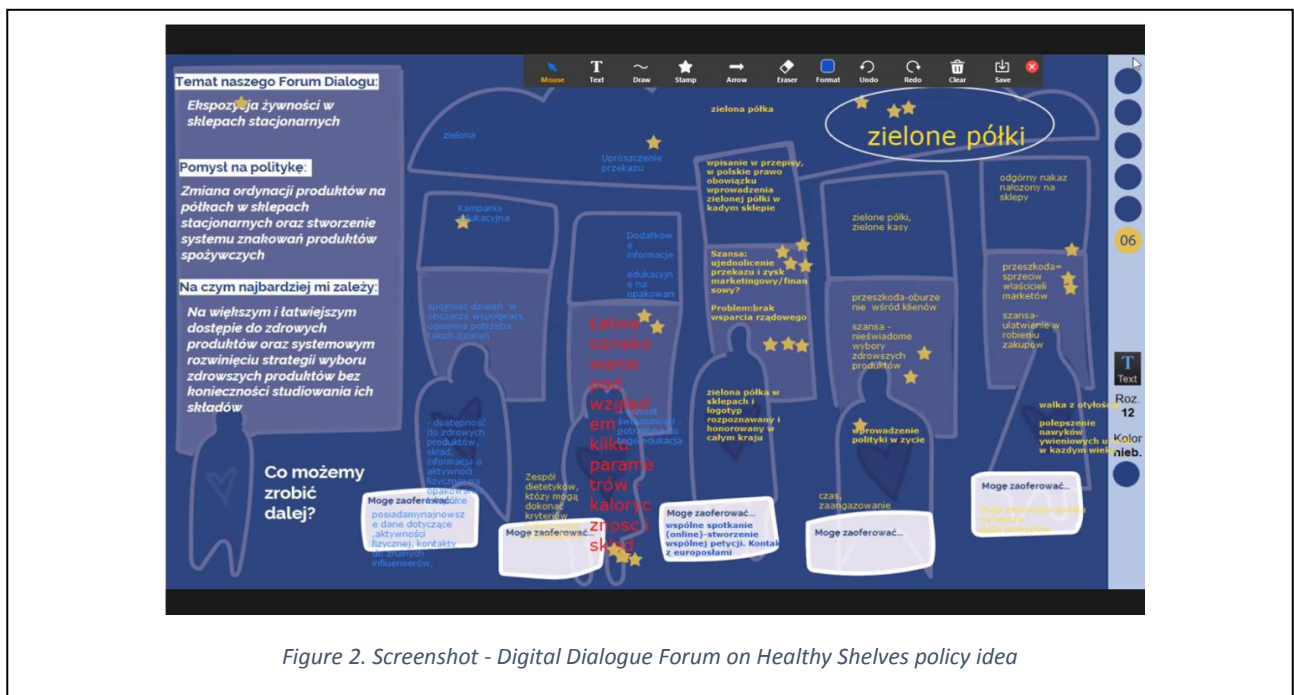


Figure 2. Screenshot - Digital Dialogue Forum on Healthy Shelves policy idea

Description of process

The implementation and evaluation plans were developed based on the policy form with the details of the youth policy idea as well as feedback from the stakeholders from the DF in several steps. The process

of preparing this report and the implementation and evaluation plans regarding the policy idea described above included several stages and followed, to a certain extent, the steps outlined in the “Protocol for developing implementation and evaluation plans (D7.4)” (4). In particular, due to limited time resources of members of the YA still willing to contribute to the process of creating implementation/evaluation plans as well as challenges with recruiting a stakeholder willing to be involved in the process (including joining the team meetings/workshops, as described in step 2 of the above-mentioned protocol), it was decided that the core team will prepare the first draft of the policy implementation/evaluation plans to be afterwards consulted both with YA representatives and a relevant stakeholder.

The policy idea (step 1) was chosen from ideas developed within one of the Polish YAs based on three criteria. Firstly, this idea was one of the two ideas from the alliance that was discussed during the DF (and thus, receiving some input from relevant stakeholders). Secondly, the representatives of youth that were involved in developing the idea were engaged in the DF preparation, took part in the DF, and declared interest in further discussing the idea. Third, there was an agreement in the Polish CO-CREATE research team that the idea reflects the youth's views on the problem solution, has a potential to take a system perspective, is likely to be supported by the relevant stakeholders, and has a potential to be institutionalized and maintained over time. Lastly, the representatives of the authors of the idea were willing to cooperate in preparing a draft of the implementations/evaluation plans.

The core team (step 2) was established based on previous experience with organizing, running, and facilitating YAs and the DF. The core team included the leader of the Polish CO-CREATE team (a researcher with expertise in policy evaluation and implementation, mostly taking an advisory role throughout the process of preparing the implementation plans) and three facilitators of the Polish YAs. One of the facilitators had experience in running the alliances' meetings, preparing the field notes from YAs meetings, and organizing DF and therefore was assigned a role of the leader of the implementation team and coordinated the process of drafting the plans. The two remaining facilitators were directly involved in the work of the young people group that was the owner of the policy idea, the last and took the role of the implementation team members.

The implementation team leader prepared a draft of the implementation/evaluation plans using templates provided in the protocol for Deliverable 7.4 (see the appendixes; 4). In particular, the following documents were prepared:

- The overall evaluation framework (appendix 1)
- A system map of the policy idea together with an overview of the logic model of the policy including factors from the group model building exercise (performed during the youth alliances meetings), factors from the consolidated map for Poland (from WP4), and factors added after revising the policy idea with youth (after DF) (appendix 1a)
- The logic model worksheet for the Policy idea (appendix 2)
- The logic model of implementation worksheet for Adopters and Implementers (appendix 3)
- Implementation plans (appendix 4)
- Evaluation plans (appendix 5)

After the initial versions of the implementation/evaluation plans were drafted by the leader of the implementation team, the two implementation team members and the leader of the Polish CO-CREATE team provided their feedback. The feedback from the implementation team included some general comments regarding the content of the appendixes (e.g., establishing a general definition of 'healthy food products within the implementation plans steps, adding some barriers and facilitators for the implementation, such as 'resistance toward changes). The most important remark from the team included

preparing a more user-friendly document of implementation plans with elements of the evaluation to be communicated and consulted with the youth and the stakeholders. The team decided to use another template for the logic model of the policy developed by Lien et al. (9) called the Tearless Logic Model (TLM). The TLM breaks down the logic model into a series of steps and manageable, jargon-free questions. The TLM can be used with almost any audience, including community-based groups and stakeholders with different backgrounds (e.g., government officers, researchers, non-profit organization representatives) and it was developed in order to help establish a logic model with a group that included high school-age leaders (9).

In the next step (step 3) two stakeholders who participated in the DFs organized in Poland were contacted in order to discuss the prepared implementation and evaluation plans. One of the stakeholders was an NGO representative and an expert in the field of developing, implementing, and evaluating city-wide projects related to healthy lifestyle/health promotion for children, another was a director of a SME providing training services and treatment in the area of dietetics and mental health. The first stakeholder could not participate in the feedback meeting for personal reasons, however, the second one agreed. The expert received the TLM document (translated into Polish) 3 weeks before an online meeting. The leader of the implementation team and the leader of the Polish Co-CREATE team consulted the implementation and evaluation plans with the stakeholder.

At the same time, the representatives from the YA who declared after the DF that they were interested in taking part in further actions related to CO-CREATE project activities and possibilities for discussing their idea, were contacted in order to consult with them about the translated TLM document. Three members of the YA met during the CO-CREATE Youth Conference (March 2022) together with a member of the implementation team in order to discuss the document and implementation/evaluation plans.

The stakeholder and youth were asked to look at the documents and consider potential changes or improvements that could be introduced to the document and therefore the implementation/evaluation plans. They were provided with the TLM document together with the following question:

This is an implementation plan of one of the youth alliance's policy ideas (called "Healthy Shelves"). It is a brief but at the same time detailed description of how the "Healthy Shelves" policy idea could be implemented and what it could achieve in the short, intermediate, and long terms. It provides a simple overview of the main goals of the project, different resources that are needed in order to accomplish them, and through what kind of activities/steps the goals could be achieved (i.e., the mechanism by which the idea could work).

Please read the attached document. This document was prepared based on the policy form of the idea, the results of DF, and youth alliance work (the discussions and other activities) that took place during the alliance meetings. We really care about your opinion on the attached plan: does it include the most important issues in your opinion (such as relevant inputs, activities, outputs, the anticipated outcomes), maybe we should add something else, or maybe something is unnecessary? Please provide your opinion on any aspect of this model/plan.

The main points raised during the feedback discussion with youth mainly referred to:

- (1) the need of highlighting that changes made according to their idea would also make unhealthy products less desirable and accessible to buy for consumers (e.g., by means of introducing restrictions on displaying unhealthy snacks directly next to the cash registers in retail outlets; a short-term outcome) and

- (2) that food producers should benefit from producing healthier products, e.g., due to rising sales of healthy products as one of the achieved outcomes (an intermediate-term outcome).

The main points raised during the discussion with the stakeholder referred to the potential barriers for the implementation of the idea.

Firstly, it was raised that the proposed policy idea has multiple goals which tackle different aspects:

- (1) an increasing number of healthy food products/better availability of healthy food products (e.g., introducing new healthy food products), and at the same time a lowering the availability of unhealthy products,
- (2) increasing the knowledge and awareness of the consumers regarding healthy nutrition and recognizing healthy food products (as well as of the other relevant actors involved in implementation, e.g., retail outlets owners)
- (3) labelling and managing the food products that are already available (e.g., as more to less healthy).

From this point of view, changing the assortment in stores (introducing new products) is a different policy than the policy of changing displays in stores (or ways of labeling food products), or marketing, or raising the nutrition knowledge. Hence, the complexity of the implementation goals could be a barrier for the implementation. The question is whether they should be implemented all at once or perhaps in several separate stages/steps. Furthermore, more feasible and realistic would be to reorganize the food products that are already available (using, e.g., rules established by dietary/nutrition knowledge and experience), than introducing new products.

Secondly, there is no exact definition of healthy food products, and reaching a consensus on a definition of “a healthy food product” could probably constitute another barrier (who should decide if a food product is healthy or not?).

Lastly, the ways to encourage retail outlets owners and staff to introduce any changes should be addressed, together with their knowledge and beliefs regarding such changes. This could perhaps include prior research on attitudes towards proposed changes and appropriate communication and adoption of the idea.

Results

The results of the consecutive steps taken are presented within the appendixes attached to this report (see Appendixes 1-5 and the Tearless Logic Model template – appendix 6). An overall logic model of the policy assumes that a trial/pilot study of ‘Healthy shelves’ policy idea will be conducted in local retail outlets. In order to do this a set of inputs, activities and outputs was identified in order to capture the information required to implement and evaluate the process of implementation and its outcomes (so called, road map of the policy). Also, plans of implementation and evaluation of the implementation of the policy idea were prepared with consecutive steps and methods to be used (such as pre-post measurement) In particular, the following documents were prepared:

- Overall evaluation framework (appendix 1) – an overall policy idea road map (logic model of the policy) how the policy idea is expected to operate; a visual way of illustrating the inputs needed to implement changes, the activities and outputs planned as well as envisioned outcomes (short-term, intermediated and long-term)

- A system map of the policy idea together with an overview of the logic model of the policy including factors from the group model building exercise (performed during the youth alliances meetings), factors from the consolidated system map for Poland (from WP4), and factors added after revising the policy idea with youth (after DF) (appendix 1a)
- Logic model worksheet for the Policy idea (appendix 2) – description of the logic of change (how the policy idea is going to create change, what factors are going to be targeted and how they are inter-related)
- Logic model of implementation worksheet for Adopters and Implementers (appendix 3) – a road map/blueprint of activities needed in order to implement the policy idea
- Implementation plans (appendix 4) – description of the steps of the implementation process
- Evaluation plans (appendix 5) – description of a plan of evaluating the assumed impact of policy implementation steps using predefined indicators/questions
- The Tearless Logic Model (TLM) for communication with youth and stakeholders (appendix 6) – as a user-friendly overall logic model of the policy of the inputs needed to implement changes, the activities and outputs planned as well as envisioned outcomes (short-term, intermediated and long-term)

Reflections

We followed the protocol in the process of-creating implementation/evaluation plans. All the consecutive templates enumerated in the Results section were used to prepare implementation/evaluation plans of the policy idea. In addition to appendices 1-5, appendix 6 was added (with the TLM model) to be consulted with the youth and stakeholder.

It seems that the most helpful activities during this task included working on the overall logic model of the policy (appendix 1 or the TLM), and the implementation and evaluation plans (appendices 4-5), as they allowed participants to pay attention to the order in which the policy adoption and implementation steps should be performed, as well as to the evaluation of implementation outcomes (such as it reach or maintenance). In particular, while the appendices 4-5 allowed for detailed description of actions to be taken during the implementation and questions to be asked (or data to be collected) during the evaluation phase, the overall logic model allows to draw an outline of expected outcomes of the implementation and helps to define the intended impact of the policy through a set of well-planned activities which are supposed to produce an expected effect.

However, during the rounds of consultations, the team faced some challenges related to the complexity of the policy idea (e.g., whether the activities should be related to introducing new food products or just managing the assortment of already available healthy food products in a way that they are more accessible – please see the main points raised during the discussion with the stakeholder in Description of the process section). The question aroused, whether several implementation plans should be prepared in order to achieve expected outcomes or whether it would be more feasible to introduce a set/package of policies at once or rather to implement them individually (starting from perhaps more acceptable or considered more important/realistic in terms of expected outcomes). This did not result in any changes in the policy idea.

Recommendations

As a result of these challenges, it was concluded that the implementation plan should be revised continuously throughout the process of implementation, based on insights from previous steps in the implementation process, scientific knowledge, and experience gained after each step of implementation is performed. Such feedback loops (from the policy implementation plan to enactment of consecutive steps and going back to the implementation plan) could be a way to address barriers for implementation, e.g., the key actors' knowledge or beliefs, that appear along the process of implementation and during the evaluation of the implementation. Also, the complexity of the policy idea and the complexity of policy goals may influence the implementation plans. In particular, more complex goals, such as those captured in "Healthy selves," may require the development of several (separate but interlinked) sub-plans and/or prioritizing which of these goals should be addressed as the first.

Another issue faced during the process of creating implementation/evaluation plans was the complexity and technical terms used in the appendices. As Lien et al. (9) state, such complex templates can be used with success for organizational planning or grant proposals, however, they could be challenging or even inaccessible to community partners due to the technical terms used and complicated nature of the process. For this reason, as already stated beforehand, the team decided to use another template for the logic model of the policy developed - the Tearless Logic Model (9) to be used during the consultation rounds with youth and the stakeholder.

References

- 1) Klepp K-I, Helleve A, Brinsden H, Brøer C, Budin-Ljøsne I, Harbron J, Knai C, Lien N, Luszczynska A, Nesrallah S, Oldridge-Turner K, Rito A, Samdal O, Savona N, Stensdal MK, Allender S, Hoelscher DM, Rutter H. Overweight and obesity prevention for and with adolescents: The "Confronting obesity - Co-creating policy with youth". *Obesity Reviews* – forthcoming.
- 2) CO-CREATE D5.1b: Protocol for youth engagement. April 2019. https://www.fhi.no/contentassets/0a74196d35c64da89d337e25af982f5f/co-create-deliverables-5.1_engagement-protocol.pdf
- 3) CO-CREATE Dialog forum tool. <https://eatforum.org/initiatives/co-create/>
- 4) CO-CREATE D7.4: A protocol for developing implementation and evaluation plans. April 2020. https://www.fhi.no/globalassets/dokumenterfiler/studier/co-create/7_co-create-deliverable-7.4-final.pdf
- 5) CO-CREATE D7.5: A workshop for CO-CREATE co-workers on how to apply the implementation and evaluation protocol. April 2020. https://www.fhi.no/globalassets/dokumenterfiler/studier/co-create/7_co-create-deliverable-7.5-final.pdf
- 6) EAT. (2022). *CO-CREATE Dialogue Forum Tool*. <https://eatforum.org/initiatives/co-create/>
- 7) Commonwealth of Australia. (2014). *Health Star Rating System*. <http://www.healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/home>
- 8) Department of Health and Social Care. (2016). *Guide to creating a front of pack (FoP) nutrition label for pre-packed products sold through retail outlets*. <https://www.gov.uk/government/publications/front-of-pack-nutrition-labelling-guidance>

- 9) Lien, A. D., Greenleaf, J. P., Lemke, M. K., Hakim, S. M., Swink, N. P., Wright, R., & Meissen, G. (2011). Tearless Logic Model. *Global Journal of Community Psychology Practice*, 2(2), 1-12. Retrieved 24 May 2022, from (<http://www.gjcpp.org/>)

Appendixes

- Appendix 1 - Overall evaluation framework
- Appendix 1a - A system map of the policy idea together with an overview of the logic model of the policy including factors from the group model building exercise (performed during the youth alliances meetings), factors from the consolidated system map for Poland (from WP4), and factors added after revising the policy idea with youth (after DF)
- Appendix 2 - Logic model worksheet for the Policy idea
- Appendix 3 - Logic model of implementation worksheet for Adopters and Implementers
- Appendix 4 - Implementation plans
- Appendix 5 - Evaluation plans
- Appendix 6 - The Tearless Logic Model for communication with youth and stakeholders
- References for appendixes 2-5

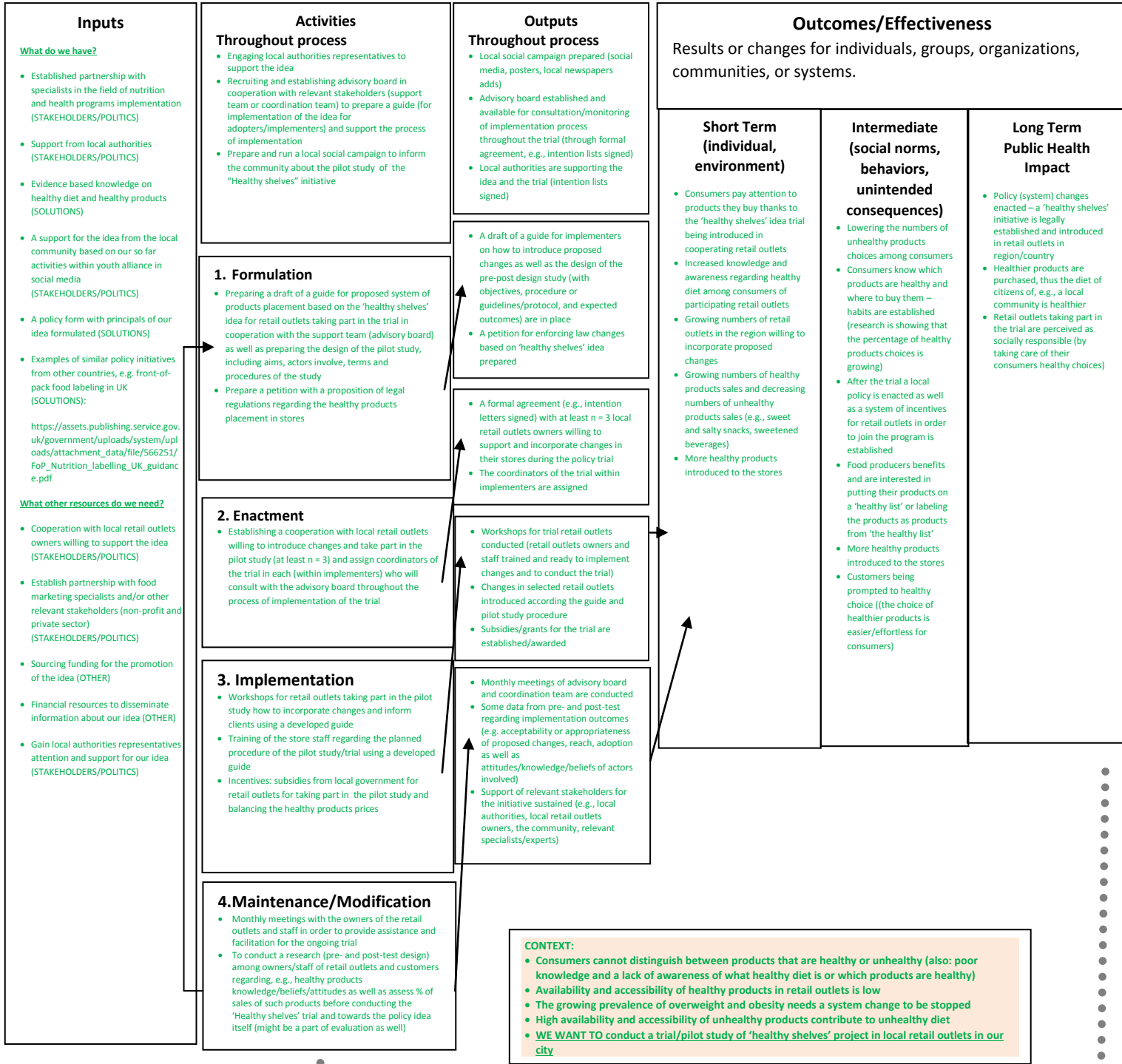
Appendix 1 Overall evaluation framework

Formative Evaluation

Process Evaluation

Outcome Evaluation

Continuous Engagement of Stakeholders, Intended Users



Describe the Program

Focus the Evaluation Design

Appendix 1a PLEASE NOTE:

