



Organisation [FISABIO – FUNDACION PARA EL FOMENTO DE LA INVESTIGACION
SANITARIA Y BIOMEDICA DE LA COMUNITAT VALENCIANA]

D5.1 Implementation plan guide in disadvantaged areas

HEALTH4EUKids

Date: 21/12/2023
Doc. Version: 0.1
Template version: 3.0.1

Document Control Information

Settings	Value
Document Title:	D5.1 Implementation plan guide Deliverable Acceptance Plan
Project Title:	<Health4EUkids>
Document Author:	<Marta Garcia-Sierra (FISABIO), Rosana Peiró (FISABIO-DGSP), Ana Boned-Ombuena (FISABIO-DGSP), Joan Quiles (FISABIO-DGSP), Fin Kasten (FHE), Ulrike Igel (FHE)>
Additional contributors:	
Project Owner:	<FISABIO>
Project Manager:	<Rosana Peiró (FISABIO)>
Doc. Version:	0.1
Sensitivity:	<Public>
Date:	21/12/2023

Document Approver(s) and Reviewer(s):

NOTE: All Approvers are required. Records of each approver must be maintained. All Reviewers in the list are considered required unless explicitly listed as Optional.

Name	Role	Action	Date
	Scientific Advisor	<Approve / Review>	

Document history:

The Document Author is authorized to make the following types of changes to the document without requiring that the document be re-approved:

- Editorial, formatting, and spelling
- Clarification

To request a change to this document, contact the Document Author or Owner.

Changes to this document are summarized in the following table in reverse chronological order (latest version first).

Revision	Date	Created by	Short Description of Changes
0.1	21/12/2023	Marta Garcia-Sierra (FISABIO) Rosana Peiró (FISABIO)	First internal draft

Configuration Management: Document Location

The latest version of this controlled document is stored in <location>.

<These notes should be deleted in the final version :>

Notes for Templates:

- Text in <orange>: has to be defined.
- Text in <blue>: guidelines and how to use the Template. Should be deleted in the final version.
- Text in green: can be customised. Should be recolored to black in the final version.

TABLE OF CONTENTS

PROJECT SUMMARY.....	4
EXECUTIVE SUMMARY	5
INTRODUCTION: TRANSFERENCE OF 'GRÜNAU MOVES' BEST PRACTICE TO A SELECTION OF DEPRIVED AREAS IN EU MEMBER STATES	6
Background and Justification	6
Why is the environment important for health?	7
Why are community-based approaches relevant to health promotion and child obesity prevention?	7
Overview of Grünau Moves Best Practice	8
Ten Statements on Community-based Health Promotion	8
Step-by-Step Breakdown of Intervention Mapping Methodology	9
STEP 0: EXPLORING AND DESCRIBING THE INTERVENTION AREA.....	12
STEP 1: ESTABLISH A 'CORE GROUP' AND A 'HEALTH NETWORK'	14
Step 1.1 The 'Core Group' (CG).....	15
Step 1.2 The Health Network (HN)	16
STEP 2: CONDUCT A PARTICIPATORY NEEDS ASSESSMENT OF THE OBESOGENIC ENVIRONMENT AND MAP HEALTH ASSETS	19
Step 2.1 Participatory needs assessment and health assets mapping	20
Step 2.2 Key criteria for method selection – A Decalogue for Participatory Community Action for Health (CAFH).....	21
Step 2.3 Participatory tools for conducting the needs assessment.....	22
Step 2.4 The 'Living Healthy tool'	23
STEP 3: CO-DESIGN, PRIORITIZATION AND IMPLEMENTATION OF LOCAL ACTIONS TO TACKLE CHILD OBESITY DETERMINANTS.....	26
Step 3.1 Prioritization of actions	27
Steps 3.2: Implementation plan co-created with the target groups	27
STEP 4: PARTICIPATORY EVALUATION	30
STEP 5: SUSTAINABILITY AND LEGACY OF THE PROGRAM.....	34
APPENDIX 1: REFERENCES AND RELATED DOCUMENTS	36
APPENDIX 2: EVALUATION FACTSHEETS.....	37
FACTSHEET 1: RECORD ON PLANNED ACTIVITIES	37
FACTSHEET 2: EXAMPLE FROM GRÜNAU MOVES PROJECT ACTIVITIES	39
APPENDIX 3: COMMUNITY WORKSHOP FOR THE PRIORITISATION OF HEALTH PROMOTION ACTIONS	41

PROJECT SUMMARY

“Health4EUkids” aims at the implementation in the field of health promotion and prevention of non-communicable diseases, indicating best practices and risk factors from research results that have already developed from previous actions to a broader level and countries.

The overall goal of the Joint Action (JA) is to develop policy changes to foster public health investments at community level in each country member on Health Promotion, Disease Prevention and Management of Non-Communicable Diseases. The implementation process will include the knowledge transfer between best practice owners (‘Smart Family’ and ‘Grünau Moves’) and partner organizations from the Member States through the implementation of actions, the cooperation and exchange of knowledge, the organization of meetings, and related technical support.

Scope of the project will be to promote to participating member states healthy lifestyles in families with children, to prevent childhood obesity, to increase physical activity and healthy diet in children, families and communities with a focus on social norms, recognition and self-esteem in deprived districts in member states. Also, to study the different requirements for member states to implement either Grünau Moves or Smart Family. Finally, to prepare the sustainability of these best practices and transfer to other member states based on the acquired knowledge and experience.

The expected results focus on the identification of concrete challenges in the prevention of noncommunicable diseases and policy solutions in the form of best practices and innovative solutions for collective action between the Member States and the Commission, to tackle the main public health challenges.

EXECUTIVE SUMMARY

The main objective of this document is to describe the implementation plan followed by Health4EUkids Work Package 5 partners and affiliated entities participating in the transference to their respective territories of 'Grünau Moves' best practice originally developed in Germany. The original project, known as 'GRÜNAU BEWEGT sich', was a community-based health promotion and child obesity prevention program. It was aimed at developing behavioural and environmental approaches to child obesity prevention in a disadvantaged area of the city of Leipzig (Germany) and to evaluate their effectiveness. Grünau Moves project was based on the methodology Intervention Mapping (IM), specifically designed for planning theory- and evidence-based interventions to bring about environmental and behavioural change in the field of health promotion. This document is intended as a step-by-step guide that outlines the process and steps involved in the transfer of this best practice to several localities within European member states. Specifically, it describes the steps outlined in the IM protocol, including the preparatory phase (pre-implementation), pilot implementation, and evaluation. The primary goal is to provide a clear and easy-to-understand guide for anyone tasked with transferring and implementing this action. This involves adapting it to their specific context, including conducting a thorough assessment of local needs, health assets, and involving key stakeholders from the early stages of implementation preparation.

INTRODUCTION: TRANSFERENCE OF 'GRÜNAU MOVES' BEST PRACTICE TO A SELECTION OF DEPRIVED AREAS IN EU MEMBER STATES

Background and Justification

The data available from the WHO Childhood Obesity Surveillance Initiative (COSI), fifth round of data collection 2018–2020¹ shows child overweight and obesity are increasing in the EU region following a north-south gradient. The highest prevalence rates are observed in countries in the Mediterranean area – Cyprus, Greece, Malta, Italy, and Spain, with figures ranging between 12-23% of prevalence of obesity in children aged 7–9 years, and 30-40% of prevalence of overweight (including obesity). However, data from this last round shows a decreasing trend in some of these countries with the highest baseline figures, namely in Malta, Greece, Italy, Portugal, Spain. Variations in child overweight and obesity are observed between regions as well as according to age (tend to increase with age), gender (more prevalent in boys than girls), and socioeconomic status (SES) as captured by the level of parental education – a low level of parental education is associated with a higher prevalence in high-income countries,² thus following the 'social gradient' in health.³

These socioeconomic differences signal a huge impact of the social determinants of health –food insecurity, education, income, unemployment and job security–, with an impact in health equity; namely, children living in the most deprived areas are disproportionately affected. Child overweight and obesity have severe implications that can compromise the healthy development of the children and youth. Being obese during childhood increases the risk of suffering serious diseases in adulthood, such as hypertension, type 2 diabetes, cardiovascular diseases, and certain types of cancer and increases premature deaths.⁴ Moreover, the psychosocial consequences suffered by overweight and obese children and youths may result in low self-esteem, social isolation, discrimination or abnormal behaviour, among other health risks.⁵

Obesity arises from the disequilibrium in the energy balance, namely energy intake versus energy expenditure. Yet, this is a complex multi-faceted issue. In addition to individual factors, contextual factors play a role in creating obesogenic environments, which favour unhealthy eating patterns and physical inactivity.⁶ These include access to healthy food and physical activity opportunities, as well as personal and cultural practices related to dietary intake, preferences, habits and knowledge, the practice of physical activity, and sedentary behaviour.⁷ All in all, this means that there are opportunities to work in deprived areas, with a focus on improving the living environment to create more supportive conditions. This is crucial because social determinants can be more influential than healthcare or lifestyle choices in shaping health outcomes, accounting for between 30% and 55% of health outcomes in some instances.

¹ WHO (World Health Organisation). (2022). Report on the fifth round of data collection, 2018–2020: WHO European Childhood Obesity Surveillance Initiative (COSI). Copenhagen: WHO Regional Office for Europe; 2022. Licence: CC BY-NC-SA 3.0 IGO. Retrieved from: <https://www.who.int/europe/publications/i/item/WHO-EURO-2022-6594-46360-67071>.

² *Idem*.

³ Arcaya, M. C., Arcaya, A. L., Subramanian, S. V. (2015). Inequalities in health: definitions, concepts, and theories. *Global health action*, 8(1), 27106.

⁴ Lakshman, R., Elks, C. E., & Ong, K. K. (2012). Childhood obesity. *Circulation*, 126(14), 1770-1779.

Lindberg, L., Danielsson, P., Persson, M., Marcus, C., & Hagman, E. (2020). Association of childhood obesity with risk of early all-cause and cause-specific mortality: A Swedish prospective cohort study. *PLoS medicine*, 17(3), e1003078.

Nuotio, J., Laitinen, T. T., Sinaiko, A. R., Woo, J. G., Urbina, E. M., Jacobs, D. R., ... & Dwyer, T. (2021). Obesity during childhood is associated with higher cancer mortality rate during adulthood: the i3C Consortium. *International Journal of Obesity*, 1-7.

⁵ Bartrina, J. A., Rodrigo, C. P., Barba, L. R., & Majem, L. S. (2005). Epidemiología y factores determinantes de la obesidad infantil y juvenil en España. *Revista pediátrica de atención primaria*, 7(Suplemento 1), 13-20.

⁶ Swinburn, B., Egger, G., & Raza, F. (1999). Dissecting obesogenic environments: the development and application of a framework for identifying and prioritizing environmental interventions for obesity. *Preventive medicine*, 29(6), 563-570.

⁷ Harrison, K., Bost, K. K., McBride, B. A., Donovan, S. M., Grigsby-Toussaint, D. S., Kim, J., ... & Jacobsohn, G. C. (2011). Toward a developmental conceptualization of contributors to overweight and obesity in childhood: The Six-Cs model. *Child development perspectives*, 5(1), 50-58.

Why is the environment important for health?

The place where we live can affect our health. Some places can limit our access to good healthcare, healthy food, clean water, parks, and safe places for physical activity, while increasing exposure to sources of environmental pollution. People with low incomes often live in these unhealthy settings, near busy roads or factories, which often lack of basic services and are not-so-well maintained. The elderly, children and other vulnerable groups are often more impacted by the externalities of environmental factors. In these areas, individuals often face greater challenges in maintaining their health and well-being. That is why it is crucial to address these challenges from a community perspective, valuing local resources and the environment.

