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Science & Technology in childhood Obesity Policy

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Dissemination Level

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PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
СО	Confidential, only for members of the consortium (including the Commission Services)	



Abbreviation	Definition	
AHA.SI	Active and Healthy Ageing for Slovenia	
ANOVA	Analysis of variance	
ASTAHG	Alpine Space Transnational Governance of Active and Healthy Ageing	
DG EMPL	Directorate-General for Employment, Social Affairs and Inclusion	
DG SANCO	Directorate-General for Health and Consumers	
DG SANTE	Directorate-General for Health and Food Safety	
EIP	European Innovation Partnership	
ЕРНА	European Public Health Association	
GDPR	General Data Protection Regulation	
HFSS	High in fat, salt or sugar	
HiAP	Health in All Policies	
ICL	Imperial College London	
MS	Member state	
NGO	Non-governmental organisation	
NIJZ	National Institute of Public Health Slovenia	
PA	Physical activity	
STOP	Science and Technology in childhood Obesity Policy	
THL	Finnish National Institute	
UL FSS	Faculty of Social Sciences, University of Ljubljana	
WOF	World Obesity Federation	
WP	Work Package	

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Executive summary

The STOP (Science and Technology in childhood Obesity Policy) Project is a major initiative funded under the EU Horizon 2020 research programme launched in 2018 (http://www.stopchildobesity.eu/). The aim of the STOP project is to find the most successful and effective approaches to reduce the incidence of childhood obesity, while helping children already suffering from the disease to get better access to treatment and management interventions.

Over a four-year period, the project aims to address the determinants of childhood obesity, conduct an exploration of the relevant policies to halt the rising prevalence of childhood obesity, and recommend policy tools to address it comprehensively. One of the main aims of this process is to recommend to national authorities and the European Commission a sustainability plan for future stakeholder engagement in childhood obesity. To this end, STOP was applying different engaging and participatory approaches to better understand stakeholders' views and positions, while simultaneously receive feedback on the project processes and outcomes.

Two stakeholders' surveys, first in 2019 and second in 2021, were conducted to get the insights of as many stakeholders in the areas of nutrition, physical activity and obesity as possible. The objective was to identify stakeholders networking characteristics and their positions towards different obesity policies. The results of the surveys were then interactively fed into four stakeholders' dialogues. The outcomes of each of the stakeholders' dialoguess were used to prepare the next ones. The findings are particularly important to provide information to future stakeholders' research and STOP stakeholders' recommendations.

The objective of two stakeholders' survey was to identify stakeholders networking characteristics, their positions towards different obesity policies and potentials for improved and sustainable collaboration. Sampling frame and stakeholders' samples of both surveys are comparable, with two thirds of stakeholders in both surveys representing the non-profit formal organisations. Share of the private for-profit sector is relatively smaller but the stakeholders there are representing a substantial number of voices. Most of the stakeholders are from Health sector, following by Research, Education and Agri-food chain. STOP consortium partners and their networks are not on the radar of the Environment, Transport, Finance or banking investment and Labour sectors, despite all the efforts to reach the stakeholders from those sectors, too. Further development of the multisectoral competences and further research to upgrade the understanding of drivers for engagement for the up listed sectors to public health issues is suggested.

Comparing stakeholders' responses regarding the relevance of the specific areas or activities preventing childhood obesity, we could observe no statistically significant differences between the two surveys. Policies of consideration were Social Marketing Campaigns, Reformulation, food taxation, labelling and food marketing, measures for treatment of childhood obesity, measures to increase physical activity and measures from private sector, contributing to tackling childhood obesity.

The concepts of power, trust, evidence and transparency, equity and sustainability have been explored in the second survey in extend, as those concepts have emerged as important glue for stakeholders' engagement and collaboration. Regarding power, only few organisations perceive themselves powerful above the average. Academia is perceived as the most trustworthy, followed by non-governmental organisations and public sector. Private sector and media have more challenges in achieving trust by other stakeholders. Evidence and transparency were highlighted as the key issue of trust by different stakeholders' groups during the dialogues. It seems there is a strong attitude towards changing the operation of the organisation based on the newly obtained credible information, while they are often engaged to research by themselves. Organisations are also considering the issue of equity, with limited success in addressing equity issues successfully. It also seems that sustainability is high on the agenda of the organisations, operating in the areas of nutrition, physical activity, and childhood obesity in the EU at different levels.

Special attention was directed to the characteristics of the decision-making processes in preventing obesitogenic environments, where research was aiming to showcase the **difference between the**

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most promising means and most commonly used methods of action. In 2021, strengthening regulatory capacity and empowering interested networks have been more often used and were more often perceived as the most promising means to influence the policy decisions in childhood obesity in comparison with the first survey in 2019. Characteristics of the decision-making processes were grouped into two categories, one being the Soft background mechanisms for Health in All Policies and the other Advocating regulation of specific policy options. Report brings number of insights in different stakeholders positions towards use of more regulatory or more soft mechanisms in policy decision making processes.

Collaboration networks of stakeholders are giving additional insights into organisation of the stakeholders' landscape. To indicate some of them, from organisational point of view, education, academy, and research and government type of stakeholders relatively strongly collaborate with all types of institutions. From perspective of sectors, health sector barely collaborates with organisations active in retail, catering, and tourism, while stakeholders from agri-food chain relatively strongly collaborate with the alike organisations. Education and physical activity sector are not so much collaborating with governmental organisations and media. Health sector stakeholders among themselves highly collaborate with educational, research, health professional and nongovernmental organisations. Health stakeholders' organisations representing patients and health professionals do practically not collaborate with governmental organisations and agri-food chain.

As problem of trust was indicated as one of the important issues in the collaborating environment of stakeholders, engaging in childhood obesity challenges, the concept of trust as a networking element was additionally explored, by using five claims: organisations are exploiting collaborating organisations to their advantage, are always fulfilling the agreements set, will not tell the whole story when they can benefit by doing so, will only pursue their primary goals and given agenda and are problematic partner due to unprofessionalism. To indicate some of the results, academia has relatively good reputation overall and is most often perceived positively by all stakeholders' groups. Relatively high level of general distrust towards others, especially private sector is present among non-governmental organisations. Stakeholders who represent the interests of patients are the only category who believes that everybody, but NGOs are problematic partner due to unprofessionalism.

Overall learning from the agreement on successfulness of policies is that **stakeholders in majority support policy measures** for prevention of childhood obesity. There are rather **small clusters of stakeholders who strongly oppose specific policy option** with more stakeholders from research and agri-food chain, being represented more often by those who engage in research and education and coming from professional institutions or associations. Perceived positive shifts observed over time are that even among stakeholders being less in favour to food taxation policy measures, subsidies for healthy food options are approved, less stakeholders doubt the success of food labelling policy measures, and those stakeholders that initially haven't seen the potential of physical activity policy measures at all moved into neutral position. It would be useful to further explore, why stakeholders are not being positive regarding policy measures providing healthy food and food choices to support childhood obesity prevention, anchoring their doubts even deeper and why are stakeholders divided by arrangement of food industry sponsorship of sports events.

Regarding the question, which of the policy approaches, legislation, guidelines or standards, collaborative action, fiscal measures, or additional research would be most promising for successful implementation of the policies, measures and activities in changing the obesogenic environment to prevent childhood obesity? – there were no mayor differences between the 2019 and 2021 surveys. In relation to fiscal measures to promote physical activities there is a significant **decline in respondents' support for legislative approaches**. There was an increase indicating for additional research to be needed in connection to the measures of food taxation, food labelling, and social marketing campaigns, expressed by stakeholders from research, health, education, and agri-food chain sectors.

Comparison among at present commonly used methods or practices and the most promising means or approaches in decision making processes, as perceived by the surveyed stakeholders, for successful implementation of the policies, measures and activities, has given the finding that *Strengthening regulatory capacity* and *Informing/empowering interested networks* are more often used in 2021 and more

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often perceived as most promising means in 2021.

Findings are providing suggestions for future stakeholder research and will represent the basis for recommending the future sustainable stakeholder engagement in areas of nutrition, physical activity, and obesity at the EU level. Broad stakeholders' engagement, as implemented in present research, could give more comprehensive understanding of the different views and standpoints regarding specific nutrition, physical activity, or childhood obesity policies. Better knowledge on the stakeholders' positions, views and modes of action allows for more successful definition and implementation of the individual policy measures and actions. Despite that and due to sometimes very diversified positions and opinions among stakeholders, achieving stakeholder agreement is not necessarily the decisive factor for introducing public health driven policies. To support policy decisions, implications for policymakers will be further elaborated in the form of short policy brief(s).

1 Introduction

The STOP (Science and Technology in childhood Obesity Policy), a Horizon 2020-funded project to tackle childhood obesity, aims at expanding and consolidating the multi-disciplinary evidence base upon which effective and sustainable policies can be built to prevent and manage childhood obesity. The aim of the project is to find the most successful and effective approaches to reduce the incidence of childhood obesity, while helping children already affected by the disease to get the best support.

In addition to exploring some of the determinants of childhood obesity, the STOP project aims to expand and consolidate multidisciplinary evidence base upon which effective and sustainable policies can be built to prevent and manage childhood obesity. Among other objectives, the project aims to engage with relevant stakeholder groups in a systematic manner.

STOP WP10 aims at supporting the STOP policy work packages (four to eight) in understanding the stakeholders landscape in the area of nutrition physical activity and childhood obesity in EU and attitudes of different stakeholders groups towards the reviewed STOP obesity policies and STOP content statements regarding studied policy options were developed to be explored in the stakeholders surveys. Stakeholder platforms and individual stakeholders were identified by STOP project partners and examined according to the STOP Work Package 10 (WP10) stakeholders' identification methodology.

Furthermore, the goal of WP10 is to build a space in which multiple stakeholders could work together towards the common aim of improving children's food and physical activity environments. To achieve this, NIJZ and WP10 partners have implemented several actions to date. Partners have conceptualised the welfare mix to identify stakeholders from different societal spheres, based on the obesity diagram framework. A guideline document (Appendix D) to identify the stakeholders was prepared.

In a parallel process, the European Public Health Association (EPHA) led the WP10 work on reviewing existing EU platforms engaging nutrition and physical activity stakeholders. The assessment covered seven main EU-level platforms which were described in accordance with five key characteristics, namely platform aims, working method, types of outputs, membership structure, and level of evaluation. Special attention was brought to the structure of platform membership. Furthermore, NIJZ and EPHA have prepared the comparative analyses of stakeholders' characteristics, comparing the characteristics of the individual stakeholders to the characteristics of the stakeholders involved in existing EU platforms.

WP10 aim is to bring together key actors from health, health enhancing physical activity, food and the nutrition sector, together with other relevant actors, to promote a shared understanding of the challenges and necessary joint actions to define and implement solutions to address childhood obesity. To be able to analyse the network of involved stakeholders and its characteristics and alliances, stakeholders were invited to take part in the stakeholders' survey. The results of the survey are presented in this Social Network Analysis Report.

1.1 STOP stakeholders definition

WP10 is one of three pillars of the overall structure of STOP and supports knowledge translation and increasing the overall impact of the STOP project. Among other outputs, STOP aims to provide a viable multi-stakeholder framework, based on effective communication and negotiation approaches while translating the new knowledge and insights of STOP among academic research, public health application actions and policy decision making implementation spheres. Other research and implementation projects could benefit from and build on the experiences gathered in the described STOP multi-stakeholder framework.

¹STOP - Science and Technology in childhood Obesity Policy (2020) Stopchildobesity.eu. Available at: http://www.stopchildobesity.eu/ (Accessed: April 11, 2022).

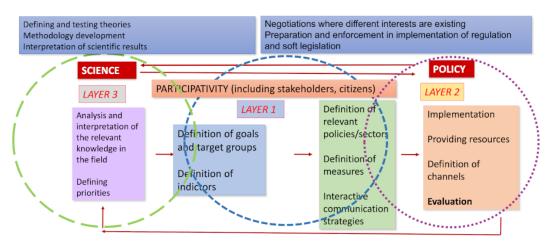
²Swinburn, B. A. et al. (2019) "The global syndemic of obesity, undernutrition, and climate change: The lancet commission report," Lancet, 393(10173), pp. 791–846. doi: 10.1016/S0140-6736(18)32822-8.

³Gabrijelčič Blenkuš, M. et al. (2012) Vsevladni pristop za zdravje in blaginjo prebivalcev in zmanjševanje neenakosti v zdravju, Nijz.si. Available at: https://www.nijz.si/sites/www.nijz.si/files/publikacije-datoteke/vsevladni_pristop_za_zdravje_in_blaginjo_prebivalcev.pdf (Accessed: April 13, 2022).

STOP is enabling broad, inclusive, engaging, participatory and transparent stakeholder engagement in different processes, as it is important to incorporate the concepts and knowledge of different sectors into research and knowledge translation processes, and thereby increasing the relevance of the project outputs and recommendations.

Within STOP multi-stakeholder framework, specific characteristics of the multi-stakeholder relationships are explored, including understanding the necessity for joint multi-stakeholder approaches in acting to decrease childhood obesity, readiness to collaborate with other of stakeholders categories, capacity and resources which stakeholders have available to cooperate with other stakeholder groups, stakeholders have the necessary skills and knowledge to improve existing multi-stakeholders cooperation, capacity and resources which stakeholders have available to cooperate with other stakeholder groups; stakeholders' willingness to work on a multi-sectoral initiatives with other stakeholder groups, exploring the level of trust (existing or needed) for a multi-stakeholders work among stakeholder groups; accountability in multi-stakeholder relationships and governance issues, as well as influencing stakeholders groups categories, and influence of the drivers for action in different stakeholder groups.

Figure 1: Interlinks of policy and expert cycle, a specific know-how area, based in health in all policies (HiAP) approach with multidisciplinary competence, providing knowledge transfer (Gabrijelčič Blenkuš, M. et al., 2012)



1.1.1 Stakeholders identification - Welfare triangle and obesity diagram

The list of stakeholders invited to the survey was jointly composed by the STOP project's WP 3-11 coordinators and other representatives. The idea was to address as many relevant stakeholders as possible and include not just the usual suspects but also those who those among stakeholders tend to be pushed aside. To ensure we successfully achieved this, we adopted a structured approach which identified the potential main drivers of obesity (via obesity diagram framework) on one hand and the spheres of society on the other (welfare mix). Partners adapted and conceptualised the welfare mix for the needs of STOP to identify stakeholders from different societal spheres (Figure 2).

Welfare mix is a concept that was originally developed to enable the identification of differences among the societal groups in the welfare states. Welfare mix is nowadays often used and adapted for the needs of understanding of different spheres of society in different contexts. For the purposes of the STOP project, we are using the welfare mix to identify as many relevant stakeholders in childhood obesity as possible.

⁴Farrer, L., Lesnik, T. and Gabrijelčič Blenkuš, M. (2012) Report of the "health in all policies" focus area group on: SCHOOL FRUIT SCHEME, Eurohealthnet.eu. Available at: https://eurohealthnet.eu/wp-content/uploads/publications/before-2016/crossing-bridges_schoolfruitscheme.pdf (Accessed: April 13, 2022).

https://www.healthpolicyproject.com/pubs/272_AccountabilitySystemsResourceGuide.pdf

⁶Esping-Andersen G (1990) The three worlds of welfare capitalism. Princeton, New Jersey: Princeton University Press

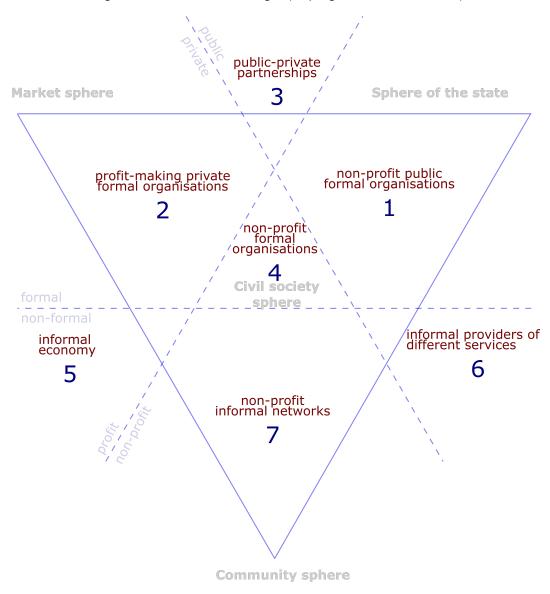


Figure 2: Welfare mix triangle (Esping-Andersen G, 1990)

The welfare mix typology is describing seven societal spheres and their relationships, using three diversification characteristics of stakeholders positions in those spheres, used in our case for the needs of STOP.

Diversification characteristics are:

- 1. profit/non-profit,
- 2. formal/non-formal and
- 3. public/private.

Mix of those characteristic in societal spheres allows for the better insight and understanding of the demography of individual stakeholder (Figure 2).

Some examples of the seven societal spheres are listed below in the the welfare mix typology:

- 1. Non-profit public formal organisations (e.g., National Institute of Public Health: 1);
- 2. Profit making private formal organisations (we would not like to engage individual organisations but umbrella organisations like FoodDrinkEurope, which are borderline: 2, 4);

- 3. Public private partnerships (like to some extent European Innovation Partnership EIP FOOD: 3);
- 4. Non-profit formal organisations (e.g., European Public Health Alliance: 4);
- 5. Informal economy (e.g., Ombudsman: 5);
- 6. Informal providers of different services (e.g., scouts: 6, 4);
- 7. Non-profit informal networks (e.g., associations of parents in local communities: 7, 4).

The obesity diagram was the first conceptual model to show obesity as a consequence of complex adaptive systems. Similarly to the socio-ecological model, its structure is centred at the individual level. While this is helpful in explaining differences in obesity drivers among individuals, it does not address the evolution of the obesity epidemic nor it's causality neither it takes the impact of the global syndemic of obesity, undernutrition and climate change into account. In spite of the above mentioned shortages of the obesity diagram, the concept was useful for the STOP stakeholders identification as it conceptualise comprehensively the content fields, relevant for childhood obesity.

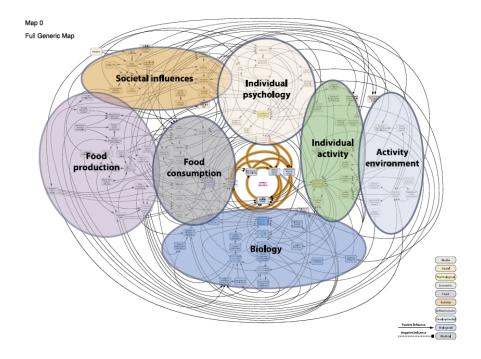


Figure 3: Obesity system influence diagram

Active collaboration with WP3, WP4, WP5, WP6, WP7, WP8 and WP9 leaders was undertaken to identify key stakeholders in their respective work packages. Stakeholders who were viewed to be particularly under-represented in this process were sought through more direct channels (especially stakeholders from the transport sector and built environments, where project partners from WP7 were addressing the stakeholders via their professional formal and non-formal contacts).

Following this, a number of relevant organisations were identified as key stakeholders (and/or right-holders, as the ones who primarily benefit from the policies) on the theme of childhood obesity. On behalf of the STOP project, they were invited to engage with the project consortium and partners aimed at informatively exploring the most effective ways to tackle childhood obesity.

⁷Swinburn, B. A. et al. (2019) "The global syndemic of obesity, undernutrition, and climate change: The lancet commission report," Lancet, 393(10173), pp. 791–846. doi: 10.1016/S0140-6736(18)32822-8.

1.2 Data gathering and sampling

1.2.1 Data gathering

The data presented in this report are based on two web surveys, conducted among stakeholders ations that have a direct or indirect links with childhood obesity. Surveys and the corresponding questionnaires were based on a number of previous experiences, such as DG SANCO Policies on marketing food and beverages to children - POLMARK project (2008/09) and DG EMPL Active and Healthy Ageing for Slovenia - AHA.SI project (2014/16). Since implemented in STOP, the stakeholders methodology was further upgraded in Alpine Space Transnational Governance of Active and Healthy Ageing - ASTAHG project (2018/21).

The first stakeholders' survey was tested by a few selected EU stakeholders and national stakeholders in Slovenia. To ensure the confidentiality of the survey, it was then piloted by the Finish National Institute (THL) on a sample of the Finnish stakeholders, and for the private sector by selected members of the Slovene Chamber of Commerce and Industries. The first stakeholders' questionnaire was finalised by mid-February 2019. Second stakeholders survey was upgrading the knowledge and experiences gathered in the first survey and in two of the STOP stakeholders dialogues. It was launched in May 2021 and it was closed end August 2021. Basic characteristics of both surveys are described below.

The invitation letter was composed for both surveys and tested with all the relevant project partners, EC (DG SANTE) and some interested Member States (Finland, France, Slovenia). The final first survey was circulated between the end of February and early April 2019, and the second survey between end May and end August 2021, addressing the identified stakeholders, with the respect of GDPR. Several reminders were sent out to the identified stakeholders, to general e-mail addresses, in line with GDPR. The status of the survey was checked on daily basis and intermediate response reports were prepared regularly to inform core team and partners on the level of the stakeholders' engagement. Based on the intermediate response results partners were encouraged to address targeted stakeholders groups additionally, again in line with GDPR. DG Santé was following the process and supported it with the reminders which were at far most potential driver for increased response when sent out. The first survey closed in early April, with a total of 165 useful responses, exceeding well the initial goal of collecting 100 responses and the second survey was closed end August 2021, with 127 useful responses.