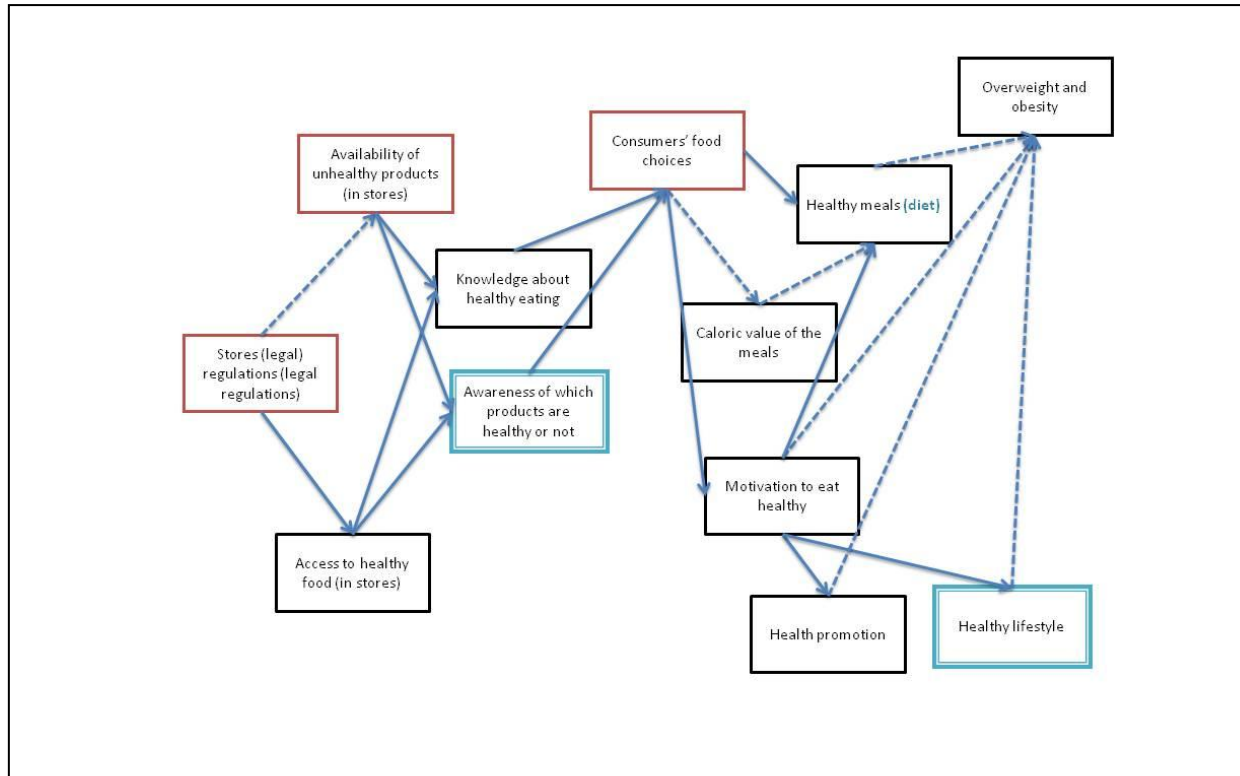
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DESCRIPTION OF THE LOGIC MODEL THE POLICY (SYSTEM MAP OF A POLICY)

Healthy Shelves: Changing the Products Exposition in Stores

Summary of the policy idea: The policy proposes to change the product placement at store shelves and at the cash registers in order to make healthy food products more visible and unhealthy food products less visible. As a result, it can also prompt companies to the introduction of new/more healthy products. The project also proposes a system of shelves or food products labeling in supermarkets, indicating the nutritional values of given products.

1. **Logic model for the policy:** system map of the policy idea (based on Poland consolidated system map from WP4 and the Youth Alliance map)



Note: RED – new factors added now (based on policy form); BLACK – factors from consolidated map for Poland from WP4; BLUE – factors raised at youth alliance meeting

Solid lines represent positive causal relationship between factors (high levels or presence of one factor causes higher levels or presence of another factor); dotted lines represent negative causal relationship (low levels or lack of presence of one factor causes low levels or lack of presence of another factor)

Overview of the logic model of the policy:

High availability of unhealthy products (and low access to healthy products) in stores contribute to consumers' (including adolescents) unhealthy food choices (e.g., through low consumer knowledge about healthy eating or awareness of which products are healthy or not) and thus, unhealthy diet (e.g., through higher consumption of unhealthy processed products high in fat and sugar with high caloric value) and unhealthy lifestyle. This way, an unhealthy diet contributes to the prevalence of overweight and obesity.

The map shows that store legal regulations regarding healthy and unhealthy products display have the potential to raise access to healthy food products (e.g., by prompting companies to produce and introduce more healthy products into the stores), lower the availability of unhealthy products and this way make consumers' food choices healthier (e.g., by consuming products lower in calories which can, in turn, contribute to changing the diet for healthier and thus lower the prevalence of people with overweight and obesity). Another path linking consumer choices with the prevalence of overweight and obesity is also possible – the opportunity to make healthier consumer choices may raise the motivation to eat healthy, thus contributing to health promotion and healthy lifestyles. Motivation to eat healthy, health promotion, and a healthy lifestyle all can contribute to decreasing the prevalence of overweight and obesity.

Appendix 2 Logic model worksheet for the Policy idea (based on Appendix H of the CDC Evaluating Violence and Injury Prevention Policies Briefs, <https://www.cdc.gov/injury/pdfs/policy/Appendices-a.pdf>)

<p>Context/need: The growing prevalence of overweight and obesity needs a system change to be stopped</p> <p>High availability and accessibility of unhealthy products contributing to unhealthy diet among adolescents</p> <p>Low knowledge and a lack of awareness of what healthy diet is or which products are healthy</p>	<p>Assumptions /Theory of Change (logic model)</p> <ol style="list-style-type: none"> The prevalence of overweight and obesity may decrease based on healthier consumers choices Consumers can change their choices based on the availability and accessibility of healthy products in stores The availability and accessibility of healthy products in stores has a potential to raise consumers’ knowledge and awareness regarding healthy diet importance The opportunity to make healthier consumer choices may raise the motivation to eat healthy, thus contributing to health promotion and healthy lifestyles The availability and accessibility of healthy products in stores can prompt companies to produce more healthier products 			<p>External influences (Other contextual factors which could influence these outcomes - systems model. Any potential unintended consequences?)</p> <p>Political climate for changes in sector Socio-economic and socio-cultural factors :limited choice and high prices of healthy products, attitudes of consumers towards healthy products (e.g., that they are expensive, difficult to prepare, not tasty, traditional cuisine and norms regarding preparing and consuming meals)</p>			
	<p>Inputs (or resources or infrastructure) <u>Resources dedicated to or consumed by our effort</u></p> <p>What resources are needed and what will they cost?</p> <p>Do we have the right organizational structure to implement desired changes?</p> <p>What other resources should we bring to this process?</p>	<p>Activities <u>What we do - in quantifiable terms</u></p> <p>What would it take to create change?</p> <p>What activities must we undertake to achieve measurable results?</p> <p>What will the initiative do with its resources to direct the course of change?</p>	<p>Outputs <u>Direct products of our activities</u></p> <p>What will we produce? How will we count it? What portfolio of services will lead to the change we desire?</p>	<p>Short-term outcomes <u>Initial changes in the condition, knowledge, attitudes, beliefs, skills</u></p> <p>What changes in knowledge, beliefs, and attitudes would you expect to see in the groups you serve?</p> <p>What changes would we expect to see in the next year if we are heading in the right direction?</p>	<p>Intermediate Outcomes <u>Resulting behavior change</u></p> <p>What changes would you expect to see in the behaviors/actions of those you serve?</p> <p>What will the people you serve do differently?</p>	<p>Impacts <u>Longer term indicators of Impact</u> <u>Changes in policies, programs and practices</u></p> <p>What changes in programs, policies, and practices are necessary to reach your vision?</p> <p>If we have reached our “vision”, what has changed to allow that?</p>	

	<p><u>What do we have?</u></p> <p>Established partnership with specialists in the field of nutrition and health programs implementation</p> <p>Support from local authorities</p> <p>Evidence based knowledge on healthy diet and healthy food products</p> <p>A support for the idea from the local community based on our so far activities in social media</p> <p>A policy form with principals of our idea formulated</p> <p>Examples of similar policy initiatives from other countries, e.g. front-of-pack food labelling in UK https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/566251/FoP_Nutrition_labelling_UK_guidance.pdf</p> <p><u>What other resources do we need?</u></p> <p>Cooperation with local retail outlets owners willing to support the idea</p> <p>Establish partnership with food marketing specialists and other relevant stakeholders (non-profit and private sector)</p> <p>Sourcing funding for the promotion of the idea</p> <p>Resources to disseminate information about our idea</p> <p>Gain local authorities representatives attention and support for our idea</p> <p>A core team that can support and conduct each step of the implementation process</p>	<p>Prepare a petition with a proposition of legal regulations regarding the healthy products placement in stores</p> <p>Create a sample ‘healthy list’ (e.g., consistent with national labels) of healthy food products (together with a definition of what healthy food product are) in cooperation with nutrition specialists</p> <p>Prepare a draft of a guide for healthy products placement in the retail outlets that could be introduced by stores willing to cooperate (detailed description of proposed changes with examples of products placement with a list of ‘healthy products’)</p> <p>Establish a cooperation with local retail outlets willing to introduce changes and take part in the pilot study</p> <p>Prepare a list of potential collaborating institutions, media and ideas of promotional materials which can help with promotion/dissemination of the idea and the stores willing to implement the idea</p>	<p>A petition/law draft with details of proposed changes</p> <p>A guide for retail outlets together with a “healthy list” (according to the definition of healthy products applied)</p> <p>Established cooperation with local stores willing introduce the proposed regulations</p>	<p>Consumers pay attention to products they buy thanks to the ‘healthy shelves’ idea trial being introduced in cooperating retail outlets</p> <p>Increased knowledge and awareness regarding healthy diet</p> <p>Acceptance and positive attitudes towards healthy products among costumers</p> <p>There is a growing network of stores willing to introduce changes</p>	<p>Lowering the numbers of unhealthy food products choices among consumers (and rising numbers of healthy food products choices)</p> <p>Consumers know which products are healthy and where to buy them – habits are established</p> <p>A broader range of healthy products introduced in stores</p>	<p>Policy (system) changes enacted – a ‘healthy shelves’ idea is legally established and introduced in retail outlets in region/country</p>
	Indicators	Indicators	Indicators	Indicators	Indicators	Indicators

	<p>A formal agreement with at least 3 local retail outlets owners willing to support and incorporate changes in their stores during the policy trial</p> <p>A formal agreement (e.g. intention letters) on the cooperation with relevant stakeholders, e.g., local authorities representatives, nutrition or food-marketing specialists</p> <p>A detailed description of our idea (e.g., in a 'policy form' form)</p> <p>Examples of similar ideas and their effectiveness from other regions/countries/context s or data regarding the effectiveness of actions that we propose (e.g., research on food products labelling or accessibility and availability of healthy/unhealthy products on consumers' choices)</p> <p>Receiving a grant/fund/subsidies for promotion of our idea</p> <p>A petition/endorsement lists of members of the local community supporting the idea</p>	<p>A draft of a guide for implementers on how to introduce proposed changes together with a definition of healthy food products (a sample 'healthy list')</p> <p>Formal agreement (e.g., intention letters) with at least 3 local retail outlets on conducting a pilot study/trial of the proposed changes</p> <p>A design of a study assessing main implementation outcomes (with objectives, procedure or guidelines, and expected outcomes)</p>	<p>A trial of product placement conducted in at least 3 local retail outlets</p> <p>First results of the trial regarding knowledge/beliefs/attitudes of customers and retail outlets owners (and other implementation outcomes)</p> <p>Potential for 'know-how' knowledge based on the trial process and results (evaluation of the actions – what worked well? What did not?) that can feed the guide</p>	<p>The research results showing that consumers of retail outlets which incorporated changes are able to distinguish between healthier vs. unhealthy food products</p> <p>Growing numbers of retail outlets incorporating changes each year</p>	<p>Research showing that the percentage of healthy products choices is rising.</p>	<p>System changes – the solution is enacted at the regional/national level</p>
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2. Logic model for the adoption/implementation

1) What **facilitating factors** might make adoption and/ or implementation of the policy more likely?

- a. Shared decision making – established cooperation with all the actors involved (local authorities, representatives of the community, retail outlets owners and staff, food producers, others who might be concerned)
- b. Establishing the leadership/identifying leaders representing each involved sector/actor and coordination of cooperation
- c. Support from local authorities (engagement in the initiative, sharing knowledge, promoting the idea)
- d. Training for the store managers and staff
- e. Support from influencers (e.g., organizations, specialists in the field of healthy nutrition)
- f. Consumers' knowledge and beliefs about their needs and healthy food choices.

2) What **barriers** might make adoption and/or implementation of the policy less likely?

- a. A lack of funding (e.g., for the pilot study)
- b. Low cost-effectiveness for actors involved (stores/food producers) to implement changes (e.g., high costs of introducing changes for stores owners)
- c. Competitive interests of food producers/lobbying (food products companies lobbying against introducing changes)
- d. High prices of healthy products vs. low prices of unhealthy products
- e. Resistance towards changes among implementers (e.g., retail outlet owners/staff) or key stakeholders/other actors involved (e.g., food producers)

Appendix 3 Logic model OF IMPLEMENTATION worksheet for Adopters and Implementers

a) **Adopter(s)** Fill in one worksheet per type of adopter

Adopters are often seen as the gate keepers within the sector or setting who is asked to implement the policy;

implementers are those that have to change their routines/make the changes in the setting or the sector (Eldredge et al 2016).

<p>Setting: Local retail outlets</p> <p>Context/need: Consumers are unaware of products that are healthy vs unhealthy</p> <p>Availability and accessibility of healthy products in retail outlets is low</p> <p>To conduct a trial/pilot study of 'healthy shelves' project in local retail outlets in the city</p> <p>and</p> <p>To address the anticipated barriers for adoption and implementation of the policy idea</p>	<p>Assumptions /Theory of Change (logic model) (Barriers and facilitators of adoption in the inner and outer context)</p> <p><u>Facilitators:</u></p> <ul style="list-style-type: none"> Shared decision making – established cooperation with all the actors involved (local authorities, representatives of the community, store owners and staff, food producers, others who might be concerned) Establishing the leadership/identifying leaders representing each involved sector/actor and coordination of the cooperation Support from the local authorities (engagement in the initiative, sharing knowledge, promoting the idea, providing subsidies) Training for the stores managers and staff Support from influencers (e.g., organizations, specialists in the field of healthy nutrition) Consumers' knowledge and beliefs about their needs and healthy food choice <p><u>Barriers:</u></p> <ul style="list-style-type: none"> A lack of funding (e.g., for a pilot study) Low cost-effectiveness for actors involved (stores/food producers) to implement changes (e.g., High costs of introducing changes for stores owners) Competitive interests of food producers/lobbying (food products companies lobbying against introducing changes) High prices of healthy products vs. low prices of unhealthy products Resistance towards changes among implementers (e.g., retail outlet owners/staff) or key stakeholders/other actors involved (e.g., food producers) 			<p>External influences (Other contextual factors which could influence these outcomes - systems model. Any potential unintended consequences?)</p> <p><i>Food producers/suppliers lobbying against identifying their products as less healthy</i></p>		
	<p>Adopter: Local retail outlets owners</p> <p>Procedures for adoption: 1. Formalizing and enforcing rules of</p>	<p>Inputs</p> <p>Support team</p> <p>Representatives of local retail outlets owners</p> <p>Local authorities</p>	<p>Activities</p> <p>Dissemination strategies (messages/materials & distribution of it)</p> <p>Assigning coordinators of the trial (within retail outlets staff)</p>	<p>Outputs</p> <p>Number of settings reached and responses</p> <p>Changes in selected retail outlets introduced according the guide and pilot study procedure (formal agreements and</p>	<p>Short-term outcomes</p> <p>Adopters express awareness and positive attitudes</p> <p>Results of the study showing:</p>	<p>Intermediate outcomes</p> <p>Policy adopted</p> <p>A local policy is enacted and a system of incentives for retail outlets is established in order</p>

<p>the trial among key actors</p> <p>2. Get formal support from local representatives</p> <p>3. Establishment of the advisory board</p> <p>4. Regular consultation throughout the process with local authorities, retail outlets and advisory board representatives</p> <p>5. Regular staff trainings and feedback sessions</p>	<p>representatives</p> <p>A nutrition specialist</p> <p>A specialist with a background in health promotion programs implementation</p> <p>A food marketing specialists</p> <p>Coordination team and CO-CREATE team</p>	<p>Preparing the design of the pilot study, including aims, actors involve, terms and procedures of the study</p> <p>Preparing a draft of a guide for proposed system of products placement based on the ‘healthy list’ idea for retail outlets taking part in the trial</p> <p>Workshops for retail outlets taking part in the pilot study how to incorporate changes and inform consumers</p> <p>Preparing a local social campaign to inform the community about the pilot study of the “healthy shelves” initiative</p> <p>Incentives: subsidies from local government for retail outlets for taking part in the pilot study and balancing the healthy products prices</p>	<p>rules of conduction of the study are established)</p>	<p>Producers are interested in putting their products on a ‘healthy list’ or labelling the products as products from ‘the healthy list’</p> <p>Retail outlets taking part in the trial are perceived as socially responsible (by taking care of their consumers healthy choices)</p>	<p>to join the program</p> <p>More retail outlets want to incorporate changes</p>		
	<p>Support team Not applicable (see next section)</p>	<p>Integration strategies Not applicable (since the trial is supposed be conducted on a local level)</p>					
	<p>Indicators</p>	<p>Indicators</p>	<p>Indicators</p>	<p>Indicators</p>	<p>Indicators</p>	<p>Indicators</p>	<p>Indicators</p>

	<p>Intention lists signed with the core team of stakeholders (advisory board) in order to cooperate, design and conduct a pilot trial</p>	<p>A guide for retail outlets prepared</p> <p>Workshops for trial retail outlets conducted</p> <p>Local social campaign prepared (social media, posters, local newspapers adds)</p> <p>Coordinators of the trial are assigned</p> <p>Subsidies/grants for the trial are established/awarded</p>	<p>A trial is being conducted in selected retail outlets, as well as the pre-post study assessing knowledge/beliefs/attitudes of actors involved and relevant implementation outcomes, barriers, facilitators, others?</p> <p>The proportion of signed agreements (the number of reached retails outlets/the number of retail outlets agreements and trials conducted)</p>	<p>Surveys among consumers showing the availability of healthy products is higher, monitoring the sale in the retail outlets involved into the trial (numbers showing higher sales of healthier products)</p>	<p>More retailer outlets joining the initiative</p>	<p>Surveys among consumers regarding the products they buy in retail outlets and attitudes/views towards the retail outlets participating in the trial or incorporating changes</p>
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b) **Implementer(s)** Fill in one worksheet per type of implementer

Adopters are often seen as the gate keepers within the sector or setting who is asked to implement the policy;

implementers are those that have to change their routines/make the changes in the setting or the sector (Eldredge et al 2016).