When it comes to food, inequalities have been found in access to fresh, healthy food at affordable prices in certain impoverished or rural areas with relatively few grocery stores or supermarkets (i.e. 'food deserts').⁸ Several studies have found positive associations in different contexts between access to fresh and healthy foods and the quality of diets. On the contrary, the presence of not-so-healthy but cheap food outlets in low-income communities is associated with poorer diets and obesity.⁹ The school environment, as a place where children spend much of their time, is of great importance. The food landscape within schools includes canteens (including school meals), kiosks or vending machines, whilst the food environment outside schools includes food retailers such as convenience stores and fast-food outlets.

Seemingly, the built environment determines the provision of safe and welcoming spaces for physical activity, sport and outdoor play and culture available to the communities in their living environment. Outdoor physical activity spaces of universal access (i.e. of affordable or free access) may include open, green spaces, urban parks and gardens, in-between buildings interiors, physical activities facilities, and play areas like playgrounds. Parks and green spaces promote health, well-being, social interaction, and equity.¹⁰ Likewise, active school grounds support physical health and stimulate cognitive development and socialization, contributing to children's' overall well-being.¹¹ Furthermore, active mobility makes a large part of peoples' physical activity in urban areas. For it is crucial to create places with safe streets, continuous routes, sidewalks, bike lanes, and well connected with public transport to get people to where they need to go (e.g. to work, school, health centre, shops, parks, landmarks or to meet friends).

Why are community-based approaches relevant to health promotion and child obesity prevention?

Community health and community health assets play a crucial role in addressing child overweight and obesity, specially in disadvantaged areas. Recognizing the relevance of community-level interventions, policymakers and public health experts are increasingly turning their attention to harnessing community health assets to address this pressing issue. By focusing on community health, interventions can be tailored to address the unique needs and challenges faced by children and families within their local environments. Community health assets, such as schools, parks, community centres, and formal and informal local organizations, provide the infrastructure and resources necessary for implementing effective strategies based on their needs. These assets serve as key catalysts for promoting healthier eating habits, improving access to healthy food, and encouraging physical activity among children.

The benefits of community-based health-promotion approaches to addressing child overweight and obesity are multi-faceted. Firstly, they facilitate tailored interventions that account for cultural, socioeconomic, and environmental local factors influencing children's health behaviours. Secondly, community involvement and engagement empower individuals and families to take ownership of their health, fostering sustainable and long-

⁸ Shaw, H. J. (2006). Food deserts: Towards the development of a classification. *Geografiska Annaler: Series B, Human Geography*, 88(2), 231-247.

⁹ Althoff, T., Nilforoshan, H., Hua, J., & Leskovec, J. (2022). Large-scale diet tracking data reveal disparate associations between food environment and diet. *Nature communications*, 13(1), 267.

¹⁰ Larson, L. R., & Hipp, J. A. (2022). Nature-based pathways to health promotion: the value of parks and greenspace. *North Carolina Medical Journal*, 83(2), 99-102.

¹¹ Bikomeye, J. C., Balza, J., & Beyer, K. M. (2021). The impact of schoolyard greening on children's physical activity and socioemotional health: A systematic review of experimental studies. *International journal of environmental research and public health*, 18(2), 535.

term changes in their living environment. In such framework, individuals and organizations use their skills and resources to address health priorities and meet their specific needs.¹² Through active participation, empowered communities provide social support for health, resolve conflicts, and gain increased influence and control over health determinants. Additionally, leveraging existing community resources enhances intervention efficiency and effectiveness, mobilizing local knowledge and fostering collaboration among various stakeholders. By capitalizing on local resources, empowering communities, and implementing tailored interventions, we can promote much supportive environments for health promotion and greater equity.

Overview of Grünau Moves Best Practice

The project 'GRÜNAU BEWEGT sich' (Grünau Moves) originated in Germany as a community-based health promotion and child obesity prevention program. The intervention is focused on a deprived district of the German city of Leipzig (Grünau district). It targets children (4-12 y) and their environmental and living conditions, using 'setting' approach with a specific emphasis on reducing health inequalities. The aim is creating environments that encourage physical activity and healthy diets in children and families. 'Grünau Moves' was conceived as a complex, multilevel, long-term intervention with a strong emphasis on social work and community organization.¹³ With this design, two key issues are addressed. On one hand, it is acknowledged that environmental conditions play a role in causing obesity (i.e., 'obesogenic environments'). On the other hand, there is a recognition of the limitations of individual preventive interventions centred on lifestyle changes in achieving long-term behavioural changes due to their narrow focus. Individual interventions often fall short, underscoring the importance of shaping broader conditions and for such reasons tend to be less effective in compelling socially disadvantaged groups that often face greater challenges in maintaining their health and well-being.

'Grünau Moves' adopted a setting approach, addressing the district rather than individual residents and focusing on creating health-promoting conditions in their living environment. The community work approach served as a socio-spatial strategy with a strong focus on social work, prioritizing local people's needs, interests, resources, involvement, activation, empowerment, networking, and cooperation among actors.¹⁴ In this way, the project sought to collaboratively design health-promotion interventions with the local community, focusing on changing environmental conditions according to their needs and resources for acceptance and lasting impact. This approach was complemented by the use of Intervention Mapping (IM) methodology,¹⁵ specifically designed for planning theory- and evidence-based interventions to induce environmental and behavioural change in the field of health promotion. It provides a systematic process for conducting the project implementation based on several steps. It considers conducting an assessment of the social and physical-environmental determinants causes of health behaviour and risk behaviour and change them.¹⁶

Ten Statements on Community-based Health Promotion

Before we commence work, it becomes necessary to establish some 'common language' about what we understand for community work and community-based health promotion. This is summarised into the ten statements on the values and ways-forward in conducting community-based health promotion projects like 'Grünau Moves'.¹⁷

Community-based health promotion...

¹² World Health Organization. (1986). Ottawa charter for health promotion. In First International Health Promotion Conference, Ottawa, Canada, 1986.

¹³ Igel, U., Gausche, R., Lück, M., Grande, G., & Kiess, W. (2022). Gemeinwesen-basierte Prävention und kindliche Adipositas. *Monatsschrift Kinderheilkunde*, 170(6), 504-512.

¹⁴ *Idem*.

¹⁵ Igel, U., Gausche, R., Lueck, M., Molis, D., Lipek, T., Schubert, K., ... & Grande, G. (2016). Community-based health promotion for prevention of childhood obesity. Study design of a project in Leipzig-Grünau. *Ernährungs Umschau*, 63(1), M20-M27.

¹⁶ Bartholomew, L. K., Parcel, G. S., Kok, G., & Gottlieb, N. H. (2006). Intervention Mapping: Designing theory and evidencebased health promotion programs. San Francisco, CA: Jossey-Bass.

¹⁷ Igel, U. (2021). *Grünau moves: Community-based health promotion and obesity prevention for children living in a deprived district (Germany)*. Presentation at the Online Marketplace event on best practices in risk factors of non-communicable diseases and European Commission Best Practice Portal, 30 June and 1 July 2021 (online). Retrieved from: https://health.ec.europa.eu/system/files/2021-07/ev_20210630_co03_en_0.pdf.

- must acknowledge without judgement that health is weighted differently in various life plans.
- can only take place from a 'lifeworld' perspective, which means that the individual 'lifeworlds' of participants and community-members need to be understood. Only in a second step, the starting points and objectives for health promotion are determined.
- should place special emphasis on the additional benefits of health-promoting measures (e.g. social recognition, social integration, self-efficacy, empowerment, happiness).
- should basically work in a population-related or setting-related manner in order not to produce new discriminations (no assignment of need). Health promotion should therefore create health-promoting conditions in local institutions and settings that are easily accessible without special requirements.
- must therefore acquire a comprehensive knowledge of the community and address the needs and interests of participants, residents, local institutions and decision-makers.
- should be inter-and transdisciplinary and incorporate methodological and theoretical approaches from differing disciplines (sociology, medicine, public health, psychology, environmental sciences, etc.).
- must be planned and implemented on-site within a participatory process. This requires trust and relationship building in the community, which takes more time. Therefore, financial and personnel continuity regardless of funding programmes is crucial.
- needs (for ethical and economic reasons) a theoretically or empirically-based impact model for each intervention, and should evaluate processes and effects by means of appropriate and pre-defined (impact) indicators.
- must advocate equity and be involved in political processes at local, state and federal level in order to raise awareness of the consequences of social inequality at the individual and societal level.
- needs political support because social inequalities in health can only be reduced in the long term through political and social strategies.

Step-by-Step Breakdown of Intervention Mapping Methodology

The Intervention Mapping (IM) protocol is specifically designed for planning theory- and evidence-based interventions for environmental and behavioural change in the field of health promotion.¹⁸ It also considers the social and physical environmental causes of health and risk behaviours, aiming to impact a set of well-defined determinants of behaviour and environmental conditions and change them.¹⁹ IM is at the core of 'Grünau Moves' intervention, which is aimed at developing behavioural and environmental approaches to child overweight and obesity prevention in disadvantaged areas.²⁰

With this in mind, the IM protocol has been adapted to transfer the 'Grünau Moves' BP to other disadvantaged areas within MS localities (see Figure 1). The development of health promotion measures is undertaken through a participatory and context-sensitive approach, strategically targeting structures and conditions –physical-environmental and social determinants of behaviours. This involves a collaborative effort with local actors, embodying the principle of 'knowledge for action'. At the heart of the process is the consideration of local needs and resources, along with the active involvement of key stakeholders to create health-promoting settings. The 'Core Focus Areas' as described by Igel (2021) are outlined below.

¹⁸ Bartholomew, L. K., Parcel, G. S., & Kok, G. (1998). Intervention mapping: a process for developing theory and evidence-based health education programs. *Health education & behavior*, 25(5), 545-563.

¹⁹ Bartholomew, L. K., Parcel, G. S., Kok, G., & Gottlieb, N. H. (2006). *Intervention Mapping: Designing theory and evidencebased health promotion programs*. San Francisco, CA: Jossey-Bass.

²⁰ Igel, U., Gausche, R., Lueck, M., Molis, D., Lipek, T., Schubert, K., ... & Grande, G. (2016). Community-based health promotion for prevention of childhood obesity. Study design of a project in Leipzig-Grünau. *Ernährungs Umschau*, 63(1), M20-M27.