The second STOP survey was supported with the similar process. It was piloted in the national context, this time with eight national institutes participating in the survey at the national level (Austria, Finland, Slovenia, Poland, Greece,).

It is important to notice that GDPR was implemented just a few months after the beginning of the STOP project, when STOP consortium had started working on the development of the first stakeholders survey. To ensure alignment with GDPR, in-depth exploration on how to approach stakeholders was conducted in the first months of the project. Due to the GDPR requirements, the collection of individual stakeholders upon their initial identification (anonymisation of the data was initially planned for all further steps for the analysis) was not implemented. The work plan for the stakeholders survey was therefore adapted accordingly. Stakeholders were identified less precisely with the help of the welfare triangle and obesity diagram. While the level of identification of STOP stakeholders is less advanced than initially planned, project partners in WP10 anyway provided adequate results to enable the consortium the implementation of the further steps, planned in WP10.

⁸The PolMark Project Policies on Marketing food and beverages to children (2010) Europa.eu. Available at https://webgate.ec.europa.eu/chafea_pdb/assets/files/pdb/2007325/2007325_deliverable_3_review_of_regulations_in_eu.pdf (Accessed: April 11, 2022).

⁹http://staranje.si

¹⁰Project Astahg (no date) Alpine-space.eu. Available at: https://www.alpine-space.eu/projects/astahg/en/home (Accessed: April 11, 2022).

1.2.2 Sampling

Sampling frame was defined, with 282 stakeholders organisations, based on the comprehensive list of stakeholders produced by all project partners.

In the first phase, separated lists of stakeholders related to childhood obesity issue from local level up were composed by STOP project partners on WPs 4, 6, 7, 8, and 11. In the second phase, five separated lists were merged into joined excel stakeholders list and reviewed by all WP leaders. Since initially separated lists among the others contained stakeholders on EU and international level, some of them were not surprisingly recognised by more than one partner and all the duplicates were removed from the database. Besides the name of the organisation, compiled stakeholders list contained the address, general contacts, and webpage of each individual entity. In the third phase compiled list was extended with additional data as every stakeholder identified, was classified by one of seven fields in societal sphere according to welfare concept and seven fields in obesity diagram.

Table 1: Shares of stakeholders groups in sampling frame, based in the welfare mix (shares of stakeholder for the samples ob both survey are presented in the Chapter 4.1)

			Sampling frame	%
Public	Non-profit	Formal	97	34.39
Private	Non-profit	Formal	104	36.88
Private	Profit	Formal	44	15.60
Public	Profit	Formal	7	2.48
Public-private	Profit	Formal	4	1.42
Public-private	Non-profit	Formal	19	6.74
Public	Profit	Informal	-	-
Private	Profit	Informal	4	1.42
Public-private	Profit	Informal	-	-
Public	Non-profit	Informal	3	1.06
Private	Non-profit	Informal	-	-
Public-private	Non-profit	Informal	-	-
	•	N	282	100%

Best possible approximation of additional stakeholders attributes according to welfare mix were made, while searching for the available information at the public web sides, where the organisations appear and partly also from Wikipedia. The search of the web sides was executed by four WP 10 team members, and where the individual for clarification didn't match, additional in-depth search was provided and joined consensus was reached while defining the welfare mix status of the individual organisation. We had methodologically ensured two-step process for a classification of stakeholders according to welfare mix. More than three researchers were assessing status of each organisation in the first step, in the second step three researchers had jointly decided on stakeholders welfare mix status. To some extant researchers ran into an obstacle as there are some border-line stakeholders and more than one possible criterion is to consider regarding their status. Distinguishing between public and private organisations can be strictly based on criterion of financial sources and consequently share of private profit-oriented organisations is quite large. But it is likely that stakeholders are bearing in mind the goal orientation of their organisation and identify them as representatives of public organisations. This duality of perception explains the slight differences in the structure of the sampling frame and the both survey samples (see Chapters 4.1) and would need further qualitative research.

If information on social orientation of a certain entity were not on disposal, researchers relied on the definitions of societal spheres according to welfare mix typology.

Overall, two thirds of stakeholders in both our surveys were representatives of organisations labelled as non-profit formal. But in further diversifications within societal spheres, nongovernmental organisations can be labelled as private or profit, since their financial sources don't originate in state budget, even if profit is not the core of their modus operandi. According to this diversification disparities between the sample frames and actual samples of our both surveys (see Chapters 2 & 3) are possible as some representatives may have declared their organisations differently as perceived by researchers in

advance. Respondents might have considered mainly the field of the organisation's activities and not the ownership.

Sampling share of the private for profit sector is smaller but the stakeholders there are representing a substantial number of voices – we could observe rather small sample share but rather influential stakeholders group.

1.2.3 Two questionnaires

Data gathering for the description of the stakeholders networking requires a specific questionnaire which aims at diversifying stakeholders' roles and positions, and not merely describe them. Questions are triggering stakeholders to decide for one or the other response option within individual question, positioning them in different clusters. The participation of the WP4 – WP8 partners in the process of the questionnaires composition was of the upmost importance as they knew all the details in stakeholders' positions and attitudes towards individual explored STOP policy measures to be addressed in the area of childhood obesity prevention. Together with the WP4-8 leaders, guidelines were developed to help identify the relevant content policy topics and to support the composition of the differentiation statements.

The questionnaire for the first survey in 2019 was composed of:

- the stakeholders' identification questions (sector, public-private, formal-nonformal, profit-nonprofit; position of respondent);
- questions for identification of the stakeholders focal interests (food reformulation, food labelling, food taxation, marketing of foods; social marketing campaigns; development of measures in the private sector to contribute to tackling childhood obesity; measures to increase physical activity in children; measures to treat childhood obesity in the health sector);
- questions around the characteristics of the decision-making processes in reversing obesogenic environments (means of influence, used and promising);
- attributes of multi-stakeholder collaboration in decreasing childhood obesity;
- question on how powerful stakeholders perceive the position of their organisation in the policy decision-making processes regarding childhood obesity.

In the second survey in 2021 the questionnaire has been mainly preserved, with some of the questions abandoned and some further developed, based on the experiences from the first survey and the stakeholders' dialogues 1 and 2:

- · health sector stakeholders were identified more precisely
- some of the policy measures for preventing childhood obesity were identified more precisely (food marketing, food taxation, food labelling, physical activity measures)
- surveying concepts, as identified in dialogues: concepts of power (which was more elaborated), transparency and evidence, trust, equity and sustainability
- some question regarding the Covid outbreak were added.

Stakeholders were invited to express their attitudes towards specific statements in the form of a questionnaire (Appendices A and B). The data were gathered through the welfare mix triangle approach with the support of the 1ka online tool [1]. Likert scales with 5 to 7 agreement options were used.

¹¹1KA Orodje za anketiranje, 1KA | Spletne ankete. Available at: https://www.1ka.si/d/en (Accessed: April 11, 2022).

1.2.4 Four dialogues with stakeholders

Over a four-year period, the project is extensively engaging the stakeholders. Four dialogues were led, following the scheme in the Figure 4 below, stakeholders' dialogues full reports could be find elsewhere.

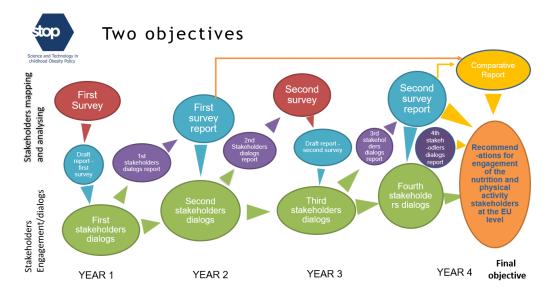


Figure 4: Two parallel objectives of the STOP stakeholders' processes

The dialogues added important topics and concepts to the two questionnaires. A number of core concepts were initially identified during the first dialogues, such as power, transparency and role of the evidence, trust, equity and sustainability issues. During the second dialogues, key concepts were elaborated further and some additional were mentioned, such as (1) general lack of awareness of the different types of stakeholders involved in that area of work, (2) there are some hidden spheres that were neglected, such as parents organisation at the EU level; (3) in the health sector, curative and disease preventive/health promotive sectors should work closer together; and (4) cognitive dissonance between stakeholders should be addressed, need for multidisciplinary competence limited availability of funding resources puts allies in nature in a competitive position.

Third dialogues are serving to the interpretation of the comparative report on both surveys, by adding the focus to the (1) multidisciplinarity as essential part of successful stakeholders cooperation; development of multidisciplinary competences in environments with high level support motivates actions to collaborate; (2) early and broad engagement (including citizens), based on the understanding diversity of stakeholder groups and their drivers for actions; defining and achieving clearly measurable public health goals gives a collaboration trust, transparency and feeling of coherence, allows for participation in (public health driven) agenda; (3) One of the strongest motives for organisations to act together in solving the childhood obesity challenge is creating political willingness at EU level to set regulation protecting children; (4) raising awareness about childhood obesity would also be one of main added benefits of engaging with other stakeholders; (5) the agenda setting and implementation of policy issues with clear evidence based communication in education and trainings as well as building capacities for effective action, (6) multilevel coordination and collaboration for effective actions; different tools should be sustainably locally implemented; common food policies mechanisms should be developed; (7) formal institutionalised mechanisms are promising starting points, and windows of opportunity as Covid-19 should be used; (8) building blocks for sustainable multi-stakeholder cooperation models, acting in public health driven agendas, were identified (leaving space for interaction, agreement on shared clear strategic vision, setting realistic common (short-, medium- and long term) goals, transparent and defined monitoring plan, open trust building relationships with senior level support, budgeting).

Fourth dialogues were the final organised dialogues with stakeholders within the STOP project. The aim was to gather opinions and insights on a sustainability plan for stakeholders engagement and discuss

building blocks for an accountability framework. Participants were stakeholders from different sectors. Among other, to improve the sustainability for the future common endeavours, participants of the fourth dialogue (1) suggested developing a common platform where all stakeholders could work together and (2) highlighted the importance of involving all stakeholders in the early stage of the project.

1.3 Statistical methods of work

This report provides a comparative overview of the collected data from two STOP stakeholders surveys. Section 2 is comprised of qualitative summary tables based on the results published in the first survey report. Section 3 begins with summary tables and descriptive statistics of the data gathered by the second survey.

In graphical representations of the data standard deviations and standard error bars are used to depict data variability. When appropriate, statistical significance of differences between compared mean values were tested using analysis of variance (ANOVA).

In subsection 3.2 the characteristics of decision-making processes are presented through application of explanatory factor analysis , in subsections 3.3. and 3.4 the data was operationalised as bipartite (also two-mode) networks, in former subsection depicting networks of collaboration and in latter trust networks among stakeholders and listed types of organisations.

Networks of interest are presented as graphs and in matrix form. For clearer matrix representation and easier interpretation of the relational data structure the blockmodeling method was applied.

Subsection 3.5 Agreement charts: clustering of stakeholders according to their responses on specific policy measures topics introduces agreement charts as a tool for sounding the attitudes of stakeholders toward surveyed topics. Agreement charts are graphical representations of distances among stakeholders according to their responses to surveyed topics. The same distances are used to assign stakeholders to clusters 4, which are described according set of basic descriptive variables.

In subsection 3.6 *Crosstopic comparison of clusters* obtained in previous subsection is presented for which additional clustering of previously obtained clusters was used to evaluate the stability of results obtained by agreement charts.

¹²Revelle, William, (2022) psych: Procedures for Psychological, Psychometric, and Personality Research. R package version 2.2.3; https://CRAN.R-project.org/package=psych

Gorsuch, Richard, (1983) Factor Analysis. Lawrence Erlebaum Associates.

¹³Žiberna, Aleš (2007). Generalised blockmodeling of valued networks. Social Networks 29(1), 105-126.

¹⁴BATAGELJ, V. (1988), "Generalized Ward and Related Clustering Problems", in Classification and Related Methods of Data Analysis, ed. H.H. Bock, Amsterdam: North-Holland, pp. 67-74.

2 Main findings of the first STOP stakeholders survey, 2019

To achieve the project aim within STOP, the multi-disciplinary and multi-stakeholder nature of the Consortium is enabling partners to develop interdisciplinary research approaches to study both, the determinants of childhood obesity at one side and the attitudes of different stakeholders towards different policy approaches designed to address it at the other. To this end, the project's WP10 is dedicated to run a public health driven multi-stakeholder work with the aim to understand better the possible drivers for engagement of multiple, diverse stakeholders around specific policy issues and to address cognitive dissonance, through extensive work with relevant stakeholders in the area of childhood obesity at the EU level.

Logical frameworks of welfare mix triangle and obesity diagram were used to identify as wide range of stakeholders as possible to the STOP stakeholders network. Different approaches and tools are employed in the stakeholders work, such as stakeholders survey with social network analysis and stakeholders dialogues, fostering participatory and inclusive public health driven multi-actor engagement.

Vast majority of project partners participated in stakeholders work, supporting the identification of the topics of interest for stakeholders engagement, feeding into the stakeholders research process and participating in the interpretation of results and in translating the research information in active dialogues with stakeholders at the first stakeholders conference. The reverse feed back information flow from WP10 to the STOP policy work packages (WPs 4 – 8) and to WPs 3, 9 and 11 is also essential.

The intention of the WP10 first round of the stakeholders survey in 2019 was to collect the information on the STOP relevant stakeholders landscape, supporting the identification of the facilitating and inhibitory factors for stakeholder's engagement and activation in potential public health driven stakeholders action to prevent and manage childhood obesity in EU. The second round of the web questionnaire has been disseminated in 2021, aiming also on the comparative report to detect possible changes in the three-year-period.

The survey aimed at building argumentation for understanding the urgent need for change of the complex obesogenic environments via different policy measures to prevent and manage childhood obesity, among all groups of stakeholders. On the other hand, the participatory engaged stakeholders have probably more actively participate in the following STOP project's steps, such as the dialogues discussing the public health driven formulation, implementation and use of the effective and sustainable policies.

The report is building on diversifying statements in the stakeholders questionnaire (Appendix A). Diversifying statements aimed to obtain better and more in-depth understanding of different positions of stakeholders. At the same time, they were aimed at exploring and possibly giving the ground for overcoming the present positive or negative attitudes towards specific "obesogenic" issues among stakeholders groups. Stakeholder's answers are enabling STOP partners to better understand, how the alliances among stakeholders towards specific statements are composed, according to their individual or group position and attitude toward a specific statement.

Different statistical methods were employed. The descriptive component of the analysis identifies the stakeholders organisations' focal interests, characteristics of the decision making processes in reversing obesogenic environments, agreement charts and clustering of the stakeholders/interest groups, by the area of interest (regulation and fiscal policies, consumer behaviour, health food and food choice environments, physical activity and health care in childhood obesity treatment). Among others, clustering of stakeholders allows for the insights how the alliances among stakeholders are composed, based on specific diversifying statements.

2.1 Regulation and fiscal policies (WP4)

The initial analysis of included stakeholders revealed that reformulation, taxation, labelling and food marketing were the lowest area of interest for the included stakeholders and their organisations (Table 2). Despite being quite a low-focus area for the engaged stakeholders, they nevertheless overarchingly

agreed with regards to the implementation method of such policies (Table 2). On the other hand, low expressed interest may result from the fact that organisations are not focusing on these points.

Table 2: Main findings for WP4.

Most promising approa	aches, as perceived by the surveyed stakeholders, for successful implementa-
	easures and activities, in changing the obesogenic environment to prevent child-
hood obesity	, 3 3
Food taxation	Most promising approach perceived by stakeholders is legislation
Food labeling	Most promising approach perceived by stakeholders is legislation
Food reformulation	Establishing guidelines or standards are most promising approaches perceived by stakeholders
Food marketing	Most promising approach perceived by stakeholders is legislation
Labeling	Stakeholders perceive labels providing an overall nutritional grade more effective than labels providing nutrient-specific information in <i>supporting healthier consumer choice</i> . They believed labels with nutrient specific information in encouraging companies price reactions and in <i>encouraging companies to reformulate products</i> are slightly more effective than the ones previously mentioned.
Marketing	Almost half of the respondents believed that marketing of food high in fat, sugar and salt, targeted to children should be restricted to children up to 18 years. 7% believed that marketing should be restricted to children up to 8 years old.
Taxation	Stakeholders perceive tax proportional to the nutrient content of a product as being more effective than a tax based on the value of a product (to support consumers in purchasing healthier options, to encourage companies price reactions and to encourage companies to reformulate product).
Agreement charts	
Food taxation	In food taxation agreement chart we could observe the clearest differences in opinions along stakeholder group lines, although a sizeable minority in both health and agrifood groups have a different opinion within a group;
Food labeling	We could observe a widespread agreement with no major differences among three clusters of stakeholders; two of the groups are uniformly supportive to the regulation with minor differences in positions, and slight differences are obserged in relation to the third, minor stakeholders group (composed of some health and agri-food chain representatives)
Food reformulation	We could observe a widespread agreement with no major differences among two bigger clusters of stakeholders which seems to uniformly support the regulation with minor differences in positions; some differences are obserged in relation to the third, minor stakeholders group (composed again of some health and no research representatives)
Food marketing	We could observe differences in opinions, but not necessarily along stakeholder group lines. Major stakeholders group is quite positive to the regulation of marketing and the smallest group is highly supportive; smaller stakeholders group (again composed from the stakeholders perceiving themselves as health stakeholders) is clearly against regulation of food marketing to children

Their feedback indicates that the implementation of some regulation and fiscal policies we have put forward in the survey would receive some opposition from the participating stakeholders. On the other

hand, more than half of the stakeholders were convinced that these policies are capable of changing obesogenic environments. Among the suggested policy options (food taxation, food labelling, food reformulation and food marketing), food labelling and food marketing were perceived by stakeholders as the most promising in changing obesogenic environments and might be promising starting points for building agreement among stakeholders.

On the other hand, food taxation, in spite of being still well rated, was perceived as the least promising among stakeholders. Stakeholders identified legislation as the most promising approach for successful implementation of the food taxation (by nature), food labelling and food marketing policies. For successful implementation of the food reformulation policies, establishing guidelines or standards were perceived as the most successful approach. Furthermore, when exploring stakeholders by Welfare triangle categories, public-private organisations showed slightly less enthusiasm for food taxation policies compared to either private or public institutions, in spite all of them being well supportive to that policy action. Non-for profit stakeholders are more supportive to food taxation than for-profit stakeholders.

Regarding labelling policies, stakeholders perceive labels providing an overall nutritional grade more effective than labels providing nutrient-specific information in supporting healthier consumer choice. In the future stakeholders dialogues, we will explore if that kind of labels encourage firms to reformulate. Furthermore, stakeholders agreed that labelling systems should include recommended portion sizes. However, high-quality information provision with respect to portion sizes is a minimal yet crucial aspect of a healthy nutrition environment [5]. Improved health literacy would be beneficial as support for more effective food labelling policies.

Regarding marketing, almost half of the stakeholders believed that marketing of food high in fat, sugar and salt, targeted to children should be restricted to children up to 18 years. As public policy should target marketing practices and taxation, the school environment remains a promising target for policy¹⁶. In the food taxation area, stakeholders in general perceived a tax proportional to the nutrient content of a product as being more effective than a tax based on the value of a product. Conveniently, this is in line with the comments from stakeholders, that tax should be inversely proportional to the nutrient content. When examining more closely the potential antagonism regarding regulation and fiscal policies, the agreement analyses showed that around 20% of stakeholders firmly disagreed that food taxation has the potential to significantly change obesogenic environments. The majority of the negative attitudes came from a part of the health and from Agri-food chain sector. A similar trend is being suggested in food labelling and marketing. Furthermore, some negative attitudes towards reformulation were detected in health and research, but not in Agri-food chain sector.

Regarding possible policy actions towards enhancing regulation and fiscal measures, the stakeholders emphasised the need to consider these policies simultaneously with other policies (e.g.: school policy). Furthermore, the need to develop approaches that contribute to reduce social inequities are emerging, as health benefits are likely to accrue to individual low-income consumers, due to their stronger response to price changes 17. In addition, we need to invest some efforts in advocating regulation and fiscal policies to health care and Agri-food chain sector. For further steps, more attention might be given to some specific issues such as the nutrient profiling systems, the power of marketing, and the types of media.

Consumer behaviour: Creating demand for healthy lifestyles (WP5)

More than a half of the organisations who participated in this survey expressed their relevance in the area of social marketing campaigns. From their feedback, we detected that the implementation of social

¹⁵Vermeer WM, Steenhuis IH, Poelman MP, Small, medium, large or supersize? the development and evaluation of interventions targeted at portion size. Int J Obes (Lond). 2014;38 Suppl 1:S13-8.

¹⁶Moise, N., Cifuentes, E., Orozco, E. et al. Limiting the consumption of sugar sweetened beverages in Mexico's obesogenic environment: A qualitative policy review and stakeholder analysis. J Public Health Pol 32, 458-475 (2011). https://doi.org/10.1057/jphp.2011.39

¹⁷F. Sassi et al. Equity impacts of price policies to promote healthy behaviours. Lancet. 2018 May 19; 391(10134): 2059–

marketing activities we have put forward in the survey would receive little opposition (disagree and somewhat disagree = 12%) from the stakeholder network involved in this research.