<p>Setting: Local retail outlets in the city region</p> <p>Context/need: Consumers are unaware of which products are healthy/unhealthy</p> <p>Availability and accessibility of healthy products in retail outlets is low</p> <p>To introduce a system of 'healthy list' (or 'healthy shelves' or 'green shelves') in selected or cooperating retail outlets/to run a pilot trial</p> <p>and</p> <p>To address the anticipated barriers for adoption and implementation of the policy idea</p>	<p>Assumptions /Theory of Change (logic model) (Barriers and facilitators of implementation at the personal and inner context)</p> <p>Facilitators:</p> <ul style="list-style-type: none"> Shared decision making – established cooperation with all the actors involved (local authorities, representatives of the community, store owners and staff, food producers, others who might be concerned) Establishing the leaderships/identifying leaders representing each involved sector/actor and coordination of the cooperation Support from the local authorities (engagement in the initiative, sharing knowledge, promoting the idea) Training for the stores managers and staff Support from influencers (e.g., organizations, specialists in the field of healthy nutrition) <p>Barriers:</p> <ul style="list-style-type: none"> A lack of funding (e.g., for pilot study) Low cost-effectiveness for actors involved (stores/food producers) to implement changes (e.g., High costs of introducing changes for stores owners) Competitive interests of food producers/lobbying (food products companies lobbying against introducing changes) High prices of healthy products vs. low prices of unhealthy products Attitudes/beliefs of customers and stores staff toward healthy products being 'pricy' and 'not tasty' Resistance towards changes among implementers (e.g., retail outlet owners/staff) or key stakeholders/other actors involved (e.g., food producers) 			<p>External influences (Other contextual factors which could influence these Outcomes - systems model. Any potential unintended consequences?)</p> <p>Food producers/suppliers lobbying against identifying their products as less healthy</p>		
	<p>Inputs → Activities → Outputs</p>			<p>Short-term outcomes → Intermediate outcomes → Impact</p>		
	<p>Implementer: Retail outlets owners/store managers</p> <p>Food products company</p>	<p>Support team</p> <p>Delivery system/ implementation team</p>	<p>Capacity-building strategies</p> <p>Training of the store staff regarding the planned</p>	<p>Implementers trained</p> <p>Support system adapted to further needs</p>	<p>Implementers express awareness, positive attitudes and</p> <p>Implementers are able</p>	<p>Implementers provide feedback on feasibility</p> <p>Policy adapted and implemented with a sufficiently high</p>

representatives Local authorities representatives who support the implementation process	Representatives of the retail outlets owners involved into the trial (internal support system) Representatives of the retail outlets employees involved into the trial (internal support system) Local authorities representative (external support system)	procedure of the pilot study/trial using a developed guide/protocol Workshops for retail outlets owners and staff	Staff and owners of the retail outlets trained and ready to implement changes and to conduct the trial	<i>self-efficacy</i> Implementers are aware of the principles of the trial and know how to implement the procedure	to train other staff of retail outlets and provide feedback on barriers and facilitators they identified during the trial implementation	fidelity The trial is expanding to other retail outlets (joining on a voluntary basis)
	Indicators	Indicators	Indicators	Indicators	Indicators	Indicators
	Intention letters signed with the core team conducting a pilot trial	Workshops for the owners of the retail outlets (involved in the trial) and workshops for the staff (an indication if they are performed and the evaluation of the workshop – do participants considered the workshop useful?)	The changes made in shops are in line with the developed guide (detailing the procedure)	Knowledge tests /surveys/interviews	Training for the new implementers performed by the trial participants (implementers involved in the trial)	New retail outlets joining the initiative (willing to incorporate changes)

Appendix 4 Template for writing implementation plans			
IMPLEMENTATION PLAN			
Name of policy: <i>HEALTHY SHELVES</i>			
Implementation support system members and responsibilities:			
<ul style="list-style-type: none"> • Food marketing specialists are involved to help in developing a guide for the owners/staff of retail outlets on how to introduce the ‘healthy shelves’ trial; the specialists are also involved to design the local social campaign, encourage the owners of the local retail outlets to join the trial/pilot, address their concerns • Specialists with a background in health promotion programs implementation are involved to share knowledge and experience on implementing interventions and social campaigns regarding healthy lifestyle, to perform workshops for the owners/staff of the retail outlets; the workshops aim at discussing the pilot/trial procedure implementation, and to help in developing a guide for the owners of the retail outlets (the guide on how to place the products from ‘healthy list’ according to a developed and applied definition of a healthy product) • The representatives of local authorities are involved to coordinate the pilot/trial, to encourage the owners of the local retail outlets to join the trial/pilot, to develop a system of incentives/subsidies to encourage retail outlets to join the trial/pilot, to set a team of coordinators of the pilot/trial • Nutrition specialists are involved to help in developing the product placement system and the guide for retail outlets, preparation the ‘healthy list’ according to definition of a healthy food product 			
Purpose: to conduct a pilot/trial of ‘Healthy Shelves’ policy idea on a local scale among retail outlets in the city district			
Setting: local retail outlets in the city district			
Adopters and implementers: local retail outlets owners and staff, local authorities			
ADOPTION			
Activities/Implementation strategies	Targeting which factors?	Who are doing this?	When and where?
Activity 1			
Reach to local authorities in order to present the idea of conducting trial of the ‘Healthy shelves’ policy idea and gain support (e.g., financial support for developing the guide how to implement changes or subsidies/financial incentives for participating retail outlets and with reaching to relevant specialists/stakeholders in the field)	<ul style="list-style-type: none"> • Support from local authorities (engagement in the initiative, sharing knowledge, promoting the idea) • Lack of funding (e.g., for pilot study) • Low cost-effectiveness for actors involved (retail outlets/food producers) to implement changes 	Youth alliance representatives together with CO-CREATE research staff team representatives	The city local district office Month 1-2
Activity 2			
Set a core team of coordinators of the trial implementation: reach to relevant specialists/stakeholders AND Prepare (with help of specialists/stakeholders) a guide on how to introduce changes in the stores step by step as well as workshops for implementers	<ul style="list-style-type: none"> • Shared decision making • Establishing leaderships representing each involved sector/actor and the coordination of the cooperation • Support from influencers (e.g., organizations, specialists in the field of healthy nutrition), cooperation 	Youth alliance representatives together with CO-CREATE research staff team representatives with a help of local authorities representatives	Month 2-5

Activity 3			
<p>Reach to nutrition specialists in order to:</p> <ul style="list-style-type: none"> • formulate a definition of healthy food product and a list of ‘healthy products’ • draft a guide for the owners and staff of retail outlets, clarifying how to implement changes 	<ul style="list-style-type: none"> • Training for the store managers and staff • Shared decision making • Establishing the leaderships/identifying leaders representing each involved sector/actor and the coordination of the cooperation • Support from influencers (e.g., organizations, specialists in the field of healthy nutrition) 	<p>Youth alliance representatives together with CO-CREATE research staff team representatives with a help of local authorities representatives</p>	<p>Months 2-5</p>
Activity 4			
<p>Reach to a specialist with background in health promotion programs implementation in order to:</p> <ul style="list-style-type: none"> • develop the guide • prepare the plan of implementation of the trial together with the local social campaign 	<ul style="list-style-type: none"> • Training for the stores managers and staff • Shared decision making • Establishing leaderships representing each involved sector/actor and coordination of cooperation • Support from influencers (e.g., organizations, specialists in the field of healthy nutrition) 	<p>Youth alliance representative together with CO-CREATE research staff team representative with a help of local authorities representative</p>	<p>Months 2-5</p>
Activity 5			
<p>Reach to the Food products marketing specialist in order to:</p> <ul style="list-style-type: none"> • develop the guide • prepare a plan of implementation of the trial 	<ul style="list-style-type: none"> • Training for the stores managers and staff • Shared decision making • Establishing leaderships representing each involved sector/actor and coordination of cooperation • Support from influencers (e.g., organizations, specialists in the field of healthy nutrition) 	<p>Youth alliance representatives together with CO-CREATE research staff team representatives with a help of local authorities representatives</p>	<p>Months 2-5</p>
Activity 6			
<p>Reach to local retail outlets representatives in order to:</p> <ul style="list-style-type: none"> • consult the idea/assess and address concerns of conducting a trial of ‘Healthy shelves’ policy idea • present the principals of ‘Healthy shelves’ idea 	<ul style="list-style-type: none"> • Competitive interests of food producers/lobbying (food products companies lobbying against introducing changes) • High prices of healthy products vs. low prices of unhealthy products • Resistance towards changes among implementers (e.g., retail outlet owners/staff) or key stakeholders/other actors involved (e.g., food producers) • Attitudes/beliefs of customers and stores staff toward healthy products being ‘pricy’ and ‘not tasty’ • Low cost-effectiveness for actors involved (stores/food producers) to implement 	<p>Youth alliance representatives together with CO-CREATE research staff team representatives with a help of local authorities representatives</p>	<p>The city local district Months 5-8</p>

	<ul style="list-style-type: none"> changes (e.g., High costs of introducing changes for stores owners) Shared decision making 		
Activity 7			
Developing the final guide for retail outlets to implement the trial (within the coordination team)	<ul style="list-style-type: none"> Training for the store managers and staff Shared decision making Establishing the leadership representing each involved sector/actor and coordination of cooperation Support from influencers (e.g., organizations, specialists in the field of healthy nutrition) 	Youth alliance representatives together with CO-CREATE research staff team representatives with a help of local authorities representatives and the team of the coordinators of the trial	Months 8-9
Activity 8			
Prepare a social campaign	<ul style="list-style-type: none"> Attitudes/beliefs of customers and stores' staff toward healthy products being 'pricy' and 'not tasty' 	Youth alliance representatives together with CO-CREATE research staff team representatives with a help of local authorities representatives and the team of coordinators of the trial	The city local district Months 9-10
Activity 9			
Prepare workshops for the owners of retail outlets on how to implement the trial according to the guide	<ul style="list-style-type: none"> Training for the store managers and staff 	Youth alliance representatives together with CO-CREATE research staff team representatives with a help of local authorities representatives and the team coordinating the trial	Month 11
Activity 10			
Prepare a research/evaluation plan on how to check the effectiveness of the trial or in terms of desired implementation outcomes (e.g., conduct surveys among costumers, retail outlets owners and staff on: changes in % of sales of 'healthy shelves' products, knowledge and attitudes towards healthy products and the trial among actors involved, such as adopters, implementers and consumers)	<p>To systematically assess and address concerns regarding, e.g.:</p> <ul style="list-style-type: none"> Low cost-effectiveness for actors involved (stores/food producers) to implement changes (e.g., High costs of introducing changes for stores owners) High prices of healthy products vs. low prices of unhealthy products Attitudes/beliefs of customers and store staff toward healthy products being 'pricy' and 'not tasty' 	Youth alliance representatives together with CO-CREATE research staff team representatives with a help of local authorities representatives and the team coordinating the trial	Month 12
Activity 11			

Recruitment and a formal agreement with at least n = 3 local retail outlet owners to take part in the trial and assign a leader of the implementation within the retail outlets staff	<ul style="list-style-type: none"> Establishing leaderships Shared decision making 	Youth alliance representatives together with CO-CREATE research staff team representatives with a help of local authorities representatives and the team coordinating the trial	Youth alliance representatives together with CO-CREATE research staff team representatives with a help of local authorities representatives and the team coordinating the trial
IMPLEMENTATION			
Activities/Implementation strategies	Targeting which factors?	Who are doing this?	When and where?
Activity 1			
Workshops for owners and staff of retail outlets how to implement changes according to the 'Healthy shelves' guide	<ul style="list-style-type: none"> Training for the stores managers and staff Shared decision making 	The coordination team	Month 16-17
Activity 2			
Conduct research pre-test among owners/staff of retail outlets and customers regarding, e.g., healthy products knowledge/beliefs/attitudes as well as assess % of sales of such products before conducting the 'Healthy shelves' trial and toward the policy idea itself	<ul style="list-style-type: none"> Addressing attitudes/knowledge of costumers, such as: healthy products being 'pricy' and 'not tasty', healthy products being pricy Resistance towards changes among implementers (e.g., retail outlet owners/staff) or key stakeholders/other actors involved (e.g., food producers) 	The coordination team and CO-CREATE research team	Month 18
Activity 3			
Social campaign on the trial being conducted in local retail outlets	<ul style="list-style-type: none"> Addressing attitudes/knowledge of costumers, such as: healthy products being 'pricy' and 'not tasty', healthy products being pricy 	The coordination team	Month 19-20
Activity 4			
The trial starts (planned to last for at least 12 months)	<ul style="list-style-type: none"> Addressing attitudes/knowledge of costumers, such as: healthy products being 'pricy' and 'not tasty', healthy products being pricy 	The implementers and coordination team	Month 21
Activity 5			
Monthly meetings with the owners of the retail outlets and staff in order to provide assistance and facilitation for the ongoing trial	<ul style="list-style-type: none"> Capacity-building Provide supervision Promoting adaptability 	The implementers and coordination team	Months 21-33
Activity 6			
Trial ends: to conduct post-test on desired outcomes (short-term and intermediate) as well as	<ul style="list-style-type: none"> Addressing attitudes/knowledge of costumers and retail outlets staff 	The coordination team and CO-CREATE research team	Month 34-35

knowledge/beliefs and attitudes assessed at the pre-test	(implementers)		
Activity 7			
Prepare a report from the trial, disseminate the results/conclusions among adopters and implementers as well as the target audience (provide feedback)	<ul style="list-style-type: none"> Motivation and capacity to integrate changes into practice 	The coordination team	Month 36

Appendix 5 Template for writing evaluation plans (based on the Center TRT's evaluation plan examples <http://centertrt.org/>)

EVALUATION PLAN
Name of policy *HEALTHY SHELVES*
Evaluation team members and responsibility: CO-CREATE research team

Purpose: To evaluate the implementation of the pilot/trial based on HEALTHY SHELVES policy idea

Evaluation question:
PROCESS EVALUATION:

- **REACH**
 - What was the number of consumers who participate in the trial (were served/purchased food during the trial) and was this a representative sample for the local community?
- **ADOPTION**
 - How many retail outlets participated in the trial?
 - What was the proportion of the participating retail outlets to all this type of outlets in the city/region?
- **IMPLEMENTATION**
 - What was the degree of implementation (and according to the plan)? Was the program delivered as intended? Which program activities were not completed and why? If activities changed, why and how did they change?
 - What were the barriers and challenges that affected program implementation?
 - What was the cost of implementation?
 - Other implementation outcomes, such as acceptability of the trial or its appropriateness
- **OTHER QUESTIONS:**
 - How did the community members (consumers) perceive the program?
 - How did the retail outlets staff members perceive the program?

OUTCOME EVALUATION:

- What were the outcomes of the trial?
 - Did the program increase knowledge or awareness the consumers?
 - Did the program change attitudes or beliefs of the consumers?
 - Did the program contribute to improvements in lifestyle changes among the target group (e.g., eating habits)?

Ethics/data handling approval procedure: Ethical clearance and informed consent from each participant providing their data during the evaluation should be obtained and proper personal data handling (in line with GDPR) should be ensured.