The Core Focus Areas:²¹

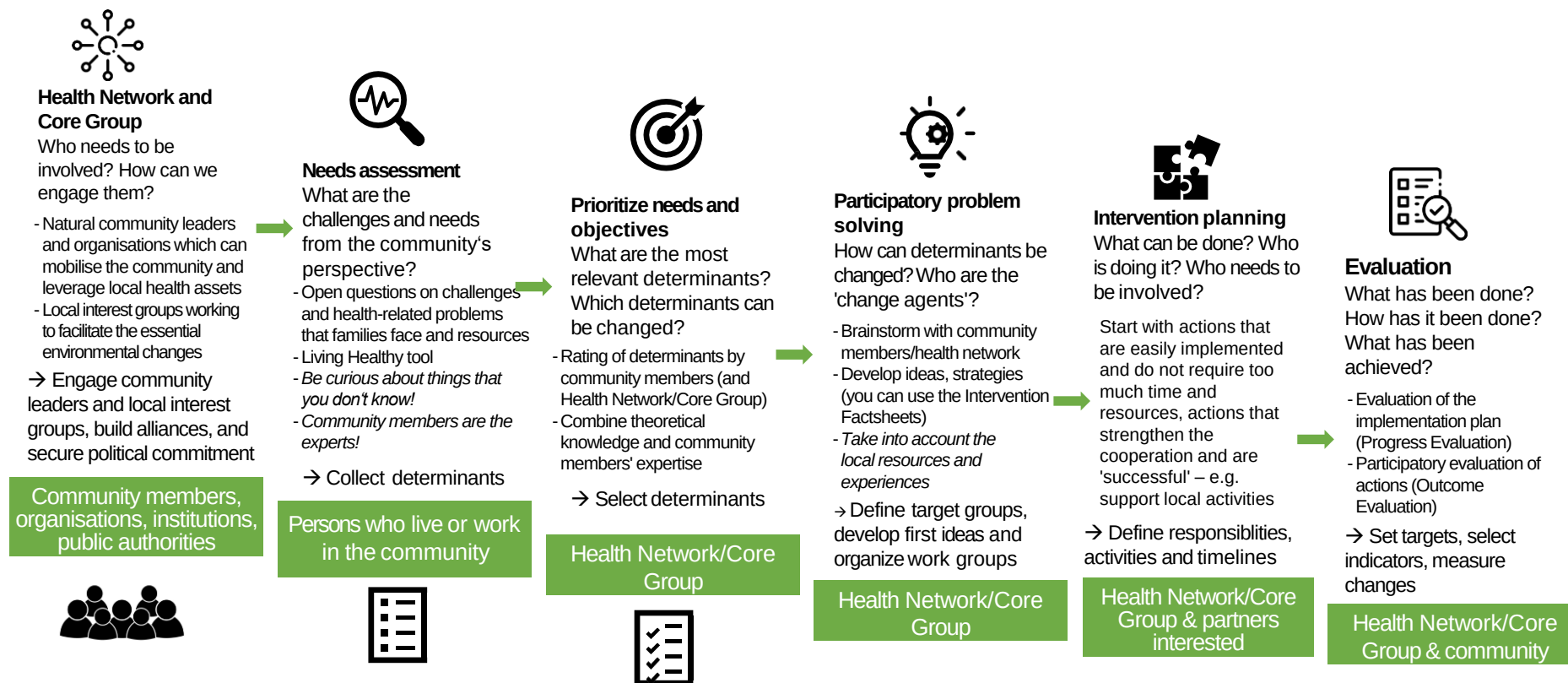
1. **Understanding Relationships – Health Network Approach:** This phase involves identifying the determinants, which have been extensively examined in previous studies, affecting child obesity in the intervention area (IA) and understanding how they come into play.
2. **Recognizing Needs and Leveraging Potential – Participatory Needs Assessment and Health Assets Mapping:** This step involves assessing both the problems and resources within the IA. It is essential to determine how various stakeholders can be engaged in the project.
3. **Developing Strategies – Participatory Problem Solving and Intervention Planning:** The development of strategies is a critical aspect of initiating changes favouring child obesity prevention and health promotion at both the behavioural and relational levels.
 - a. Strategies suitable for reaching the target group and achieving the intended effects.
 - b. Investigating potential correlations between the extent of participation and effectiveness.
4. **Measuring Changes – Preparing the Evaluation Plan:** This step addresses the methodologies for recording and mapping states and changes at different levels.
5. **Evaluating Effectiveness:** It involves assessing the impact of the project on multiple levels, specifically examining how changes in determinants at the socio-environmental level lead to changes in behaviour or a positive weight development:
 - a. On an individual level (micro level) – examining changes in factors such as motor skills, physical activity, healthy food, and the prevalence of overweight and obesity in the intervention area (IA).
 - b. On an organizational level (meso level) – evaluating changes in terms of networking and services provided by institutions and stakeholders in the IA.
 - c. On an environmental level (exo-level) – examining changes in the design of public facilities and spaces, such as the layout of day cares and school routes.
6. **Identifying Obstacles and Facilitators – Ensuring Transferability:** This step focuses on identifying factors that can hinder or promote the implementation and effectiveness of individual interventions and the overall project.
7. **Assessing Sustainability:** Finally, the project's long-term impact on local strategies and municipal policy decisions is evaluated.

This structured approach ensures a comprehensive and systematic assessment of the IA, the development of tailored strategies, and a focus on achieving sustainable improvements in health and well-being with long-lasting effects beyond the transfer and implementation period. Furthermore, initiatives that prioritize the promotion of healthier environments are likely to foster greater equity compared to interventions primarily relying on educational approaches.²²

In what follows, we break down the transfer, implementation, and evaluation phases step by step, with a focus on adapting to local conditions. In the subsequent sections, each step and its key considerations are presented one by one in comprehensive detail.

²¹ Igel, U. (2021). *Grünau moves: Community-based health promotion and obesity prevention for children living in a deprived district (Germany)*. Presentation at the Online Marketplace event on best practices in risk factors of non-communicable diseases and European Commission Best Practice Portal, 30 June and 1 July 2021 (online). Retrieved from: https://health.ec.europa.eu/system/files/2021-07/ev_20210630_co03_en_0.pdf.

²² Allender, S., Nichols, M., Foulkes, C., Reynolds, R., Waters, E., King, L., ... & Swinburn, B. (2011). The development of a network for community-based obesity prevention: the CO-OPS Collaboration. *BMC Public Health*, 11, 1-8.



What is behind? Building trust and relationships/cooperation, empowerment, improve social capital and health literacy (knowledge, attitudes, skills)

Figure 1. Intervention Mapping in a nutshell. *Source:* Elaborated by 'Grünau Moves' best practice owners, Ulrike Igel and Fin Kasten.

STEP 0: EXPLORING AND DESCRIBING THE INTERVENTION AREA

Background: The first step in transferring and adapting 'Grünau Moves' BP to other deprived areas is the selection and description of the Intervention Area (IA). This involves exploring and understanding our IA for the first time. Below, you will find indicators designed to assist users of this guide in choosing their intervention area (IA). The selection process involves identifying zones, neighbourhoods, or places within your city's vulnerable areas that meet the most criteria for a successful intervention.

Box 1. What's a setting and a 'supersetting' in health promotion?

The notion of 'setting' in the context of health promotion is quite broad and includes social systems, the physical environment, and the places where children spend time as well as the social context (e.g., family, school, day care centre, neighbourhood).²³

The notion of 'supersetting' further involves the resources embedded in local community settings and the strengths of social interaction and local ownership, with a strong emphasis in participation, empowerment and capacity building.²⁴

Goal: To select and describe the Intervention Area (IA) using indicators of vulnerability and opportunity.

How: The selection and initial description of the IA is based on, at least, socioeconomic indicators that show vulnerability, and opportunity indicators that show political and community support to work in a process of community action for health, guaranteeing the minimum criteria are met for intervention success. These are:

- *Socioeconomic indicators:* education level, occupation, employment, household income, wealth, and composite indices of socioeconomic status (SES).
- *Opportunity indicators:* political will, previous community work, strong social fabric, local or community health projects, platforms, and participation forums.

Additionally, a description of health indicators on the prevalence of child overweight and obesity, as well as of physical activity levels, is deemed relevant, though the social gradient on child obesity and physical activity is well documented in Europe. At least it is important to have identified the main sources of secondary data disaggregated at various levels (e.g., by SES, gender, age group) and for such small geographic areas. Data at the local level is a valuable

²³ World Health Organization. (1986). Ottawa Charter for Health Promotion. WHO. Copenhagen.

²⁴ Bloch, P., Toft, U., Reinbach, H. C., Clausen, L. T., Mikkelsen, B. E., Poulsen, K., & Jensen, B. B. (2014). Revitalizing the setting approach—supersettings for sustainable impact in community health promotion. *International Journal of Behavioral Nutrition and Physical Activity*, 11(1), 1-15.

resource for making well-informed decisions and tailoring initiatives to specific needs, while the lack of it has been identified as a potential limitation for the subsequent monitoring and impact evaluation of community-based interventions.²⁵

However, the lack of data in a territory that meets special characteristics, in our case socially vulnerable areas, does not impede interventions from being carried out. There is abundant epidemiological information that systematically demonstrates, that is, in all analyses, and persistently, over time, a social gradient where the most vulnerable people are much more obese and overweight and perform less physical activity compared to the general population. Therefore, the unavailability of data in a specific territory cannot justify inaction within that territory based on ethical and justice criteria, as the data can be extrapolated to similar territories.

Equally relevant is to secure political commitment at the local level to shape policies and plan interventions impacting child settings like schools, parks or playgrounds. It is recommended to initiate discussions with local politicians to clearly explain the proposal, and assess their level of involvement, highlighting the current situation's challenges and opportunities. In this way we can effectively convey the urgency and importance of their commitment, thereby fostering a strong foundation for the pilot implementation. Moreover, this step ensures that our efforts are aligned with local political support, which is essential for the success and effectiveness of the initiatives carried out.

Main outcomes:

- Select the Intervention Area (IA) from the vulnerable areas within your city that best meet the criteria for a successful intervention.
- Secure political commitment at the local level (change facilitators) to harness all capacities for shaping policies and intervening within child settings.
- When possible, collect data on health indicators –prevalence of child overweight and obesity and physical activity levels– to facilitate the monitoring of progress in the initiatives, as well as mid- and long-term impact evaluation.

²⁵ Caldeira, S., Carvalho, R., genannt Bonsmann, S. S., Wollgast, J., & Safkan, S. (2018). *Mapping and zooming in on childhood obesity*. Luxembourg: Publications Office of the European Union. Retrieved from: <https://op.europa.eu/en/publication-detail/-/publication/0f9b13c3-250b-11e9-8d04-01aa75ed71a1/language-en>.

STEP 1: ESTABLISH A 'CORE GROUP' AND A 'HEALTH NETWORK'

Background: The setting approach calls for high degree of participation of beneficiaries (target groups), establishing a health network and a core group of key stakeholders (change facilitators) throughout the whole process of developing, implementing, monitoring and evaluating health-promotion initiatives.²⁶ This is to increase the likelihood of achieving sustainable attitudinal and behavioural change.

The Core Group (CG) is a stable, long-term intersectoral and participative working group. These are the participation 'champions', and includes individuals with a natural leadership in the local community. It is a compact team of 6-8 stakeholders who bear some responsibilities related, in this case, to the determinants of child obesity and overweight at the local level, involving some community associations. They are tasked with mobilizing the community and leveraging local health assets. This small CG will provide on-the-ground support for organising the activities and ensuring the long-term sustainability of the actions implemented. This support ensures the initiatives continuation even after the initial efforts have concluded and ownership is transferred to the local social capital.

The Health Network (HN) is in itself a local interest group working to change the local circumstances that affect the determinants of obesity and overweight in children within a specific setting.²⁷ It is encouraged that the HN stakeholders be diverse, inclusive, interdisciplinary, and intersectoral, namely referring to activities/initiatives that involve cooperation and collaboration across different sectors to address complex issues or challenges, as is the case. In Grünau Moves project, a strategic decision was made to establish a 'professional' network comprising community agents who, while potentially being residents, assume 'functional roles' such as representatives of initiatives or associations. This approach was adopted to address concerns regarding power inequalities and asymmetric relationships, which may pose challenges in integrating residents, parents, and youth directly into the HN.