Regarding social marketing campaigns, more than half of the stakeholders believed that these activities are successful in changing obesogenic environment to prevent childhood obesity, as a part of comprehensive approach. In relation to that, more than a half of the stakeholders who expressed their relevance in the area of social marketing are convinced that supporting collaborative action is the most promising approach for successful implementation. That may be useful to know in terms of establishing collaborations for research and/or dissemination of results. Furthermore, stakeholders believed that social marketing campaigns targeting physical activity options in the environment are the most successful and the least successful on the other hand, if they target portion size. When targeting portion sizes, we found some differences when exploring stakeholders by Welfare triangle categories, as private organisations showed less enthusiasm compared to public institutions. In general, the non-for profit sector showed less support in all actions we have put forward in the survey. In addition, respondents also highlighted the need for different approaches, depending on the target audience.

Table 3: Main findings for WP5.

The most promising approaches, as perceived by the surveyed stakeholders, for successful implementation of the policies, measures and activities, in changing the obesogenic environment to prevent childhood obesity	Supporting collaborative action
Social marketing campaigns	Stakeholders agree that social marketing campaigns are successful, as part of a comprehensive approach, in changing obesogenic environments to prevent childhood obesity. The most promising approach for successful implementation of the social marketing campaigns, in changing the obesogenic environment to prevent childhood obesity is supporting collaborative action. Stakeholders thought that social marketing campaigns to reduce childhood obesity are more successful if they first target physical activity options in the environment and then target the marketing of improved nutrition behaviors and approaches.
Agreement charts	We could observe three different clusters regarding social marketing. Two clusters are strongly in favour to social marketing, with minor differences in positions. One smaller cluster is in average attitude towards social marketing potentials, and it is composed mainly of health and research stakeholders.

When examining more closely the potential antagonism regarding social marketing campaigns, we found out that only 12% of stakeholders firmly disagree with the social marketing campaigns, denying it has the potential to significantly change obesogenic environments. Moreover, cluster analysis showed that one cluster expressed lower support for social marketing campaigns. The majority of the negative attitudes came from the health sector stakeholders, and some negative attitudes were also from research sector.

When pointing out other possible policy actions towards enhancing social marketing campaigns not covered in the survey, the stakeholders emphasised the involvement of family and also the need for nutrition education. Furthermore, the contextual analysis revealed that Cluster No. 3 is the one most

interested in social marketing campaigns. The three findings from this cluster that we found interesting include: 1) the cluster appears to consist primarily of for-profit organisations; 2) the cluster appears to exclude research institutions; and 3) the cluster also seems to have support for active transport as an approach for addressing childhood obesity.

In conclusion, there is already a high level of acceptance of various social marketing related actions across the different types of stakeholders. Additional efforts need to be invested in advocating social marketing to health care and research sector to explore their thoughts toward social marketing campaigns. This could be achieved by consulting with stakeholders on the focal issue to enable joint action inspired by new insights and to prepare a sustainable plan for further engagement. Furthermore, we must ensure that all potential stakeholders who may be affected, involved or have a partial responsibility to act are considered in future surveys . To conclude, we need to define the role of health promotion campaigns in comparison to social marketing campaigns and consider which social marketing channels we use for public health. That should be possible if social marketers collaborate with public health researchers to identify and ameliorate the environmental determinants of risk behaviour and create a context where downstream interventions may flourish. Across the literature, it has been argued that upstream measures necessary to shape supportive environments should be regarded not as constraints diminishing voluntary behaviour, but instead as the pre requisites enabling full and free choices.

2.3 Healthy food and food choice environment (WP6)

Almost half of the stakeholders believed that the *monitoring business actions and performance* is, as part of a comprehensive approach, a successful way to change obesogenic environments to prevent childhood obesity. It is interesting that around 20% of the respondents had a neutral opinion. While stakeholders had different opinions about the most promising approaches for successful implementation of monitoring business actions and performance, legislation was perceived as the most encouraging one.

¹⁸Brown, L. D. (1983). Organising participatory research: Interfaces for joint inquiry and organisational change. Journal of Occupational Behaviour, 4, 9–19.

¹⁹Bryson, J. M. (2004). What to do when stakeholders matter? Public Management Review, 6, 21–53.

²⁰Hoek, J. and Jones, S.C. (2011), "Regulation, public health and social marketing: a behaviour change trinity", Journal of Social Marketing, Vol. 1 No. 1, pp. 32-44.

Table 4: Main findings for WP6.

Most promising approaches, as perceived by the surveyed stakeholders, for successful implementation of the policies, measures and activities, in changing the obesogenic environment to prevent childhood obesity	Legislation
Monitoring business action and performance	Stakeholders most agree that business impact assessment of actions supporting the creation of healthy food environments should concentrate most on evaluating the transparency of actions and operations and less agree to use performance indicators for businesses. Most stakeholders opted for the engagement of industry in obesity prevention as role of food industry.
Agreement charts	We could observe differences in opinions, but not necessarily along stakeholder group lines. Two big clusters are supportive or very supportive to the monitoring business action and performance. One smaller cluster is agains the discussed policy, composed of the health and research stakeholders representatives.

Furthermore, when exploring stakeholders by Welfare triangle categories, public-private organisations showed slightly less enthusiasm for monitoring business actions and performance policies compared to private institutions. On the other hand, it seems like public-private partnerships are raising interest among health policymakers. Some view them as an opportunity to create publicly available outputs, and innovate to add value to research, knowledge translation and direct-service programmes for communities. However, it is also important to consider some of the challenges associated with such partnerships and the need to establish and monitor them carefully to ensure their ultimate output remains public health driven.

Stakeholders were also asked to express their opinion with regards to conducting business impact assessments. Most agreed that business impact assessment of actions supporting the creation of healthy food environments should concentrate most to the transparency of actions and operations. At the same time, they identified the importance of involving the food industry in obesity-related interventions. Nevertheless, stakeholders also alluded to the fact that due to conflict of interests, the food industry is often excluded from research and /or education programmes.

In addition, the agreement analyses showed that less than 10% of stakeholders disagreed with the need to monitor business actions and performance policy areas as an approach that could significantly change obesogenic environments. Furthermore, in the health, research and agri-food chain sectors we saw that respondents had differing opinions. This is particularly seen within the health sector.

To conclude, stakeholders also identified other concepts regarding monitoring business actions and performance policies that were not included in the survey. For example, they noted that these actions should not prevent the adoption of stricter legislations, especially given that self-commitments by industry are not effective. They believed that the role of the food industry is to produce products which consumers want and need, based also on the public health perspective. Through nutrition and consumer research, the food industry gains valuable insights on consumers' expectations regarding food, diet and health

 $^{^{21}}$ Kraak VI , Swinburn B , Lawrence M , Harrison P . An accountability framework to promote healthy food environments . Public Health Nutr . 2014 ; 17 (11): 2467 – 83.

²²Kraak VI, Story M. Guiding principles and a decision-making framework for stakeholders pursuing healthy food environments. Health Aff (Millwood). 2015;34(11):1972–8.

in order to ensure that both products and communications are motivating and relevant to consumers' lives 3, health benefits and well-being. On the other hand, individuals should be able to make healthier food choices, benefiting their health and without impacting their revenue.

It was also stressed that business and educational campaigns should be separated.

2.4 Physical activity (WP7)

A large part of organisations who participated in this survey are active in the area of physical activity (PA) promotion. Their feedback indicates that the implementation of some of the suggested PA policies in the survey would receive little opposition from the stakeholder network involved in this research. For all three PA policy areas proposed here, more than half of the stakeholders were convinced that these policies are capable of changing obesogenic environments. Among these three PA policy areas, stakeholders identified measures to promote PA in schools as the most promising in changing obesogenic environments to prevent childhood obesity and were at the same time concordant in their opinion that it is the responsibility of the states and the municipalities to provide financial support to improve school infrastructure for PA and sports. All types of PA programmes set in schools received universally high support from all types of stakeholders involved, irrespective of their Welfare triangle category or profit making. With regards to the level of support they received, PA policies in schools were closely followed by strategies to promote active transport, while fiscal measures were deemed as the least promising approach (although still with a high level of support). Conveniently, this is in-line with the current existing body of evidence showing that strong evidence for the effectiveness in curbing obesity is available only for the school-based PA programmes but not for the ones from other environmental domains [24]. When exploring stakeholders by Welfare triangle categories, public-private organisations showed slightly less enthusiasm for PA policies compared to either private or public institutions. In addition, profit organisations are not likely to embrace fiscal measures to promote PA as they were shown to be much less inclined to this policy area compared to the non-profit sector. On the other hand, nearly all stakeholders strongly supported investing public money in both school and community PA programmes, and clearly communicating that the provision of PA as a public health measure is seen as the responsibility of the national and local governments.

²³Gassin AL (2001), Helping to promote healthy diets and lifestyles: the role of the food industry. Public Health Nutr. 2001 Dec;4(6A):1445-50.

²⁴Wang, Youfa, et al. "What childhood obesity prevention programmes work? A systematic review and meta □ analysis." Obesity reviews 16.7 (2015): 547-565. doi: 10.1111/obr.12277.

Table 5: Main findings for WP7.

•	by the surveyed stakeholders, for successful implementas, in changing the obesogenic environment to prevent child-
Fiscal measures to promote physical activity	Legislation
Measures to promote physical activity in schools	Establishing guidelines or standards
Measures to promote active transport among children	Supporting collaborative action
Fiscal measures to promote physical activity	The fiscal policy would be most successful if schools should be aided by state and municipalities to improve their infrastructure for PA/sports. Financial support from municipalities for sport-for-all programmes was identified as the second most popular approach.
Measures to promote physical activity in schools	All types of PA programmes set in schools received universally high support from all types of stakeholders involved (Providing active learning and active breaks during school time, free extracurricular PA offered to all children free of charge, introducing one hour of physical education per day or all children, throughout primary and secondary schools, short breaks in sitting, learning about PA benefits)
Measures to promote active transport among children	Stakeholders agree most with statement that active mobility should become a policy based on mobility and land use planning, especially in urban environments. Encouraging active commuting to school for children under 12 under adult supervision also received wide agreement.
Agreement charts	
Fiscal measures to promote physical activity	differences of opinion, some differences in health sector
Measures to promote physical activity in schools	no huge differences - seems there's widespread agreement
Measures to promote active transport among children	differences of opinion, but not necessarily along stakeholder group lines

When examining more closely the potential antagonism towards PA policies, the agreement analyses showed that only around 10% of stakeholders firmly disagreed for PA policy area to have the potential to significantly change obesogenic environments. The vast majority of the negative attitudes came from stakeholders in the health sector, which could present a possible challenge when implementing future PA policies. However, cluster analyses showed that the dissonance between clusters of stakeholders is smaller for PA policies than for any other policy area investigated. Nevertheless, two clusters that expressed lower than average support for PA policies were identified, especially regarding measures set around schools and active transport. Not surprisingly, one of these clusters involved stakeholders that are not active in the PA area. However, this cluster is very small and has reported to have little perceived influence on policy creation processes which undermines its relevance for the general acceptance of the future PA programmes. On the other hand, the other cluster is a bit larger and of much greater perceived influence. It includes mostly non-profit organisations from health and education sectors that endorse

both regulatory and soft approaches to influence policy decisions. Interestingly, organisations included in this cluster have, on average, a rather negative attitude towards all examined policies except those targeting fiscal measures to promote PA.

When identifying other possible policy actions towards enhancing PA that were not covered in the survey, stakeholders emphasised the role of the school personnel, the focus on physical literacy, which is linked to improved quality of physical education teaching and provision of non-curricular school-based PA programmes, on the provision of special lessons, dedicated to healthy lifestyle that would help children to translate and integrate their physical literacy into everyday life in the form of regular physical activity, and on the transformation of the traditional learning environment towards physically active and playful learning environment.

In conclusion, although there is already a high level of acceptance of various PA-related policies across the different types of stakeholders, additional efforts need to be invested in advocating PA policies to health care sector and in improving their attitude towards PA-related measures if universal acceptance is to be achieved when implementing these policies on a population scale. Soft approaches in influencing policy decisions would probably gain wider acceptance from stakeholders.

2.5 Health care (WP8)

Based on the analysis of the included stakeholders, they identified health care as their second area of interest. They believed that measures to treat childhood obesity in the health sector are also successful in changing obesogenic environments to prevent childhood obesity as a part of comprehensive approach. Only 1% disagree with the previous claim.

It is interesting to learn that the main challenge in health systems regarding the appropriate treatment for childhood obesity identified was the lack of understanding of the need for team work, lack of education/knowledge of health professionals, lack of financial resources, lack of human resources and lack of time of health professionals. However, when stakeholders were then asked to what extent they agree on identifying the most promising approach to effectively manage obesity, most agreed that to establish a harmonised collaboration between the health care professionals and extended family was most the promising approach. This means that capacity building needs to be a core component of interventions focused on the treatment of childhood obesity in the health care sector, and we need to increase the collaboration between health care professionals and the extended family. This confirms earlier findings from this field. Furthermore, when exploring stakeholders by Welfare triangle categories, we noticed that public-private organisations showed slightly less enthusiasm for "establishment harmonised collaboration of health professionals with kindergartens and schools" as the most promising approach to manage obesity, compared to either public institution.

²⁵S. Lundvall, Physical literacy in the field of physical education - A challenge and a possibility. Journal of Sport and Health Science 4 (2015) 113-118.

²⁶Van Gerwen M et al. Systematic review of primary care physicians' knowledge, attitudes, beliefs and practices regarding childhood obesity Obesity Reviews 2009. DOI: 10.1111/j.1467-789X.2008.00532.x.

Mazur A et al. Childhood obesity: knowledge, attitudes, and practices of European pediatric care providers. Pediatrics 2013. DOI: 10.1542/peds.2012-3239

Table 6: Main findings for WP8.

Most promising approaches, as perceived by the surveyed stakeholders, for successful implementation of the policies, measures, and activities, in changing the obesogenic environment to prevent childhood obesity	Supporting collaborative action
Capacity building for the implementation programmes for the treatment of child-hood obesity in the health sector	If obesity in children is detected, the main challenges for appropriate treatment in health system are as follow: lack of understanding of the need for team work, lack of education/knowledge of health professionals, lack of financial resources, lack of human resources and lack of time of health professionals.
Agreement charts	There are only two clusters of stakeholders with regard to the treatment of childhood obesity, one big cluster being high in score of supporting the action and one smaller cluster below the average support (composed mainly of the stakeholders, perceiving themselves as being health stakeholders).

Moreover, the agreement analyses showed that almost 20% of stakeholder disagree that *capacity building for the implementation of programs* have the potential to change obesogenic environments. Although the statement is related to health care, we have concluded that the health care sector has differing opinions.

The topic of effective management of childhood obesity in health sector provoked major written added responses of the participating stakeholders. To increase health workforce capacity, multi-disciplinary approach, establishment of a holistic view on the leading causes for obesity and breaking barriers between health professionals around roles and responsibilities were some of the added responses.

2.6 Conclusions linked to contextual analysis in the first survey

Policy decision making processes are complex, with different means of influence. To understand the stakeholders perception of the most promising means and the most commonly used methods of influencing policy decision making processes among different groups of stakeholders, we extended the insights with more in-depth contextual analyses.

We have explored the most promising means and most commonly used methods, perceived as such by stakeholders, to influence the policy decisions in childhood obesity in depth by additional statistical analyses, reducing 13 dimensions of means and methods to two dimensions, retaining by that 50% of variability.

For profit organisations tended to significantly less believe in both, either identified "advocating regulation of specific policy options" or identified "soft background mechanisms for health in all policies approach" in comparison to the non-for profit stakeholders. The identified lower belief of for-profit stakeholders in any kind of the most often used governance mechanisms could indicate there might be differences in perceptions in different stakeholders groups or that there might be more promising other means of influence in place for profit stakeholders we have not yet identified through the stakeholders survey. This warrants further exploration and discussions in future stakeholders dialogues.

Discussing perceived most promising means and most often used methods further. The highest believing into "advocating regulation of specific policy options" belongs to (two) stakeholders dealing with built environments and for "soft background mechanisms in health in all policies approach" was

detected among (two) stakeholders dealing with physical activity and sports. Two categories of this variable significantly differ from others. The, first one is represented by (two) stakeholders active in social affairs with very low opinion towards soft mechanisms and the second one represented by (four) stakeholders from agri-food chain with decline in opinion on successfulness of regulatory measures. We assume small numbers in above mentioned categories could partly explain the detected variability.

The research, health and education stakeholders groups differ only to minor extent in beliefs about the means and methods potentials in the "soft background mechanisms for health in all policies" and the same is valid about the "advocating regulations for specific policy options".

One of the interesting findings out of that part of research, supported also with the descriptive analytical results, is the fact that stakeholders do not differ in perceiving the most promising means for influencing the policy decision making processes and slightly differ in practicing common used methods. A specific set of questions was dedicated to the characteristics of decision-making processes in preventing obesogenic environments, regarding most promising means and commonly used methods. There are no significant differences among public, private and public-private on one hand and between for profit and not-for profit ations on the other, in most promising means for influencing the policy decision making processes. Regarding most commonly used means, we could observe the distinction among above listed stakeholders spheres (public, private and public-private) for strengthening the voluntary approach (higher rated by private and for profit stakeholders) and supporting professional associations or research (higher rated by public and public-private stakeholders). Similar distinction in the systembased options for influencing policy decision making processes we could observe between for profit and not-for profit ations.

Results indicate that private and for-profit stakeholders are more keen to define specific relationships among stakeholders what also gives the potential for further stakeholders dialogues discussions.

The described difference have been be further explored in future stakeholders' dialogues and in the second iteration of STOP stakeholders survey in year 4.

We have also been exploring the attributes of the multi-stakeholder collaboration in decreasing childhood obesity. We were interested in understanding of necessity for the joint approach, readiness, capacities and resources, necessary skills and knowledge, willingness, level of trust and accountability for the joint multi-stakeholder approach, but also the importance of consideration of health inequalities and sustainability and environmental issues for such relationships (Table 7). It is obvious that more sensitive questions would be needed as almost all the responding stakeholders were convinced that the listed attributes are important or very important for a joint multi-stakeholders approach. For the second wave of surveys, additional efforts were invested into testing and piloting that set of questions to be able to harvest more significant differences among stakeholders.

As described above, the descriptive part of the analysis was supported by the contextual analysis (initial factor analyses), conceptualisation of the reporting focus was supported by the first stakeholders conference (September 2019) outcomes. The principal component analysis yielded two new dimensions, "Soft background mechanisms for health in all policies approach" and "Advocating regulation for specific policy option". Five different clusters of stakeholders were obtained in the two new dimensions:

• Cluster 1: form large group of stakeholder (N= 24). It is positioned high above average in attitude towards regulative approaches and low below average in attitude towards soft approaches to influence policy decisions. The structure according to welfare triangle variables is similar to Custer 4 (the majority of stakeholders are from public sector. According to distribution of sectors, majority of stakeholders are from health sector. The general overview indicates that members of cluster are active in the topic of Reformulation, taxation, labelling, food marketing and do not deal with measures to treat childhood obesity in the health sector. Stakeholders in this cluster reported the highest level of perceived power at the national level. Members of that cluster are relatively close regarding the opinion on the most promising means to shape policies, at the same time they are

²⁷Gabrijelčič Blenkuš, M. et al. (2020). First Childhood Obesity Stakeholder Conference and Dialogues – report [Documentation from STOP project].

quite far apart on the topic of food taxation. Furthermore, they have high opinion in policies dealing with food marketing.