Design: Pre-post data collection design (were appropriate), focus group interviews

Data collection (*incl. available measurement tools*): questionnaires, semi-structured interviews, focus groups, sales data from retail outlets

Users and uses – the evaluation is likely to be done for potential funding agencies (funding the change in the stores) to demonstrate promising outputs/outcomes of the implementation, for public health and local authorities to show effects on environment, the target group as well as

PROCESS EVALUATION		
Evaluation questions	Data to be collected	Data collection method
adopters/implementers behaviors/knowledge/attitudes/beliefs within short or intermediate time-frame.		
Reach		
What was the number of consumers who participate in the trial (were served during the trial) and was this a representative sample for the local community?	<ul style="list-style-type: none"> - Sales data - Characteristics of participants compared to non-participants or to target population 	QUANTITATIVE DATA (e.g., pre-post design) (questionnaires, counts through direct observation, city demographic data to assess the representativeness of the sample)
Adoption		
<ul style="list-style-type: none"> • How many retail outlets participated in the trial? • What was the proportion of the participating retail outlets to all this type of outlets in the city/region? 	<ul style="list-style-type: none"> - Characteristics of retail outlets staff participants vs. non participating staff or typical staff - Percent of retail outlets staff invited that participate - Characteristics of retail outlets participating vs. non participating - Percent of retail outlets invited that participate 	QUANTITATIVE DATA (questionnaires, counts through direct observation)
Implementation		
<ul style="list-style-type: none"> • What was the degree of implementation (and was it according to the plan)? Was the program delivered as intended? • What program activities were not completed and why? If activities changed, why did they change? • What were the barriers and challenges that affected program implementation? • What was the cost of implementation? 	<ul style="list-style-type: none"> - Implementers (staff and retail outlets owners) views - Cost analyses 	QUALITATIVE DATA Semi-structured interviews with retail outlets owners/managers and staff (implementers); logs QUANTITATIVE DATA Questionnaires to assess evidence: assessing barriers and facilitators for implementation among retail outlets owners/managers and staff (implementers) Cost analyses
Other questions		
<ul style="list-style-type: none"> • How did the community members or consumers perceive the program? • How did the retail outlets staff members perceive the program? 	Questionnaires assessing implementers' and adopters' implementation process-related attitudes, barrier and facilitators for implementation, other factors, e.g., attitudes towards the support from local authorities representatives (pros and cons)	QUALITATIVE DATA Semi-structured interviews with retail outlets owners/managers and staff (implementers)
OUTCOME EVALUATION		
Evaluation questions	Data to be collected	Data collection method

Outcome 1		
Did the program increase knowledge or awareness?	<p>Questionnaires assessing implementers' and adopters' and the target group (costumers) knowledge and awareness, e.g., regarding healthy products, healthy nutrition, change of healthy habits</p> <p>Semi-structured interviews with retail outlets owners/managers and staff (implementers), as well as costumers (target group) assessing in depth knowledge/awareness regarding healthy products/healthy eating</p>	<p>QUANTITATIVE DATA (e.g., pre-post design)</p> <p>QUALITATIVE DATA Semi-structured interviews or the focus group design</p>
Outcome 2		
Did the program change attitudes or beliefs?	<p>Semi-structured interviews with retail outlets owners/managers and staff (implementers), as well as costumers (target group) assessing attitudes and beliefs towards the trial, healthy products, healthy nutrition, change of healthy habits</p> <p>Questionnaires assessing implementers' and adopters' and the target group (costumers) attitudes and beliefs regarding the trial, healthy products, healthy nutrition, change of healthy habits</p>	<p>QUANTITATIVE DATA (e.g., pre-post design)</p> <p>QUALITATIVE DATA (e.g., semi-structured interviews or the focus group design)</p>
Outcome 3		
Did the program contribute to improvements in lifestyle changes among the target group (e.g., eating habits)?	<p>Questionnaires assessing changes in health behaviours of customers (e.g., eating habits or buying habits)</p> <p>Semi-structured interviews or focus groups assessing in-depth changes in costumer habits</p>	<p>QUANTITATIVE DATA (e.g., pre-post design)</p> <p>QUALITATIVE DATA (e.g., semi-structured interviews or the focus group design)</p>
Outcome 4		
Other implementation outcomes, such as acceptability of the trial or its appropriateness?	Questionnaires assessing implementers' and adopters', e.g. acceptability of the trial, appropriateness	QUANTITATIVE DATA (e.g., pre-post design)

Appendix 6

Tearless Logic Model Template – WHAT WE WANT TO CHANGE AND HOW WE ARE GOING TO DO THIS							
CONTEXT: <ul style="list-style-type: none"> Consumers cannot distinguish between products that are healthy or unhealthy (also: poor knowledge and a lack of awareness of what healthy diet is or which products are healthy) Availability and accessibility of healthy products in retail outlets is low The growing prevalence of overweight and obesity needs a system change to be stopped High availability and accessibility of unhealthy products contribute to unhealthy diet WE WANT TO conduct a trial/pilot study of ‘healthy shelves’ project in local retail outlets 							
TARGET POPULATION	INPUTS	ACTIVITIES	OUTPUTS	SHORT TERM OUTCOMES	INTERMEDIATE OUTCOMES	LONG TERM OUTCOMES	ANTICIPATED IMPACTS
Who will directly benefit?	Resources dedicated to or consumed by our effort	What we do - in quantifiable terms	Direct products of our activities	Initial changes in the condition, knowledge, attitudes, beliefs, skills.	Resulting behavior change	Changes in policies, programs and practices	Longer term indicators of impact
Questions: <ul style="list-style-type: none"> What’s our intention here? Who benefits directly? What assumptions should we challenge about who we target? Who do you serve or help? (think both directly and indirectly) Who benefits from your work in the community? Who are you 	Questions: <ul style="list-style-type: none"> What resources are needed and what will they cost? Do we have the right organizational structure to implement desired changes? What other resources should we bring to this process? What do you have and what do you need to make this 	Questions: <ul style="list-style-type: none"> What would it take to create change? What activities must we undertake to achieve measurable results? What do you need to do to create the changes we have just discussed? What new or different activities would it take to create change? What must be 	Questions: <ul style="list-style-type: none"> What will we produce? How will we count it? What portfolio of services will lead to the change we desire? What can you “count” when you successfully do the “activities” we just talked about? How many do we serve and what do we provide them? 	Questions: <ul style="list-style-type: none"> Who or what would change and how? What are the outcomes for which we want to be held accountable? What changes in knowledge, beliefs, and attitudes would you expect to see in the groups you serve? What changes would we expect to 	Questions: <ul style="list-style-type: none"> Who or what would change and how? What are the outcomes for which we want to be held accountable? What changes would you expect to see in the behaviors/actions of those you serve? What will the people you serve do differently? 	Questions: <ul style="list-style-type: none"> What’s possible and who cares? What are the outcomes for which we want to be held accountable? What changes in programs, policies, and practices are necessary to reach your vision? If we have reached our “vision”, what has changed to allow that? 	Questions: <ul style="list-style-type: none"> If we got it right... What’s worth our best effort? If you really got it right, what would it look like in 10 or 20 years? If our organization were operating at our very best what would we be achieving?

ultimately trying to serve?	happen? • What will it cost your program/organization to offer the activities we just discussed (people, materials, facilities, hardware, computers, etc.)?	undertaken to make this change possible?		see in the next year if we are heading in the right direction?			
Who is being helped?	What do we need?	What must be done?	What can be measured?	What are the first changes you expect?	Who would change and how?	What rules need to change?	If we got it right, what would it look like?
Members of local communities in our region (city district): citizens who shop for food products in local retail outlets	<p><u>What do we have?</u></p> <ul style="list-style-type: none"> Established partnership with specialists in the field of nutrition and health programs implementation Support from local authorities Evidence based knowledge on healthy diet and healthy products A support for the idea from the local community based on our so far activities within youth alliance in social media A policy form with principals of our idea formulated Examples of similar policy initiatives from other countries, e.g. front-of-pack food 	<p>Throughout process</p> <ul style="list-style-type: none"> Engaging local authorities representatives to support the idea Recruiting and establishing advisory board in cooperation with relevant stakeholders (support team or coordination team) to prepare a guide (for implementation of the idea for adopters/implementers) and support the process of implementation Prepare and run a local social campaign to inform the community about the pilot study of the “Healthy shelves” initiative <p>1. Formulation</p> <ul style="list-style-type: none"> Preparing a draft of a guide for proposed system of products placement based on the 	<p>Throughout process</p> <ul style="list-style-type: none"> Local social campaign prepared (social media, posters, local newspapers adds) Advisory board established and available for consultation/monitoring of implementation process throughout the trial (through formal agreement, e.g., intention lists signed) Local authorities are supporting the idea and the trial (intention lists signed) <p>2. Formulation</p> <ul style="list-style-type: none"> A draft of a guide for implementers on how to introduce proposed changes as well as the design of the pre-post design study (with objectives, procedure or guidelines/protocol, and expected outcomes) are 	<ul style="list-style-type: none"> Consumers pay attention to products they buy thanks to the ‘healthy shelves’ idea trial being introduced in cooperating retail outlets Increased knowledge and awareness regarding healthy diet among consumers of participating retail outlets Growing numbers of retail outlets in the region willing to incorporate proposed changes Growing numbers of healthy products sales and decreasing numbers of unhealthy products sales (e.g., sweet and salty snacks, sweetened beverages) More healthy products introduced to the stores 	<ul style="list-style-type: none"> Lowering the numbers of unhealthy products choices among consumers Consumers know which products are healthy and where to buy them – habits are established (research is showing that the percentage of healthy products choices is growing) After the trial a local policy is enacted as well as a system of incentives for retail outlets in order to join the program is established Food producers benefits and are interested in putting their products on a ‘healthy list’ or labeling the products as products from ‘the healthy list’ More healthy products introduced to the stores Customers being 	<ul style="list-style-type: none"> Policy (system) changes enacted – a ‘healthy shelves’ initiative is legally established and introduced in retail outlets in region/country Healthier products are purchased, thus the diet of citizens of, e.g., a local community is healthier Retail outlets taking part in the trial are perceived as socially responsible (by taking care of their consumers healthy choices) 	<ul style="list-style-type: none"> Higher accessibility of healthy products (balancing prices) High knowledge/awareness regarding healthy eating Lowering the prevalence of overweight and obesity rates in our region/country

	<p>labeling in UK: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/566251/FoP_Nutrition_labelling_UK_guidance.pdf</p> <p><u>What other resources do we need?</u></p> <ul style="list-style-type: none"> • Cooperation with local retail outlets owners willing to support the idea • Establish partnership with food marketing specialists and/or other relevant stakeholders (non-profit and private sector) • Sourcing funding for the promotion of the idea • Financial resources to disseminate information about our idea • Gain local authorities representatives attention and support for our idea 	<p>‘healthy shelves’ idea for retail outlets taking part in the trial in cooperation with the support team (advisory board) as well as preparing the design of the pilot study, including aims, actors involve, terms and procedures of the study</p> <ul style="list-style-type: none"> • Prepare a petition with a proposition of legal regulations regarding the healthy products placement in stores <p>2. Enactment</p> <ul style="list-style-type: none"> • Establishing a cooperation with local retail outlets willing to introduce changes and take part in the pilot study (at least n = 3) and assign coordinators of the trial in each (within implementers) who will consult with the advisory board throughout the process of implementation of the trial <p>3. Implementation</p> <ul style="list-style-type: none"> • Workshops for retail outlets taking part in the pilot study how to incorporate changes and inform consumers using a developed guide • Training of the store staff regarding the planned procedure of the pilot study/trial using a developed guide • Incentives: subsidies 	<p>in place</p> <ul style="list-style-type: none"> • A petition for enforcing law changes based on ‘healthy shelves’ idea prepared <p>2. Enactment</p> <ul style="list-style-type: none"> • A formal agreement (e.g., intention letters signed) with at least n = 3 local retail outlets owners willing to support and incorporate changes in their stores during the policy trial • The coordinators of the trial within implementers are assigned <p>3. Implementation</p> <ul style="list-style-type: none"> • Workshops for trial retail outlets conducted (retail outlets owners and staff trained and ready to implement changes and to conduct the trial) • Changes in selected retail outlets introduced according the guide and pilot study procedure • Subsidies/grants for the trial are established/awarded <p>4. Maintenance/Modification</p> <ul style="list-style-type: none"> • Monthly meetings with the owners of the retail outlets and staff in order to provide assistance and facilitation for the ongoing trial • To conduct a research 		<p>prompted to healthy choice (the choice of healthier products is easier/effortless for consumers)</p>		
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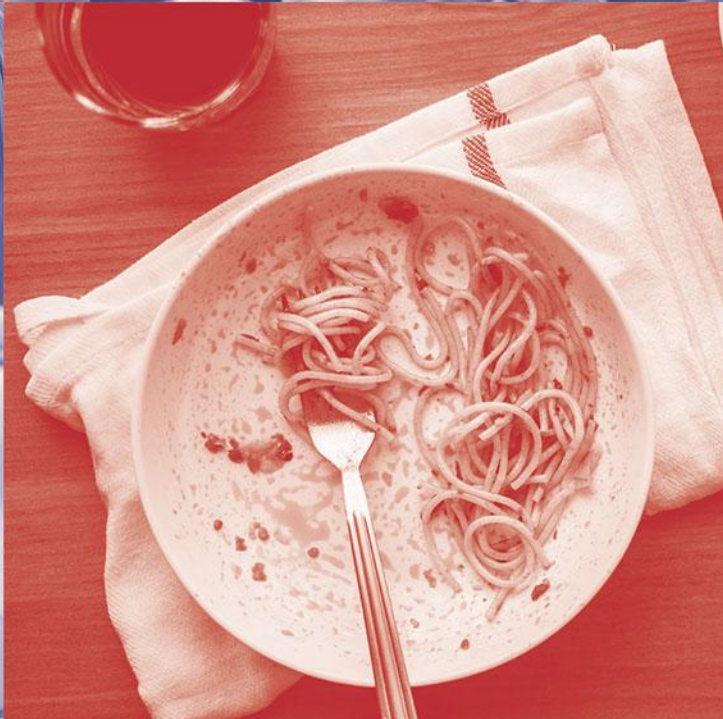
		<p>from local government for retail outlets for taking part in the pilot study and balancing the healthy products prices</p> <p>4.Maintenance/Modification</p> <ul style="list-style-type: none"> • Monthly meetings with the owners of the retail outlets and staff in order to provide assistance and facilitation for the ongoing trial • To conduct a research (pre- and post-test design) among owners/staff of retail outlets and customers regarding, e.g., healthy products knowledge/beliefs/attitudes as well as assess % of sales of such products before conducting the 'Healthy shelves' trial and towards the policy idea itself (might be a part of evaluation as well) 	<p>(pre- and post-test design) among owners/staff of retail outlets and customers regarding, e.g., healthy products knowledge/beliefs/attitudes as well as assess % of sales of such products before conducting the 'Healthy shelves' trial and towards the policy idea itself (might be a part of evaluation as well)</p>				
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References:

- *Adoption – RE-AIM*. Accessed 24 May 2022, from <https://re-aim.org/learn/what-is-re-aim/adoption/>
- Bertram, R. M., Blase, K. A., & Fixsen, D. L. (2015). Improving Programs and Outcomes: Implementation Frameworks and Organization Change. *Research on Social Work Practice, 25*(4), 477–487. <https://doi.org/10.1177/1049731514537687>
- *Chapter 2. Other Models for Promoting Community Health and Development | Section 1. Developing a Logic Model or Theory of Change | Tools | Community Tool Box*. Accessed 24 May 2022 from <https://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/logic-model-development/tools>
- Measuring the Use of the RE-AIM Model Dimension Items *Checklist*. Accessed 24 May 2022, from <https://re-aim.org/wp-content/uploads/2016/09/checklistdimensions.pdf>
- Co-Create Deliverable D7.4 - A protocol for developing implementation and evaluation plans
- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology, 41*(3–4), 327–350. <https://doi.org/10.1007/s10464-008-9165-0>
- *Evaluation Questions – RHIhub Philanthropy Toolkit*. Accessed 24 May 2022, from <https://www.ruralhealthinfo.org/toolkits/philanthropy/5/evaluation-questions>
- *Implementation – RE-AIM*. Accessed 24 May 2022, from <https://re-aim.org/learn/what-is-re-aim/implementation/>
- *Implementation Strategies | Implementation Science at UW*. Accessed 24 May 2022 from <https://impsciuw.org/implementation-science/research/implementation-strategies/>
- *Improving Adoption – RE-AIM*. Accessed 24 May 2022, from <https://re-aim.org/learn/what-is-re-aim/adoption/improving-adoption/>
- *Improving Implementation – RE-AIM*. Accessed 24 May 2022, from <https://re-aim.org/learn/what-is-re-aim/implementation/improving-implementation/>
- *Improving Reach – RE-AIM*. Accessed 24 May 2022, from <https://re-aim.org/learn/what-is-re-aim/reach/improving-reach/>
- Muellmann, S., Steenbock, B., De Cocker, K., De Craemer, M., Hayes, C., O’Shea, M. P., Horodyska, K., Bell, J., Luszczynska, A., Roos, G., Langøien, L. J., Rugseth, G., Terragni, L., De Bourdeaudhuij, I., Brug, J., & Pischke, C. R. (2017). Views of policy makers and health promotion professionals on factors facilitating implementation and maintenance of interventions and policies promoting physical activity and healthy eating: Results of the DEDIPAC project. *BMC Public Health, 17*(1), 932. <https://doi.org/10.1186/s12889-017-4929-9>
- *Reach – RE-AIM*. Accessed 24 May 2022, from <https://re-aim.org/learn/what-is-re-aim/reach/>
- Lien, A. D., Greenleaf, J. P., Lemke, M. K., Hakim, S. M., Swink, N. P., Wright, R., & Meissen, G. (2011). Tearless Logic Model. *Global Journal of Community Psychology Practice, 2*(2), 1-12. Retrieved 24 May 2022, from (<http://www.gjcpp.org/>)



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2022



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Implementation and evaluation plan from PORTUGAL /D7.6

Centre for Studies and Research in Social
Dynamics and Health (CEIDSS)
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Executive summary

This report is part of the Objective 7.2: *To develop implementation and evaluation plans for 1-3 selected co-created obesity-related policy interventions (tools, strategies, programmes) in each of the five countries in Work Package 7 in the CO-CREATE project.*

Planning for implementation and evaluation of policies should be standard practice in public health in order to provide recommendations for termination, maintenance, improvements and or/scaling up of policies in a timely manner. However, lack of knowledge in and skills on how to develop and follow up implementation and evaluation plans are potential barriers to establishing such a practice. Building capacity for this through partnership between the CO-CREATE-partners and local stakeholders of a policy idea is one contribution to changing this.

To facilitate this a protocol was developed outlining how to select the 1-3 policy ideas of those developed in the Youth Alliances, establish a core team, draw logic models for implementation and evaluation, write up the implementation plan and focus the evaluation before summarizing it all in one implementation and evaluation plan.

This report contains implementation and evaluation plans for the policy idea of including nutrition and cooking contents in the curriculum of the Citizenship/Civic Education subject in schools with the second and third cycles in Portugal (appendix 1-3). Furthermore, it describes the process of developing the plans and reflects on the usefulness of the protocol and templates.

Based on the experience, recommendations are drawn for the timeline of the process developing implementation and evaluation plans, engaging stakeholders, as well as the need for better examples for training purposes.

Table of content

Executive summary	2
List of acronyms / abbreviations	4
Background of policy idea	6
Description of process	8
Reflections	12
Recommendations	12
References	14
Appendices	15

List of acronyms / abbreviations

DF – Dialog Forum

WP – Work Package

YA – Youth Alliances

Introduction

The CO-CREATE-project is a 5-year EU-funded research project aimed at preventing childhood obesity through taking a systems approach to understanding and solving the problem and engaging adolescents in policy development (1). The project was conducted in the Netherlands, Norway, Poland, Portugal and the United Kingdom.

The engagement of adolescents (16–18-year-olds) was based on Participatory Action Research/ Youth-led Participatory Action Research and to be organized as Youth Alliances (3 per country of 15-20 youth in each). The Youth Alliances (YA) were engaged in activities (such as system mapping, data collection methods, advocacy training) and provided with tools (such as photo voice, the policy form) and resources (such as funding) to systematically develop their policy ideas (2). The policy ideas were discussed with relevant stakeholders in online or face-to-face Dialog forums (3). As part of the research process, data on the running and outcomes of the alliances and dialog forums were collected through online questionnaires, field notes and structured reports.

The CO-CREATE project could not promise enactment and implementation of the policy ideas of youth. However, planning for implementation and evaluation of policies should be standard practice in public health in order to provide recommendations for termination, maintenance, improvements and or/scaling up of policies in a timely manner. Thus, building capacity for this through partnership between the CO-CREATE-partners and local stakeholders of a policy idea is one contribution to changing this. This work was conducted based on a CO-CREATE protocol and internal workshop on developing implementation and evaluation plans (4,5).