The HN should be conceived as a participatory forum where active engagement and input from stakeholders are necessary. The HN serves as a dynamic health promotion infrastructure for co-creating interventions in a participative manner. It can grow over time and adapt to changing engagements. It could also be referred to as a platform of stakeholders for participative governance at the local level.

Goal: The implementation process will involve creating and establishing the 'Core Group' (CG) and 'Health Network' (HN) to collaborate on-site and facilitate the essential environmental changes.

²⁶ Bloch, P., Toft, U., Reinbach, H. C., Clausen, L. T., Mikkelsen, B. E., Poulsen, K., & Jensen, B. B. (2014). Revitalizing the setting approach—supersettings for sustainable impact in community health promotion. *International Journal of Behavioral Nutrition and Physical Activity*, 11(1), 1-15.

²⁷ Igel, U., Gausche, R., Lück, M., Grande, G., & Kiess, W. (2022). Gemeinwesen-basierte Prävention und kindliche Adipositas. *Monatsschrift Kinderheilkunde*, 170(6), 504-512.

How: Visit the city hall and introduce the initiative; the first and most important step is to secure political commitment by engaging them in the CG. Hold meetings with the representatives themselves or relevant technical personnel in related fields. Identify existing intersectoral spaces and forums for participation related to the issue at hand (e.g. infancy and adolescence, child obesity prevention, responsive parenthood). Present the proposal to them and request their support or create a specific space to address the issues concerning the project within their agendas and calendar. This phase also involves mapping out communities, educational centres, organizations, businesses, and other entities that are affected and may be interested in collaborating towards a solution. To achieve this, organize meetings and conduct semi-structured interviews, utilizing the 'snowball sampling' method to identify natural community leaders, organizations, and participation spaces or places of gathering. Understanding their objectives is crucial as it forms the foundation for building relationships, networking, and fostering engagement. The ultimate goal is to ensure that the project generates health-promotion interventions on matters that are meaningful to people and to identify multi-stakeholder groups with a genuine interest in investing their time and resources, and who could be involved in the next phases of the process.

Main outcomes:

- Establish a 'Core Group' (CG) –a compact team of 6-8 stakeholders from politicians and professionals from local administrations and a selected community association tasked with mobilizing the community and leveraging local health assets: the participation 'champions'.
- Expand the 'Health Network' (HN) based on the input of CG members regarding persons they identify as crucial to the success of the initiative.
- Draft the stakeholders' engagement plan, with a focus on mobilizing the community and utilizing local health assets.

Step 1.1 The 'Core Group' (CG)

The CG consists of a small group of stakeholders (i.e. some 6-8 persons), including decision makers, politicians and professionals from the local administrations and selected community associations. They are responsible for mobilizing the community and leveraging local health assets, which include essential resources and strengths for improving health outcomes in the IA. These are the most motivated and active stakeholders and community members. They will act as 'participation champions' for involving wider publics in the problem formulation, planning, implementation, and evaluation of the health promotion initiatives launched.

As an example, here is a proposed composition for the local CG:

1. **Local Representative:** Focused on health, urban planning, education or other relevant matters.
2. **Local Public Health Technician:** Specializing in public health matters.
3. **Primary Health Centre Representatives:** Contributing to local health initiatives.
4. **School Manager:** Involved in the educational aspects of health programs.
5. **Families from Local Schools:** Actively engaged in school-related matters.
6. **Community Associations:** Representing neighbourhood interests.

If interventions in local infrastructures (e.g., playground, park, school walk, street or path) are planned, then it would be strategic to further involve a local representative with competences in the matter, for instance in landscape architecture or urbanism, from the local government. The composition of the CG may vary depending on how the implementation unfolds, and it must be adaptable to these changes. However, the CG is intended to provide stability and sustainability to the changes resulting from these actions. Furthermore, the CG also plays a role in identifying any

local stakeholders of interest to the HN through a snowball sampling approach, which involves expanding the HN's network.

The functions of the CG comprise:

- Identifying local stakeholders of interest to the HN.
- Sharing and supporting the functions of the HN.
- Documenting the organisation and results of the work at each stage, including maintaining an activity diary, elaborating reports, and recording meeting minutes.
- Maintaining open communication with various sectors of the City Council and other relevant institutions (i.e. healthcare centres, educational institutions, etc.) to facilitate and sustain the planned health promotion activities. This involves mutual collaboration in task development and maintaining a smooth workflow.
- Providing updates on work progress.
- Participating in the monitoring and evaluation of the pilot implementation.
- Assisting in overcoming identified barriers.

Step 1.2 The Health Network (HN)

The Health Network (HN) serves as the platform for stakeholder groups to collaborate on-site and facilitate crucial environmental changes. The composition of the HN may vary based on context-specific adaptations and the nature of the planned activities, including the needs and available resources within the IA. It is highly recommended that the HN is composed of a diverse, inclusive, and interdisciplinary group of stakeholders, provided the importance of cooperation and collaboration across various sectors to address complex issues like child obesity prevention.

In the Grünau Moves project, every association, institution, or initiative related to children and health was regularly invited; their participation in a given meeting depended on the issues discussed in each session. Initially, contact details of all potential network members were collected, followed by one-on-one interviews with representatives of relevant organizations. This process aimed to understand their interests and needs before extending invitations to join the HN. Therefore, the first step involved building trust and establishing a stable relationship.

As example, this list includes a variety of stakeholders who can contribute to and benefit from local HNs, covering a range of health and well-being-related activities and initiatives:

Local Government and Administration:

- Local Administration, including the Technicians staff

Healthcare and Social Services:

- Professionals from Primary Health Centres
- Social Services

Educational community:

- Daycares, Schools, High Schools, Teachers, Students, Family Associations, Managers

Community Associations:

- Women's Associations
- Youth Groups, Youth Clubs
- Associations for the Elderly
- Senior Citizen Centres
- Sports Clubs or Groups
- Hiking Clubs
- Cultural Organizations
- Environmental Groups
- Mental Health Support Groups
- Parenting Support Groups

Humanitarian and Charitable Organizations:

- Food Banks
- Charities
- Churches

Local Businesses and Trade Associations:

- Trade Associations/Local Businesses Association

The HN should be seen as a participatory platform that requires active involvement and contributions from stakeholders. This entails the identification of community health assets and a comprehensive assessment of the situation (see Step 2).

Box 2. The benefits of participatory work at this stage:^{28 29 30 31}

Initiating Participatory Relationship:

- Analysis of health situation and creation of asset map mark the beginning of joint activity for participation.
- Initiates relationship within the Health Network (HN) and explores communication channels among represented groups and organizations.

Building Participatory Skills:

- Group learns to undertake and lead a participatory process, creating a framework for the future.
- Serves as a learning experience for both community representatives and professionals involved in community development in health.

Community Involvement in Initial Stage:

- Success of health promotion actions depends on early involvement of the beneficiary population.
- Involving the community in the analysis of health situations fosters commitment to the project.

Mutual Recognition of Needs:

- Promotes mutual recognition of community and professional needs in health.
- Encourages discussion of health-relevant objectives, identifying and negotiating potential conflicts early in the process.

Benefits and Outcomes:

- **Enhanced Capabilities:** Strengthening personal and community capacities, fostering a more resilient and empowered community.
- **Improved Policy and Equity:** Enhancing equitable policy outcomes and acknowledging the need for diverse stakeholder collaboration, especially in interventions promoting healthier environments.

²⁸ Allender, S., Nichols, M., Foulkes, C., Reynolds, R., Waters, E., King, L., ... & Swinburn, B. (2011). The development of a network for community-based obesity prevention: the CO-OPS Collaboration. *BMC Public Health*, 11, 1-8.

²⁹ Bell, A. C., Simmons, A., Sanigorski, A. M., Kremer, P. J., & Swinburn, B. A. (2008). Preventing childhood obesity: the sentinel site for obesity prevention in Victoria, Australia. *Health Promotion International*, 23(4), 328-336.

³⁰ Economos, C. D., & Irish-Hauser, S. (2007). Community interventions: a brief overview and their application to the obesity epidemic. *Journal of Law, Medicine & Ethics*, 35(1), 131-137.

³¹ Procedimiento para trabajar la acción comunitaria para la salud desde los municipios en cinco etapas. Valencia: Generalitat. Conselleria de Sanitat Universal i Salut Pública, 2018. Serie Guías XarxaSalut, nº 1.

- **Comprehensive Impact:** Influencing a broad spectrum of health behaviours, while leveraging and strengthening existing community assets and capacity across diverse settings and target groups.

How to effectively engage:³²

- **Coordination and Optimal Integration:** Establishing long-term cross-cutting coordination groups early in the process optimizes the integration of diverse health promotion initiatives involving stakeholders from diverse professions and sectors.
- **Common Language for Innovative Exploration:** Achieving a shared understanding of values, norms and aspirations enables flexibility for these groups to explore innovative ideas that might be challenging within individual organizational frameworks.
- **Building Sustainable Collaboration:** Ensure sustainable integration of health promotion actions by cultivating mutual respect, trust, and a shared understanding of common goals.
- **Empowering Change through Active Participation:** Acquiring new knowledge and psychologically adapting to new recommendations needs motivation and active participation of stakeholders in the change processes to inspire a sense of ownership.
- **People-Centred Initiatives for Long-Term Impact:** Recognizing the deep-rooted nature of attitudes and behaviours in social contexts, health promotion initiatives place people at the centre of long-term social development processes, emphasizing respectful dialogue, building competences, creating opportunities, and encouraging action.

In many cases, changing the built environment may be out of reach, although documenting its influence on behaviour is feasible. However, if structural changes are achieved, they can effectively instigate behavioural change. Contextual factors are a broad concept, which also includes the social context and beneficiaries' perceptions of everyday life circumstances. Changes in perception may be easier to induce than physical changes in the environment. Finally, it is equally important to understand that complex interventions in local community settings do not follow simple linear cause-effect relationships. Instead, they aim to generate new bottom-up, innovative approaches, interventions, and solutions. They also seek to understand processes and outcomes over time because changes are never just the sum of the parts.

³² Bloch, P., Toft, U., Reinbach, H. C., Clausen, L. T., Mikkelsen, B. E., Poulsen, K., & Jensen, B. B. (2014). Revitalizing the setting approach—supersettings for sustainable impact in community health promotion. *International Journal of Behavioral Nutrition and Physical Activity*, 11(1), 1-15.

STEP 2: CONDUCT A PARTICIPATORY NEEDS ASSESSMENT OF THE OBESOGENIC ENVIRONMENT AND MAP HEALTH ASSETS

Background: Understanding the living environment is crucial for successful health promotion efforts in shaping the social systems, places, or social contexts in which people's everyday lives take place in a way that is conducive to health. This involves gaining insights into the subjective realities of those working and living on-site, identifying the framework conditions, circumstances, and living environments that may be changed.³³ Also, by using community work as a socio-spatial strategy, we aim to mobilise local resources and work with the residents to address their challenges and make up for its deficits in a meaningful way for them.

Building upon this foundation, with the support of the CG and HN we will conduct a needs assessment, identifying what needs to be changed, for whom, and how to do so. It is important to understand the underlying connections between behaviours (and sub-behaviours) and determinants, allowing us to create a logic model of the health problem in the given setting. During this step, all stakeholders are actively involved and extensive inquiry and conversations help us all understand why a specific need or situation exists in this specific context. Moreover, by involving parents, children, and the general population of the neighbourhood, we can identify their needs, interests, and resources. This enables us to derive context-specific and appropriate measures for the design of health-promoting conditions.