- Cluster 2: form mid-sized group of stakeholder (N=13). It is positioned high above average in both dimensions. They believe in both, regulative and soft approaches to influence policy decisions. Regarding sectoral structure, that cluster covers mostly health and education-oriented stakeholders. This is also the only cluster without representative of profit ations. Furthermore, the majority of members are from health sector. The general overview indicates that members of the cluster are mainly active in measures to treat childhood obesity in health sector and are inactive in development of measures in the private sector to contribute to tackling childhood obesity. Moreover, members of the cluster perceived themselves as the most powerful at the national level. Members of cluster have in average very low opinion in all policies except those targeting fiscal measures to promote physical activity.
- Cluster 3: form relatively small group of stakeholder (N=7). Proportionally it is the cluster with highest level of profit organisations. At the same time, this is the only cluster with no representative among stakeholders operating as research organisations. It is positioned extremely low in attitude towards regulatory approaches and low (but close to average) in attitude towards soft background mechanisms. Members of cluster indicated low level of engagement in all areas, the highest reported engagement of the members is in development of measures in the private sector to contribute to tackling childhood obesity. Members reported the lowest level of perceived power among all. Regarding food taxation, the extremely negative value is reported by this cluster, with stakeholders being mainly profit organisations who also have very low opinion on regulative approaches in policy making. On the other hand, physical activity in schools and active transport policies have strong support in Cluster 3. Furthermore, cluster indicates positive attitudes towards the understanding the necessity of the joint multi-stakeholder approach and readiness to collaborate with other stakeholders and indicative negative attitude towards capacities and resources which stakeholders have available to cooperate with others.
- Cluster 4: form the largest group of stakeholders (N=25). It is positioned high above average in attitude towards soft approaches and low below average in attitude towards regulative approaches to influence policy decisions. The structure according to welfare triangle variables is the same as cluster No.1. Both clusters have similar representation of stakeholders from Research and Health sector, but cluster No.4 is more diverse: has higher number of stakeholders from Education and stakeholder from Physical activity and sports category which are not present in first cluster. Stakeholder from cluster No.4 engage on measures to increase physical activity in children and measures to treat childhood obesity in the health sector. Moreover, members of the cluster reported the highest level of perceived power on regional and international levels. Same as cluster No.1 their opinion are relatively close regarding the opinion on the most promising means to shape policies, they are quite far apart on the topic of food taxation. An indicative overview shows that cluster is close to average on all policies except those on capacity building in the health sector.
- Cluster 5: form the smallest group of stakeholders (N=4) with least belief in soft mechanisms used to influence the policy decisions on childhood obesity. The cluster is compound of two stakeholders from social affairs sector and other two from research and education sector. Members of cluster are active in the topics of social marketing campaigns and development of measures in private sector to contribute to tackling childhood obesity. That small marginal cluster reported the lowest level of perceived power among all clusters. Moreover, members of the cluster 5 have high opinion on policies regarding food labelling and food marketing and low beliefs in both types of policy measures, in physical activity and in strengthening health sector. In addition, cluster has stronger indicative negative attitudes on all attributes except one: consideration of health inequalities and social determinants.

Table 7 indicates some areas we wish to explore further in the next STOP steps, regarding stake-holder engagement. With question "What do we want to explore further?" project partners are bringing focus back from the research to the work with stakeholders in the field. Research questions in the last column of Table 6 are relevant for guiding further explorations of the stakeholders network and providing evidence based explanations in the next STOP steps.

Table 7: Possible further exploring regarding stakeholder engagement.

	Key characteris- tics	Highlights	What do we want to explore further?
Cluster 1 Prevention policy group	Mixed stakehold- ers	Favouring regulatory approaches, less soft mechanisms	Why favouring policies over soft mechanisms?
Cluster 2 Health sector treatment group	Purely non-profit; Treatment fo- cused health sector	Positive attitude to- wards both regula- tory and soft mecha- nisms	Why this cluster has unfavourable attitude towards labelling, marketing and physical activity policies, while it has positive attitude towards policies overall?
Cluster 3 Private sector group	Mixed stakehold- ers, but relatively large private sec- tor	Low opinion on regulatory approaches; Extremely negative on food taxation	Being wary of regulatory policy is predictable when it comes to industry. But the cluster has many non-profit organisations as well. Why are some non-profit groups against? (or is it the case that within the cluster the non-profit groups are actually in favour of taxation but are clustered together on other grounds?) Why do private sector groupings have a low opinion of regulatory policies, and taxation especially?
Cluster 4 Soft approach group	Mixed stakehold- ers	Favouring soft mechanisms, less regulatory approaches.	Why favouring policies over soft mechanisms?
Cluster 5 Anti-soft mea- sures group	Mixed stakehold- ers	Does not believe in soft measures, but engaged in social marketing and private sector contribution	What does a strong belief in social mar- keting reveal about attitudes towards tackling child obesity?

In general, if we look at one of the researched policy domain, **food taxation**, we could observe the clearest difference along stakeholder group lines, although a sizeable minority in both health and agri-food groups have a different opinion. In **food labelling**, there seems to be widespread agreement, and **food reformulation** follows a similar trend. In **food marketing**, we could observe differences of opinions, but not necessarily along stakeholder group lines. Considering the clear public health goals as the prerequisite, policy recommendations could build on the insights of the stakeholders' positions and there, where acceptable from the public health perspective, win-win situations could be recommended.

What is clear from the research results, health sector stakeholders do substantially differ in their views in almost all of the STOP policy fields. To clarify why and how to approach those differences is one of the main challenges of the further research in WP10.

3 Main findings of the second STOP stakeholders survey, 2021

The second stakeholders survey was implemented in year four of the STOP project, with the aim to upgrade the surveying of the positions, actions, and values of the nutrition, physical activity and obesity stakeholders at the EU level. Second survey is based on the increased understanding of the stakeholders, gathered with the first stakeholders survey and two implemented stakeholders' dialogues. We also aimed at providing ground for comparisons of the stakeholders' positions, actions and values detected in two-year period, while we were faced with the interruption of the Covid-19 syndemic. In spite of that, we are providing a comparison of the two periods in the fourth section of the report. Beforehand, we are briefly introducing the main outcomes of the second survey from 2021, that is based on the same methodological approaches as we used in the first survey of the stakeholders, and that are described in the Introduction.

In addition to the EU level stakeholders survey, the WP10 team has implemented eight national stakeholders surveys (Austria, Hungary, Greece, Spain, Estonia, Poland, Serbia and Spain), with the countries engagement support from the JA Best-ReMaP project side.

3.1 Surveying concepts

As one of the main added values of the second survey, the main concepts, identified in the first and second STOP stakeholders dialogues, were additionally explored: the concepts of power, trust, evidence and transparency, equity, and sustainability.

3.1.1 Power

The first concept approached is power which in the inter-organisational (networked) context presents the potential of the actor to benefit resources and activities for their own purpose with one of the three power mechanisms: "gatekeeping, decoupling and resource allocation" (Olsen et al., 2014); in the process of negotiations, organisations have "bargaining power" (Lu, Wei & Wang, 2020).

"In the specific context of negotiations, power refers to 'the probability that a negotiator will influence a negotiation outcome in the direction of his or her ideal outcome' [Galinsky et al., 2017, p. 606). The more power one party has, the higher the probability that it will achieve its goals at the bargaining table (Galinsky et al., 2017). In this paper, the term 'bargaining power' is used to refer to the power that one party is perceived as having relative to its counterpart in bilateral negotiations between organisations" (Lu, Wei & Wang, 2020).

When forming the survey questionnaire, hypothetical situations were used to assess different dimensions of this concept:

- 1. An institution expects their ideal outcome when negotiating with another institution.
- 2. An organisation has a reputation/prominence that is recognised by other stakeholders.
- 3. Other stakeholders follow the lead of the organisation.

²⁸Per Ingvar Olsen, Frans Prenkert, Thomas Hoholm, Debbie Harrison, The dynamics of networked power in a concentrated business network, Journal of Business Research, Volume 67, Issue 12, 2014

²⁹Lu, W., Wei, Y. and Wang, R. (2020), "Handling inter-organisational conflict based on bargaining power: Organisational power distance orientation matters", International Journal of Conflict Management, Vol. 31 No. 5, pp. 781-800. https://doi-org.nukweb.nuk.uni-lj.si/10.1108/IJCMA-06-2019-0092

³⁰Galinsky, A.D., Schaerer, M. and Magee, J.C. (2017), "The four horsemen of power at the bargaining table", Journal of Business and Industrial Marketing, Vol. 32 No. 4, pp. 606-611

4. An organisation wins the inter-organisational transactions/bargains.

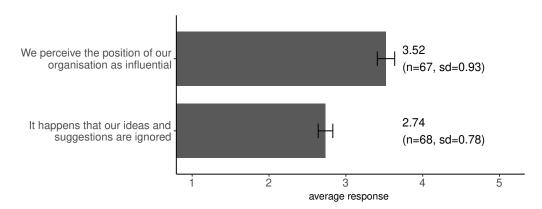


Figure 5: Perception of power and influence among stakeholders

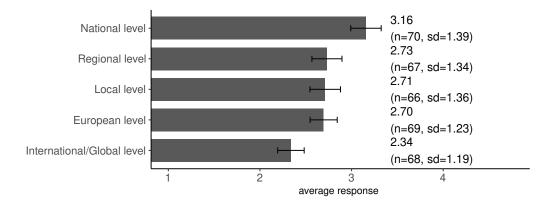
Stakeholders (their representatives) were asked about relations and work with other organisations, whether they feel ignored or influential (Figure 5, Table 8). On average, more organisations feel influential (average response = 3,52) than ignored (average response = 2,74). Only one among 68 organisations answered they always feel ignored, on the contrary 3 of them never feel ignored. However, 50% of them answered that they Sometimes and 32% that they Rarely feel ignored. Only 8 stakeholders (12%) perceive the position of their organisation as rarely or never influential.

Never Rarely Sometimes Very often Alwavs Valid ava sd It happens that our 3 (4%) 22 (32%) 34 (50%) 8 (12%) 68 (100%) 2.7 0.8 1 (1%) ideas and suggestions are ignored We perceive the po-2 (3%) 6 (9%) 22 (33%) 29 (43%) 8 (12%) 67 (100%) 3.5 0.9 sition of our organisation as influential

Table 8: In relation to other organisations we work with...

Important aspect of power is the environment and context to which it is related. To evaluate this, stakeholders were asked about the level of operation and perception of their own power.

Figure 6: How powerful do you perceive the position of your organisation in the policy decision-making processes regarding childhood obesity?



Stakeholders were asked how they perceived the power of their organisation in the policy decision-making processes regarding childhood obesity (Figure 5, Table 9). Stakeholders feel the most powerful

at the National level (average response = 3.16), while most of them answered they feel extremely powerful (20%) or very powerful (26%). On average they feel a little less powerful at the Regional (average response = 2.73), Local (average response = 2.71) and European levels (average response = 2.70). On the International/Global level they feel the least powerful (average response = 2.34), as more than 60% of stakeholders answered they are not powerful at all or only slightly powerful.

Table 9: How powerful do you perceive the position of your organisation in the policy decision-making processes regarding childhood obesity?

	1 - Not at all power- ful	2	3	4	5 - Ex- tremely powerful	Valid	avg	sd
Local level	15 (23%)	18 (27%)	13 (20%)	11 (17%)	9 (14%)	66 (100%)	2.7	1.4
Regional level	17 (25%)	12 (18%)	18 (27%)	12 (18%)	8 (12%)	67 (100%)	2.7	1.3
National level	13 (19%)	9 (13%)	16 (23%)	18 (26%)	14 (20%)	70 (100%)	3.2	1.4
European level	12 (17%)	23 (33%)	14 (20%)	14 (20%)	6 (9%)	69 (100%)	2.7	1.2
International/Global level	20 (29%)	22 (32%)	12 (18%)	11 (16%)	3 (4%)	68 (100%)	2.3	1.2

3.1.2 Trust

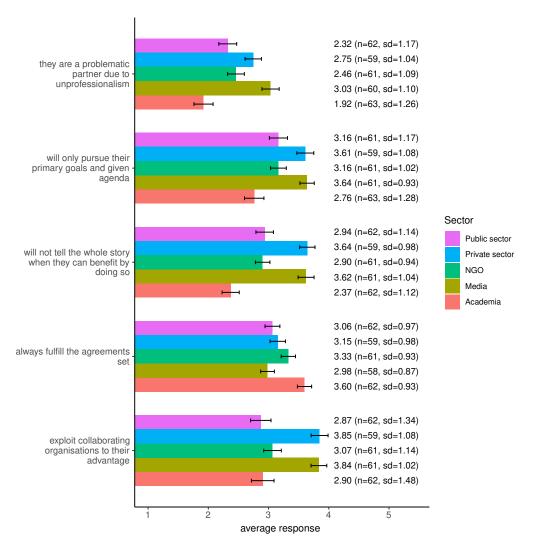
Stakeholders dialogues exposed trust as one of the most essential components of the stakeholders' engagement and collaboration. Avery Aunger et all, 2021 have put trust as the central component of the successful inter-organisational collaboration.

STOP stakeholders' dialogues have delivered some additional insights, for instance that different groups of stakeholders perceive the definition and the level of trust among themselves differently.

Dialogues have identified the following elements of trust, defining the collaboration among stakeholders: (1) to pursue only organisations primary goals and given agendas, (2) to not tell the whole story when benefiting by doing so, (3) being problematic due to unprofessionalism, (4) exploiting collaborating organisations to the own advantage, (5) to always fulfil the agreements set. On the other side, dialogues have also elaborated on the differentiation among different stakeholders' groups and have identified the following groups as the important ones for the further consideration: (1) academia, (2) public sector, (3) private sector, (4) media, (5) non-governmental organisations.

³¹Avery Aunger J, Millar R, Greenhalgh J, Mannion R, Rafferty AM and McLeod H. 2021. Why do some inter-organisational collaborations in healthcare work when others do not? A realist review. BMC Systematic Reviews 10:82.

Figure 7: Overview in differences in trust (comparison of trust components among stakeholders groups (Lickert scale 1-5)



Regarding trust among the stakeholder organisations, we could observe the following findings:

- The academia seems to be the most trustworthy group of stakeholders, with the least expressed concerns regarding their unprofessionalism and perceived highest fulfilment of the agreements set with them.
- The private sector and media have similar perception of trust components among different groups
 of stakeholders, with highest scores in three out of five elements: they are most often perceived
 as persuading their own goals and agendas, not telling the whole story to other stakeholders when
 benefiting by doing so and exploiting collaborating organisations to the own advantage.
- The NGOs are perceived as the organisations with second highest perception of always fulfilling
 the agreements set, they are perceived rather neutral regarding unprofessionalism and might be
 seen as someone who goes for their own goals and agendas, and someone who might exploit
 collaborating organisations.
- In general, most challenging element of trust for all explored groups of stakeholders is persuasion
 for own primary goals and given agendas, followed by exploiting others and not telling the whole
 story if doing so would be beneficial to them.

Table 10: Elements of trust and stakeholders groups: Agreement of the stakeholder organisations with the five trust indicative statements.

Statements	Academia	Public sector	Private sector	Media	NGOs
persuation for own primary goals and	2.76	3.16	3.61	3.64	3.16
given agendas	-	+	++	++	+
2. not telling the whole story when benefit-	2.37	2.94	3.64	3.62	2.90
ing by doing so	_	-	++	++	-
3. being problematic due to unprofession-	1.92	2.32	2.75	3.03	2.46
alism	_	_	-	+	_
exploiting collaborating organisations to	2.90	2.87	3.85	3.84	3.07
the own advantage	-	-	++	++	+
5. always fulfilling the agreements set	3.60	3.06	3.15	2.98	3.33
5. always lumining the agreements set	++	+	+	-	+

Legend:

Statements 1 to 4 represent negative elements of trust, and statement 5 a positive element of trust (highlighted).

Below 1-99: —

2.00 - 2.49: -

2.50 - 2.99: -

3 is a neutral position

3.00 - 3.49: +

Above 3.50: ++

It was essential to consider mechanisms underlying functioning of stakeholders' engagement, such as building trust and faith in the collaboration to maximise synergy and thus collaborative performance.

Analysis of trust indicators is extensively presented in section 3.4 of this report, where they are operationalised and analysed in form of social networks.

3.1.3 Evidence and transparency

The third identified concept has evolved around the problem of evidence and transparency in relation to evidence-based decision making and action.

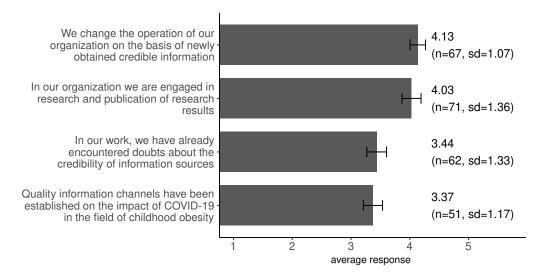
Transparency is a critical element of intentional sharing of information (knowledge, data, analysis results...), whereby the information exchanged among the stakeholders can be used to modify decisions or actions of the parties involved; also, relevant is perception of the quality of the received information (Schnackenberg & Tomlinson, 2016)⁸².

On the basis of stakeholders' answers, we can anticipate evidence to have an important role in almost all participating organisations. Moreover, most organisations are engaged in research and credible information has an impact on organising operations. This nicely demonstrates Figure $\frac{8}{10}$, where stakeholders most strongly agree with the statement "We change the operation of our organisation on the basis of newly obtained credible information" (average response = 4.13), while only 7 of 67 stakeholders disagree or somewhat disagree with it. The majority of stakeholders also, quite strongly agree (agree = 54%, somewhat agree = 24%) with the statement "In our organisation we are engaged in research and publication of research results" (average response = 4.03). However, there is a question of the credibility of the results, when more than 50% of stakeholders somehow agree with the statement "In our work, we have already encountered doubts about the credibility of information sources" (average response =

³²Schnackenberg AK, Tomlinson EC. Organizational Transparency: A New Perspective on Managing Trust in Organization-Stakeholder Relationships. Journal of Management. 2016;42(7):1784-1810. doi:10.1177/0149206314525202

3.44). At least they agree with the statement "Quality information channels have been established on the impact of COVID-19 in the field of childhood obesity" (average response = 3.37). Regarding COVID-19 statement, most of the stakeholders are on the agreeing side, however, 29% of them are remaining neutral.

Figure 8: We are kindly asking you to express your organisation agreement with the following statements below, regarding childhood obesity



3.1.4 Equity

Equity is referring to equal opportunity and fairness in social context, including institutional forces that promote inclusion – also for minoritized or traditionally excluded individuals/stakeholders; also, it demands focus on structural disparities, and often calls for redistribution of resources and opportunities (Galloway in Ishimaru, 2019)³³.

To investigate the concept of equity, respondents were asked how their ation is including equity in their operations and actions.

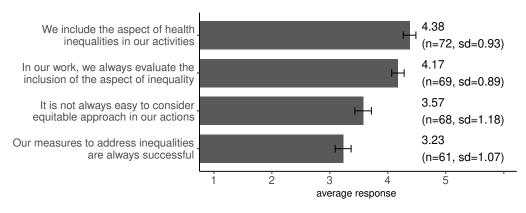


Figure 9: Equity in the stakeholders' daily basis work

³³Galloway in Ishimaru, 2019, "Leading Equity Teams: The Role of Formal Leaders in Building Organizational Capacity for Equity"

Stakeholders consider the inequalities at their work as they quite strongly agree with all the statements listed in Figure [9]. This supports the data in Table [10], where is demonstrated more than 80% of stakeholders are on the agreeing side for the statements "We include the aspect of health inequalities in our activities" (average response 4.38) and "In our work, we always evaluate the inclusion of the aspect of inequality" (average response = 4.17).

In addition, 2/3 are completely aware it is not always easy to consider an equitable approach in their work. As it is indicated in Figure 9, stakeholders at least agree with "Our measures to address inequalities are always successful" (average response = 3.23), moreover, 20% of them are on the disagreeing side and 36% of stakeholders remain neutral. This shows there is still room to better address and work on actions to lower inequalities.

Table 11: We are kindly asking you to express your organisation agreement with the following statements below.

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Valid	avg	sd
We include the aspect of health inequalities in our activities	3 (4%)	0 (0%)	4 (6%)	24 (34%)	39 (56%)	70 (100%)	4.4	0.9
In our work, we al- ways evaluate the in- clusion of the aspect of inequality	2 (3%)	0 (0%)	10 (15%)	28 (42%)	27 (40%)	67 (100%)	4.2	0.9
It is not always easy to consider equitable approach in our ac- tions	7 (11%)	4 (6%)	13 (20%)	30 (45%)	12 (18%)	66 (100%)	3.5	1.2
Our measures to address inequalities are always successful	6 (10%)	6 (10%)	22 (37%)	21 (36%)	4 (7%)	59 (100%)	3.2	1.1

3.1.5 Sustainability

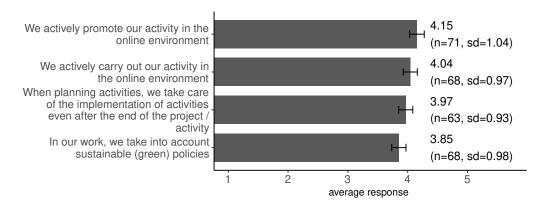
Sustainability is agility and adaptability of an action to understand and adapt diverse resources and engage with their providers (Fowler, 2016) [34]; "it involves the preservation and/or maintenance of a finite and crucial environment; and incurs some duty of social justice – between and within generations" (Gray, 2010) [55].

Taking into consideration the sustainability aspect, most stakeholders use the online environment to actively promote and carry out their sustainable activities.

³⁴Alan Fowler (2016) Non-governmental development organisations' sustainability, partnership, and resourcing: futuristic reflections on a problematic trialogue, Development in Practice, 26:5, 569-579, DOI: 10.1080/09614524.2016.1188883

³⁵Rob Gray, Is accounting for sustainability accounting for sustainability...and how would we know? An exploration of narratives of organisations and the planet, Accounting, Organizations and Society, Volume 35, Issue 1, 2010, Pages 47-62.

Figure 10: Dissemination means of the organisation, for the dissemination of the nutrition, physical activity and obesity topics



This supports the data in Table 15, as is indicated more than 70% of stakeholders are on the agreeing side regarding the statements, which describes use of online environment (average response = 4.15 and 4.04). They very often (40% of stakeholders) or always (20% of stakeholders) take care of the implementation of the activities even after the end of the project. There were only 3% of stakeholders, who answered with never (Table 12). Sustainable (green) policies have a significant impact on stakeholders' work as can be seen in Table 12 to 31% of stakeholders always consider sustainable policies, 32% never and 29% of them sometimes. Overall, on all given statements about sustainability, stakeholders quite strongly agree (average response from 4.15 to 3.85), which shows sustainability is really an important factor in stakeholders' work.