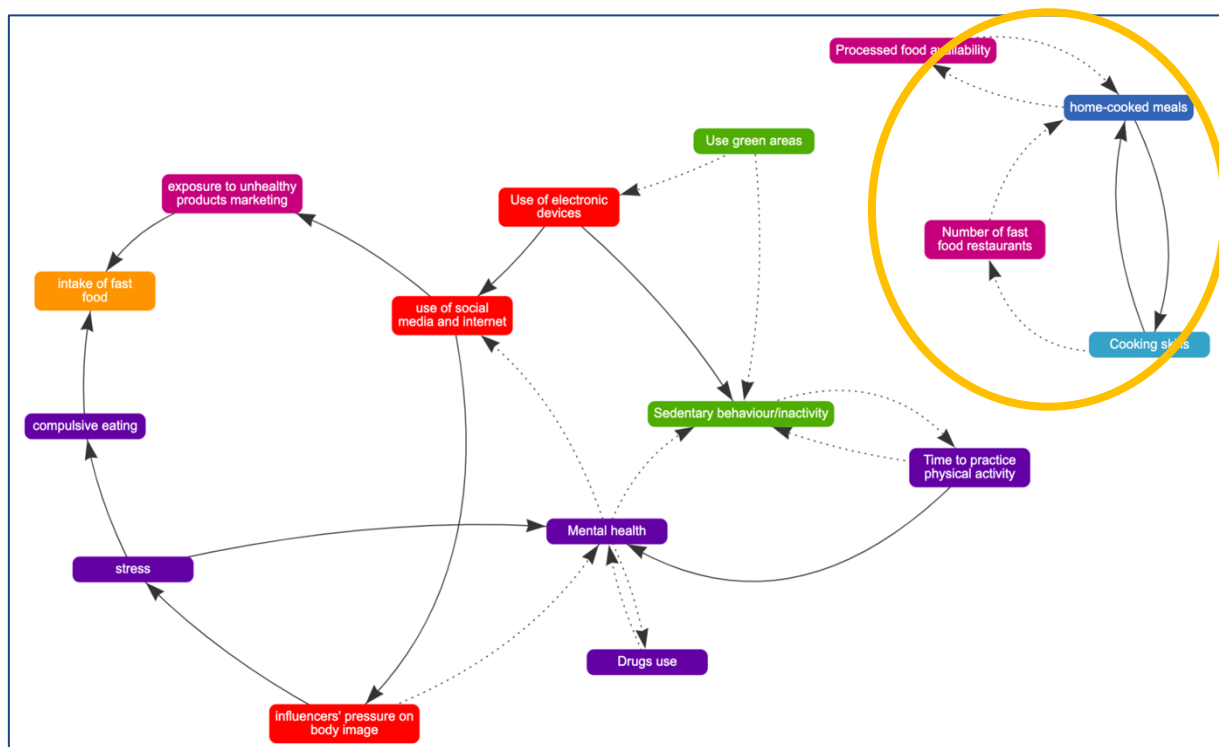
The present report is focused on a policy idea developed by Portuguese adolescents during their participation in the YA established under the scope of WP 5, from November 2019 to April 2021. The YA in Portugal were established through three Scouts Groups from three Municipalities. A total of 41 adolescents (aged 15 to 18 years old) were involved in the YA and were facilitated by one or two co-facilitators who were Scouts' members and two facilitators that were part of the research team from CEIDSS. During their time as part of the YA, the adolescents reflected about the factors driving obesity as perceived by them to produce policy ideas and received capacity building to collect information through activities, such as the ones mentioned above (system mapping, data collection methods, advocacy training), to support these ideas. The policy idea addressed in this report and in the implementation and evaluation plans is the following: *“To include nutrition and cooking contents in the curriculum of the Citizenship/ Civic Education subject in schools with the second and third cycles of education”*. This was one of the nine fully developed policy ideas from the Portuguese YA, which has also been discussed in two Dialog Forums during WP6.

Background of policy idea

The aim of the policy idea is to empower young people by providing knowledge and skills to increase the confidence, autonomy and awareness in terms of food choices (from the moment of purchase to the cooking method of food products), ultimately promoting healthy and informed food choices among young people in their everyday lives that could be sustained later in life. This policy idea was conceptualized to be firstly implemented as a pilot project at the local level, targeting a local school, but with the vision of expanding this policy by changing the school curriculum at the national level.

The policy idea was developed through several activities during the course of the CO-CREATE project (particularly during WP5 and WP6), such as systems mapping exercises (Figure 1) to identify and connect various factors contributing to the issue of obesity in adolescents' immediate environment, which was also part of WP4 and replicated in WP5.

Figure 1. System map of the Portuguese CO-CREATE youth and the main factors addressed in the policy idea “To include nutrition and cooking contents in the curriculum of the Citizenship/ Civic Education subject”.



Photovoice activities and surveys were also carried out to gain a better understanding of the challenges of healthy eating among young people. Moreover, there were several moments during the CO-CREATE

project where this policy idea was discussed between the young people and experts/health professionals (nutritionists, psychologists), namely during Q&A sessions, as well as between the young people and stakeholders (from researchers to representatives from the Ministry of Education and Youth Organization members) in two Dialog Forums (one at the local level and other at the national level). With that being said, the policy idea presented is a result of changes and refinements done throughout the project and includes the perspectives and inputs from different relevant activities and stakeholders.

Portuguese youth mentioned that they lack knowledge about food and nutrition as well as cooking skills, which highly contributes to poor eating choices. It was mentioned that most students opt not to eat at the school canteens because the food is not the most attractive in terms of flavor and visual aspect, although it may be nutritionally balanced. Consequently, students opt to go to fast food restaurants near the schools or to cafés. Additionally, youth stressed that not having the right knowledge about food and nutrition would also be reflected later in life and by the time these young people become adults they do not have or have few cooking skills, continue to buy ready-to-eat products and go to fast food restaurants and may be persuaded by the (often cheap) price of unhealthy food products. This contributes to the intake of foods high in sugar, salt, and fat and usually young people are not even aware of the consequences this kind of products might have on their health. Therefore, it was stressed that training and education on this matter should be provided since early ages and school would be the right setting to do it.

In Portugal, with regards to food and nutrition education in schools, during the primary education (grade 1 to 4) and in the subject of Natural Sciences of the second and third cycles (grades 5 to 9), some topics related to food are addressed, such as the Portuguese guide “*A nova Roda dos Alimentos*” (The new Food Wheel), with the distribution of the macronutrients and principles of healthy eating (6,7). However, these are explored in a very “theoretical” way and not in depth. The Ministry of Education, in collaboration with the Ministry of Health, developed the document “*Referencial de Educação para a Saúde*” (Health Education Framework) which comprises proposals of several contents to be addressed in several school grades from pre-school to secondary education, including about food and nutrition, but this document is not binding, thus the teachers and schools can opt to not include these contents in their curriculum (8). The teachers who do wish to address some of the proposed contents, often choose the ones they feel most comfortable with and follow their own methodology, since there is no training in how to teach such contents in a standardized way from specialized professionals in food and nutrition. Currently, the food and nutrition education in schools highly depends also on the resources and organization of local authorities, such as municipalities and health centres that may have teams of health professionals available and allocated to conduct education sessions, however these are often delivered by health professionals not specialized in food and nutrition, such as nurses, and are occasional events (9). There are also independent organizations that establish a contractual partnership with the municipalities and conduct food and nutrition programs

in the schools, but once again this situation depends on the resources, agenda and priorities of the municipalities, leading to regional disparities (9).

Several guidelines have been produced by the Ministry of Education and Health so that the food supply inside schools is increasingly healthy. Just recently, in 2021, the Office of the Deputy Secretary of State and Education published the Dispatch No. 8127/2021, which establishes the rules to be considered in the preparation of school menus and the sale of food and beverages in buffets and vending machines in Portuguese public educational establishments (10). However, despite the insistence and policy proposals from the Board of Nutritionists, there are no nutritionists on the school grounds to manage and monitor both the school food supply, make it more appealing and healthier, or conduct educational activities about food and nutrition and closely support students on this matter, allowing them to make more conscious and healthier choices (11,12).

Therefore, this gap needs to be addressed and a window of opportunity to include nutrition and food contents as part of an already existing subject, such as Civic Education/Citizenship, was raised by the Portuguese young people participating in CO-CREATE. As discussed, this could start as pilot project in a local school and subsequently replicated in other schools at national level. This idea was inspired also on examples from several countries, such as Australia, Mexico, France and Slovenia that have acknowledged the importance of integrating nutrition and food related contents in the school curriculum to promote healthier and sustained eating habits to prevent obesity and other noncommunicable diseases and have already in place similar policies (13).

Description of process

The process of preparing this report as well as the implementation and evaluation plans about the policy idea *“To include nutrition and cooking contents in the curriculum of the Citizenship/Civic Education subject in schools with the second and third cycles of education”* included several stages based on the steps outlined in the *“Protocol for developing implementation and evaluation plans (D7.4)”* (14). The several stages of this process are described below.

As the starting point, out of the nine fully developed ideas from the Portuguese YA, one policy idea was selected. The selection was based on the following criteria:

- 1) This policy idea was discussed during the DF and has received feedback and inputs from relevant stakeholders. The policy idea at hand was actually one of the two policy ideas that have been discussed in two DF: one at the local level and other at the national level;
- 2) The YA members responsible for developing this policy idea were involved in the planning and organization of the DF, participated in the DF and expressed their interest

and motivation in engaging in further activities related to the discussion and dissemination of the policy idea, as well as in the process of preparing the implementation and evaluation plans;

- 3) Besides the criteria presented above, it was also considered the relevance of the scope of the policy idea within the current Portuguese context and its focus on a more local level. For that reason, the Portuguese CO-CREATE team opted to select this policy idea for the preparation of the implementation and evaluation plans.

A core team was established, composed by the CEIDSS research team working on CO-CREATE, namely the project leader in Portugal, one facilitator (also research assistant) of the Portuguese YA and one research assistant. The core team was firstly responsible for gathering all the documents, materials and other resources related to the development of the policy idea produced throughout the course of CO-CREATE, namely the Policy Form filled by the young people, the field notes from the WP5 meetings written by the facilitators, and the reports from the DF in WP6. These were frequently consulted by the core team and served as the fundamental basis for the drafting of the logic model and, subsequently, for the implementation and evaluation plans about the policy idea at hand.

The core team also reflected on potential stakeholders and experts that could be consulted for feedback in regards to the plans and was responsible to invite and contact them, as well as to contact the YA members involved in the development of the policy idea. An officer of the Department of Health Promotion from a Portuguese Municipality, that has also a background in nutrition, was reached out to, particularly due to already existing a close collaboration and joint work between this stakeholder and CEIDSS. In addition, two YA members were contacted.

During the preparation of the logic model and based on the experiences shared by the other CO-CREATE partners in the meetings about this process, the core team decided to slightly adapt the logic model based on the Tearless Logic Model developed by Lien et al. (15) by mainly adding some guiding questions. The core team then shared the logic model with the YA members and the stakeholder and asked, in a first instance, for their written feedback. For the purpose of helping and guiding the stakeholder and the YA members, the logic model was accompanied by some suggestions of topics to reflect, namely if the logic model contemplated the most relevant *inputs*, *activities* and expected *outputs* and *outcomes* according to them and/or if there was something missing that should be added or something irrelevant that could be excluded. Furthermore, in the case of the stakeholder, it was also shared a brief introduction and context of the policy idea. In the meantime, the drafts of the implementation and evaluation plans were also being prepared by the core team.

Written feedback was received from the stakeholder and from one YA member. After obtaining the written feedback, the core team updated the logic model and made the related changes in the implementation and evaluation plans. An online meeting between the core team and the stakeholder was then arranged to present the revised versions of the logic model and the plans and to potentially get additional feedback on the documents produced. These revised versions were also shared with the

YA members so that they could suggest any changes or provide additional feedback if they wished to and a telephone call between the core team and one YA member took place. Thereafter, the core team finalized the logic model and the implementation and evaluation plans.

Besides the steps mentioned above, members of the core team participated in the meetings organized by the WP7 leader with the CO-CREATE partners working on the process of developing implementation and evaluation plans related to the policy ideas selected.

Results

The above-mentioned process stages, resulted in three Appendices about the policy idea *“To include nutrition and cooking contents in the curriculum of the Citizenship/ Civic Education subject”* that can be found in the Appendices section of the present report, namely:

- Appendix 1: Logic model worksheet for the Policy idea
- Appendix 2: Implementation plan
- Appendix 3: Evaluation plan

An overall logic model of the policy idea about including nutrition and food contents in the school curriculum assumes that a pilot project targeted to students from grade 5 to 9 conducted in a selected school will contribute to healthy and informed food choices since an early age that could be sustained later in life and, ultimately, prevent obesity. In order to do this, a set of inputs, activities and outputs was identified. The outcomes and desired impacts were also described, which altogether provided the basis for defining the adopters, implementers and corresponding roles/activities envisioned to implement this policy idea and to evaluate the process.

The Municipality and the school selected and willing to conduct the pilot project were identified as being the adopters of such policy. As for the implementers, the team of researchers and nutritionists, school teachers, invited professionals from different backgrounds related to food systems, were identified as having this role.

The changes and adjustments made to the logic model and plans were based on the feedback of the stakeholder from the Portuguese Municipality and one YA member. Overall, no major changes needed to be made to the drafts shared. One of the main points stressed by the stakeholder from the Portuguese Municipality was the existence of several important resources already available that could be facilitators for the implementation of the pilot project and underlying policy idea. Therefore, the core team emphasized and included this, particularly in the “Inputs” part of the logic model. There was also an effort by the core team to reflect the collaboration between CEIDSS and the Municipality in the implementation plan.

The YA member added that besides the expected and desirable outcomes in terms of improving healthy food choices and preventing childhood obesity, it should also be considered as an outcome that with this pilot project, the subject of Citizenship might gradually become more popular among students because it would have a useful and attractive purpose, by addressing new contents through an innovative methodology. In addition, the YA member stressed the importance of having a detailed description of the implementation activities and the actors responsible for each. Nonetheless, one aspect reflected particularly in the implementation plan, which was discussed during the DF as well as with YA member who provided inputs to the model and plans, was that some activities of the implementation of the pilot project included a shared agreement and decision between the nutritionists, teachers and youth on the specific contents and components of the pilot study intervention rather than implementation activities regarding an already specific intervention.

Regarding the evaluation of the policy idea, the team of researchers and nutritionists were the actors identified as responsible for leading the evaluation process. However, this process would count with the continuous support of stakeholders and experts from different backgrounds related to policy and the food system. To guide this process, the evaluation plan outlines several questions and methods to assess the number of participants reached and openness in the adoption of such policy idea through the pilot project, as well as its knowledge and health related outcomes.

Finally, the stakeholder from the Municipality stated that this policy idea and the pilot project are aligned with the Local Health Promotion Strategy of the Municipality and could be easily integrated on it.

Reflections

The process of developing the implementation and evaluation plans about the policy idea “*To include nutrition and cooking contents in the curriculum of the Citizenship/ Civic Education subject*” proved to be a challenge but also a very interesting and enriching experience.

CEIDSS team had little experience on policy implementation and evaluation plans, but relied on the important support and guidance of the WP7 leader and the protocol created for the purpose of this activity. Even though some steps of the protocol were not entirely followed and some conditions were not met, particularly related with the engagement of several stakeholders, it contained valuable literature and references for consultation, as well as useful and clear instructions to better understand what was intended and what was needed.

During this process, CEIDSS team was faced with some constraints, especially related to time and availability. It was difficult to align the agendas and availability of the stakeholder and core team members involved in the development of the plans, which in the end was reflected in the limited feedback from diverse stakeholders and experts, specifically experts in policy implementation and evaluation plans. Another limitation of the plans produced that we would like to acknowledge is related to the fact of not having the perspectives of important actors responsible for the implementation, particularly school teachers, and only having one-sided perspective (that from the nutritionists responsible for conceptualizing these plans).

With that being said, the process of developing the logic model and the policy implementation and evaluation plans included in the present report ended up being mostly an internal exercise. Nonetheless, the documents and activities from previous WPs of the CO-CREATE project, in which CEIDSS team was closely involved, more specifically the moments where this policy idea was discussed with professionals and stakeholders, was extremely helpful to already have a substantial basis for the plans which, in our understanding, include all the inputs collected during those moments.

Recommendations

For similar activities in the future related to the development of policy implementation and evaluation plans and based on our experience, some recommendations are presented.

Since there was a time gap between the period in which the policy idea was being developed (WP5) and discussed with relevant stakeholders (WP6) *versus* the period in which the plans were being developed, we believe that perhaps it would have been helpful to make these activities closer in time,

so that we could closely follow up with the youth and stakeholders engaged and, in result, the process of developing the plans would have been more dynamic with a greater exchange of experiences and expertise. This time gap also naturally led to obtaining different input from different stakeholders in different stages of the project which we don't think is necessarily a downside, but made it harder to stay on track and "faithful" to what was discussed and agreed in previous activities of the project (during WP5 and WP6). In order to prevent this, there was a constant need to revisit the documents and reports from other WPs by the team involved in the development of these plans and report.

It was very helpful to have ready and available templates of the logic model and the implementation and evaluation plans to fill in. Even though there was flexibility to adapt the templates, we couldn't help but to focus on the available templates since this process was quite new to the team. More practical training and analysing concrete examples of plans about other policy ideas would have facilitated the process of preparing the plans, although this was something that was perceived as a need only after going through this process.

References

1. Klepp K-I, Helleve A, Brinsden H, Brøer C, Budin-Ljøsne I, Harbron J, Knai C, Lien N, Luszczynska A, Nesrallah S, Oldridge-Turner K, Rito A, Samdal O, Savona N, Stensdal MK, Allender S, Hoelscher DM, Rutter H. Overweight and obesity prevention for and with adolescents: The "Confronting obesity - Co-creating policy with youth. *Obesity Reviews* – forthcoming.
2. CO-CREATE D5.1b: Protocol for youth engagement. April 2019.
https://www.fhi.no/contentassets/0a74196d35c64da89d337e25af982f5f/co-create-deliverables-5.1_engagement-protocol.pdf
3. CO-CREATE Dialog forum tool. <https://eatforum.org/initiatives/co-create/>
4. CO-CREATE D7.4: A protocol for developing implementation and evaluation plans. April 2020.
https://www.fhi.no/globalassets/dokumenterfiler/studier/co-create/7_co-create-deliverable-7.4-final.pdf
5. CO-CREATE D7.5: A workshop for CO-CREATE co-workers on how to apply the implementation and evaluation protocol. April 2020.
https://www.fhi.no/globalassets/dokumenterfiler/studier/co-create/7_co-create-deliverable-7.5-final.pdf
6. Rodrigues S, Franchini B, Graça P, et al. New Food Guide for the Portuguese Population: Development and Technical Consideration. *Journal of Nutrition Education and Behaviour*, 2006; Volume 38, Issue 3, Pages 189–195
7. Direção-Geral da Educação. A alimentação escolar em Portugal - uma visão estratégica. 2021
8. Direção-Geral da Educação & Direção-Geral da Saúde. Referencial de Educação para a Saúde. 2017
9. Bento A, Cordeiro T, Frias A, et al. Portuguese School Food Strategy: a Proposal. *Acta Portuguesa de Nutrição*. 2018; 13:8-13.
10. Despacho n.º 8127/2021. Diário da República. 2ª série. 159 (17-08-2021): 44-49. Estabelece as normas a ter em conta na elaboração das ementas e na venda de géneros alimentícios nos bufetes e nas máquinas de venda automática nos estabelecimentos de educação e de ensino da rede pública do Ministério da Educação.
11. Resolução da Assembleia da República n.º 67/2012 de 10 de maio. Recomenda ao Governo a adoção de medidas tendentes ao combate da obesidade infanto-juvenil em Portugal, Diário da República, 1.ª Série - n.º 91 (2012).
12. Faria R, Sousa B. Food Education in School Environment and the Figure of School Nutritionist. *Acta Portuguesa de Nutrição*. 2020; 20:20-25
13. World Cancer Research Fund. NOURISHING policy database. Available from:
<https://www.wcrf.org/int/policy/nourishing-database> Give nutrition education > Nutrition on education curricula
14. CO-CREATE D7.4: A protocol for developing implementation and evaluation plans. 2020. Available from: https://www.fhi.no/globalassets/dokumenterfiler/studier/co-create/7_co-create-deliverable-7.4-final.pdf

15. Lien A, Greenleaf J, Lemke M, et al. Tearless Logic Model. Global Journal of Community Psychology Practice [Internet]. 2011. Available from [http:// www.gjcpp.org/pdfs/2011-0010-tool.pdf](http://www.gjcpp.org/pdfs/2011-0010-tool.pdf)

Appendices

In this section, the following appendices can be found:

- Appendix 1: Logic model worksheet for the Policy idea
- Appendix 2: Implementation plan
- Appendix 3: Evaluation plan

Appendix 1. Logic model worksheet for the Policy idea

<p>Context/need: Childhood overweight and obesity can be preventable. There is an overwhelming amount of information about food and nutrition, however it is often not evidence-based or reliable. Children and adolescents have little (correct) knowledge about healthy eating as well as lack of cooking skills, which altogether contributes to unhealthier food choices, such as a regular intake of fast food and ready-to-eat meals, that can persist later in life. School is a privileged setting for acquiring knowledge and plays a key role in promoting health and healthy eating habits.</p>	<p>Assumptions /Theory of Change (logic model) - Empowering young people by providing knowledge and skills to increase the confidence, autonomy and awareness in terms of food choices (from the moment of purchase to the cooking method of food products), will contribute to healthy and informed food choices since an early age that could be sustained later in life and, ultimately, prevent obesity.</p>			<p>External influences - Political agenda (the priorities may not be aligned and favourable to the implementation of such idea) - Willingness of the school and the community to support and adopt such idea - Lack of infrastructures and facilities in schools to conduct practical activities (ex: kitchens and school canteens, ...)</p>		
	<p>Inputs</p>	<p>Activities</p>	<p>Outputs</p>	<p>Short-term outcomes</p>	<p>Intermediate outcomes</p>	<p>Impacts</p>
	<p>Resources. What do we already have? - Engaged youth (and their expertise) and structured documents developed by them and/or based in their inputs with the conceptualization of the policy idea (ex. Policy Form) - Nutritionists and health professionals experienced in designing and implementing school-based programs - Scientific and evidence-based knowledge about healthy eating, as well as examples of similar initiatives already in place - Established partnership with the</p>	<p>What activities would it take to create change? - Assessment of the current needs, expectations and knowledge of the students and school staff (diagnosis) - Development of a methodological protocol/ guide - Training sessions and meetings with the teams and professionals - Communication strategy with a campaign for the dissemination of informational materials (flyers, ...) - Assessment of the impact of the pilot project</p>	<p>What the activities will produce? What can be counted? - Report with the insights on the priority areas and knowledge gaps to be addressed during the pilot project - Number of people (students, families and school staff) reached during the pilot project - Methodological protocol/ guide - Reports of the training sessions and meetings with the teams - Report related to the evaluation of the pilot project impact</p>	<p>Immediate/initial changes in knowledge, beliefs and attitudes - Increased awareness about the problem of overweight and childhood obesity - Increased knowledge about food, nutrition and health - Development of cooking skills - Increased self-confidence and autonomy - Increased awareness about the challenges and costs associated with healthy eating - Increased motivation and positive attitudes associated with a</p>	<p>Behavioral change. Actions that participants are predicted to make as a result of their learning such as changing behavior or making decisions - Adoption of a healthier and more sustainable eating pattern by choosing healthier food products and preparing more homemade foods instead of fast food or ready-to-eat meals - Critical recognition of risky eating behaviors - Critical reflection on</p>	<p>The end in mind, our vision. If we got it right what it would like? Policy changes? - The knowledge and skills acquired will be sustained and applied across the life course and will be passed and shared with the close social networks and to future generations - The pilot project will be replicated in other schools at the national level with the</p>

	<p>Municipality of Cascais and previous joint work/ collaboration with the municipality technical staff</p> <ul style="list-style-type: none"> - Established network of professionals from different backgrounds related to food systems (ex. chefs, farmers, researchers, policy-makers, industry, ...) - Established schools' network from community-based project in place in the Municipality of Cascais (MUN-SI Program) - Affiliation with an EU Program Horizon 2020 funded project <p><i>What do we need to make it happen?</i></p> <ul style="list-style-type: none"> - Willingness and support of the Municipality - Approval from the Municipality and from the school 			<p>healthy and sustainable eating pattern</p> <ul style="list-style-type: none"> - The changes introduced in the curriculum will allow students to have a more enriching and productive time during this subject's classes, increasing their interest, motivation and engagement in such subject 	<p>what can be improve in their own eating habits</p> <ul style="list-style-type: none"> - The participants will share their knowledge and skills with their peers and families 	<p>inclusion of nutrition and cooking contents in the school curriculum by enacting this policy idea</p> <ul style="list-style-type: none"> - Decrease in the prevalence of childhood and adolescent overweight and obesity
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	<p>selected to have the pilot project</p> <ul style="list-style-type: none"> - Cooperation with the school teachers, school staff and local stakeholders - Funding for the implementation of the policy idea, namely human resources and materials - Availability of facilities to conduct the activities planned - Audio-visual support: computer, projector, ... - Formal support of the Ministry of Education and openness to actively collaborate on this policy idea 					
	Indicators	Indicators	Indicators	Indicators	Indicators	Indicators

	<ul style="list-style-type: none"> - Signed protocol between the Municipality and our organization to conduct this pilot project - Signed protocol between the school and our organization to conduct this pilot project - Documents with the rationale and description of the policy idea - Evidence on the initiatives similar to our policy idea - Amount of funding 	<ul style="list-style-type: none"> - Analysis and results of interviews and questionnaires conducted/applied to the students and school staff at the diagnosis stage - One written methodological protocol/guide with the detailed timeline, description of the contents and methodology to implement this policy idea in the school - Analysis and results of interviews and questionnaires at the end of the pilot project 	<ul style="list-style-type: none"> - Results of the report related to the diagnosis assessment - Results related to the evaluation of the pilot project impact - Participation rate 	<ul style="list-style-type: none"> - Results from the Reports showing improvements in the knowledge and attitudes related to food, nutrition and health - Results from the evaluation of student's eating habits and motivation for fruit and vegetable consumption using a validated questionnaire and interviews - Results from the evaluation of student's knowledge and motivation related to healthy cooking habits using a validated questionnaire and interviews 	<ul style="list-style-type: none"> - Results from the evaluation of student's food consumption using a validated questionnaire - Results from the reports and from existing literature 	<ul style="list-style-type: none"> - Results from surveillance initiatives, such as COSI and HBSC - Policy idea enacted at the national level
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Appendix 2. Implementation plan

IMPLEMENTATION PLAN			
<i>Include nutrition and cooking contents in the curriculum of the Citizenship/Civic Education subject.</i>			
<p>Implementation support system members and responsibilities:</p> <ul style="list-style-type: none"> - <u>CEIDSS team & CO-CREATE youth</u>: responsible for the development of the methodological protocol/guide with the proposal of contents, timeline and detailed methodology of the pilot project; the nutritionists from CEIDSS will be involved in the implementation and coordination of the pilot project by being the ones responsible to conduct some sessions during the classes of the Citizenship subject; responsible also for the training and standardization of procedures by all the implementers; participation in meetings and regular contact with all the actors involved to provide support; responsible for preparing/drafting the reports about the pilot project and for developing communication and dissemination materials - <u>Technical staff from the Municipality of Cascais from different departments (including education, health promotion, finance, executive)</u>: responsible for selecting the school where the pilot project is going to take place; involved in the definition of the design and planning of the pilot project, by participating in the coordination meetings and providing feedback to the methodological protocols; offer support throughout the pilot project (both financial and technical). - <u>School community (teachers and staff)</u>: involved in the definition of the design and planning of the pilot project, by participating in the coordination meetings and providing feedback to the methodological protocols; responsible for the arrangements related to the school facilities necessary to conduct the pilot project; the school teachers will be involved in the implementation of the pilot project by being the ones responsible to conduct some sessions during the classes of the Citizenship subject and for that purpose will also participate in the training sessions. - <u>Professionals from different backgrounds related to food systems (such as chefs and farmers)</u>: will be involved in the implementation and coordination of the pilot project by being the ones responsible to conduct some sessions during the classes of the Citizenship subject and for that purpose will also participate in the training sessions. - <u>Stakeholders and experts from different backgrounds related to policy and the food system</u>: responsible to provide knowledge and expertise throughout the process, namely related to the implementation of the pilot project itself; will also be involved in the review of the communication materials and the reports developed. <p>Purpose: to implement the policy idea regarding the inclusion of nutrition and cooking contents in the school curriculum of the already existing subject of Citizenship/Civic Education for grades 5 to 9 by conducting, in the first place, a pilot project in a school from the Municipality.</p> <p>Setting: School from the Municipality with the second and third cycles (grades 5 to 9)</p> <p>Adopters: Municipality and the school selected and willing to conduct the pilot project</p> <p>Implementers: CEIDSS team (researchers and nutritionists), school teachers, invited professionals from different backgrounds related to food systems</p>			
ADOPTION			
Activities/Implementation strategies	Targeting which factors?	Who are doing this?	When and where?

Activity 1			
Contacts/meetings with the Municipality to firstly present and discuss the policy idea in order to obtain the approval and support to implement the idea, as well as to select a potential school (with both second and third cycles) to conduct the pilot project	<ul style="list-style-type: none"> - Formal approval - Collaboration and support from the partner entities - Funding for the pilot project - Integrated vision of the project in the school context 	CEIDSS team and CO-CREATE Portugal youth Technical staff from the Municipality of Cascais	M4 – M5 CEIDSS' facilities, or at the Municipality facilities, or via Zoom
Activity 2			
Presentation of the policy idea to the Director/Coordinator and/or appointed teachers from the school selected for the pilot project to get their approval and support to implement the idea	<ul style="list-style-type: none"> - Formal approval - Collaboration and support from the partner entities - Integrated vision of the project in the school context 	CEIDSS team and CO-CREATE Portugal youth Technical staff from the Municipality School staff	M4 – M5
IMPLEMENTATION			
Activities/Implementation strategies	Targeting which factors?	Who are doing this?	When and where?
Activity 1			
Reach out to the school teachers responsible for the Citizenship subject from the second and third cycles (grade 5 to grade 9)	<ul style="list-style-type: none"> - Ensuring human resources and multidisciplinary collaboration - Integrated vision of the project in the school context 	School staff with the help of CEIDSS team	M6 – M7
Activity 2			
Identification of the classes that will participate in the pilot project - at least one class from each school grade (between grades 5 to 9, approx. 5 classes or more)	<ul style="list-style-type: none"> - Definition of the target population - Integrated vision of the project in the school context 	School staff with the help of CEIDSS team and the technical staff from the Municipality	M6 – M7
Activity 3			
Arrangements with the whole school community to ensure the necessary conditions to conduct the pilot project	<ul style="list-style-type: none"> - Ensuring the resources and conditions - Integrated vision of the project in the school context 	School staff with the help of CEIDSS team and the technical staff from the Municipality	M6 – M7

are met (school canteens, school classrooms, outdoor spaces, ...)			
Activity 4			
Definition and development of the contents, methodology and materials adapted to the age group based on the document elaborated by the Portuguese Ministry of Education " <i>Referencial de Educação para a Saúde</i> " (the Health Education Framework is a guiding document with a proposal of themes to be addressed in schools, by school grades, in the area of food education) to be addressed and applied during the pilot project for grades 5 to 9	<ul style="list-style-type: none"> - Integrated vision of the project in the school context - Evidence-based intervention in line with guidelines from national governmental bodies - Standardized methodologies 	CEIDSS team and CO-CREATE Portugal youth	M1 – M3
Activity 5			
Preparation of a document with the evidence, design and detailed proposal of the intervention and implementation of the policy idea as a pilot project to present to the Municipality of Cascais and to the selected school (methodological protocol/guide)	<ul style="list-style-type: none"> - Integrated vision of the project in the school context - Evidence-based intervention in line with guidelines from national governmental bodies - Standardized methodologies 	CEIDSS team and CO-CREATE Portugal youth	M1 – M3
Activity 6			
Establish a team with members from the Municipality, teachers from the selected school together with the CEIDSS team and CO-CREATE youth (coordination group)	<ul style="list-style-type: none"> - Shared decision-making - Multidisciplinary collaboration - Support system 	CEIDSS team and CO-CREATE Portugal youth, technical staff from the Municipality of Cascais, school teachers	M4 – M5
Activity 7			
Engage with relevant stakeholders/experts in food systems and from the policy sector to follow and	<ul style="list-style-type: none"> - Shared decision-making - Multidisciplinary collaboration - Continuous support system 	CEIDSS team and CO-CREATE Portugal youth with suggestions from the technical staff from the Municipality of Cascais	M4 – M5

provide advise throughout the process (Advisory board)			
Activity 8			
Discussion of the expectations, needs and pedagogical approach that the Municipality and the teachers and staff from the participating school wish to see addressed within the pilot project and believe to be the most appropriate and adequate to the target population	<ul style="list-style-type: none"> - Shared decision-making - Multidisciplinary collaboration - Integrated vision of the project in the school context 	CEIDSS team and CO-CREATE Portugal youth together with the technical staff from the Municipality of Cascais and the school staff	M4 – M5
Activity 9			
Contact and recruitment/invitation of the professionals that will conduct the pilot project	<ul style="list-style-type: none"> - Ensuring human resources - Multidisciplinary collaboration - Support system 	CEIDSS team	M5 – M7
Activity 10			
Make the necessary adjustments in the design and planning of the pilot project, namely concerning the timeline, contents and the format in which they are going to be delivered	<ul style="list-style-type: none"> - Integrated vision of the project in the school context - Adaptation of the intervention according to the context-specific needs and reality 	CEIDSS team	M6 – M7
Activity 11			
Training sessions with the professionals involved in implementing the pilot project (school teachers, nutritionists and professionals related to the food systems) to address the content, the methods and provide the materials to be used during pilot project's sessions with the students from grades 5 to 9	<ul style="list-style-type: none"> - Training human resources - Standardized methodologies 	CEIDSS team	M7 – M9
Activity 9			
Pilot project diagnosis - Implementation of the pilot project with	<ul style="list-style-type: none"> - Understanding the knowledge, behaviors, 	Nutritionists from CEIDSS together with the invited professionals and school teachers involved in the implementing the pilot project	M10

the assessment of the knowledge of the students on the matters of food, nutrition and cooking (through questionnaires and interviews) as well as the anthropometric measurements	attitudes of the target population		Facilities of the school selected for the pilot project
Activity 10			
Pilot project intervention - sessions conducted in the classes of the Citizenship subject during a school year (approx. 8 months) and directed at the students from grade 5 to grade 9, based on the Portuguese Health Education Framework and adapted to the age group	- Providing knowledge, capacity-building and skills to the target population	Nutritionists from CEIDSS together with the invited professionals and school teachers involved in the implementing the pilot project	M10 – M18 Facilities of the school selected for the pilot project
Activity 11			
Close support and follow-up, through regular contact and meetings with all actors involved	- Continuous support system - Multidisciplinary collaboration	Nutritionists from CEIDSS together with the invited professionals and school teachers involved in the implementing the pilot project	M4 – M18
Activity 12			
Development of communication and dissemination materials targeting young people, students and school community throughout the process	- Providing knowledge, capacity-building and skills to the target population and close community	Nutritionists from CEIDSS with the scientific review of the advisory board	M1 – M24
Activity 13			
Pilot project evaluation – Assessment of the impact of the project evaluation among the participating students and the school community by applying questionnaires and conducting interviews	- Understanding the changes in knowledge, behaviors, attitudes of the target population and close community - Understanding the satisfaction and benefits of the intervention	Nutritionists from CEIDSS together with the invited professionals and school teachers involved in the implementing the pilot project	M19 – M20 Facilities of the school selected for the pilot project
Activity 14			
Final meeting - joint reflection and discussion with all the adopters and implementers, as well as with the	- Multidisciplinary collaboration	CEIDSS team and CO-CREATE Portugal youth, technical staff from the Municipality of Cascais,	M21

<p>stakeholders/experts (advisory board), about the process, methodology applied, results, potential limitations and strengths of the pilot project</p>	<ul style="list-style-type: none"> - Integrated vision of the project in the school context - Understanding the lessons learned and providing opportunities for improvements in the future 	<p>school staff, stakeholders/experts (advisory board)</p>	
<p>Activity 15</p>			
<p>Development of a report with the results and experiences of the pilot project to be presented and disseminated among all actors involved as well as among the scientific community and policy-makers</p>	<ul style="list-style-type: none"> - Raising awareness and promoting interest about the pilot project and the underlying policy idea 	<p>CEIDSS team with the scientific review of the advisory board</p>	<p>M21 – M24</p>

Appendix 3. Evaluation plan

EVALUATION PLAN		
<i>Include nutrition and cooking contents in the curriculum of the Citizenship/Civic Education subject</i>		
<p>Evaluation team members and responsibility: CEIDSS team (researchers and nutritionists) will be the responsible for leading the evaluation process. During this process, there will be regular consultations with the advisory board composed by stakeholders and experts from different backgrounds related to policy and the food system.</p> <p>Purpose: To evaluate the adoption and implementation of the pilot project in the school selected from the Municipality, based on the policy idea about the incorporation of nutrition and cooking contents in the school curriculum of the Citizenship/Civic Education subject.</p> <p>Evaluation question:</p> <ul style="list-style-type: none"> - What was the number of participating students in the pilot project? - What was the openness and willingness of the Municipality to adopt and accept to be on board with the pilot project? - Was the pilot project applied and delivered as planned? - Has the pilot project contributed to positive changes in the eating patterns and behaviors of the students (healthy food choices in terms of the purchase of food products and also of cooking methods)? <p>Ethics/data handling approval procedure: Formal consent/approval from the school to conduct the pilot project; Informed consent from the participant's parents/caregivers (participants under 18 years old); Follow and guarantee all the GDPR principles</p> <p>Design: pre-experimental design with pre and post evaluation</p> <p>Data collection (incl. available measurement tools): questionnaires, semi-structured interviews, observations, progress reports</p>		
PROCESS EVALUATION		
Evaluation questions	Data to be collected	Data collection method
<i>Reach</i>		
<ul style="list-style-type: none"> - What was the number of participating students in the pilot project? - What was the estimated number of people reached from all the dissemination and communication activities (general public, scientific community, policy-makers)? 	<ul style="list-style-type: none"> - Number of proposed students vs number of participating students - Communication metrics (including from social media account, website, physical materials distributed), such as reach, engagement, audience growth rate, views, number of 	<ul style="list-style-type: none"> - Record forms and questionnaires - Social media monitoring - Progress reports

	contacts (emails, phone calls, among others) asking for more information	
Adoption		
<ul style="list-style-type: none"> - What was the openness and willingness of the Municipality to adopt and accept to be on board with the pilot project? - How many schools were contacted before one accepting the invitation to conduct the pilot project and were there any negative responses? 	<ul style="list-style-type: none"> - Attitudes shown by the adopters as well as barriers and/or facilitators stated by the adopters - Number of schools contacted and responses provided 	<ul style="list-style-type: none"> - Questionnaires - Semi-structured interviews - Observation - Record forms/logs
Implementation		
<ul style="list-style-type: none"> - Was the pilot project applied and delivered as planned? Were there any adjustments/changes done in the activities throughout the process of implementation? - To what extent were the pilot project methodology and intervention appropriate in achieving the intended outcomes? - What has been the cost of the pilot project implementation? - What was the perceived degree of satisfaction and how did the students and the school community perceive to have benefited from the pilot project? 	<ul style="list-style-type: none"> - Insights and feedback from the adopters, implementers and advisory board throughout the process of implementation - Estimated costs vs real costs 	<ul style="list-style-type: none"> - Record forms/logs - Questionnaires - Semi-structured interviews - Progress reports - Cost analysis
OUTCOME EVALUATION		
Evaluation questions	Data to be collected	Data collection method
Outcome 1 (<i>short-term outcomes</i>)		
<ul style="list-style-type: none"> - To what extent have the students become more aware about food, nutrition and health? - Did the students increase their knowledge and skills concerning healthy eating and cooking? - Did the students attitudes and beliefs about the Citizenship subject change with the pilot project? 	<ul style="list-style-type: none"> - Awareness, knowledge, beliefs, skills of the students concerning food, nutrition and health pre and post the pilot project intervention - Insights and feedback from the students about the pilot project post intervention 	<ul style="list-style-type: none"> - Questionnaires - Focus groups
Outcome 2 (<i>intermediate outcomes</i>)		

<p>- Has the pilot project contributed to positive changes in the eating patterns and behaviors of the students (healthy food choices in terms of the purchase of food products and also of cooking methods)?</p>	<p>- Eating patterns and behaviors of the students related to food and cooking pre and post the pilot project intervention</p>	<p>- Questionnaires - Semi-structured interviews</p>
<p>Outcome 3 <i>(long-term outcomes and overall impact)</i></p>		
<p>- Has the pilot project and its methodology, activities and materials resulted in a potential health promotion strategy capable of preventing childhood obesity in the long-term and create life-long sustainable changes among young people? - Has the pilot project provided contributes and recommendations for future actions or continuation of the intervention? - What has been learnt about the pilot project delivery that can inform the implementation of the underlying policy idea in the future and in other schools at the national level? - Were there any expressions of interest by local, regional or even national governments to replicate the pilot project?</p>	<p>- Insights and feedback from the adopters, implementers and advisory board as well as from other stakeholders not directly involved in the pilot project - Number of contacts and meetings with other stakeholders not directly involved in the pilot project that have reached out for more information</p>	<p>- Questionnaires - Semi-structured interviews - Progress reports - Surveys and literature review (to support possible inferences)</p>



➔ **The CO-CREATE project** has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774210. The products of the research are the responsibility of the authors: the European Commission is not responsible for any use that may be made of them.