We define 'assets for health' as any factor (or resource) that enhances the capacity of individuals, groups, communities, populations, social systems, or institutions to maintain and sustain health and well-being in the community, while contributing to reducing health inequalities.³⁴ The health assets map is an inventory of assets identified by the community in a given setting. However, it is not sufficient to simply list resources; for them to be true 'assets', they must be related to and mobilized by the needs identified. In other words, the community (associations, groups, or individuals) must identify how these resources can benefit them, agree on, and propose how they will use them (i.e., mobilize them), so that these assets can genuinely contribute to increasing health and well-being in the community. In summary, for resources to become health assets, the community must identify and use them.

Goal: Develop a participative analysis of the situation and map local health assets.

How: Contextual interviews, conversations and mapping events with key stakeholders and the community are the main activities to be conducted in this phase. Exploratory surveys are launched to identify health-related matters of concern that residents care about.

³³ Igel, U., Gausche, R., Lück, M., Grande, G., & Kiess, W. (2022). Gemeinwesen-basierte Prävention und kindliche Adipositas. *Monatsschrift Kinderheilkunde*, 170(6), 504-512.

³⁴ Morgan, A., & Ziglio, E. (2007). Revitalising the evidence base for public health: an assets model. *Promotion & education*, 14(2_suppl), 17-22.

In doing so, the relevant steps include:

1. Conduct observations and interviews with stakeholders, community groups and residents. This will provide the basis for describing the determinants of the obesogenic environment, recognizing interests, and identifying needs and resources.
2. Identify relevant settings for child obesity prevention, including families, the school or day-care centre as well as the neighbourhood with all the array of possibilities for healthy food, physical activity, social contact or active leisure. These are important places for obesity prevention which must be included in their map of health assets.
3. Categorize determinants into categories and subcategories during discussions with the community – e.g., determinants representing health risks or resources at the individual, organizational, and environmental levels.
4. Create a logic model of the health problem, namely a flow chart depicting the relationships between determinants –environmental and social conditions– and children health behaviours.

Main outcomes:

- Engagement with the resident population, especially vulnerable groups, low-income and social exclusion to facilitate their participation and raise their voice.
- Subjective map of health matters of concerns, needs and resources in a collection of disadvantaged areas (neighbourhood, district or town), identified by the participants themselves.
- Selection of theory-based intervention methods and translation of these into practical strategies. To structure this process a logic model of the health problem in the given setting will be created.
- Collective co-design of the strategies, initiatives, and actions for each pilot site that address residents' health concerns, needs, attitudes, and values underlying health and risk behaviours.
- Identification of other communities of interest and stakeholders related to (i.e. affecting or being affected by) the issues identified.

In what follows, we will break down how to give a thorough description and analysis of the IA, choose participatory methods for community research, and use 'Grünau Moves' and IM toolkits.

Step 2.1 Participatory needs assessment and health assets mapping

In this initial phase, the primary objective is to provide a comprehensive description of the starting situation in the Intervention Area (IA). This entails enquiring about the specific situation of the health determinants identified by the resident population as related to or affecting their health, more generally, and particularly those that either facilitate or prevent child obesity.

The fundamental questions here are: *What is the perceived situation in the IA in reference to the determinants of child obesity and overweight? What are the health assets that can contribute to reducing the prevalence of obesity and improving health?*

To this end, the determinants at the individual, institutional/organisational, and environmental levels are identified by means of different methodological approaches.³⁵

³⁵ Igel, U., Gausche, R., Lueck, M., Molis, D., Lipek, T., Schubert, K., ... & Grande, G. (2016). Community-based health promotion for prevention of childhood obesity. Study design of a project in Leipzig-Grünau. *Ernährungs Umschau*, 63(1), M20-M27.

Box 3. Conduct the Needs Assessment.

Using different Paths!

- **Access (settings):** Day-care centres, schools (after-school-care), public space, project contact point, playgrounds, neighbourhood management
- **Target groups:** Professionals, children, parents, residents, district representatives
- **Type and nature of offers:** Open and voluntary, compulsory, accompanying

Stay Close to the Inhabitants, Ask for...

- **Initiate open conversations about life in the neighbourhood:** This leads directly to the identification of the social determinants of health.
- **Identify their concerns:** How can we, as a community with the CG and HN, improve the situation?
- **Examine the social determinants of child obesity and overweight:** Reflect on strategies and actions to be taken in a participatory manner to improve the situation.
- **Engage the CG in these conversations and enlists their support to carry out future actions.**

Addressing Uniqueness and Local Needs:

It is vital to acknowledge the unique attributes of the IA and its residents. A thorough understanding of available resources, existing networks, collaborating actors, and ongoing projects is crucial. Furthermore, it is essential to identify the specific needs of the community. Even if objective data highlights child obesity as an issue in the area, it is essential that a participatory, community-oriented health-promotion project addresses other health-related concerns prioritized by the target group (community members), while these should be considered to an extent appropriate for the project's goals.

At this stage, it would be useful to create a logic model of the health problem and change opportunities, depicting the relationships between determinants and behaviours, and setting possible change objectives that might be both feasible and acceptable to the community. Thus, the sequence would involve conducting the needs assessment and creating a logic model of the health problem and change.

Step 2.2 Key criteria for method selection – A Decalogue for Participatory Community Action for Health (CAFH)

At this stage, an important step is to select the appropriate methods to get to know the community, map health assets, and generally understand how families in the specific area live. That is, identify the challenges they face, explore the resources they have, and understand the values and attitudes underlying health behaviours. To facilitate the work, we established a set of shared and agreed-upon criteria for selecting participatory methods and tools within the framework of the JA Health4EUkids, specifically concerning the transferring of Grünau Moves BP.

Grünau Moves is inherently a community action for health (CAFH). These criteria provide a comprehensive framework for conducting inclusive and effective CAFH. The recommendations on key criteria for method selection are meant to serve as a roadmap to ensure methods and tools are aligned with the principles of CAFH, prioritizing interventions that address community needs, foster engagement, empower the community, facilitate the co-design of actions, and drive sustainable change to achieve better health and well-being specifically in deprived areas.

We created a Decalogue, namely a set of ten key criteria, for effective participation in CAFH Grünau Moves. The criteria include active participation at every step, utilization of both quantitative and qualitative methods, customized recruitment and data collection, consideration of diverse stakeholders, adherence to validity criteria, building trustful relationships, embracing diversity and inclusiveness, prioritizing capacity building, empowering communities, and promoting participant agency. These criteria serve as guidelines to ensure meaningful engagement, inclusivity, and impactful outcomes within the CAFH process.

The CAFH Decalogue:

1. Active participation at each step of the research process: ensure meaningful involvement, collaboration, and empowerment.
2. Use both quantitative and qualitative methods adapted for participatory intervention.
3. Employ customized recruitment approaches and data collection instruments to suit the specific context.
4. Use methods that fit the needs of diverse stakeholders, including community members, underrepresented populations, patients, caregivers, policymakers, researchers, and multi-stakeholder collaborations.
5. Adhere to validity criteria to ensure the credibility and accuracy of research findings.
6. Foster trustful relationships between technical staff and participants from the community based on mutual respect and open communication.
7. Embrace diversity and promote inclusiveness by actively involving individuals and community associations from different backgrounds and perspectives.
8. Prioritize capacity building efforts to enhance the skills and knowledge of all involved stakeholders.
9. Empower communities by supporting their active engagement in decision-making processes and fostering a sense of ownership over the intervention.
10. Promote agency among participants, enabling them to have a greater influence on the direction and outcomes of the project.

Step 2.3 Participatory tools for conducting the needs assessment

Participatory needs assessment is a way of understanding the health needs of a local community, including the determinants of health. It involves listening to the community residents and considering their input in decision-making.³⁶ This approach helps to discover how community members perceive their needs and their thoughts on addressing them.

We provided project partners with a toolbox to facilitate their work in getting to know the community and gaining a deep understanding of the health problem with the community specifics. This toolbox included methods and tools used by the 'Grünau Moves' Best Practice (BP) team and shared during the Training Pills, while other methodologies were suggested by project partners themselves from their experience. We established a platform for experience sharing during our regular meetings with project partners. This space allows partners to exchange the tools and methods they are using in their respective IAs for the needs assessment. The contents of this toolkit were made available on the project's shared platform.

The toolkit encompasses various components:

1. **Socio-spatial methods for 'Health Assets Mapping':** These are methods for identifying and mapping activities and places that either pose health risks or serve as health assets, and include methods like 'Subjective Map', 'Community Walks (group tours)', 'Needle Method',

³⁶ Șandru, C. (2014). Participatory needs assessment in local communities. methodological aspects. *Bulletin of the Transilvania University of Brașov, Series VII: Social Sciences and Law*(2), 97-104.

or 'Photovoice'. Health assets involve formal resources, existing community activities as well as informal, personal and symbolic health resources that sustain or improve health and well-being.³⁷ These methods also involve collecting reflections from participants about these significant places, the behaviours around them and how they are used.

2. **Classical empirical research methods:** This category encompassed survey questionnaires, interview scripts, and guidance on using various observational tools to assess the built environment (e.g., EAPRS, SOPARC, Park Audit Tool).
3. **Indicators from secondary data:** These indicators covered health, socioeconomic, and spatial data.
4. **Group Model Building method:** It is a participatory and qualitative method designed to facilitate shared understanding among stakeholders, enabling them to collectively consider the structures, relationships, and root causes of complex health problems and plan interventions.^{38,39}
5. **Additional resources** on processing the outputs from the needs assessment to create a logic model of the health problem and a change matrix.

At the end of the project, a toolbox for community-based health promotion programs will be created, including all the participative tools used throughout the project by the participants.

Step 2.4 The 'Living Healthy tool'

Lastly, within the context of the Joint Action (JA) Health4EUkids, we also developed a tool for performing the assessment of the determinants of obesogenic environments. The Living Healthy tool (LHT) is an adaptation of the Place Standard tool built by NHS Health Scotland, the Scottish Government and Architecture & Design Scotland,⁴⁰ which is being widely used in several European countries. This tool was previously adapted and translated to Spanish by the DG Salut Pública, Generalitat Valenciana, for its use in the regional programme on community health 'XarxaSalut' and the Join Action JAHEE.⁴¹

The LHT is specifically designed to open the conversation in a discussion group around 14 determinants of child obesity and overweight at the local level. These were identified in a scoping review of the bibliography as key determinants of obesogenic environments. The working group selected this methodology because it is easy to use with the community and other stakeholders groups when reviewing the obesogenic environment. It facilitates structured conversations with local residents, considering the physical, social, and emotional aspects of a place or community and the relationships between these aspects and child obesity. The ultimate goal is to collectively assess the situation in that given place or community and identify the strengths (resources and assets) and areas for improvement. Moreover, the results obtained can be presented in a way that is easy for the CG and the HN to understand, and they can be straightforwardly translated into implementable actions.

³⁷ Botello, B., Palacio, S., García, M., Margolles, M., Fernandez, F., Hernán, M., ... & Cofino, R. (2012). Methodology for health assets mapping in a community. *Gaceta Sanitaria*, 27(2), 180-183.

³⁸ Siokou, C., Morgan, R., & Shiell, A. (2014). Group model building: a participatory approach to understanding and acting on systems. *Public Health Res Pract*, 25(1), e2511404.

³⁹ Gerritsen, S., Harré, S., Rees, D., Renker-Darby, A., Bartos, A. E., Waterlander, W. E., & Swinburn, B. (2020). Community group model building as a method for engaging participants and mobilising action in public health. *International Journal of Environmental Research and Public Health*, 17(10), 3457.