Table 12: Please define the frequency in relation to the principle of sustainability in the operation of your organisation:

	Never	Rarely	Sometimes	Very often	Always	Valid	avg	sd
When planning activities, we take care of the implementation of activities even after the end of the project / activity	2 (3%)	0 (0%)	16 (26%)	25 (41%)	18 (30%)	61 (100%)	3.9	0.9
In our work, we take into account sustainable (green) policies	1 (2%)	4 (6%)	20 (30%)	22 (33%)	19 (29%)	66 (100%)	3.8	1
We actively promote our activity in the online environment	2 (3%)	3 (4%)	12 (17%)	19 (28%)	33 (48%)	69 (100%)	4.1	1
We actively carry out our activity in the online environment	1 (2%)	3 (5%)	15 (23%)	22 (33%)	25 (38%)	66 (100%)	4	1

3.2 Characteristics of decision-making processes in preventing obesogenic environments

A number of theoretical models are present of how policies are developed, existing policies are changed and how the process of adoption works. The linear model of policy development describes policymaking as a step-by-step process in which advocacy takes place in a complex and often fluid and unpredictable context. The best advocacy will take work out with the best methods and tactics for each as part of a wider strategy while strategies for advocacy require consideration of the agenda setting.

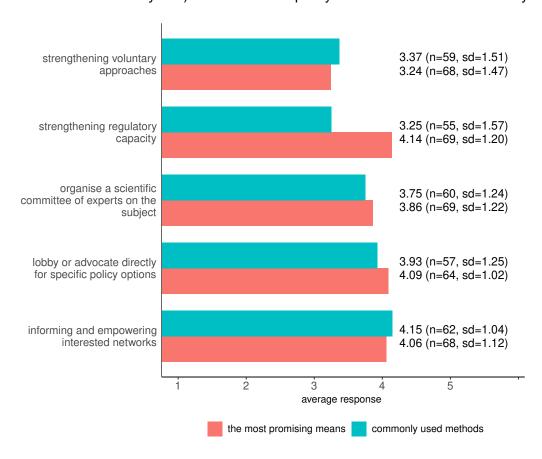
³⁶Brinsden, H. and Lang, T. (2015) An introduction to public health advocacy: reflections on theory and practice, Food Research Collaboration Policy Brief. Available at: https://criancaeconsumo.org.br/wp-content/uploads/2014/02/315912016-An-Introduction-to-Public-Health-Advocacy-Reflections-on-Theory-and-Practice-1.pdf (Accessed: April 13, 2022).

Starting with evaluation of broad range of strategies to influence the policy decisions in childhood obesity in the first STOP WP10 survey, new questionnaire as surveying tool for measuring characteristics of decision-making processes was developed. Part of the questionnaire with five indicators evaluating the most promising means were later used to evaluate two types of strategies described as: i) advocating regulative approaches and ii) introducing soft background mechanisms.

3.2.1 Indicators

Stakeholders were asked about their most promising means and already used methods regarding to influence the policy decisions in childhood obesity. Results are demonstrated in Figure 11. As it is seen, "strengthening regulatory capacity" is the most promising mean, but also the least commonly used method. Stakeholders marked as the next most promising means "lobby or advocate directly for specific policy options" (average response = 4.09) and "informing and empowering interested networks" (average response = 4.06). They give value to the organisation of a scientific committee of experts on the subject (average response = 3.86), which is followed by "strengthening voluntary approaches" (average response = 3.24).

Figure 11: According to your organisation what are the most promising means (and what methods does your organisation most commonly use) to influence the policy decisions in childhood obesity?



Based on the factor analysis, the factor model, which describes the use of more or less binding political approaches, was created. In the analysis were included 5 different approaches: Strengthening regulatory capacity; strengthening voluntary approaches; Lobbying or advocating directly for specific policy options; Organise a scientific committee of experts on the subject and informing and empowering interested networks. Based on the results of the most promising means, demonstrated in Table 13, the factor model in Figure 12 was created - five different mechanisms were thus classified into two factors: Soft background mechanisms for health in all policies approach (MR1) and Advocating regulation of

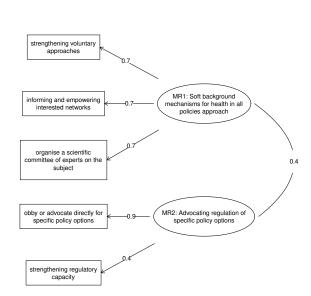
specific policy options (MR2).

Table 13: The most promising means (factor analysis)

	Indicators	MR1	MR2
Q15a_1	strengthening regulatory capacity	0.01	0.42
Q15b_1	strengthening voluntary approaches	0.72	-0.29
Q15c_1	obby or advocate directly for specific policy options	0.04	0.91
Q15d_1	organise a scientific committee of experts on the subject	0.66	0.14
Q15e_1	informing and empowering interested networks	0.70	0.31

In MR1 were classified all those mechanisms with high values in the first column and low values in column MR2 in Table $\boxed{13}$ (Q15b = 0.72; Q15D = 0.66; Q15E = 0.70). It goes vice versa for factor MR2. Figure $\boxed{12}$ demonstrates all three mechanisms, which define the MR1 factor have the same correlation (0.7). On the other hand, the MR2 has one factor much more correlated (0.9 = lobby or advocate directly for specific policy options) than other (0.4 = strengthening regulatory capacity).

Figure 12: Factor model – informative graphic representation of the factor analyses outcome

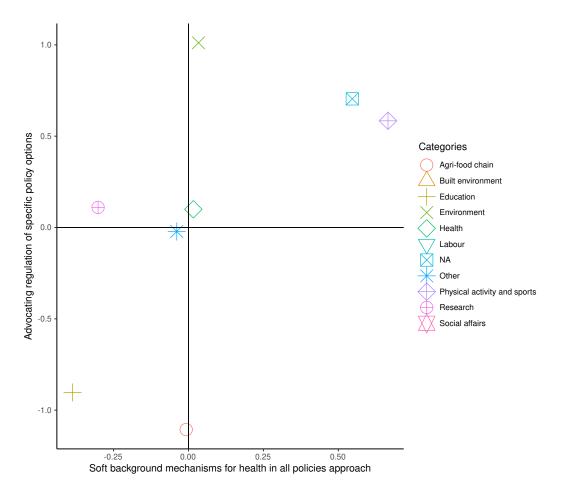


Two factors provide two-dimensional space presented in the subsequent figures, with the first dimension, the support of Soft background mechanisms for health in all policies approach (MR1), represented on the horizontal axis, and the second dimension, the support of Advocating regulation of specific policy options. (MR2), on the vertical axis. In each diagram, centroids (average values) for specific categories of stakeholders are presented. The legend beside the diagram represents groups of stakeholders divided into sectors. Further comparisons are presented below, based on the new elaborated dimensions.

3.2.2 Soft background mechanisms for HiAP or advocating regulation of specific policy options, by sectors

Regarding the use of soft background mechanisms (soft) or advocating regulation of specific policy options (hard), different sectors were presented on the diagram with centroids (Figure 13).

Figure 13: Soft background mechanisms (soft) or advocating regulation, by sectors, diagram with centroids

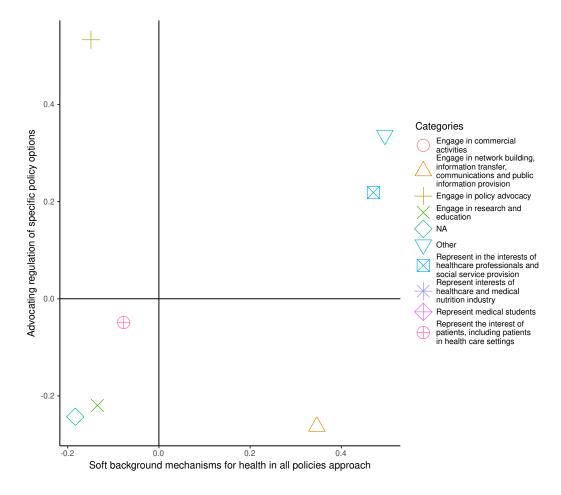


It is demonstrated that the most neutral is the Health sector and stakeholders in the group of Others. The greatest supporter of hard mechanisms is the Environment sector. On the other hand, the Agri-food chain is least in favour of that measure. Both are more or less neutral about the use of soft approaches. However, the greatest supporter of soft mechanisms is the sector of Physical activity and sports, moreover, this sector is also in favour of hard mechanisms. The same goes for the stakeholders with unidentified (NA) sector. Stakeholders who are not supporters of soft approaches are in Research and Education, with a difference that the Education sector is against the use of hard approach, but Research slightly supports it.

3.2.3 Soft background mechanisms for HiAP or Advocating regulation of specific policy options, by stakeholders in health sector

Figure 14 demonstrates more detailed information on where stakeholders from the Health sector are engaged. The horizontal axis represents the use of Soft background mechanisms for health in all policy approaches (short = soft approach) and the axis represents the use of Advocating regulation of specific policy options (short = hard approach). Centroids represent stakeholders engaged in different categories, which are also explained in the legend beside.

Figure 14: Soft background mechanisms (soft) or advocating regulation, by stakeholders in health sector

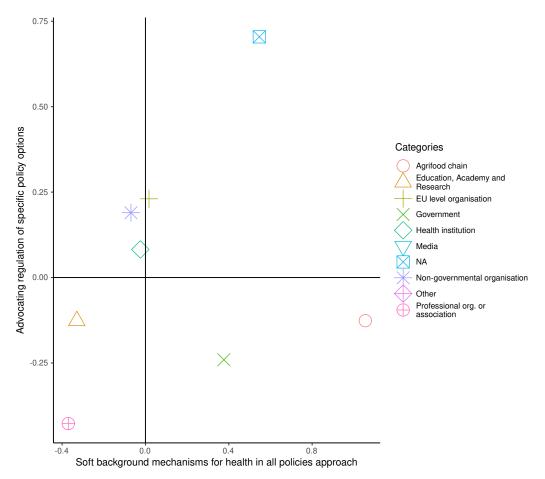


As is seen in the diagram, those stakeholders from the health sector, who engage in network building, information transfer, communications and public information provision are the most against the use of hard approaches, however they support soft approaches. On the contrary, those who are against the use of both approach mechanisms are organisations with unidentified sector (NA) and those who engage in research and education. In addition, those organisations, which represent the interest of patients, including patients in health care settings, are against both mechanisms; however, they are not so opposed to the hard approach. On the other hand, health institutions engaged in policy advocacy are against the use of soft approaches and in high support of hard mechanisms. Organisations, which represent the interest of healthcare professionals and social service provision, and some organisations in-group of others, are supporters of both soft and hard approach.

3.2.4 Soft background mechanisms for HiAP or Advocating regulation of specific policy options, by stakeholders formal type of organisation

Figure 15 demonstrates the diagram with centroids, where centroids are sorted between four quadrants on the basis of the support of using Soft background mechanisms for health in all policy approaches (short = soft approach) and the use of Advocating regulation of specific policy options (short = hard approach). Each centroid represents one type of formal organisation (their names are listed in the legend on the left side). The most neutral ones, but still a little in favour of the use of hard approaches are Health institutions, Non-governmental organisations, EU level organisations.

Figure 15: Soft background mechanisms (soft) or advocating regulation, by stakeholders formal type of organisation



The diagram, which shows formal types of organisations (centroids), demonstrates that the most neutral about soft approach and slightly for hard approach are from sectors who work in Health institutions, Non-governmental organisations and EU level organisation. On the contrary, completely against both hard and soft approaches are Professional organisations or associations and those from Education, Academy and Research. Strong supporter of the soft approach and slightly against the use of hard mechanisms is the Agri-food chain. The same, but a little less supporting, soft approaches go for the Government.

3.3 Networks of collaboration and trust

One of the topics covered in the second survey was collaboration of stakeholders with listed types of institutions. The list of institutions was provided in advance, the respondents indicated intensity of their collaboration with each of listed items on 1 - 5 scale with categories ordered from never, rarely, sometimes, very often to always. in this part of report the collaboration data is operationalised as collaboration network in which the responses "very often" and "always" define collaboration of respondents with listed institutions.

Within the report several descriptors are used for categorisation of responding stakeholders. These are:

- i) Sector of organisation,
- ii) Category based on organisational point of view and
- iii) additional contextual categorisation if respondents indicated themselves as part of the health sector. These three categorisations of responding stakeholders were used to construct three representations

of collaboration networks responding stakeholders with listed institutions. Strength of ties (weights in the network) represent the average collaboration strength over category members.

3.3.1 Collaboration network 1 – category based on organisational point of view

Within the graph representation of the network orange circles present responding stakeholder categories, and blue squares types of institutions stakeholders are collaborating with. Ties strength is depicted by width and colour of plotted relations. Where darked shades of grey represent stronger connections. In the following - matrix - representation of the same network, rows represent responding stakeholder categories and columns institutions stakeholders are collaborating with. To simplify the interpretation, blockmodeling method for two-mode networks was applied on the network, so categories are reordered according to obtained clusters.

Figure 16: Collaboration network: i) Organisational point of view

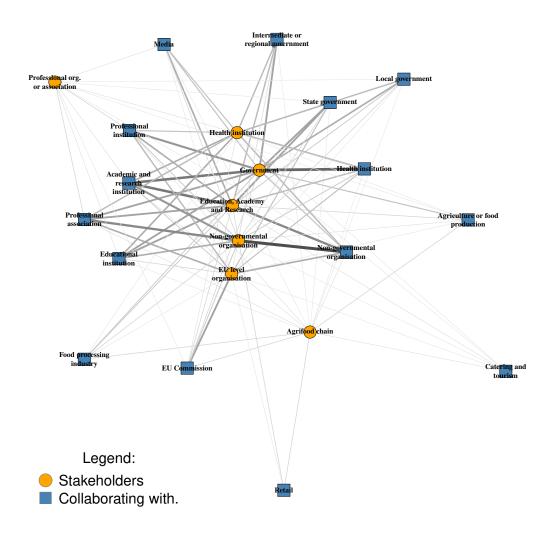
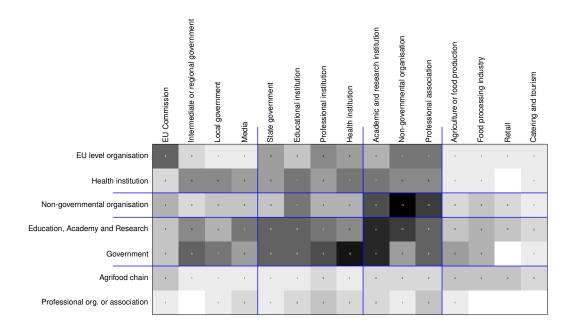


Figure 17: Collaboration network: i) Stakeholders according to organisational point of view - matrix representation. Blockmodeling optimisation of partitions completed 1 solution with minimal error = 254.425.



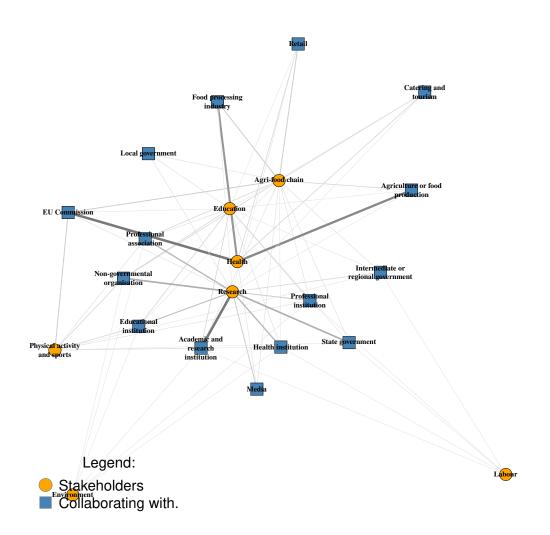
The interpretation of the network structure should be done row-wise due to the differences in number of stakeholders covered by each (row) category and focused on relative differences between cells (and clusters), Figure 17.

In the collaboration network in which the responding stakeholders are categorised according to organisational point of view, Education, Academy, and Research and Government type of stakeholders relatively strongly collaborate with all listed types of institutions, NGOs highly collaborate with Educational, Academic and research institutions, other NGOs, and professional associations. EU level organisations and Health institutions are clustered together, they collaborate with all but agri-food chain institutions (the large cluster).

3.3.2 Collaboration network 2 – based on sector of organisation

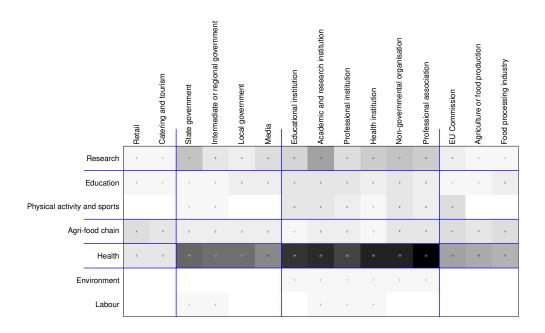
The most apparent feature of the collaboration network with sectoral categorisation of stakeholders is the difference in tie weights between health and other sectors, which is consequence of the difference in number of stakeholders covered by each category.

Figure 18: Collaboration - Sector of organisation Optimisation of all partitions completed 1 solution(s) with minimal error = 120.9167 found



Here the rule that the differences should be observed by row is essential. Taking the rule into account it is obvious that health sector barely collaborates with organisations active in retail, catering and truism, while stakeholders from agri-food chain relatively strongly collaborate with retail, catering and tourism and other agri-food chain organisations (food production and processing industry), Figure 18. It seems the research is collaborating with media, governmental, educational, professional and health organisations as well as with NGOs. Education and physical activity sector is collaborating with educational, professional, health organisations and NGOs and not so much with governmental organisations and media. Number of stakeholders categorised as Environment and Labor is so small their collaborations cannot be evaluated.

Figure 19: Collaboration – ii) Category based on organisational point of view - matrix representation. Blockmodeling optimisation of partitions completed 1 solution with minimal error = 254.425.

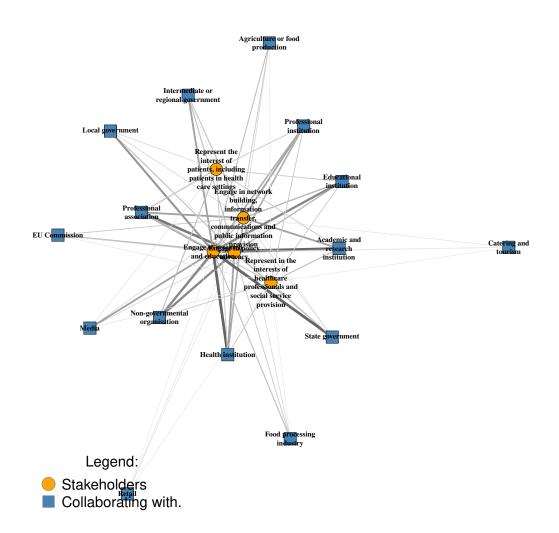


3.3.3 Collaboration network 3 - based on categorisation of Health sector

The third network is focused on organisations that indicated themselves operating in health sector. These are categorised according to their engagement as:

- 1. Engage in network building, information transfer, communications and public information provision
- 2. Engage in policy advocacy
- 3. Represent in the interests of healthcare professionals and social service provision
- 4. Represent the interest of patients, including patients in health care settings
- 5. Engage in research and education

Figure 20: Collaboration network: iii) Additional contextual categorisation if respondents indicated themselves as part of the health sector

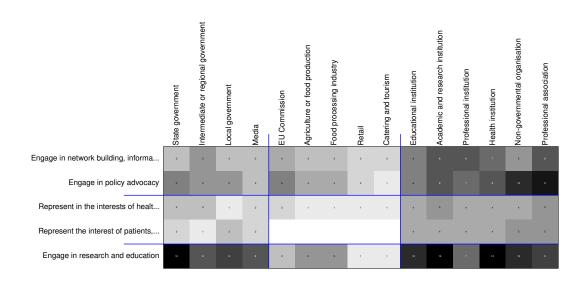


Like for previous networks, listed organisations were clustered into three clusters consisting of: a) governmental organisations and media, b) agri-food chain and EU commission, and c) educational, research, health, professional organisations and NGOs.

In terms of collaboration structure all health stakeholders highly collaborate with cluster c, educational, research, health professional and nongovernmental organisations. Stakeholders from categories 1 and 2, evenly collaborate with organisations from governmental-media and agri-food chain-EU commission clusters, although this collaboration is less intense than the one with cluster c. Organisations from categories 3 and 4 practically do not collaborate with organisations from agri-food chain EU commission cluster, but have some collaboration with governmental organisations and media.

The last category of organisations who engage in research and education collaborate with governmental – media cluster as strong as with cluster c and slightly less strong with agri-food chain cluster.

Figure 21: Collaboration - Additional contextual categorisation of health sector. Blockmodeling optimisation of partitions completed 1 solution with minimal error = 117.1333.