2022



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Implementation and evaluation plan from UK /D7.6

London School of Hygiene
and Tropical Medicine
21.09.2022



Deliverable administration and summary			
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Executive Summary

This report is part of the Objective 7.2: *To develop implementation and evaluation plans for 1-3 selected co-created obesity-related policy interventions (tools, strategies, programmes) in each of the five countries* in Work package 7 in the CO-CREATE project. It is the UK contribution to Deliverable 7.6.

This report follows protocols developed for Deliverable 7.4 on implementation and evaluation plans for policy ideas developed by young people in the CO-CREATE Youth Alliances. It contains implementation and evaluation plans for the policy idea of free cookery classes in an administrative borough in South London.



Table of content

Executive Summary	2
List of acronyms / abbreviations	4
Introduction.....	5
Background of ‘cookery classes’ policy idea	5
Description of process.....	11
Results	13
Reflections.....	13
Recommendations	14
Appendices	15



List of acronyms / abbreviations

GCDA	Greenwich Co-operative Development Agency
LSHTM	London School of Hygiene & Tropical Medicine
WP	Work Package

Introduction

The CO-CREATE-project is a 5-year European Union-funded research project aimed at preventing childhood obesity through taking a systems approach to understanding and solving the problem and engaging adolescents in policy development.¹ The project was conducted in the Netherlands, Norway, Poland, Portugal and the UK.

The engagement of adolescents (16-18 year olds) was based on participatory methods, organized as Youth Alliances (3 per country, with 15-20 youth in each). The youth alliances were engaged in activities (such as system mapping, data collection methods, advocacy training) and provided with tools (such as photo voice, the policy form) and resources (such as funding) to systematically develop their policy ideas.² The policy ideas were discussed with relevant stakeholders in online or face-to-face Dialogue forums.^{3 4}

The CO-CREATE project could not promise enactment and implementation of the policy ideas of youth, However, planning for implementation and evaluation of policies should be standard practice in public health in order to provide recommendations for termination, maintenance, improvements and or/scaling up of policies in a timely manner. Thus, building capacity for this through partnership between the CO-CREATE-partners and local stakeholders of a policy idea is one contribution to changing this. This work was conducted based on a CO-CREATE protocol and internal workshop on developing implementation and evaluation plans.⁵

This policy idea is about providing free cooking classes for young people that focus not only on technical cooking skills but also on practical skills related to eating, like budgeting and meal planning. It was developed by members of a Youth Alliance in South London – a group assembled as part of the CO-CREATE Youth Alliances. The group consisted of volunteers at a high school who participated in weekly Alliance activities for four months, to generate, research and develop policy ideas to help combat adolescent obesity.

Background of ‘cookery classes’ policy idea

The policy idea was co-created by the local Youth Alliance and alliance facilitators (LSHTM researchers) through a series of engagement activities, including discussing and further shaping the policy idea with local stakeholders in a Dialogue Forum.

¹ Klepp KI, et al. Overweight and obesity prevention for and with adolescents: The “Confronting obesity - Co-creating policy with youth” (CO-CREATE) Project. *Obesity Reviews (in press)*

² Deliverable D5.1b: Protocol for youth engagement, published April 2019

³ Deliverable D6.6: a set of recommendations for how to establish multi-actor Dialogue Forums, submitted April 2022

⁴ Deliverable D7.5: A workshop for CO-CREATE co-workers on how to apply the implementation and evaluation protocol. Published 20 April 2020

⁵ Deliverable D7.4: A protocol for developing implementation and evaluation plans. Published 30 April 2020

Youth Alliance participants took part in a system mapping activity (Image 1) where they added to/revised an obesity system map created by other adolescents in England (see CO-CREATE Deliverable 4.1 and reported in Savona et al. 2021⁶). Though cooking skills specifically were not added to the map at this stage, a key focus of the alliance’s cooking skills policy was to address the affordability and accessibility of healthy food by equipping young people with the skills and resources to make their own healthy food at home. This is rooted in the system map pictured, and more specifically in the feedback loop connecting consumption, demand, cost, and access of un/healthy foods. Young people from the Youth Alliance suggested classes be provided at various local locations such as schools and community centres across the Royal Borough of Greenwich. Many children and young people, especially in more deprived areas, do not have access to healthy food due to its availability, cost, and not having the skills and resources provided to prepare healthy food in the home. Many of these deprived neighbourhoods have less healthy foodscapes with high exposure to low cost ‘fast-food’—this could be contributing to established and widening socioeconomic gradients in diet, obesity, and health.⁷ Based on this, the Youth Alliance wished to focus their policy development on increasing cooking skills for young people via council funded cooking classes.

⁶ Savona N, et al. Identifying the views of adolescents in five European countries on the drivers of obesity using group model building. *Eur J Public Health*. Published online 2021:1-6. doi:10.1093/eurpub/ckaa251

⁷ Maguire, E. R., Burgoine, T., & Monsivais, P. (2015). Area deprivation and the food environment over time: A repeated cross-sectional study on takeaway outlet density and supermarket presence in Norfolk, UK, 1990–2008. *Health & Place*, 33, 142-147.

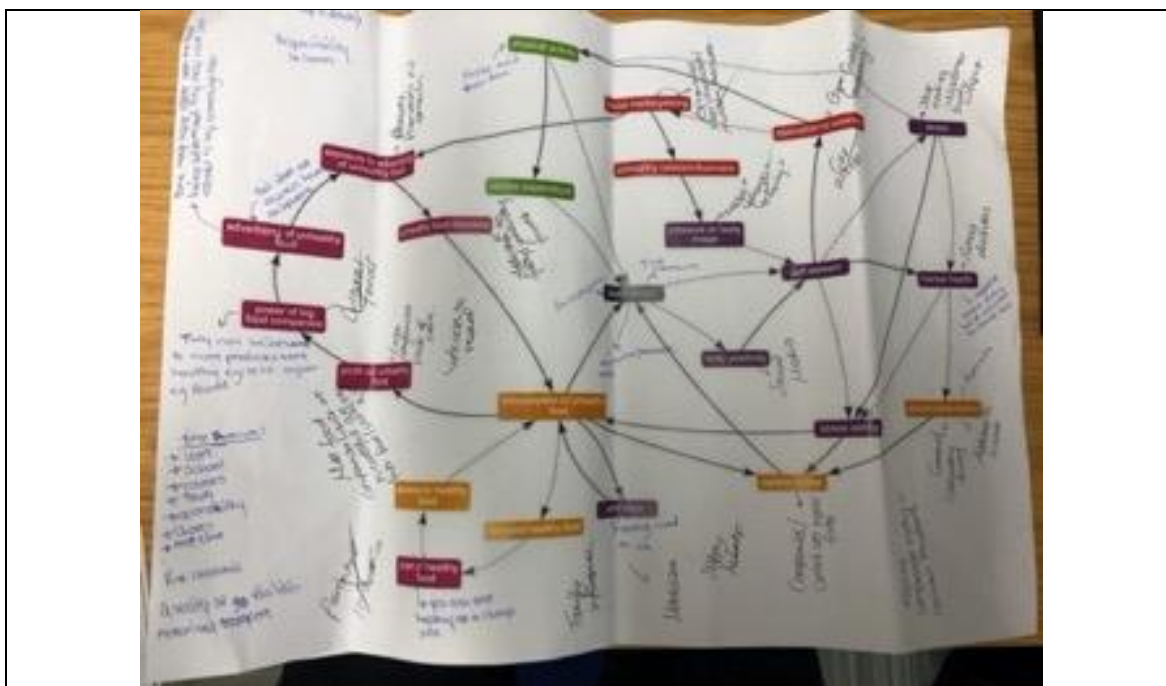


Image 1: This is an amalgamation of the four different maps produced with young people in England with notes and additions from the Greenwich Youth Alliance members—it was used for a system mapping activity where alliance members added and changed anything they felt was missing from the original map following a brief training/overview of systems thinking and systems mapping.

To refine this idea, the youth alliance participated in the following activities:

- They consulted the Greenwich Obesity Public Health officer to learn about the council’s local cookery programmes for communities which could be extended to include teenagers, in line with their policy idea.
- They also reviewed the [NOURISHING](https://www.wcrf.org/policy/policy-databases/nourishing-framework/)⁸ framework created by the World Cancer Research Fund to find information on existing policies pertaining to cooking; they found that although “cooking and nutrition’ are part of the national curriculum for England, this does not seem to be routinely included in schools.
- Finally, they worked with the LSHTM CO-CREATE team to co-design surveys to collect information about cooking habits from their peers and used the results from the survey to help refine their policy idea. Survey results in August 2020 indicated that 25/35 respondents would be willing to participate in cookery programmes if they were free of cost and/or at school (Figure 1) and said they would like to learn both practical and technical skills related to cooking (Figure 2)

⁸ <https://www.wcrf.org/policy/policy-databases/nourishing-framework/>

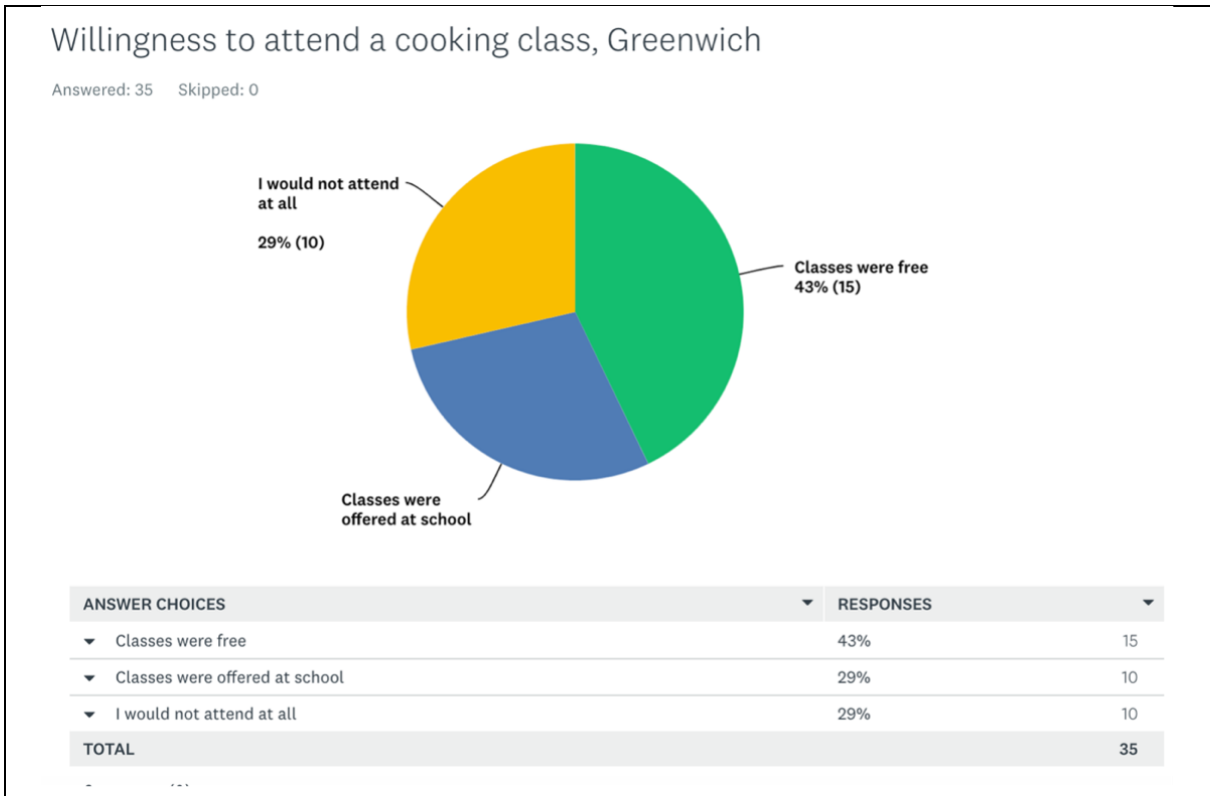


Figure 1. Survey result – willingness to attend a cooking class

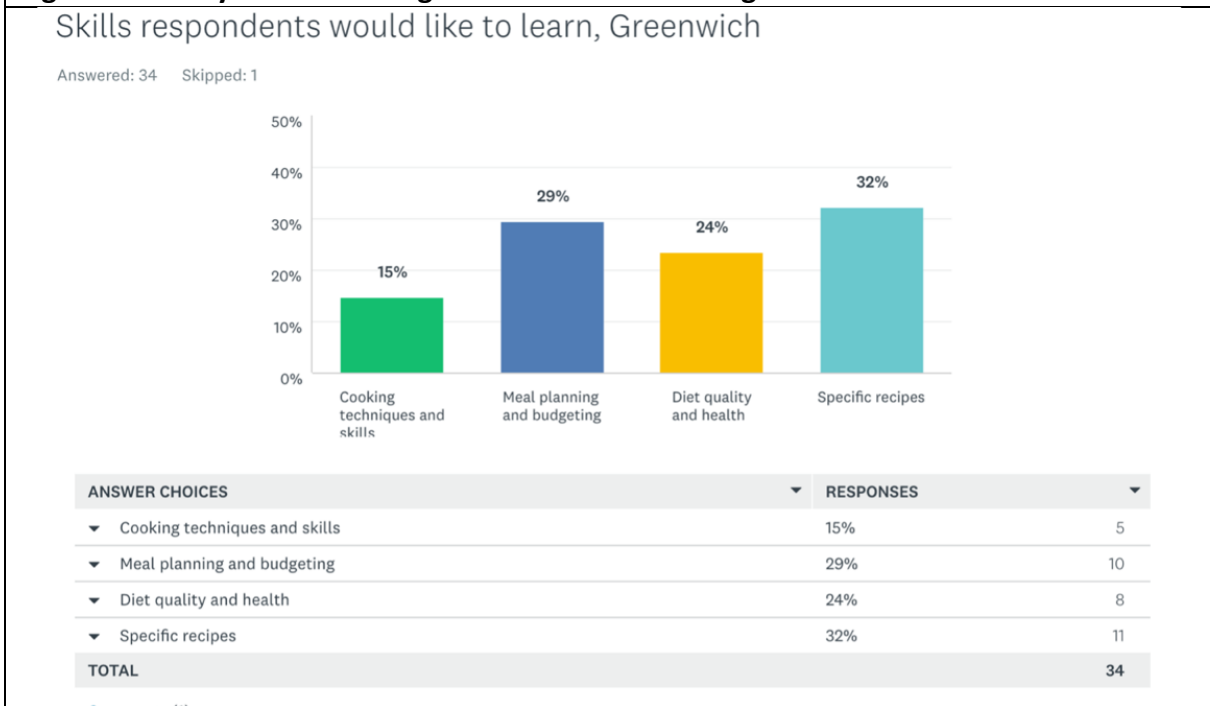


Figure 2. Survey result – skills respondents would like to learn

Thus, based on this initial input, the idea of Council-funded cookery clubs for young people focuses on technical cooking skills as well as practical skills like budgeting and meal planning. This policy idea was developed for the local level, targeting the Greenwich community.

To further explore and refine this idea with relevant decision-makers, a digital Dialogue Forum (Work Package 6) was held on April 29th, 2021, where three youth from the youth alliance discussed their policy idea with three local stakeholders: a health improvement (food and health) expert, a local authority cookery club coordinator (for adults), and a community food provision programme volunteer.

During the Dialogue Forum (Figure 3), all participants agreed on the key role that cookery clubs play in providing a life skill, including how to save money and make better, more nutritious food choices. One participant noted that this knowledge could then be passed on to families, friends, and future generations. People's physical and mental health were highlighted as important outcomes. This included developing a love of food and cooking and sharing this pleasure with the community, be comfortable and confident to cook something to be proud of, building control around your own food choices, and achieving skills that can be taken forward in life. It was noted that sixth form students (age 16-18) have a full schedule, and so the participants discussed ways to incorporate cooking lessons into the school curriculum. Another aspect of the discussion was to deliver after-school cookery club sessions as part of an accreditation program, which could incentivize young people to participate. Examples of accreditations were resumé-building opportunities, the Duke of Edinburgh's Award⁹, and tutor training courses. One stakeholder suggested that students undertaking training can identify opportunities within the curriculum to teach cooking.

Finally, the participants saw it as crucial to make cooking classes interesting and social. One idea that was brought up was to provide take home kits to cook the recipes from class at home.