⁴⁰ Hasler, K. (2018). Place standard: A practical tool to support the creation of healthier places. *European Journal of Public Health*, 28(suppl_4), cky213-022.

⁴¹ Ocaña Ortiz, A., Paredes-Carbonell, J. J., Peiró Pérez, R., Pérez Sanz, E., & Gea Caballero, V. (2022). Evaluación participativa del territorio con enfoque de equidad: adaptación y validación de la Place Standard al contexto español. *Gaceta sanitaria*, 36(4), 360-367.

The tool takes into wide consideration the risk and protective factors for child overweight and obesity from a community health perspective and considering the concept of 'obesogenic environments'. Obesogenic environments are settings that encourage behaviours and conditions conducive to obesity development, such as high energy intake, unhealthy eating habits, and sedentary behaviours. These environments are characterized by easy access to high-calories, low-nutrient foods that are cheap and heavily marketed, while offering limited opportunities for physical activity.

The Living Healthy tool covers 14 determinants of obesogenic environments –physical, social, and emotional from local, school and family settings. Each theme includes a main valuation question and supporting prompts to facilitate the conversation and inform the assessment of the main question using a 1 to 10 rating scale; 1 being 'Very bad' (there is plenty of room for improvement) and 10 being 'Excellent' (there is very little improvement needed). For each theme a space is provided to capture qualitative information on:

- reasons for the scoring (*What are the reasons for your scoring?*), and
- proposals for improvement (*What can we do to improve it?*), which lead to the next step of co-designing and prioritising tailored actions and strategies.

The 14 determinants (and main question) explore the situation in the specific setting and the conditions within the context of the IA, focusing on the community as a whole rather than the individual circumstances of a family or a child. These include:

Local environment	1	Healthy food environment	<i>How healthy is the food available in your neighbourhood?</i>
	2	Unhealthy food environment	<i>How easy is it to access unhealthy foods and drinks in your neighbourhood?</i>
	3	Moving actively	<i>How easy is it to move around actively to get to where you want to go to?</i>
	4	Outdoor spaces for play & culture	<i>How good are outdoor spaces for active play and recreation in your neighbourhood?</i>
	5	Social cohesion & community networks	<i>How good is the range of opportunities to meet and spend time with people?</i>
Family	6	Food at home	<i>How easy is it for children in your community to eat healthy?</i>
	7	Physical activity & sport	<i>Do children in your community engage in enough physical activity?</i>
	8	Sedentary behaviours	<i>Do children in your community spend much time sitting?</i>
	9	Sleep well	<i>Do children generally have a sleep routine?</i>
School	10	Parenting & emotional well-being	<i>How do you value family life in your community?</i>
	11	Food at school	<i>How good is food approached at school?</i>
	12	Active schools	<i>How good is physical activity at the school?</i>
PHC	13	Emotional well-being at school	<i>How do you value emotional well-being at the school?</i>
	14	Primary care & other public services	<i>How do you value primary care and other public resources?</i>

The tool can be completed individually or in discussion with others in a group. In this case, the group has to agree on the scores given to each theme but also record where there is agreement or difference of opinion. When a decision is made on a score for a question it is marked on the Living Healthy wheel. Once all of the scores you have been marked the dots can be connected to draw the shape. Then the shapes can be compared with anyone else who has also completed the wheel that is with other stakeholders groups and see what differences/coincidences emerged from the several views.

Here's an example of how the scores make a shape on the wheel (Figure 2):

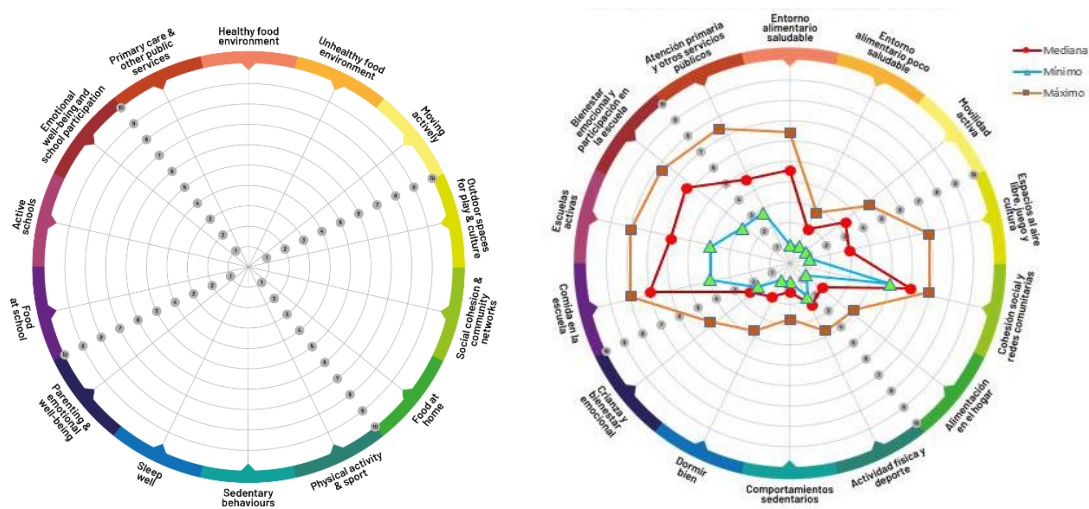


Figure 2. The Living Healthy wheel, featuring data from the pilot conducted in Andalusia, Spain.
Credits for the pilot outputs attributed to SAS and EASP project partners.

STEP 3: CO-DESIGN, PRIORITIZATION AND IMPLEMENTATION OF LOCAL ACTIONS TO TACKLE CHILD OBESITY DETERMINANTS

Background: We will work together with the resident population, CG, HN and other groups of stakeholders to propose courses of action. The aim is to co-create, plan, and deliver health promotion actions that can address the health problems identified and leverage the resources and assets within the community to possibly make an impact. The actions must be designed to target the specific determinants of health identified during the needs assessment, creating a comprehensive and organised program to improving health outcomes. Most important, activities aimed directly at children and the youth will focus on self-efficacy, recognition, self-empowerment and social integration in addition to focusing on the topics of healthy food and physical activity.⁴²

Working in a neighbourhood means that various settings may exist within it, such as schools, day-care centres, sports facilities, and more. Action proposals are identified concurrently or after the needs assessment, depending on the tool used, allowing the initiation of specific actions in certain settings without waiting for the overall neighbourhood situation analysis to conclude (see Figure 3). For instance, starting with a needs analysis within the educational community of neighbourhood schools (students, families, teachers, managers), there may be activities that can be agreed upon and prioritized within the community. These can be initiated without awaiting the complete neighbourhood needs analysis. We need to inform the CG, but engagement with diverse groups can happen at various times. The participatory community action process is dynamic and interventions are implemented while simultaneously incorporating more settings or community groups into the process.

Lastly, the program implementation plan must be collaboratively designed with input from communities and all relevant stakeholders, ensuring a coordinated effort towards desired changes. To this aim, it is crucial to establish clear goals, responsibilities, and timelines to guide action execution. Simultaneously, monitoring and evaluation mechanisms must be put in place to track progress, assess the effectiveness of the activities, and make adjustments as needed. This iterative process of problem identification, planning, implementation, and evaluation is integral to the Health Network approach and must involve communities and stakeholder groups. It is essential to maintain open communication and cooperation with the various sectors –local government, healthcare providers, educational institutions, and community organizations– to facilitate and sustain the planned activities. This collaborative effort ensures a comprehensive approach to improving health and well-being in the community.

⁴² Igel, U., Gausche, R., Lück, M., Grande, G., & Kiess, W. (2022). Gemeinwesen-basierte Prävention und kindliche Adipositas. *Monatsschrift Kinderheilkunde*, 170(6), 504-512.

Goal: To co-design, plan, and implement health-promotion actions that can address the health problems identified and leverage the resources and assets within the community to possibly make an impact.

How: Key to this phase is the organisation of public-facing activities aimed at prioritizing the strategies and actions arisen during the needs assessment, studying their feasibility and practicability, and creating an implementation program together with the CG and HN and other pertinent stakeholders groups if necessary. Furthermore, monitoring and evaluation mechanisms must be agreed upon during the design of the implementation program, taking into account the relevant aspects outlined by communities and stakeholders as part of the participatory process. For example, during this phase, citizens will generate practical actions to encourage the adoption of healthy eating habits in their daily lives and neighbourhoods. They will also co-design indicators and monitoring frameworks, ensuring that the initiative is grounded in evidence and incorporates the perspectives of citizens.

Step 3.1 Prioritization of actions

We have adapted a tool for prioritizing health promotion actions for its use in workshops with the community, CG, HN, and other stakeholder groups. The tool is included in Appendix 3 and is also accessible in our CAFH toolbox within the project's shared folder. This adaptation is based on Sánchez-Ledesma et al (2018),⁴³ which provides guidance on conducting prioritization processes in community public events. The aim of such events is to broaden awareness of the results from the needs assessment and the proposed actions. While these events are open to the community, they also serve to involve more people in the project. Multiple public prioritization events can be organized, each corresponding to different a 'settings' within our AI (e.g., schools, daycares, primary healthcare). Once we have the list of needs and corresponding actions, we can commence planning the participative implementation.

Steps 3.2: Implementation plan co-created with the target groups

To facilitate this process, 'Grünau Moves' best practice owners have shared two models of **factsheets** for compiling relevant information from the activities undertaken. 'Factsheet 1: Record on Planned Activities' includes Part 1 recording the general aspects of the activity, while Part 2 refers to the frame conditions during implementation. Factsheet 2: Example from Grünau Moves Project Activities provides an example of a record of an activity carried out in the 'Grünau Moves' project, demonstrating how it can be presented in its final form for distribution as project outputs (catalogue) or for sharing with third parties to disseminate the project to a broader audience, thereby increasing its impact. The factsheets are in Appendix 2 for reference.

A guide on how to structure actions, along with key aspects to consider during implementation, is provided by the 'Grünau Moves' team. In Appendix 2, you will find an example of a completed factsheet (see Factsheet 2: Example from Grünau Moves Project Activities). It is essential to gather information about the planned actions and complete factsheets for each action or activity, including planning and evaluation details. The minimum information to be collected should include the action/activity objective, target group, levels of intervention, time period, expenses (both human resources and material costs), funding, methods and approach, and qualitative evaluation. Basic items need to be covered without the necessity of linking to a publication.

⁴³ Sánchez-Ledesma, E., Pérez, A., Vázquez, N., García-Subirats, I., Fernández, A., Novoa, A. M., & Daban, F. (2018). La priorización comunitaria en el programa Barcelona Salut als Barris. *Gaceta Sanitaria*, 32(2), 187-192.