3.4 Trust and transparency as network data

Within the discussions in WP10 dialogues of STOP project, problem of trust was indicated as one of the important issues in the collaborating environment of stakeholders dealing with childhood obesity. To shed a light on this specific issue additional research strand was added to the survey, analysed and is presented in this sub-section.

3.4.1 Description of the methodology

The initial challenge of tackling the concept of trust, was measurement of usually individual attitude towards specific actor, in the setting of collective stakeholders. The second challenge was the measurement of differences in trust regarding different actors of interest – e.g. trust to specific stakeholder group.

To address these challenges, simple measurement tool was introduced, consisting of five claims indicating indicating experience of responding stakeholder with each of the listed types of institutions: private sector, public sector, academia, NGOs and media. Responding stakeholders evaluated these claims on 1 to 5 scale with categories ranging from disagree, somewhat disagree, neutral, somewhat agree to agree.

Five claims:

- 1. these institutions are exploiting collaborating organisations to their advantage,
- 2. these institutions always fulfilling the agreements set [57],
- 3. these institutions will not tell the whole story when they can benefit by doing so,
- 4. these institutions will only pursue their primary goals and given agenda,
- 5. these institutions are problematic partner due to unprofessionalism

³⁷This is the only claim with positive connotation, which requires some caution at interpretation and comparison with data gathered based on other claims.

Data gathered with this measurement tool is operationalised as bipartite social networks with categories of responding stakeholders presented as first and listed types of institutions as second partition. Tie values in these networks are defined as aggregated mean response for each of the stakeholder category. For the visualisation purposes constant value 3 was subtracted of tie weights, so values range from -2 indicating total disagreement with a statement to 2 indicating agreement with it.

Each of the five claims is used to define separate bipartite network.

Generated networks are presented in two formats:

- As a graph, in which responding stakeholder categories are represented as yellow circles and
 the listed types of institutions as blue squares. Positive relations indicating agreement with the
 statement defining the network are marked blue, negative relations indicating disagreement with
 the claim are red. Size of yellow circles vary according to number of stakeholders representing the
 category.
- Matrix representation, in which rows represent responding stakeholder categories and columns listed types of institutions. The crossing cell in the table contains the tie value between them. Strength of positive (agreement) ties is indicated by shades of grey and strength of negative (disagreement) ties by shades of red.

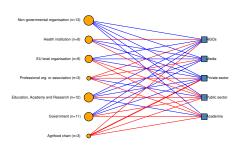
Generated networks of trust, can be used to identify two partitions: partition of stakeholders according to similarity of their trust to listed organisations, and partition of listed organisations based on how they are trusted. The partitions, obtained by blockmodeling, are used in matrix representation of the networks in which units classified into the same cluster are grouped together while clusters are divided by blue lines. To simplify the analysis the default number of clusters for both partitions was arbitrarily set to 3.

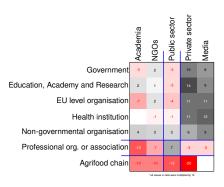
3.4.2 Trust networks 1 – stakeholder category based on organisational point of view

The first set of analysed networks is generated on the basis of initial categorization of responding stake-holders according to organisational point of view. Most of categories accept professional organisation and agri-food chain are relatively well represented each containing 9 or more stakeholders. Each of the two mentioned have only 3 representatives, which may effect the validity of tie weights from these two categories.

Overview of the networks structure:

"Focal institutions are exploiting collaborating organisations to their advantage": interpretations are based on matrix representation of the network. In this network clear structure of two stakeholder (rows) clusters can be observed: the first consists of stakeholders originating from Agri-food chain and Professional organisations or associations which will together be referred as private sector. In general these stakeholders disagree with a claim that listed types of organisations are exploiting collaborating organisations to their advantage. Some evidence of distrust (agreement) can be found among Professional organisations aiming to organisations from public sector. The second cluster of stakeholders consist of stakeholders from all other categories, that we can refer as public sector (all levels of governance, health, academia, education and research) and non governmental organisations. These stakeholders express clear difference in attitude towards private sector and media and other listed types of institutions (Academia, NGOs and Public sector). Relatively high positive tie weights indicate clear agreement with a statement, that former exploit other organisations to their advantage. Overall positive weights of NGOs towards all types of listed organisations indicate relatively high level of general distrust present among non-governmental organisations.



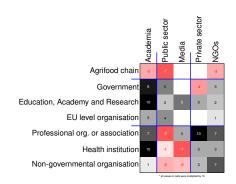


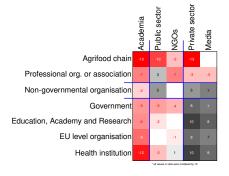
- (a) Graph representation of the network
- (b) Matrix representation of the network

Figure 22: Focal institutions are exploiting collaborating organisations to their advantage

In a similar manner different structural patterns can be observed in networks defined on a basis of other claims:

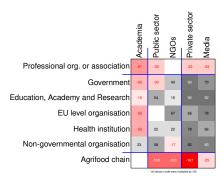
"Focal institutions always fulfil the agreements set": The global structure of this network indicates
that professional, health and non-governmental organisations disagree that public sector and media fulfil the agreements set. Academia has relatively good reputation overall. In this network
stakeholders from agri-food chain generally disagree that all but private institutions and media
fulfil the agreements. They expressed the least confidence to public sector.

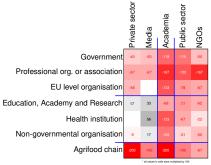




(a) ... always fulfil the agreements set

(b) ... will not tell the whole story when they can benefit by doing so





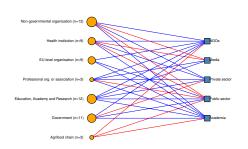
(c) ... will only pursue their primary goals and given (d) ... are problematic partner due to unprofessionalism agenda

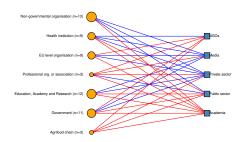
Figure 23: Matrix representations of trust networks for stakeholder category based on organisational point of view

• Further, "focal institutions will not tell the whole story when they can benefit by doing so": this network reveals clear division to three clusters of stakeholders described for the first of the trust

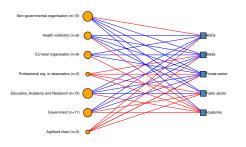
networks. While private sector (Agri-food chain and Professional organisations) generally disagrees with this claim for all listed types of institutions, public sector (all levels of governance, health, academia, education and research) and NGOs agree that private sector and media will not tell always tell the whole story. The interesting information in this context is the distrust of professional organisations and NGOs towards public sector.

- Also, "focal institutions will only pursue their primary goals and given agenda": this claim may not
 be straightforwardly connected to trust, but provides good insight into how stakeholders perceive
 themselves or are perceived by others. E.g. while other stakeholders believe NGO's only pursue
 their primary goals NGO's for themselves say they do not.
- Finally, "focal institutions are problematic partner due to unprofessionalism": the overall picture is, that stakeholders generally disagree that unprofessionalism is a problem, the relative differences in tie values reveal the least problematic is academia, the only that is by some stakeholders problematic due to unprofessionalism is Media. The outstanding is also distrust of academic, educational and research stakeholders towards private sector.

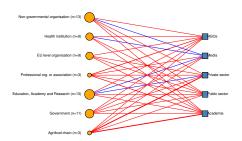




(a) ... always fulfil the agreements set



(b) ... will not tell the whole story when they can benefit by doing so

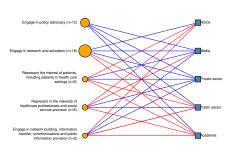


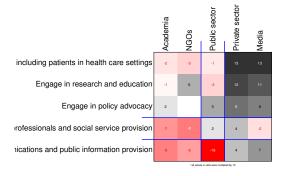
(c) ... will only pursue their primary goals and given (d) ... are problematic partner due to unprofessionalism agenda

Figure 24: Graph representations of trust networks for stakeholder category based on organisational point of view

3.4.3 Trust networks 2 – stakeholders within health sector

The second set of analysed networks is generated on stakeholders who identified themselves as part of the health sector. These respondents were asked to identify what kind of organisation they represent. Each of the five categories is represented with at least 5 stakeholders: those who engage in policy advocacy (12), engage in research and education (18), represent the interest of patients (6), represent the interest of healthcare professionals (6) and engage in network building and public information provision (5).



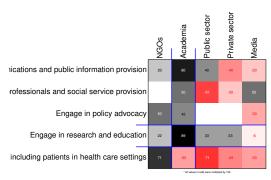


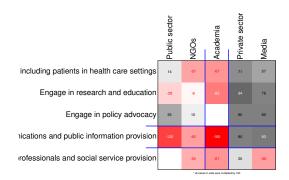
- (a) Graph representation of the network
- (b) Matrix representation of the network

Figure 25: Focal institutions are exploiting collaborating organisations to their advantage

Overview of the networks structure:

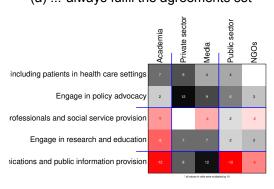
General structure of networks indicates some level of distrust towards private sector and media while on the other side stakeholders from NGOs and Academia present reliable collaborators. Health-care stakeholders that have slightly out standing attitudes compared to others are those who engage in network building, information transfer and public information provision. They have stronger opinions that other stakeholders, show some level of distrust towards Academia and are the only group that believes that compared to others public sector NGOs and Academia will not only pursue their primary goals. Stakeholders who represent the interests of patients are the only category who believes that everybody but NGOs are problematic partner due to unprofessionalism.

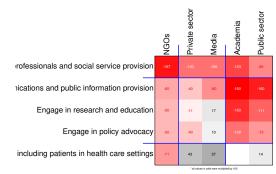




(a) ... always fulfil the agreements set

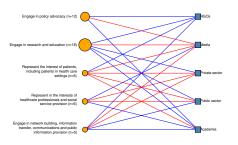
(b) \dots will not tell the whole story when they can benefit by doing so

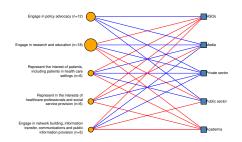




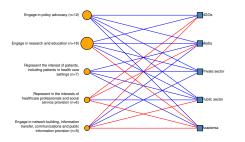
(c) ... will only pursue their primary goals and given (d) ... are problematic partner due to unprofessionalism agenda

Figure 26: Matrix representations of trust networks for stakeholder category based on health sector organisations

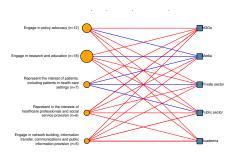




(a) ... always fulfil the agreements set



(b) \dots will not tell the whole story when they can benefit by doing so



(c) ... will only pursue their primary goals and given (d) ... are problematic partner due to unprofessionalism agenda

Figure 27: Graph representations of trust networks for stakeholder category based on health sector organisations

3.5 Agreement charts: clustering of stakeholders according to their responses on specific policy measures topics

In this section the responding stakeholders are clustered according the agreement (how supportive they are) towards specific policy options. By considering different policy measures (measured by the indicating statements on selected policy topic) different alliances of the same group of stakeholders can be observed. Stakeholders were encouraged as much as possible to respond/present the view on behalf of the organisation they work for. In the current analysis agreement or disagreement of stakeholders were measured on the Likert scale from 1 to 5, with 1 – disagree, to 5 – agree. Clusters are enumerated as shown in the agreement chart below.

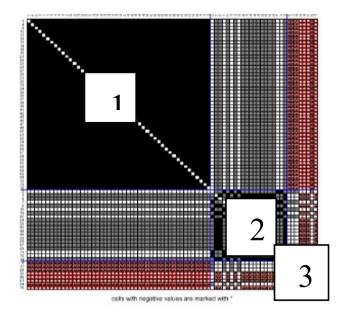


Figure 28: This is an example of agreement chart with three clusters

Methodological introduction:

As part of the STOP project a tool for graphical representations of differences among respondents was developed. The differences between respondents are defined as distances between responses to one or more questions within the survey. The same distances are used to assign stakeholders to clusters $^{\boxed{58}}$, which are later described according set of basic demographic variables. Agreement charts are graphical representations of the stakeholders matrix, where, each row and each column represents a stakeholder. The (dis)similarity of responses of two stakeholders (xi and xj) is represented by the crossing of rows i and j. Black colour on the crossing indicates high level of agreement, while red colour indicate disagreement on the topic. Shades indicate the strength of (dis)agreement.

3.5.1 Food taxation

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful is food taxation in changing the obesogenic environment to prevent childhood obesity, as a part of a comprehensive approach. The question was compound of three indicators related to the queried topic:

- Food taxation
- Taxation of HFSS (high in fat, salt or sugar) products
- Subsidies for e.g. fruit and vegetables

Responses to these three indicators were used to cluster stakeholders and producing agreement chart.

³⁸BATAGELJ, V. (1988), "Generalized Ward and Related Clustering Problems", in Classification and Related Methods of Data Analysis, ed. H.H. Bock, Amsterdam: North-Holland, pp. 67-74.

Figure 29: Agreement on successfulness of the policies, measures and activities – food taxation

As seen in Figure 29, three clusters of responding stakeholders were obtained. In the Table 14, mean values of surveyed indicators for each of obtained clusters is presented. Stakeholders clustered into the first cluster can be called yes-sayers clusters. Practically all of them (44) responded with agree to all three indicators. The second cluster (26 stakeholders) is already much more diverse with significantly lower agreement with general food taxation and still relatively high responses to the indicators on taxation of HFSS products and vegetable subsidies. Stakeholders clustered into the third cluster, of similar size as cluster 2, in average report much lower level of agreement with all three indicators. They disagree with general food taxation but indicated even lower agreement with taxation of HFSS products. The only acceptable solution for them would be establishment of subsidises for health food choices.

Table 14: Clusters of agreement on successfulness of the food taxation policies, measures and activities

Clusters:	1	2	3
Food taxation	5.00	3.73	1.96
Taxation of HFSS (high in fat, salt or sugar) products	5.00	4.35	1.57
Subsidies for e.g. fruit and vegetables	4.84	4.35	3.54
Number of organisations per cluster	44	26	25

A closer look to the stakeholders clustered into the third cluster reveals relatively high proportion of those who are only partially related to the topic of childhood obesity; according to welfare triangle they are relatively often categorised as private formal non-profit or public formal non-profit organisation. In terms

of sector of operation, relatively high proportion of stakeholders from third cluster operate in research and agri-food chain. The proportion of those working in health sector is relatively small, but those who identified themselves as part of health sector primarily work with patients in healthcare settings and are engaged in research and education.

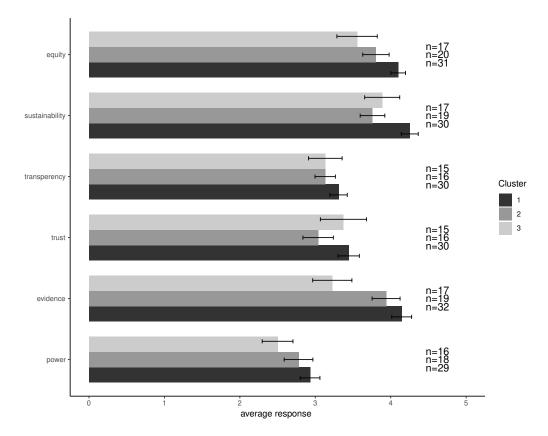


Figure 30: Indices – compound variables on concepts by obtained clusters

According to surveyed concepts (transparency, trust, power, evidence) the major difference among third cluster compared to other two can be observed in the evidence with significantly lower average agreement with the surveyed items.

3.5.2 Food labelling

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful is food labelling in changing the obesogenic environment to prevent childhood obesity, as a part of a comprehensive approach. The question was compound of two indicators related to the queried topic:

- · Food labelling
- Front of pack nutrition labelling

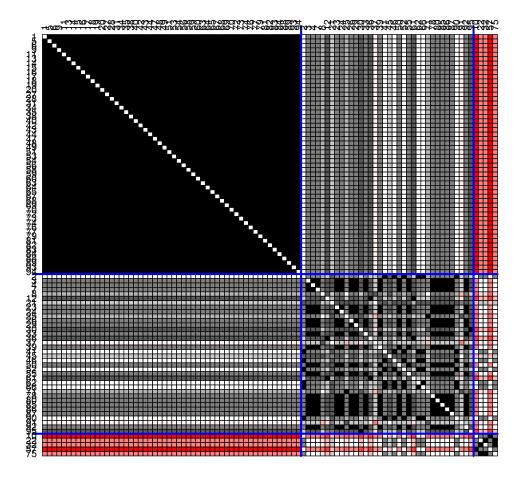


Figure 31: Agreement on successfulness of the food labelling policies, measures and activities

Two indicators of labelling reveal the following three clusters of responses: cluster one as yes-sayers - (average 5, completely agree), cluster two are less enthusiastic but still yes-sayers (average 3.83), and cluster three that stands out the first and second indicator are average 1.5 (mainly disagree).

Table 15: Clusters of agreement on successfulness of the food labelling policies, measures and activities

Clusters:	1	2	3
Food labelling	5.00	3.83	1.60
Front of pack nutrition labelling	5.00	3.86	1.50
Number of organisations per cluster	54	36	5

A closer look in the third cluster reveals a partial organisational relation to childhood obesity, as reported by the respondents from these organisations (weighted proportions); primarily, they are private-non-profit.

Demography in weighted proportions reveals a more significant proportion of health, research and educational organisations in cluster number three. In further comparison with clusters number one and two, the health organisations in the third cluster engage to a greater extent in research and education and represent the interests of healthcare professionals. Accordingly, weighted proportions in the figure of institutional types reveal an outstanding share of the non-governmental organisation and professional association.

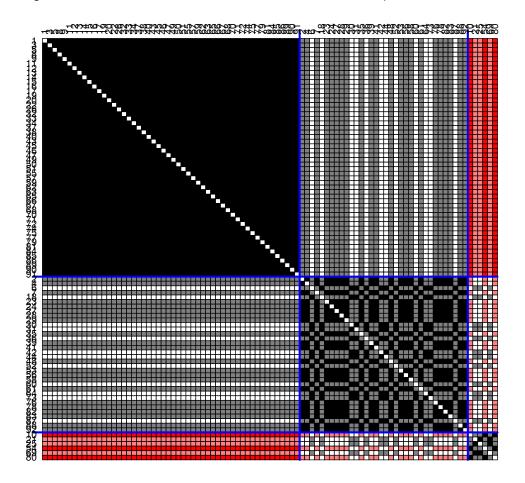
The concept chart reveals that organisations in the third cluster have the lowest equity and power. There are some differences between clusters regarding views on regulative action and soft approaches, the third cluster indicative have the most positive attitude to soft background mechanisms

proaches, the third cluster indicative have the most positive attitude to soft background mechanisms and regulative action. First cluster is more for soft background mechanisms while the second cluster slightly more in favour of hard approaches.

3.5.3 Food reformulation

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful is food reformulation in changing the obesogenic environment to prevent childhood obesity, as a part of a comprehensive approach (from 1 – disagree, to 5 – agree). The question had only one indicator related to the queried topic food reformulation.

Figure 32: Agreement on successfulness of the food reformulation policies, measures and activities



The single indicator of reformulation reveals the following three clusters of responses: cluster one as yes-sayers (average 5, completely agree), cluster two are less enthusiastic but still yes-sayers (average 3.65), and cluster three that stands out (average 1.5, mainly disagree). The third cluster differentiates itself in the negative assessments of the relevance of reformulation, and also taxation, labelling, food marketing. A closer look in the third cluster reveals a partial organisational relation to childhood obesity, as reported by the respondents from these organisations (weighted proportions); primarily, they are private or public non-profits.

Table 16: Agreement on successfulness of the food reformulation policies, measures and activities

Clusters:	1	2	3
Food reformulation	5.00	3.65	1.50
Number of organisations per cluster	52	34	6

Demography in weighted proportions reveals a more significant proportion of educational and research organisations in cluster number three. In further comparison with clusters number one and two, the health organisations in the third cluster engage to a greater extent in research and education. But they do not engage at all in the representation of patients and the interests of healthcare professionals. Accordingly, weighted proportions in the figure of institutional types reveal an outstanding share of the educational institutions.

Figure with compound variables on concepts (transparency, trust, power, evidence) shows no significant difference among the three clusters.

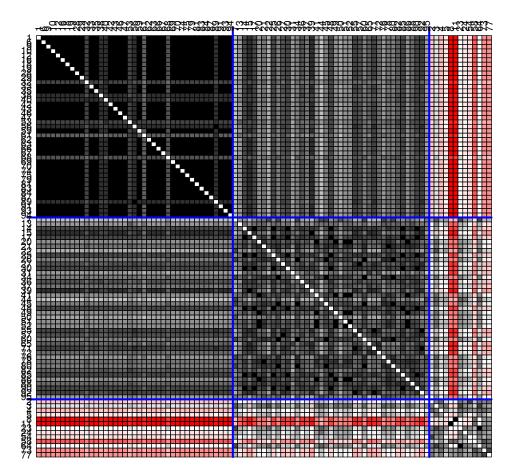
There are some differences between clusters regarding views on regulative action and soft approaches, whereby the third cluster positions against soft background mechanisms and slightly against regulative action. In comparison, the first and second clusters tend to position more neutrally.