⁹ <https://www.dofe.org>

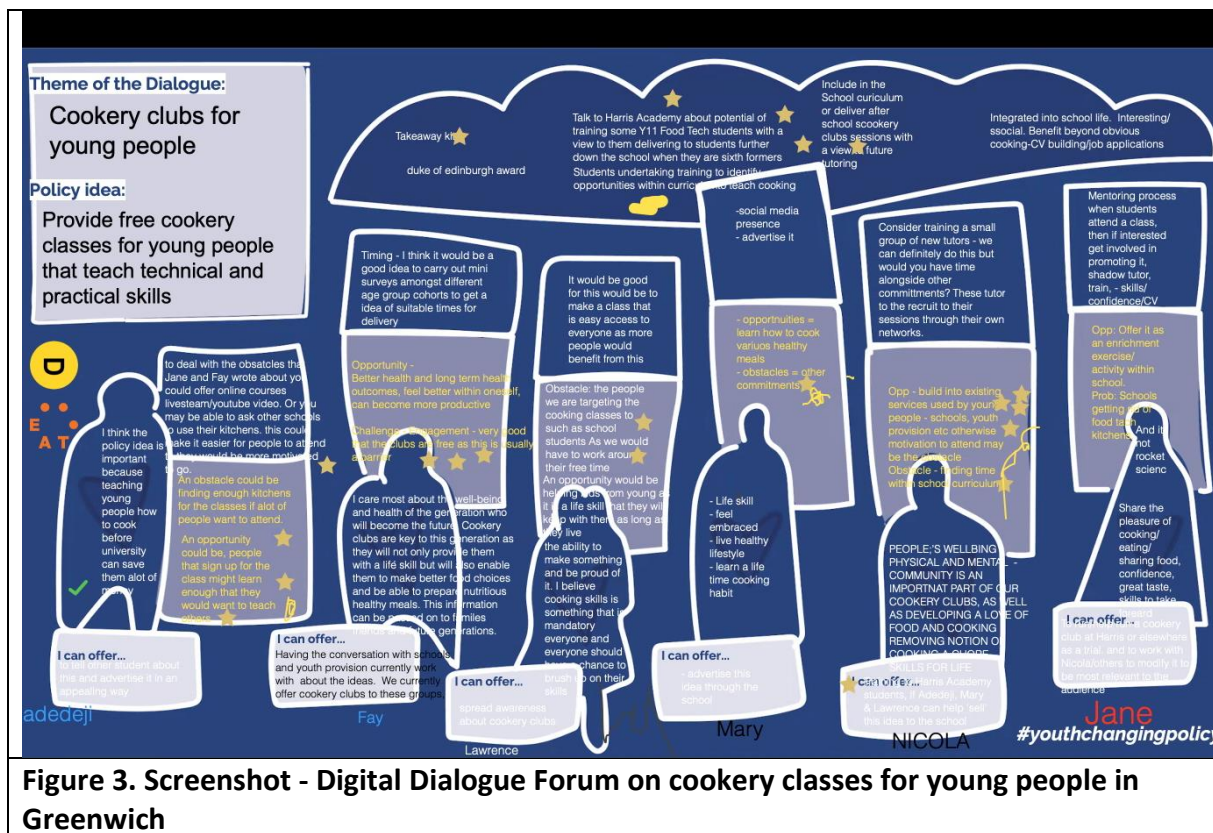


Figure 3. Screenshot - Digital Dialogue Forum on cookery classes for young people in Greenwich

Local stakeholders expressed during the dialogue forum, a keenness to take forward this policy idea given that there are already existing cookery programmes in place in Greenwich. However, these are mostly geared towards adults and families so there is an opportunity to expand the cookery programme offerings to classes specifically for young people. Ideas, obstacles, and opportunities to take the policy idea forward were discussed in detail during a Dialogue Forum.

The six forum participants concluded with an agreement for actions needed, including to:

- explore ways to incorporate cooking into other aspects of the curriculum at earlier ages rather than in sixth form when it’s a lot to take on as a full programme.
- explore the school curriculum ahead of time and identify opportunities where cooking knowledge could be incorporated; capitalize on what they already have.
- Incentivise and identify ways to provide accreditation to young people e.g.
 - Tutor training course is already accredited with Open College Network— make sure this is well advertised when recruiting young
 - Cooking classes could count towards Duke of Edinburgh award scheme
 - Provide take home kits to do the recipe from class at home

Ultimately, the aim of the policy is to increase the knowledge, skills, and confidence of young people to buy, prepare and eat home-cooked food in both the shorter and long term. Although there is not robust evidence of the positive value in providing such cookery classes¹⁰ the young people were committed to such a policy and believe it would make a difference; additionally, Greenwich (and many other councils throughout the United Kingdom) already run adult and family cookery classes as part of efforts to increase healthy eating¹¹. There is also some evidence that such courses are valued by participants and may provide skills that would be used later in life¹².

Description of process

Based on the revision of the system map, Youth Alliance participants identified areas of the map where potential interventions may help reduce unhealthy eating and physical inactivity. A popular idea focussed on increasing young people's ability to buy, prepare and eat healthier food. There was a strong sense that many families were not as skilled in food budgeting, procurement, and preparation and that something needed to be done to deal with this. Various options around classes for teaching such skills were suggested – such as courses after school, including cookery in the school curriculum more routinely and widely, and asking the council to increase its offering of teaching food budgeting and cookery. The Alliance members conducted surveys (see Figures 1 and 2) which confirmed that there was good potential for cookery classes to be taken up by young people, so they adopted this as their policy focus. After the policy idea was chosen to be pursued, the step-by-step approach described in the Implementation and Evaluation Protocol (see Deliverable 7.4) was planned in detail.

First, a list of members of a core advisory team was created, to contribute to the feasibility, development, and implementation of the policy. To inspire the adoption of this policy, there needs to be considerable buy-in from a range of actors across the borough. For example, the local Public Health team need to make a strong case for the implementation; commissioning groups would need to justify costs; and others, such as the Greenwich Co-operative Development Agency would be a useful ally in the process as they already run similar initiatives in the borough.

¹⁰ Brooks, N, Begley, A (2013) Adolescent food literacy programmes: A review of the literature *Nutrition & Dietetics* 71(3);158-171

¹¹ https://www.royalgreenwich.gov.uk/events/event/6316/free_cookery_clubs

¹² <https://www.communityfoodandhealth.org.uk/wp-content/uploads/2013/04/CFHS-impact-cooking-courses-families.pdf>

The initial wider team would consist of:

- LSHTM CO-CREATE lead: Cecile Knai
- LSHTM/CO-CREATE staff: Natalie Savona, Talia Macauley
- Youth representative from Greenwich/Bexley alliance
- Stakeholders involved in adopting and implementing the policy in the local council public health team
- Stakeholders with potential to provide implementation input:
 - o GCDA (Greenwich Co-operative Development Agency) rep who currently runs adult cookery programme
 - o 'Good Food in Greenwich' Advisory Committee members
 - o head teachers
 - o existing cookery tutors (GCDA staff)
 - o food education experts
 - o nutrition experts
 - o youth commissioner
 - o education/curriculum rep

The core members of the team consisted of the researchers from LSHTM – each taking different roles in the process at different times, in conjunction with two youth members of the Alliance and a key person in the Royal Borough of Greenwich public health team.

By engaging the above groups in Greenwich, meetings would need to be set up with the relevant local actors, to discuss the following, to plan the intervention:

- Clarify and agree involvement with potential partners (GCDA, suppliers, schools, Duke of Edinburgh/ other accreditation)
- Funding of cookery courses for young people
- Whether cookery courses would be incorporated into s2school curriculum or held at other times
- Whether cookery courses would be able to be incorporated as part of a wider accreditation programme e.g. Duke of Edinburgh awards scheme; tutor training courses
- Whether a training programme would be needed for cookery tutors
- Whether extra staff would be needed and if so, who would employ and fund them.
- Design and develop food education and cookery programme curriculum

Templates that were selected during protocol development (as presented in Deliverable 7.4) were completed, for a logic model of the policy, as well as the implementation and evaluation plans; their content was derived from the above considerations and discussions on the required inputs, activities, expected outputs, various expected outcomes and impacts.

Results

As per the logic model, the intended theory of change of providing free cookery classes to young people in the borough, was such that by learning technical cooking skills, as well as food budgeting and meal planning, ultimately, the young people would eat healthily going forward. As such, the theory is that they would be more likely to maintain a healthy weight. Shorter-term outcomes expected are that there would be less out-of-home consumption of unhealthy food (such as take-aways), more cooking in the home and healthier and more sustainable eating habits. Broadly speaking, the process took the following steps, the details of which are presented in appendices attached to this report:

- Logic model worksheet for the Policy idea (Appendix 1): this consisted of working through a logic model framework to plan how the policy would work; we considered what inputs would be required, from whom, what actions would need to be taken to advance the planning of the intervention, and then what outputs could be expected.
- Logic model of implementation worksheet for Adopters & Implementers (Appendix 2); similarly, a logic model framework for the adoption and subsequently, the actual implementation of the intervention (cookery classes).
- An Implementation plan (Appendix 3) and an Evaluation plan (Appendix 4) were also made, using a clear framework to demonstrate the support system members and their responsibilities, the purpose, and the setting of the intervention. These segments fed into activities and strategies, divided up by which factors they target, who would be responsible for the activities and when/where they would take place.

Reflections

The policy idea of having cookery classes for young people was put forward and across all stakeholders, there was considerable enthusiasm for it and a clear understanding for the need for such important life skills. The council already offers free cookery teaching as part of its offering to residents¹³ so it was not too far a stretch for them to see the potential benefits to extending the offering to adolescents. As such a ready-made team of people across the borough was already semi-formed should the idea be implemented in reality, with strong leadership from the public health team, and people who already have such a remit within their role. The logic models for the policy itself, as well as for the implementation were, because of this existing offering, already more or less in place. However, the stumbling blocks to turning the policy into reality were typical of those for any new initiative, as local government is increasingly under-resourced:

¹³ https://www.royalgreenwich.gov.uk/events/event/6316/free_cookery_clubs

- Time – students, teachers and local council or community staff
- Resources – financial and otherwise.

Recommendations

In truly taking an iterative systems approach, the development, design and implementation of the policy would need to be continuously revised throughout the process. This could have been incorporated more smoothly into the process by generating less linear logic models, though this would be unusual and challenging. This way, at each step, any barriers faced can be examined and dealt with right away, rather than post hoc.

Because this was largely a theoretical exercise i.e. the actual implementation and evaluation of the policies was not directly built in to the CO-CREATE grant agreement, it was difficult to make demands on the time of council and other officers, who are critical to the development, funding and implementation of any such policy. Therefore, though it was useful to use the templates to think through the various processes methodically and in detail, the hypothetical nature did mean it remained just that – hypothetical and theoretical, rather than knocking up against the reality of policymaking, which is a messy, iterative, and sometimes antagonistic process. Ideally, such a process would be done, hand-in-hand with the potential adopters and implementers, to make the models and plans as close to ‘real-life’ as possible.

It is quite possible that this policy will be implemented at some stage, in which case, the details given in the various plans (see Appendices) will be useful for those concerned.

Appendices

Appendix 1. Logic model worksheet for the policy idea: Council Funded Cooking Classes for Young People

Appendix 2 Logic model worksheet for Adopters & implementers

Appendix 3 Template for writing implementation plan

Appendix 4 Template for writing evaluation plans (based on the Center TRT's evaluation plan examples <http://centertrt.org/>)



Appendix 1. Logic model worksheet for the policy idea: Council Funded Cooking Classes for Young People






Context/Needs Council Funded Cooking Classes for Young People	Assumptions /Theory of Change (logic model) Lack of available funding (seek external grant); existing cookery programme (why expand programme); little engagement from young people with policy idea in CC; Lack of facilities, little space in curriculum, lack of tutors, partnerships with local suppliers (produce etc.)			External influences		
	Inputs	Activities	Outputs	Short-term outcomes	Intermediate Outcomes	Impacts
Young people express not having access to healthy food due to its availability, cost, and not having the skills and resources provided to prepare healthy food in the home. Many deprived neighbourhoods have less healthy foodscapes with high exposure to low-cost fast food—this could be contributing to established and widening socioeconomic	Support from schools Young people willing to enrol/engaged Staff/tutors to run courses Kitchen facilities Produce/ingredient suppliers (local partnerships) Possible sources to apply for funding	Meetings with schools (that have kitchen facilities) Meetings with GDCA Meetings with council re available funding Clarify and agree involvement with potential partners (GCDA, suppliers, schools, Duke of Edinburgh/ other accreditation)	Agreements in place with schools (to use premises, add to curriculum) Agreement/partnership establish with GCDA to implement programme (as an extension of existing programme) List of possible funding available (and amount) List of partners agreed to be involved	Positive attitudes towards the cookery programme Knowledge amongst young people that the programme exists Accessibility of cooking skills (availability/cost etc of cooking classes) Social/peer support	Less out-of-home consumption More cooking in the home Healthier and more sustainable eating habits	long term impacts would be on population rates of overweight and obesity among youth and ensuring that any pre-existing social inequalities (socio-economic, gender, ethnicity, geographically)



<p>gradients in diet and health. Greenwich council already has existing cookery school programmes, likely to support expansion for young people (interest expressed from stakeholders in dialogue forum)</p> <p>Survey conducted by young people amongst their peers regarding willingness to attend cooking classes. 25/35 respondents said they would if they were free and/or at school</p>	<p>User survey to young people (ideal conditions for them to take part)</p> <p>Plan for costs/budget</p> <p>Stakeholders Local Public Health</p> <p>Greenwich commissioning groups</p> <p>GCCA, Greenwich Co-operative Development Agency</p> <p>Education authority plus School heads/heads of relevant departments/teachers</p> <p>Students/young people / youth alliance members</p>	<p>Establish an implementation plan</p> <p>Training programme for cookery tutors (existing programme?)</p> <p>Hire/train appropriate staff</p> <p>Design and develop food education and cookery programme curriculum (with experts)</p>	<p>Facilities/suppliers I.e. school spaces suitable for classes; catering suppliers of ingredients</p> <p>Written training programme</p> <p>Staff/tutors secured</p>	<p>Increased awareness about the benefits of food education/cooking skills</p>		<p>in these rates are evened out</p>
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*based on Appendix H of the CDC Evaluating Violence and Injury Prevention Policies Briefs, <https://www.cdc.gov/injury/pdfs/policy/Appendices-a.pdf>

Appendix 2 Logic model worksheet for Adopters & implementers

Setting: Greenwich local authority Context/need: Willingness and desire from young people to increase cooking skills; support from local stakeholders (dialogue forum) Adopter: Greenwich council Implementer: Schools; head teacher; domestic science teachers Procedures for adoption: -Funding from RBG	Assumptions /Theory of Change (logic model) <i>(Barriers and facilitators of adoption in the inner and outer context)</i> Lack of available funding (seek external grant); existing cookery programme (why expand programme); little engagement from young people with policy idea in CC; Lack of facilities, little space in curriculum, lack of tutors, partnerships with local suppliers (produce etc.)			External influences <i>(Other contextual factors which could influence these outcomes - systems model. Any potential unintended consequences?)</i> Rigidity of school curriculum Funding constraints Lack of 'ownership' of policy		
	Inputs	Activities 	Outputs 	Short-term outcomes 	Intermediate Outcomes 	Impacts 
	Support team Public health Children & young people; especially student council GCDA Local authority education department Head teacher backing	Dissemination strategies Curriculum meetings with head teacher (re timetables, staff/materials required) Model from existing GCDA strategies for adult cookery programme Find other examples elsewhere to demonstrate value of the policy Get endorsement based on above activities, from council, to enact policy.	Number of settings reached and responses	Adopters express awareness and positive attitudes Greenwich public health endorses/ supports adoption of policy - building the case for the use of resources and time	<i>Policy adopted</i> Appropriate approvals to move forward with adopting policy Implementers provide feedback on feasibility	Policy adapted and implemented with a sufficiently high fidelity



-Integration into school curriculum by local authority	Delivery system/ implementation team Cookery tutors/ food education experts	Capacity-building strategies Training for tutors find out from existing ones what accreditation is possible	Resources allocated Implementation team set up Plan for implementation agreed upon Implementers trained Potential for former cookery programme participants to be trained as tutors Support system adapted to further needs	Reduced internal barriers to implementation Leadership/organization supportive of implementation Implementers express awareness, positive attitudes and self-efficacy		
	Indicators	Indicators	Indicators	Indicators	Indicators	Indicators
			Reach <i>Number and types of settings contacted versus number/Representativeness of positive responses</i>			



Appendix 3 Template for writing implementation plan

IMPLEMENTATION PLAN

Name of policy Council Funded Cooking Classes for Young People

Implementation support system members and responsibilities:

The local council will need to adopt the policy and therefore provide funding plus a base/staff from which it can be organised, or commissioned.

School head teachers and relevant staff (e.g. food tech) will need to be on board with the decision as they are in a position to help navigate the environment within which the policy can be implemented. They will also need to provide facilities and help recruit young people to take part in the classes.

Staff/tutors to run courses – depending on what the council decides to do, tutors for the courses will either be hired by the council or be employed by an organisation commissioned to run the policy.

Purpose:

To provide lessons that increase levels of cooking/food budgeting skills amongst adolescents in Greenwich

Setting:

Secondary schools in the Royal Borough of Greenwich; initially 3 pilot schools

Adopters and implementers:

Adopters: council

Implementers: schools, commissioned/employed tutors

ADOPTION			
Activities/Implementation strategies	Targeting which factors?	Who are doing this?	When and where?
Activity 1			
Convene initial meeting with all those required to ultimately get this adopted.	Getting consensus, funding agreement for this project to go ahead. Identifying lead person from council as anchor point for it.	Led by contact at public health team in council; Local Public Health, Greenwich commissioning groups, GCDA, Greenwich Co-operative Development Agency, Education authority, School heads/heads of relevant departments/teachers, Students/young people / youth alliance members	Royal Borough of Greenwich council office meeting room. Month 1
Activity 2			
Making sure there is funding for this project	Get details of financial commitment, which budget.	Council lead on this; point person from relevant department e.g. health or education; relevant finance team member	Month 2-5
Activity 3			
Create core team for planning cookery classes, based on Activity 1	Planning details of teachers, when, where and target audience of cookery classes	...depending on above members of first meeting, core team.	Month 2-6
Activity 4			
Recruitment and consent from c.3 pilot schools to trial project	Get commitment from three schools to trial cookery classes	Core team plus head and relevant teachers	Months 5-8

IMPLEMENTATION			
Activities/Implementation strategies	Targeting which factors?	Who are doing this?	When and where?
Activity 1			
Plan timetable, location, materials for pilot classes	Getting things organised to start pilot phase	Core team plus relevant teachers at schools and classes	Months 6-8
Activity 2			
Recruit students	Getting participants for the courses	School teachers	Months 7-10
Activity 3			
Start classes in schools	Full implementation of pilot classes in three schools	Cookery teachers & participating students	Month 12

Appendix 4 Template for writing evaluation plans (based on the Center TRT's evaluation plan examples <http://centertrt.org/>)*

EVALUATION PLAN		
Name of policy Council Funded Cooking Classes for Young People		
Evaluation team members and responsibility: Co-Create research team plus point person at Royal Borough of Greenwich council		
Purpose: to evaluate the implementation of and outcomes of the pilot - free cookery classes for young people in three RBG schools		
Evaluation question: Were the free cookery classes successful in both their reach and achieving improvements in the participants' cookery and food budgeting skills?		
Ethics/data handling approval procedure: appropriate ethics clearance required from LSTHM ethics committee to interview participants about their experience and collect data on outcomes of the cookery classes		
Design: data/numbers from council/schools; asking for general feedback from participants and those running the classes.		
Data collection (incl. available measurement tools): data held by programme organisers on number of attendees; questionnaire, interviews		
PROCESS EVALUATION		
Evaluation questions	Data to be collected	Data collection method
Reach What proportion of the target population of young people applied to take part in the cookery classes? What proportion of schools expressed interest in taking part in the programme?	Numbers of applicants/schools (and total number of those contacted about the classes)	Numbers from managers of the programme
Adoption	Numbers of schools/participants	Numbers from managers of the programme



How many young people signed up for the classes? How many schools signed up for the classes?		
Implementation How many young people took part in the classes? How many schools took part the classes? Do the council and schools think this is a programme worth spreading wider through more schools?	Numbers of schools/participants Answers direct from those responsible for funding and organising the classes	Numbers from managers of the programme Questionnaire and team meeting discussion
OUTCOME EVALUATION		
Evaluation questions	Data to be collected	Data collection method
Outcome 1		
Increase in young participants' knowledge, skills and self-efficacy to buy, prepare and eat home-cooked food	Knowledge Skills Self-efficacy	Questionnaire Before and after the course



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