1. The Core Group (CG) has already been identified, and their support has been secured.
2. We have starting to identify the health network that could be possible to engage more participants from the neighbourhood during all the intervention.
3. Initiating the needs assessment, an example:

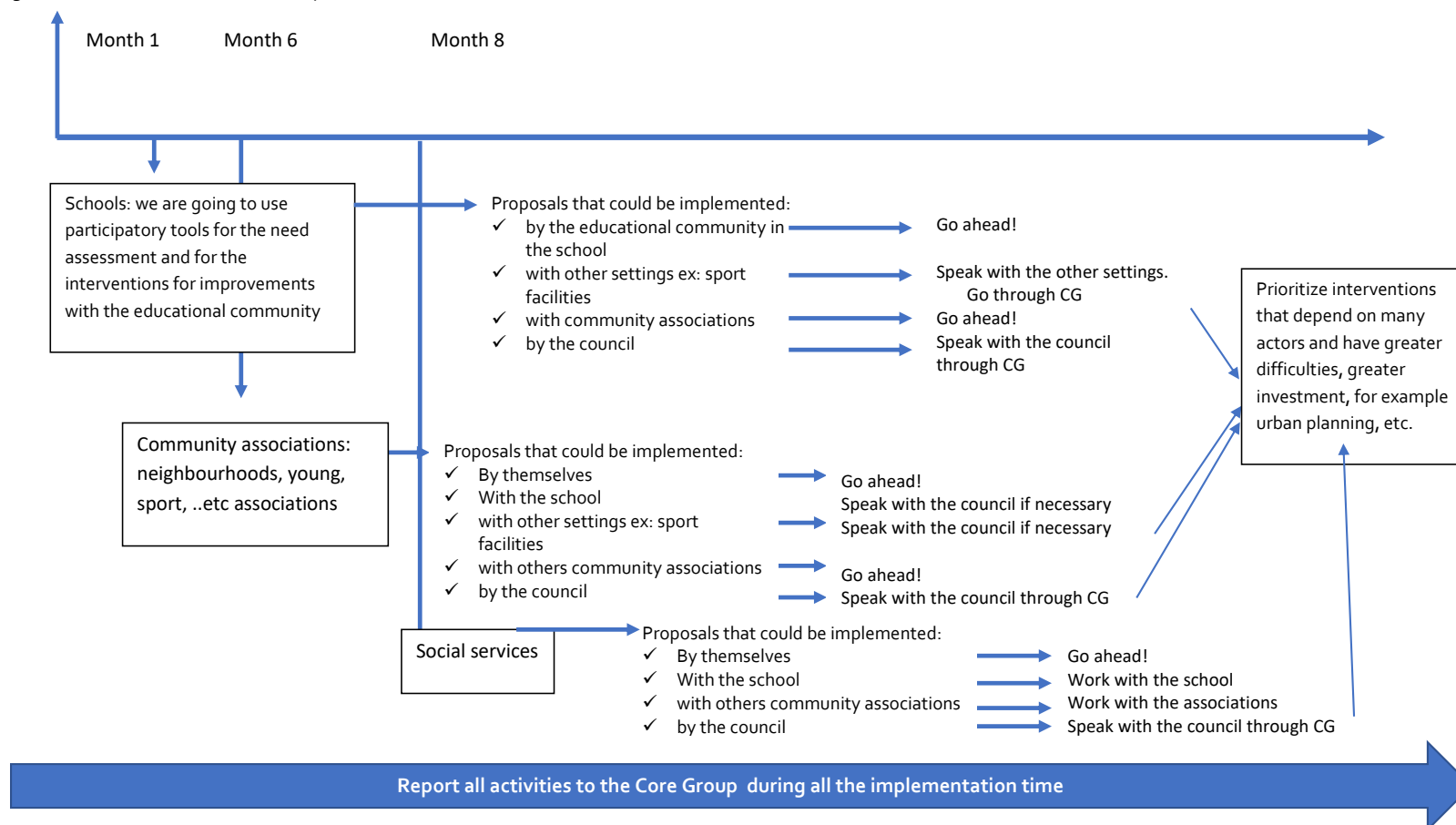


Figure 3. Schematic view of the implementation process. *Source:* Own production.

Main outcomes:

- Widening awareness of the results from the needs assessment by organizing cross-actor policy dialogues.
- A tested (and validated) methodology for the co-design, prioritization, and evaluation of the activities, strategies, and actions programmed.
- Citizen-driven actions that can have direct impact on food-eating habits and physical activity habits in their communities.
- Citizen-designed recommendations for urban food policies in the pilot cities or regions, to amplify impact and ensure viability and sustainability of the programmed actions.

STEP 4: PARTICIPATORY EVALUATION

Background: The evaluation has to be considered in parallel with program planning and begins with the needs assessment. The evaluation of the program will happen at least at two levels, namely the evaluation of the implementation plan (progress evaluation) and the participatory evaluation of the actions co-designed with the communities and stakeholders (outcome evaluation). The evaluation of community-based health-promotion initiatives should be participatory. Community participation is beneficial in identifying the perspectives of stakeholders, especially those with less power. It enhances appreciation for the issue under evaluation, understanding and acceptance of the findings, and promotes commitment to act based on the results. Evaluation must be introduced early on and integrated into all stages of the health promotion program. It is an ongoing activity involving a monitoring and learning process.

Goal: The outcome of this step is a description of the evaluating the process and outcomes of the health promotion program, built upon the products from the previous steps. This involves:⁴⁴

- Describing program outcomes for quality of life, health, behaviour, and the local environment and write objectives and evaluation questions.
- Write evaluation questions concerning performance objectives and determinants in relation to the targets set.
- Write process evaluation questions based on the descriptions of methods, conditions, strategies, program, and implementation.
- Develop indicators and measures.
- Specify evaluation design and write an evaluation plan.

⁴⁴ Bartholomew, L. K., Parcel, G. S., Kok, G., & Gottlieb, N. H. (2006). *Intervention Mapping: Designing theory and evidencebased health promotion programs*. San Francisco, CA: Jossey-Bass.

Box 4. Overview of process and outcomes evaluation for health promotion programs.

Process Evaluation (*What has been done? How has it been done?*):

The process evaluation must be considered within the action plan itself, defining indicators/methodologies for each of the activities to be developed throughout the implementation period. It is important to select a concise set of indicators for an efficient evaluation process, keeping in mind that these indicators should address questions such as:

- Compliance with the scheduled plan?
- Participation in the designed activities/actions?
- Adaptation to the context?
- Monitoring of the Action Plan: completion of tasks and schedule adherence and as identification of facilitators and barriers to the execution of the plan as foreseen.

Outcome Evaluation (*What has been achieved?*):

In this step, we will measure (or identify, if quantifying the magnitude of change is not possible):

- Changes in behaviours, knowledge, skills, perceptions, and attitudes of the targeted population regarding the issues addressed by the actions taken.
- Changes in infrastructures or services related to the actions, as well as changes in people's living environments that enable/promote healthy behaviours.
- Perception of these changes by those who participated in the planning and implementation of the actions (e.g., professionals, local authorities, social groups, and other stakeholders).
- Changes in the micropolitics of the local environments in pilot sites.
- Reflect on the barriers and facilitators of the changes of interest.
- Reflect on the equity dimension of the changes accomplished.

How:

Process Documentation (*What has been done? How has it been done?*):

- Record all activities, including content, duration, target group, attendance, personnel, and financial outlay. This information can be completed by adding other aspects from the Coordinated Action Checklist, a framework and tool designed for evaluating coordinated action in community health promotion.⁴⁵ To facilitate this process, 'Grünau Moves' best practice owners have shared two models of **factsheets** for compiling relevant information from the activities undertaken. 'Factsheet 1: Record on Planned Activities' includes Part 1 recording the general aspects of the activity, while Part 2 refers to the frame conditions during implementation. Factsheet 2 provides an example of a record of an activity carried out in the 'Grünau Moves' project, demonstrating how it can be presented in its final form for distribution as project outputs (catalogue) or for sharing with third parties to disseminate the project to a broader audience, thereby increasing its impact. The factsheets are in Appendix 2 for reference.
- Produce **research diaries** to document challenges, incidents, positive aspects, successful experiences, work methodologies, and information on the local situation. This information can be used to assess the transferability of the program.

⁴⁵ Wagemakers, A., Koelen, M. A., Lezwijn, J., & Vaandrager, L. (2010). Coordinated action checklist: a tool for partnerships to facilitate and evaluate community health promotion. *Global Health Promotion*, 17(3), 17-28.

Outcome Evaluation (What has been achieved?):

- In 'Grünau Moves' project, impact and outcome evaluation of implemented actions was made using the **RE-AIM framework** (RE-AIM = Reach, Effectiveness, Adoption, Implementation, Maintenance).⁴⁶

Table 1. RE-AIM Evaluation Dimensions.

Dimension ^a	Level
Reach (proportion of the target population that participated in the intervention)	Individual
Efficacy (success rate if implemented as in guidelines; defined as positive outcomes minus negative outcomes in relation to a target health or risk indicators)	Individual
Adoption (proportion of settings, practices, and plans that will adopt this intervention)	Organisation
Implementation (extent to which the intervention is implemented as intended in the real world)	Organisation
Maintenance (extent to which a program is sustained over time)	Individual and organisation

^aThe product of the 5 dimensions is the public health impact scores (population-based effect.)

Source: Glasgow et al. (1999).

- Participatory evaluation** of the actions with the communities and stakeholders. This entails enquiring participants about the issues relevant to them and collecting their evaluations regarding the activities and outputs for quality of life, health, behaviour, and the local environment (see Figure 4 for an example).



Results:

Criteria	PP1	PP2	PP3	PP4	PP5	PP6	PP7	PP8	PP9	PP10	PP11	PP1
1. Issues discussed	8	7	7	10	10	6	8	8	7	8	6	
2. Clarity	6	3	8	8	10	8	9	7	7	7	9	
3. Tools	8	5	7	7	7	9	10	10	8	7	7	
4. Knowledge sharing	3	7	7	6	10	8	9	10	10	10	8	
5. Proposals	8	5	8	8	6	7	7	7	8	8	9	
6. Milestones	5	6	10	7	7	3	6	8	5	6	9	
7. Situation	8	6	4	7	1	8	8	9	9	4	7	
8. Getting to know each other	8	8	6	10	10	10	10	5	10	9	9	
9. Organisation	10	10	10	6	10	9	9	10	10	10	10	1

Figure 4. Participatory evaluation of JA Health4EUkids activity. Source: Own production.

⁴⁶ Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). Evaluating the public health impact of health promotion interventions: the RE-AIM framework. *American Journal of Public Health*, 89(9), 1322-1327.

Main outcomes:

- Evaluation plan.
- Factsheets of all the activities carried out (catalogue).
- Process and outcome evaluation of implemented actions based on evaluation design, outputs, outcome and impact indicators, and set targets.
- Participatory evaluation involving community members and stakeholders who participated throughout the process of problem formulation, design, planning, and implementation of actions.

STEP 5: SUSTAINABILITY AND LEGACY OF THE PROGRAM

Background: Securing the sustainability of the health promotion program begins with the initial steps of engaging stakeholder groups. It is crucial to integrate the program into local policy agendas and school programs while fostering ownership by community organizations. This phase also involves confirming that the study results and designed protocols are accessible to third parties. Citizens can contribute by translating the practical knowledge gained through the process into useful and applicable insights for society.

Goal: The goal is to encourage external adoption, leading to the creation of innovative solutions for the issues at hand. Ultimately, the objective is to ensure that the project leaves a lasting legacy and impact, extending well beyond the lifespan of the funded project, and if possible permeating the city or town as well as relevant networks.

How: Key to this phase is the organisation of public-facing activities aimed at widening awareness of the results and cross-actor policy dialogues. Participation in dissemination activities by citizens and community organizations may foster a sense of ownership, feeling pride in the results, and provide an opportunity for their voices to be heard in settings not typically open to the general public or very inclusive.

Box 5. Lessons learned on program sustainability from the benchmarking undertaken in 'D4.1 Children's Health Promotion and Responsive Parenthood: A Review of Current Initiatives.'