3.5.4 Restriction of marketing of unhealthy foods to children

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful are the food marketing measures in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach (from 1 – disagree, to 5 – agree). The question was compound of seven indicators related to the queried topic:

- Reduction of food marketing pressure to children
- Reduction of food marketing pressure on broadcast and online media
- · Reduction of food marketing pressure on product packages
- · Reduction of food marketing pressure to children in retail settings
- · Reducing food marketing pressure to children in urban environment
- · Arrangement of food industry sponsorship of sports events
- Urban planning policies to reduce food outlet density around schools

Figure 33: Agreement on successfulness of the policies, measures and activities, related to the marketing of unhealthy food to children



Three groups were identified regarding the orientation towards the studied policy measures in food marketing.

Seven indicators of food marketing measures reveals the following three clusters of responses: cluster one as the vast majority of yes-sayers, cluster two are a bit less enthusiastic yes-sayers, and cluster three that stands out, being less supportive to the surveyed measures in general, with one explicit no-say.

Among three clusters of respondents on the measures related to food marketing, responses to the indicator "Arrangement of food industry sponsorship of sports events" seems to be the most dividing issue. The deviation is evident in both the second (n = 41) and third (n = 13) cluster, where respondents provided the lowest assessments for the indicator; at the same time, the food industry sponsorships of sports events got the most pessimistic assessment of all the indicators, surveying assessments on the policies, measures, and activities related to food marketing for children.

Table 17: Agreement on successfulness of the policies, measures and activities, related to the marketing of unhealthy food to children

Clusters:	1	2	3
Reduction of food marketing pressure to children	4.97	4.71	2.75
Reduction of food marketing pressure on broadcast and online media	4.97	4.50	2.50
Reduction of food marketing pressure on product packages	4.91	4.33	2.33
Reduction of food marketing pressure to children in retail settings	4.94	4.38	2.42
Reducing food marketing pressure to children in urban environment	5.00	4.38	2.55
Arrangement of food industry sponsorship of sports events	5.00	3.76	1.83
Urban planning policies to reduce food outlet density around schools	4.82	4.13	2.70
Number of organisations per cluster	41	41	13

A closer look into the demography of sceptics towards food industry sponsorships in the third cluster reveals public and private non-profits that represent agri-food chains to a greater extent if compared to the organisations from clusters one and two. Regardless, most respondents from the third cluster positioned their organisations to a more significant measure in the health sector. These from the health sector further described their engagement as research and education, policy advocacy, public information provision and network building, information transfer, communication, and as professional association type of the institution.

The decision-making process chart shows that the respondents from the third cluster do not believe in regulation of specific policy options and neither in soft mechanisms in the policy approach, whereby the respondents from the second cluster tend to sign a slightly positive attitude on both dimensions.

3.5.5 Social marketing campaigns

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful are the food marketing campaigns in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach (from 1 – disagree, to 5 – agree). The question was compound of two indicators related to the queried topic:

- Social marketing campaigns
- Monitoring business actions and performance

Figure 34: Agreement on successfulness of the social marketing policies, measures and activities

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful are the food marketing campaigns in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach (from 1 – disagree, to 5 – agree). Two indicators of food marketing campaigns reveal the following three clusters of responses: cluster one as the vast majority of yes-sayers, cluster two are a bit less enthusiastic yes-sayers, and cluster three that stands out, being less supportive to the surveyed measures in general.

Table 18: Agreement on successfulness of the social marketing policies, measures and activities

Clusters:	1	2	3
Social marketing campaigns	4.62	3.54	1.80
Monitoring business actions and performance	4.58	3.19	1.33
Number of organisations per cluster	59	26	6

A closer look into the demography in the third cluster reveals public non-profit, private-profit and public-private profit organisations. That represents health, research and agri-food chains organisations. Regardless, most respondents from the third cluster positioned their organisations to a more significant measure in the health sector. Those from the health sector further described their engagement as research and education, engage in network building, information transfer, communications, engaging in commercial activities and representing interests of healthcare and medical nutrition industry (see Heath sector figure with weighted proportions), and as professional association type the following institutions

predominate: professional institution and agriculture and food product (see the figure representing Institution types in weighted proportions).

Respondents in third cluster perceive themselves as indicative less powerful with least evidence among all clusters.

The Decision-making process chart shows that the respondents from the third cluster are they are very much in favour of hard regulation of specific policy options and for soft mechanisms in the policy approach, whereby the respondents from the second cluster tend to have no attitude to both approaches and third cluster have a slightly positive attitude on hard regulations and less on soft background mechanisms.

3.5.6 Physical activity

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful are the physical activity measures in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach (from 1 – disagree, to 5 – agree). The question was compound of three indicators related to the queried topic:

- · Fiscal measures to promote physical activity
- · Measures to promote physical activity
- Policies for sustainable urban mobility

Figure 35: Agreement on successfulness of the physical activity policies, measures and activities

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful are the physical activity measures in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach (from 1 – disagree, to 5 – agree). Three indicators of physical activity measures reveal the following three clusters of responses: cluster one as the vast majority of yes-sayers, cluster two are less enthusiastic but still yes-sayers, and cluster three that stands out, being less supportive to the surveyed measures in general, with one explicit no-say.

Table 19: Agreement on successfulness of the physical activity policies, measures and activities

Clusters:	1	2	3
Fiscal measures to promote physical activity	4.67	3.57	1.57
Measures to promote physical activity	4.97	3.91	3.00
Policies for sustainable urban mobility	4.85	3.75	3.00
Number of organisations per cluster	60	24	7

Among three clusters of respondents on the measures related to physical activities, responses to the indicator "Fiscal measures to promote physical activity" are the most dividing. The difference is pronounced within the third cluster (n = 7) of respondents who disagree with the potential of regulating childhood obesity by promoting physical activity through fiscal measures and express ambivalence against the general "Measures to promote physical activity" and "Policies for sustainable urban mobility".

As a look into demography reveals, six of seven organisations in cluster three come from the private sector or public-private partnership.

Weighted proportions highlight that the organisations from the third cluster:

- engage in research, education, agri-food chain, health, and finance or banking investment;
- those from the health sector further reveal their engagement in research and education, representation of healthcare professionals, healthcare and medical nutrition industry, commercial activities, and network building, information transfer, communications more often than respondents from the other two clusters;
- also, those from the health sector reveal no representation of patient interests nor engagement in community and social service provision.

The Concepts chart reveals that the respondents from the third cluster feel less power than respondents from the other two clusters. However, with only five responses, numerous here is very low and results should be further explored during the stakeholder dialogues.

The figure of the Decision-making process hints that respondents from cluster three are leaning towards "Soft background mechanisms for health in all policies approach," whereby cluster two is directed against the soft mechanisms, and respondents from cluster 1 seem to be positioned neutrally.

3.5.7 Urban planning

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful are the urban planning measures in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach (from 1 – disagree, to 5 – agree). The question was compound of three indicators related to the queried topic:

- Policies for the built urban environment
- Policies for integration of urban mobility and land use planning
- Measures to promote active transport among children

Figure 36: Agreement on successfulness of the urban planning policies, measures and activities

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful are the urban planning measures in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach (from 1 – disagree, to 5 – agree). Three indicators of urban planning measures reveal the following three clusters of responses: cluster one as the vast majority of yes-sayers, cluster two with little average (around 4) but still yes-sayers, and cluster three that stands out, being less supportive to the surveyed measures in general (average a little less than 3).

Table 20: Agreement on successfulness of the urban planning policies, measures and activities

Clusters:	1	2	3
Policies for the built urban environment	5.00	4.00	2.71
Policies for integration of urban mobility and land use planning	5.00	4.00	2.43
Measures to promote active transport among children	4.79	4.48	2.92
Number of organisations per cluster	47	29	13

As a look into demography reveals, that most of the organisations from cluster three come from the private no-profit and public non-profit, we also see some (3) organisations from private- profit partnership.

Weighted proportions highlight that the organisations from the third cluster engage in health, research, agri-food chain, education, health, finance or banking investment and labour. Those from the health sector further reveal their engagement in research and education, engage in policy advocacy,

engage in public information provision, engage in commercial activities, engage in network building, information transfer, and communications and represent the interests of healthcare professionals. Institution type in figure of weighted proportion of category representation according to agreement chart clusters - we can see that prevail state government, EU level organisations and academic and research institution. The Concepts chart reveals that the respondents from the third cluster feel less power than respondents from the other two clusters. However, with only eight responses, numerus here is very low. The figure of the Decision-making process hints that respondents from cluster three are against both approaches. "Soft background mechanisms for health in all policies approach," whereby cluster one is more for hard regulation and cloister 2 is for both approaches.

3.5.8 Healthcare

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful is public health in changing the obesogenic environment to prevent childhood obesity, as a part of a comprehensive approach (from 1 – disagree, to 5 – agree). The question had only one indicator related to the queried topic Capacity building for the implementation of programs for the treatment of childhood obesity in the health sector.

Figure 37: Agreement on successfulness of the healthcare policies, measures and activities

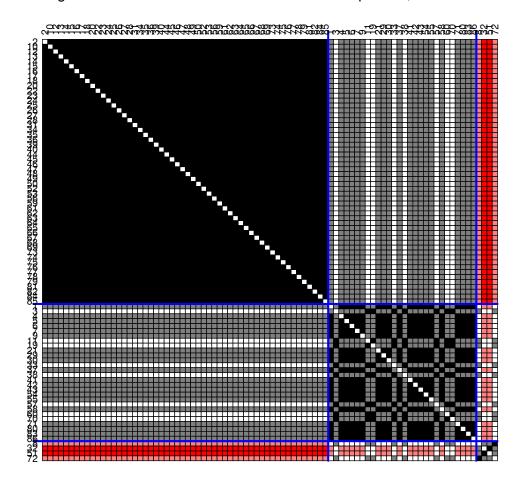


Table 21: Agreement on successfulness of the healthcare policies, measures and activities

Clusters:	1	2	3
Capacity building for the implementation of programs for	5.00	3.71	1.50
the treatment of childhood obesity in the health sector			
Number of organisations per cluster	54	28	4

Stakeholders were asked to respond to the question (In the context of their work with their organisation) how successful is public health in changing the obesogenic environment to prevent childhood obesity, as a part of a comprehensive approach (from 1 – disagree, to 5 – agree). The indicator of public health shows the following three clusters of responses: cluster absolutely as yes-sayers - (average 5, completely agree), cluster two are less enthusiastic but still yes-sayers (average 3.71), and cluster three that stands out on average 1.5 (mainly disagree).

A closer look in the third cluster reveals a partial organisational relation to childhood obesity, as reported by the respondents from these organisations (weighted proportions); primarily, they are privateprofit (2 of 4 respondents).

Demography in weighted proportions reveals a more significant proportion of research, health, finance or banking investment and educational organisations in cluster number three. In further comparison with clusters number one and two, the health organisations in the third cluster engage to a greater extent in work with patients in healthcare settings, represent the interests of healthcare professionals, engage in policy advocacy and Engage in network building, information transfer, communications.

Accordingly, weighted proportions in the figure of institutional types reveal an outstanding share of the academic and research institution, health and retail. The concept chart reveals that organisations in the third cluster have the lowest power. There are some differences between clusters regarding views on regulative action and soft approaches, the third cluster have the most positive attitude to soft background mechanisms and regulative action. First cluster is more for soft background mechanisms while the second not even for hard approaches or soft mechanisms.

Common characteristics of the cluster no 3: Among three clusters of respondents on the measures related all specific topics, third cluster always stands out the with mainly disagreement in positions. (no-sayers or the sceptic ones). A closer look into the demography of sceptics towards all topics in the third clusters reveals private and public formal non-profits and some private formal profit these are mostly representatives Health, Research, Education organisation and agri-food chains (see Demography figure with weighted proportions). Regardless, most respondents in the third clusters positioned their organisations to a more significant measure in the health sector. These from the health sector further described their engagement as research and education and engage policy advocacy (see Heath sector figure with weighted proportions), and as EU Level organisations, NGOs, professional institution and some Agriculture and food production type of the institution (see the figure representing Institution types in weighted proportions). The Concepts chart reveals that the respondents from the third cluster feel less power, less evidence and less transparency than respondents from the other two clusters. The Decision-making process chart shows that the respondents from the third cluster some of them do not believe in regulation of specific policy options and neither in soft mechanisms in the policy approach, whereby there are (less than half) respondents from the third cluster tend to sign a slightly positive attitude on both dimensions.

Additional meta-analysis of the obtained results is presented in next section.

3.6 Crosstopic comparison of clusters

In previous sections we explored eight agreement charts, each of them clustered stakeholders into three clusters. After clustering stakeholders with agreement charts according to different topics, the question of stability of clustering results emerges. In the current section we prepared groups of stakeholders that were similarly clustered through all analysed topics. Cluster No. 1 obtained by the agreement charts is usually composed of stakeholders with high average response to focal topics, while on the other hand cluster No.3 usually covers stakeholders with low level of agreement with surveyed topics.

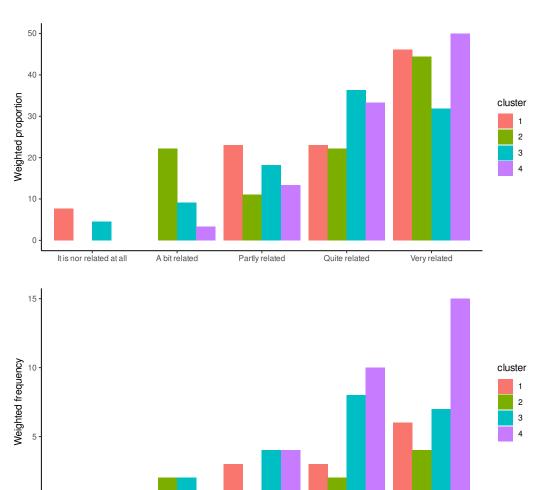
We used an additional clustering approach to cluster stakeholders according to clusters in which they were clustered in previous sections. We obtained 4 groups of stakeholders.

Table 22: Crosstopic comparison of clusters

Clusters:	1	2	3
1st group of stakeholders	40	55	9
2nd group of stakeholders	1	29	42
3rd group of stakeholders	87	77	12
4th group of stakeholders	193	44	3

Organisations clustered into cluster 2 often appeared in the low level attitudes group (cluster 3) obtained by agreement charts, the cluster no 4 consists of stakeholders who were always in the first cluster (highly agreed with all claims). Clusters 1 and 3 are somehow evenly distributed among all three Agreement chart clusters.

Figure 38: To what extent is the work of your organisation related to the childhood obesity? Weighted proportion of category representation according to agreement chart clusters - sum of all categories for each cluster is 100.



Partly related

Quite related

Very related

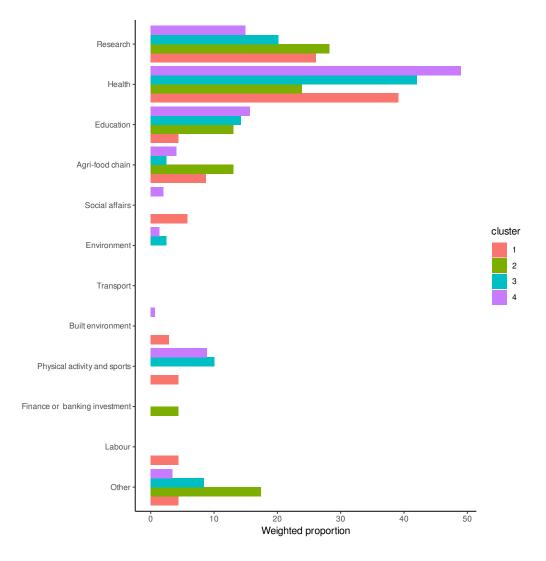
It is nor related at all

A bit related

3.6.1 Demography

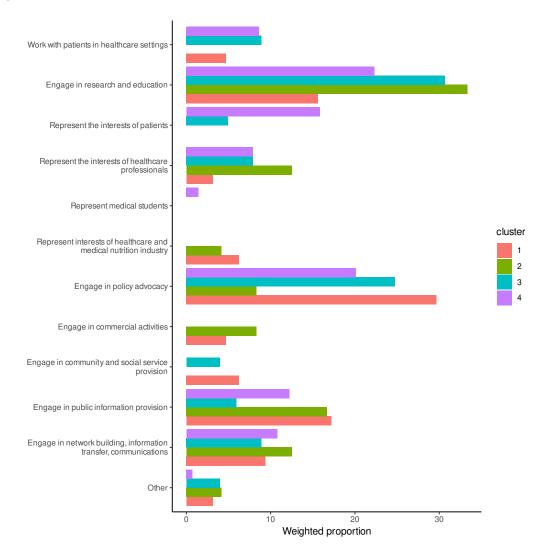
Weighted proportion of category representation according to agreement chart clusters - sum of all categories for each cluster is 100.

Figure 39: Weighted proportion of category representation according to agreement chart clusters - sum of all categories for each cluster is 100.



From the Figure [39] in an in-depth study with weighted proportions we can identify from which sectors are stakeholders in individual clusters. In cluster one dominated by stakeholder groups from health, research, agri-food chain and we also can see that we have some stakeholders from social affairs, education, built environment, labour and physical activity and sports. In cluster two we have the majority of stakeholders from research, health, and education and agri-food chains. In cluster three are mainly from health, research, education, physical activity and sports and some stakeholders from agri-food chain and environmental. Custer four has stakeholder's representatives from health, research, education, physical activity and sports and some from social affairs, built environment and agri-food chain.

Figure 40: Weighted proportion of category representation according to agreement chart clusters - sum of all categories for each cluster is 100.



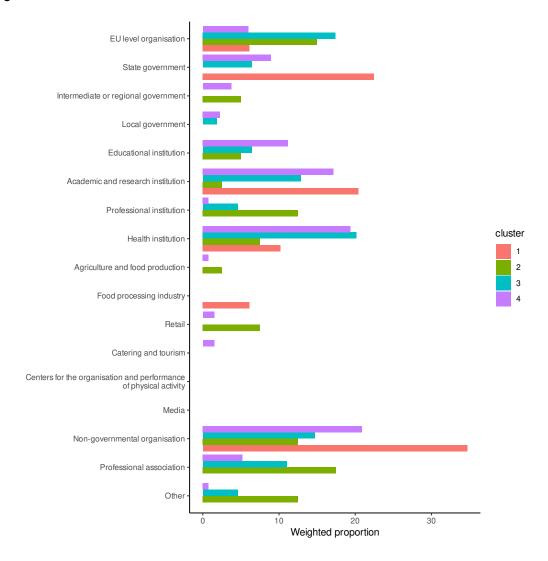
In Figure 40 we can define stakeholders who have identified themselves as health stakeholders in which part of healthcare they operate by individual cluster. In cluster one are mainly stakeholders who engage in policy advocacy, engage in public information provision and engage in research and education. In cluster two we find stakeholders who engage in research and education, engage in public information provision and represent the interests of healthcare professionals. In coaster three are many stakeholders who engage in research and education and engage in policy advocacy. There are also some stakeholders who work with patients in healthcare settings and Represent the interests of healthcare professionals. The fourth cluster represent the stakeholders from health who mainly engage in research and education, engage in policy advocacy, represent the interests of patients, and they engage in public information provision.

3.6.2 Institution type

In figure 41 we divided our stakeholders further after institution type accordingly by weighted proportion we see that in cloister one are mainly non-governmental organisations, state government, academic and research institutions and health institutions. In cluster two we have stakeholder's representative from professional association, EU level organisation, professional institution and non-governmental organisation. Cluster three is defined by stakeholders from health institutions, EU level organisations, academic

and research institutions and non-governmental organisations. Cluster four consists of stakeholders by institutional type: non-governmental organisations, health institutions, academic and research institutions and few stakeholders from retail, agriculture and food production and catering and tourism.

Figure 41: Weighted proportion of category representation according to agreement chart clusters - sum of all categories for each cluster is 100.



3.7 Associations among measured variables and modelling

3.7.1 Power and Welfare triangle

Perception of power of the organisations. Organisations feel themselves most powerful at the national level and least powerful at the international or global level. Some authors are pointing out that Big Food companies, operating globally, are concentrating the power at that level, contributing to the food systems being unsustainable, unhealthy and inequitable for people and planet (Yates J et all, 2021). It is difficult to interpret the fact that organisations, not operating at the local or regional level, feel themselves powerful at those two levels.

In any case, when comparing all of the organisations towards their power (at the Likert scale 1-5, 1 = 10 = lowest (1) and 5 = 10 + highest value (5), organisations in general perceive their power at 2 and at 3, which

³⁹Yates Joe, Gillepsie S, Savona N, Deeney M, Kadiyala S. 2021. Trust and responsibility in food systems transformation. Engaging with Big Foos: marriage or mirage?BMJ Global Health 6:e007350.

is in general below the average. Only very few organisations perceive themselves really powerful.

In relation to other organisations they work with, stakeholders organisations perceive the position of their organisation overall as influential modestly above the average (with average 3,52 at the Likert scale 1-5, with 5 indicating they perceive themselves as always influential in 12% of organisations). They perceive themselves influential very often in 43%. At the same time, it seems that their ideas and suggestions are also ignored at the almost average level (with the value of 2,74 at the Likert scale 1-5, with 5 indicating that it is always happening their ideas and suggestions are ignored in only 1% of organisations). Most often chosen option is they are sometimes ignored with 50% organisations claiming that frequency.