MAIN FACTORS:

- ✓ Ensure that the good practice can become 'part of the system.'
- ✓ Develop a long-term strategy to support the good practice.
- ✓ Implement effective and transparent communication, including public reporting and disseminating program outputs to address broader audiences and convey the message.
- ✓ Involve key stakeholders from all levels and sectors.
- ✓ Emphasize the gains for all key engaged stakeholders.
- ✓ Identify additional funding resources for the good practice.
- ✓ Facilitate the transfer of knowledge to inexperienced staff when turnover occurs.

INSTITUTIONAL INVOLVEMENT:

- ✓ Involve policymakers at national and sub-national levels from the inception.
- ✓ Establish governance structures that enable activities to persist beyond the lifespan of a funded project or initiative.

INTERSECTORAL COLLABORATION:

- ✓ Involve relevant sectors.
- ✓ Engage beneficiaries and target groups, including stakeholder analysis.

FUNDING AND RESOURCES:

- ✓ Develop the capacity to allocate funding beyond the lifespan of a project or initiative.
- ✓ Implement human resources planning and forecasts.

Main outcomes:

- Organisation of public events and cross-actor policy dialogues to broaden awareness of the project outcomes.
- Communication materials for disseminating results to quadruple helix actors and city networks.
- Technical reports and scientific papers.

APPENDIX 1: REFERENCES AND RELATED DOCUMENTS

ID	Reference or Related Document	Source or Link/Location
1	04.Project_Handbook.XYZ.11-11-2023.V.1.0.docx	<Example of a location> < U:\METHODS\Folder\Documents\>
2	08.Quality_Management_Plan.XYZ.11-11-2023.V.1.0.docx	<Insert project artefact location.>
3	09.Communications_Management_Plan.XYZ.11-11-2023.V.1.0.docx	<Insert project artefact location.>
4	13.Resource_Plan.XYZ.11-11-2023.V.1.0.docx	<Insert project artefact location.>
5	29.Deliverables_Acceptance_Checklist.XYZ.11-11-2023.V.1.0.docx	<Insert project artefact location.>
6	XX.Deliverables_Acceptance_Note.XYZ.11-11-2023.V.1.0.docx	<Insert project artefact location.>
7	XX.D4.1_Children's health promotion and responsive parenthood. A review of current initiatives_Annex 1.Report.XYZ.28.09.2023.V.1.0.docx	<Insert project artefact location.>
8	Project folder	https://drive.google.com/drive/folders/15gRXiiS5FI2RqWPoQVNqJAQgMqwuu6Km?usp=sharing

APPENDIX 2: EVALUATION FACTSHEETS

FACTSHEET 1: RECORD ON PLANNED ACTIVITIES

Planned activity:

Planned action (intervention)	
Target group:	☐ children ☐ adolescents ☐ parents ☐ residents ☐ agents ☐ multiplier ☐ other: _____
Content (topic):	☐ food ☐ physical activity ☐ other: _____
Implementation:	☐ active ☐ passive Short description: _____
Objectives:	☐ find out attitudes, norms, and opinions ☐ needs assessment ☐ change attitudes ☐ change behaviour ☐ knowledge ☐ activation/mobilisation ☐ get in contact/building relationships ☐ being visible ☐ other: _____

Further notes:

Frame conditions during implementation:

Date:		
Day:	☐ monday ☐ tuesday ☐ wednesday ☐ thursday ☐ friday ☐ saturday ☐ Sunday	
Time:		
Duration:		
Place:		
Venue:	☐ inside ☐ outside	
Weather:	☐ sunny ☐ cloudy ☐ rainy ☐ windy ☐ thunderstorm	
Temperature:		
Occasion:	☐ own event ☐ event of someone else. Specify whose event it is and its purpose: _____	
Expenditure:		
Personnel	How many persons	
	Who? Intern (extern)	
	How many person-hours? <i>[Total person-hours (without preparation)? (Only project staff that needs to be paid)]</i>	
	How many hours of preparation?	
Costs (total):	_____ €	
Sponsoring:		
Cooperation (if received)		

FACTSHEET 2: EXAMPLE FROM GRÜNAU MOVES PROJECT ACTIVITIES

Factsheet Interventions - active to school - Designing public spaces Physical Activity

Stand: 6.11.2019

Example: Active to school – Designing public spaces	
Main Objective:	Increase physical activity (PA) of children
Further Objectives:	<u>Individuals:</u> - Empowerment/increase self-efficacy of children through participation in planning and implementation - Raising awareness for possibilities for physical activity in public spaces - Increased physical activity in public spaces <u>District/Environment:</u> - increased attractiveness for PA of paths (constructional changes) - visible PA in public spaces (→ role models, change of social norms) <u>Municipalities (Politics):</u> Awareness raising and activation of the municipalities for change in the district
Target Group:	Children, local residents, municipalities
Access:	School
Levels of Intervention:	Individuals, organizations, urban district/environment
Methods:	Active learning (children) Observational learning/modeling (children, local residents) Persuasion and advocacy
Content/Approach:	Phase 1: theoretical and practical introduction to PA, school routes, scopes for design – participative, lifeworld oriented, low-threshold (08-09/2016) Phase 2: conception of decoration/design of paths with landscape architect (10/2016-01/2017) Phase 3: negotiation with administration, voting by children (01/2017-04/2019) Phase 4: implementation (09/2019) and evaluation
Cooperation with:	Primary schools Landscape architect Public health department Traffic department and civil engineering department Department for urban greenery and waterbodies
Time period:	08/2016 bis 09/2019
Expenses (human resources, material, time)	Human Resources and time intensity: Involvement of landscape architect (3 months) 2 school lessons each class (for one class: 1 project staff and 1 teacher) 2hrs exploration of the urban district (1 project staff, 1 childcare worker of day-care center per day-care group)

	2hrs collecting of ideas and testing on the schoolyard (1 project staff, 1 childcare worker of day-care center) Material cost: Chalk for each group Printed maps of urban district (one for each child) Diaries for the way to school (one diary for one week) A3 Sheets of paper Clipboards, devices to take pictures Colors for individual colored markers (stencils and self-spraying) (2 locations 6 play opportunities = 400,00€) Contribution of the company (2 locations 6 play opportunities = 5000,00€)
Funded/Supported by	Deutsches Kinderhilfswerk Verfügungsfonds Grünau AOK PLUS, IKK classic, Knappschaft
Evaluation:	<i>Question:</i> <i>Do colored markers on pavements increase the level of physical activity of passers-by?</i> <i>Method:</i> <i>Standardized observation (SOPARC) before and after the implementation of colored markers.</i> <i>Over the period of 48 observations 5455 passers-by with information regarding their gender, age and activity level were recorded. Additionally, the use of bicycles and after the implementation (T1) the interaction with the markers recorded.</i> <i>Results:</i> <i>50% of younger children (Kindergarteners) and 16% of school children used the markers. The chance to increase vibrant movement (excluding bicycling), increased with the designed ways about 2,3times (OR 2.34; CI 1.70-3.21; p<0.01). The majority of the persons, which interacted with the markers (61%), had a higher level of activity and intensity. All in all did the amount of children, which in- tense PA increase from 9.6% to 23.3%.</i> <i>Colored markers in public spaces can be a good starting point for interventions to increase the physical activity of children. Furthermore it creates opportunities for social interactions.</i> <i>Qualitative evaluation: How are we going to evaluate this activity?</i> Ask the implicated stakeholders how we can evaluate the success of the activity. Review different tools and method from those introduced in 'Step 4: Participatory Evaluation.'
Publication	Igel, U., Gausche, R., Krapf, A., Lück, M., Kiess, W., Grande, G. (2020). „Movement-enhancing footpaths“ – A natural experiment on street design and physical activity in children in a deprived district of Leipzig, Germany. <i>Preventive Medicine Reports</i> 20: 101197. DOI: 10.1016/j.pmedr.2020.101197

APPENDIX 3: COMMUNITY WORKSHOP FOR THE PRIORITISATION OF HEALTH PROMOTION ACTIONS

Objective

Select the health promotion actions (or needs) to be prioritized or implemented first, based on the results of the analysis of the health situation and the mapped assets.

Target group

This workshop is aimed at the entire population and involves holding a participatory session open to engage them in prioritizing actions. Typically, it targets a territory with a population ranging from 10,000 to 25,000 inhabitants.

Recommended number of participants

Suitable for large groups (30+ participants), it is possible, if necessary, to work in sub-groups (around 8-10 people) and then share the results with the entire audience.

Development

The workshop is aimed at prioritizing the needs or health promotion actions to be implemented by the population.

Step 1. Preparation of the Event: The event should be scheduled in the afternoon to facilitate participation, hosted in an accessible space in the neighbourhood, and equipped with the necessary materials for a public presentation. It is crucial to clarify who will lead the process; ideally, non-professional community members and residents are the most suitable persons. Prepare a list of identified needs and health promotion actions to be voted on. The simpler and more comprehensible, the better. It is very important that it is written in a level of language that can be understood by anyone, regardless of their level of education.

Step 2. Dissemination of the Call and Venue: Use new technologies to inform the municipality (neighbourhood) through channels such as the municipal website, Facebook, email, Instagram, or others. You can use the same digital media channels of the associations included in the CG and HN or that collaborate regularly in other activities. You can also use traditional forms of communication such as posters in public spaces: markets, supermarkets, schools, health centres, town hall, civic and cultural centres, community association headquarters, informing through municipal news feed or newsletter, etc. It must be clearly explained what is to be done, namely the prioritisation process and voting of actions.

Step 3. Event Development:

Welcome, brief presentation of the objectives of the event and of the objectives of the project.

Presentation of the community's assets and the main needs identified as well as the health promotion actions proposed to address them. Distribute a list of needs and actions on paper, allowing participants to read them and seek clarifications. Each person can vote for 5 or 10 actions; the specific number must be decided beforehand. Participants assign the highest score to the action they consider the highest priority (refer to the example table).

The organization collects the votes and takes approximately 10-15 minutes to tally the scores and announce the result of the voting. During this time, the organization may offer refreshments. Finally, publicly present the list of actions in order of the votes received. If there were many with the same score, a second round could be held.

Express gratitude for attendance and participation. Explain the current status of the process and when the highest-rated actions will be implemented, or if additional participatory processes will contribute to further prioritization, emphasizing that this is not the final decision. Provide the

participating population with the contacts of the CG so that they can inquire about the status of the situation and explore ongoing opportunities for participation.

Example: Score the most important actions from 1 to 5, with the highest priority, i.e. the first action to be initiated, getting the highest score.

Objective	Actions	Participants Scores	Total Score
Childhood: Increasing physical activity and improving nutrition	Identify and mark healthy routes to school and promote their use	5 + 1	6 2^a
	Organise physical activities in the parks of the city, town, or neighbourhood	5	5 3^a
	Ensure that all food served in activities involving the administration is healthy	4	4
	Open the school grounds to the public for safe play	1 + 3	4
	Ensure that the school provides fruit and vegetables in the canteen for students	2 + 2 + 2	6 2^a
	Ensure that unhealthy foods and beverages are not offered in schools	3	3
General population: Facilitate access to healthcare services	Propose joint activities between the school and hiking clubs	5	5 3^a
	Provide relevant information (e.g. workshops) tailored to the understanding of the healthcare system and reading capabilities of the vulnerable population. The information should cover how the system operates, preventive programs they can engage in, and how to access them	4 + 1	5 3^a
	Organize joint activities between local associations and associations of migrant or Romani communities to combat stereotypes	3 + 4	7 1^a
(...)			

Necessary resources

Some audiovisual equipment for the presentation, copies of the list of detected needs and actions to be prioritised, and pens and other writing materials. Plan for coffee breaks.

Estimated duration

Approximately 2 hours.