3.7.2 Mode of operation and perception of power

In that section, organisations are clustered according to their perception of power.

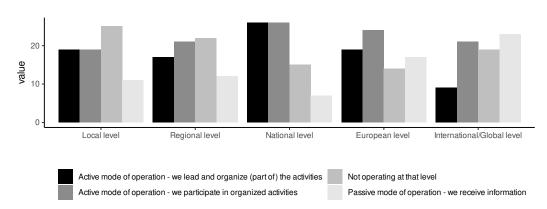


Figure 42: Organisations, clustered according to their perception of power

Histogram of power demonstrates there is a small number of organisations, which they feel powerful and more of them, which feel less powerful or not powerful at all. This is especially evident from the comparison of the sum of organisations that are above or below the number 3 on the Histogram of power (Figure 43), on the power axis.

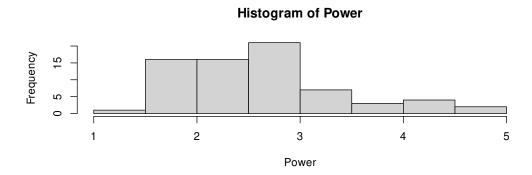


Figure 43: Histogram of power, as perceived by stakeholder organisations

If we observe the perception of power according the mode of action of the individual organisation, we could notice:

• the organisations which are most active in the area of childhood obesity, which means they lead and organise the activities, feel most powerful at the national level and least powerful at the global/international level;

- organisations, which actively participate in the organised activities, also feel themselves most powerful at the national level, with only slightly less of that perception while engaging at the other levels;
- Organisations, in majority not operating at the local and regional levels, still seems to feel powerful
 at those two levels;
- While having passive mode of operation (only receiving information), international/global organisations perceive themselves most powerful, followed by EU level organisations; national, regional and local organisations don't feel powerful if only passively receiving information.

Table 23: How powerful according to the mode of operation you perceive your organisation at different levels?

Level	Active mode – lead and organise activities	Active mode – participate in organised activities	Not active at that level	Passive mode of oper- ation – only receiving information
Local	+++	+++	++++	+
Regional	+++	++++	++++	++
National	+++++	+++++	++	+
European	+++	++++	++	+++
International or global	+	++++	++	++++

Legend:

Less than 10 organisations: +

10-15 organisations: ++
16-20 organisations: +++
21-25 organisations: ++++
Above 25 organisations: +++++

Most powerful perceive themselves national level organisations while operating actively in organisations of activities or while participating in organised activities. All levels organisations feel themselves most powerful while actively participating in organised activities. International/global organisations perceive themselves powerful while only receiving information.

4 Comparison of STOP stakeholders surveys 2019 and 2021

The data presented in this report is based on two ways of web survey gathered among organisations that are in a broadest possible sense involved in the problem of Childhood obesity.

4.1 Characteristics of the stakeholders involved

The majority of organisations who participated in the surveys fall in the formal part of the welfare triangle, mainly coming from non-profit and less from profit sectors. The coverage of stakeholders is presented in the tables below. 40

Speaking about the stakeholder shares in the 2019 Survey and 2021 Survey, the only statistically significant difference between both samples is detected on the in/formal dimension, where low number of responses does not allow for the statistically valid interpretations. Otherwise both samples are comparable regarding the shares of the engaged stakeholders by the dimensions of the welfare triangle which allow us to conclude that both surveys are stable and comparable.

The following tables bellow show how the frequencies differ between the samples of 2019 and 2021, according to the public-private, profit-non-profit, and formal-informal statuses of the organisations, participating in the survey.

Table 24: Public and private organisations from the welfare triangle, comparing frequencies 2019 - 2021

	2019	%	2021	%
Public	94	56.97	57	44.88
Private	48	29.10	54	42.52
Public-private	23	13.94	16	12.60
N	165	100%	127	100%

Table 25: Profit and non-profit organisations from the welfare triangle, comparing frequencies 2019 - 2021

	2019	%	2021	%
Profit	25	15.15	22	17.32
Non-profit	140	84.84	105	82.68
N	165	100%	127	100%

Table 26: Formal and informal organisations from the welfare triangle, comparing frequencies 2019 - 2021

	2019	%	2021	%
Formal	163	98.90	119	93.70
Informal	2	1.21	8	6.30
N	165	100%	127	100%

We have also noticed an increase in participation of the informal organisations. In spite of being significant, the absolute numbers are very low and therefore, any sound interpretation not possible. In any case, informal organisations are most often found at the local levels, EU level survey is less feasible for engaging the informal organisations of stakeholders.

4.1.1 Sectoral perspective of the participating stakeholders

One of the objectives of the STOP project is to involve a broad spectrum of stakeholders. From a sectoral perspective, in 2019, most represented organisations operate in Health, Research and Education

⁴⁰The sampling frame is presented in the Chapter 1.2.2

sectors. In the first survey, no one identified as mainly operating in the Environment, Finance or banking investment and Labour sectors. In the second survey, nobody selected Transport nor Finance or banking investment as their first choice. It is obvious that STOP consortium partners and their networks are not on the radar of the Environment, Transport, Finance or banking investment and Labour sectors, in spite of all of the efforts to reach the stakeholders from those sectors, too.

Based on the responses in the first survey it became clear that stakeholders perceive their activities as multisectoral. Therefore, in the second survey they were able to select up to three sectors and prioritise them from the most to the least important for their organisation. Based on that, the weighted frequencies have been calculated (see the third column in the following Table 27).

Table 27: Which sector your organisation operates in? Comparing frequencies for 2019, frequencies of first selection for 2021, and weighted frequencies for 2021.

Selected sector	2019	2021	2021w
Research	35	25	26.00
Health	95	72	46.50
Education	18	6	15.50
Agri-food chain	10	20	15.67
Social affairs	4	1	2.83
Environment	0	1	3.50
Transport	5	0	0.17
Built environment	2	1	1.50
Physical activity and sports	3	5	7.33
Finance or banking investment	0	0	0.33
Labour	0	1	0.50
Other	12	9	8.33
N	184	141	128.16 ¹²

However, since not all participating stakeholders in the second survey selected three sectors and the differentiations between frequencies for the first choice and weighted frequencies seem to have less significance than expected, the demographic comparisons between the two surveys will be based on the first choice of participants' sectoral affiliations.

Table 28: Which sector your organisation operates in? 2019 - 2021 frequencies.

	2019	2021
Research	35	26
Health	95	74
Education	18	6
Agri-food chain	10	22
Social affairs	4	1
Environment	0	1
Transport	5	0
Built environment	2	1
Physical activity and sports	3	6
Finance or banking investment	0	0
Labour	0	1
Other	12	9
Sum	184	141

⁴¹Weighted frequencies have been calculated as 1/2 for the first chosen sector, 1/3 for the second, and 1/6 for the sector in the third place.

⁴²Since not all participants responded with all three sectoral choices, the summary of weighted frequencies is lower than the summary of the frequencies for the first choice.

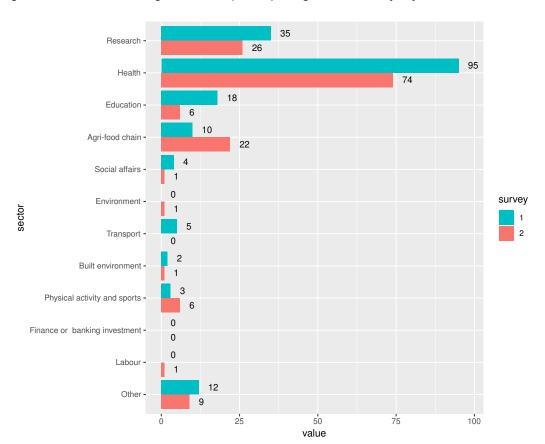


Figure 44: Number of organisations participating in the survey, by sectors, 2019 - 2021

4.1.2 Policy measures in childhood obesity

One of the key objectives of the surveys was to identify focal interests of participating stakeholders. The main question used for interests identification was "Please, indicate the relevance of the following areas or activities, listed below, for your organisation. Some of the topics and statements might be irrelevant for your organisation, in such case please mark that option."

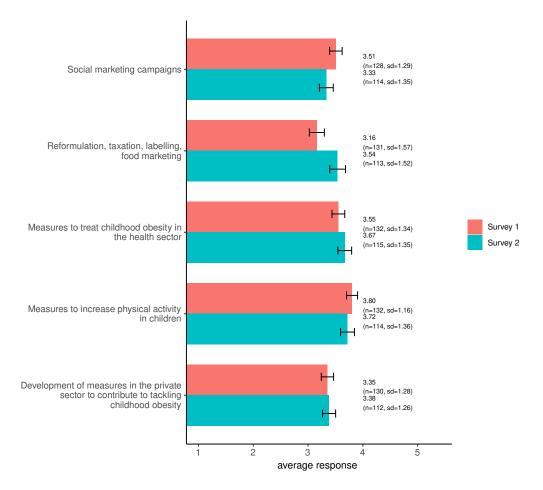
Hereby, it should be noted that respondents were asked to consider the relevance of these areas specifically with regards to their organisation. This is particularly relevant as a specific organisation might not work or be involved in the areas mentioned. Respondents were able to answer on five item measurement scale indicating that certain topic was irrelevant (1), of low relevance (2), relevant to some extent (3), relevant (4) or very relevant (5).

The first survey offered five areas, based on the content of the following five specific WPs of the STOP project:

- Food marketing (WP4)
- Social marketing campaigns (WP5)
- Development of measures in the private sector to contribute to tackling childhood obesity (WP6)
- 4. Measures to increase physical activity in children (WP7)
- 5. Reformulation, taxation, labelling, in the health sector (WP8)

Based on the analysis of the included stakeholders, it seems like most respondents from the both samples perceive *measures to increase physical activity in children* the most valuable, closely followed by *measures to treat childhood obesity in the health sector* (Figure 45).

Figure 45: Please, indicate the relevance of the following areas or activities, listed below, for your organisation, 2019 - 2021



Comparing stakeholders' responses on that basic question regarding the relevance of the specific areas or activities preventing childhood obesity, we could observe no statistically significant differences in both surveys. That is indicating the comparability of the samples regarding stakeholders core interests and stability of the samples of the engaged stakeholders in both surveys.

Participating stakeholders were asked to respond to the question, which of the five listed policy approaches (legislation, guidelines or standards, collaborative action, fiscal measures or additional research) would be most promising for successful implementation of the policies, measures and activities in changing the obesogenic environment to prevent childhood obesity. In the Table 29, statistically significant differences of the responses between the two samples are highlighted.

Table 29: According to your organisation, which of the following approaches would be most promising for successful implementation of the policies, measures and activities, listed below, in changing the obesogenic environment to prevent childhood obesity? Set of indicators Q9 in 2019 and Q14, and Q47 in 2021.

	Most promising approaches 2019 - 2020 in %							
Most promising approaches:	N	Legislation	Establishing guidelines or standards	Supporting collabora-tive action	Fiscal measures	Additional research		
Food taxation	61/82	66%/56%	15%/20%	11%/10%	48%/40%	11%/30%		
Food labelling	75/83	64%/60%	44%/47%	16%/19%	8%/ 7%	5%/18%		
Food reformulation	73/82	33%/28%	47%/52%	36%/34%	18%/20%	15%/27%		
Reduction of food marketing pressure to children	74/86	54%/69%	46%/38%	23%/31%	14%/8%	5%/21%		
Social marketing campaigns	71/75	18%/24%	34%/39%	63%/47%	8%/ 5%	15%/24%		
Monitoring business actions and performance	59/71	36%/24%	32%/39%	29%/42%	20%/14%	20%/15%		
Fiscal measures to promote physical activity	66/71	39%/21%	26%/24%	24%/34%	38%/42%	18%/18%		
Measures to promote physical activity in schools	83/73	36%/30%	55%/58%	49%/56%	11%/11%	12%/19%		
Measures to promote active transport among children	78/74	35%/20%	50%/38%	53%/64%	15%/22%	14%/18%		
Capacity building in the health sector [13]	73/76	36%/21%	44%/54%	56%/58%	19%/16%	22%/22%		

Most promising approaches according to the stakeholders from different sectors

In the Table 30, differences of the responses between the sectors and the two samples are presented.

Table 30: Sectoral affiliation of participating organisations and their evaluation of the most promissing approaches 2019 - 2021 (According to your organisation, which of the following approaches would be most promising for successful implementation of the policies, measures and activities, listed below, in changing the obesogenic environment to prevent childhood obesity? You could choose more than one.)

		Most	promising ap	proaches, M v	alues for 2019	9 - 2020 in %			
Sector	Year	N	Reduction of food marketing pressure: Additional research	Food taxa- tion: Ad- ditional re- search	Food la- belling: Additional research	Fiscal measures to promote physical activity: Legislation	Social marketing cam- paigns: Supporting collabora- tive action	Measures to promote active transport: Legislation	Capacity building in the health sector: Legislation
Research	2019	35	7%	8%	7%	30%	67%	46%	27%
	2021	26	25%	38%	33%	20%	25%	14%	13%
Health	2019	95	8%	13%	5%	34%	68%	27%	29%
	2021	47	11%	23%	9%	22%	45%	13%	22%
Education	2019	18	0%	25%	0%	57%	38%	22%	42%
	2021	6	50%	50%	50%	33%	67%	67%	67%
Agri-food chain	2019	10	0%	0%	25%	0%	40%	50%	50%
	2021	22	50%	63%	38%	0%	57%	29%	0%

Fiscal measures to promote physical activities - legislation

The share of participants who percept legislation as potentially successful approach for changing the obesogenic environment to prevent childhood obesity, dropped in the second survey. There is a significant decline from the survey in 2019 to the 2021 survey in stakeholders who think that legislation could work in favour of implementing Fiscal measures to promote physical activity. We could notice this decline in all three major groups of the engaged stakeholders – Research, Health and Education. Agri-food stakeholders show no relationship to that question.

Table 31: Legislation would be most promising for successful implementation of the measures, 2019 - 2021

Legislation would be most promising for:	р	M1	M2	N1	N2
Fiscal measures to promote physical activity	0.03	0.39	0.21	66	71

⁴³Capacity building for the implementation of programs for the treatment of childhood obesity in the health sector

Additional research in reducing marketing to children and food taxation and food labeling

Increase in responses for additional research for the measures Reduction of food marketing to children, Food taxation, and Food labelling is identified while comparing the results from 2019 with the results of 2021 (Table 32). These three indicators reveal statistically significant rise in responses of stakeholders from Research, Health, Education and Agri-food chain sectors, seeking for additional evidence for the successfulness of three suggested measures. The highest increase is noticeable in Education and Agri-food sectors. Request for additional research might slow down legislative changes and further exploration would be needed to prove such understanding of the observe change.

Table 32: The most promising approaches for successful implementation of the measures, 2019 - 2021

Additional research would be most promising for:	р	M1	M2	N1	N2
Reduction of food marketing pressure to children	0.01	0.05	0.21	74	86
Food taxation	0.01	0.11	0.30	61	82
Food labelling	0.03	0.05	0.18	75	83

4.2 Decision making processes

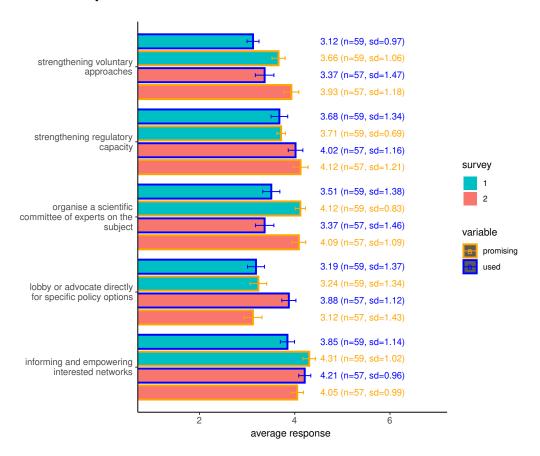
We have been exploring what are the at present commonly used methods or practices at one side, and what would be the most promising means/approaches at the other, **as perceived by the surveyed stakeholders**, for successful implementation of the policies, measures and activities, in changing the obesogenic environment to prevent childhood obesity.

Sectoral comparison of the most promissing approaches between first and second survey is in the Figure 46 below.

"Strengthening regulatory capacity" and "Informing/empowering interested networks" are more often used in 2021 and more often perceived as most promising in 2021. is more often used in 2021 and more often perceived as most promising in 2021.

"Organising a scientific committee" is perceived as more promising in 2021. "Lobby or advocate" is more often used in 2021, but not perceived as most promising. "Strengthening voluntary approaches" is perceived somewhat higher as most promising means in 2021.

Figure 46: Comparison among at present commonly used methods or practices at one side, and the most promising means / approaches at the other, **as perceived by the surveyed stakeholders**, for successful implementation of the policies, measures and activities, in changing the obesogenic environment to prevent childhood obesity



4.2.1 More stakeholders from the second survey perceive organising scientific committees of experts significantly more promising in 2021 in comparison with 2019

There is a statistically significant difference (p = 0.0194), indicating that the organisations of respondents from the survey of 2021 are somewhat more inclined (M = 3.75, min = 1, max = 5) to organise a scientific committee of experts on the subject than respondents from the 2019 survey (M = 3.18, min = 1, max = 5). $\frac{144}{14}$

Table 33: The most promising approaches for successful implementation of the measures, 2019 - 2021

Additional research would be most promising for:	р	М1	М2	N1	N2
Reduction of food marketing pressure to children	0.01	0.05	0.21	74	86
Food taxation	0.01	0.11	0.30	61	82
Food labelling	0.03	0.05	0.18	75	83

⁴⁴Question from the Q37/Q15 indicator sets: Policy decision making processes are complex, with different means of influence. We are kindly asking you to express your organisation views on the means of influence in the policy decision making processes in childhood obesity. What methods does your organisation most commonly use to influence the policy decisions in childhood obesity?

4.3 Agreement on successfulness of selected policies, measures and activities in childhood obesity prevention

Agreement charts are graphical representations of distances among stakeholders according to their responses to surveyed topics.

4.3.1 Food taxation

Yes-sayers agree that strengthening of regulatory approaches could be successful policy option to reduce childhood obesity, in comparison with no-sayers which express higher readiness to collaborate with other stakeholders, being especially in favour of developing consortium of actors having similar interest on policy options ass most.

In 2019 two alliances were composed among stakeholders, major one with high support to food taxation in general as a possible successful policy in competing obesity and one rather small group strong in opposition to such opinion.

In year 2021 we could recognise three alliances of stakeholders, expressing the opinion towards food taxation. In this year we have triggered stakeholders with three different food taxation policy options. First and the biggest group of stakeholders is fully supporting food taxation in general and the same goes for the support to the taxation of foods high in fat, sugar and salt. The other two clusters are of the same size, one of them being still in yes-saying position but less in favour to food taxation in general as a successful policy approach, the other one is strongly opposing food taxation in general and taxation of HFSS foods but is interestingly in a yes-saying position seeing the subsidies for healthy food options as a successful policy option. That could represent the window of opportunity for development of the food taxation policies in MSs.

Table 34: Agreement on successfulness of the healthcare policies, measures and activities

2019	1	2	3	2021	1	2	3
	Yes	Interm.	Nay		Yes	Interm.	Nay
cells with registive values are marked with *	n=62		n=16		n=44	n=26	n=25
Food taxation	4.50		1.60	Food taxation	5.00	3.73	1.96
				Taxation of HFSS (high in fat,	5.00	4.35	1.57
				salt or sugar) products			
				Subsidies for e.g. fruit and	4.84	4.35	3.54

Table 35: Food taxation, 2019 - 2021

4.3.2 Food labelling

The yes-sayers are supporting the labelling as a successful policy option for combating childhood obesity. Three policy clusters were composed in food labelling in the first (2019) and in the 2021 round of questionnaire.

Fully yes-sayers clusters are comparable in years 2019 and 2021. In 2019, cluster of no-sayers was approximately twice as big as in 2021, and the middle cluster has increased in the same time period which is giving an indication that less stakeholders might be of opinion that food labelling is not a successful policy measure for preventing childhood obesity. Those moving to the middle cluster 2 are indicative a bit more doubtful in the measure in year 2021.

Interestingly, front of pack nutrition labelling seems to be the equivalent of the food labelling general measure as such, provoking the same reactions in all three clusters.

2 3 2021 2019 2 3 Yes Interm. Nay Yes Interm. Nay n=46 n=16 n=13 n=36 n=5 n = 54Food labelling 2.5 5.00 5.00 4.00 Food labelling 3.83 1.60 5.00 3.86 1.50 Front of pack nutrition labelling

Table 36: Food labelling, 2019 - 2021

4.3.3 Food reformulation

Stakeholders were asked how do they agree on successfulness of measures and activities of food reformulation in general, to support childhood obesity prevention.

The single indicator of reformulation reveals the following three clusters of responses: two agreeing clusters were identified in 2019 and in 2021, one completely agreeing in recognising food reformulation as a very successful measure. There is also a quite supportive position of the middle clusters, too (cluster 1 in 2019 and cluster 2 in 2021, with agreement of 4).

The smallest third clusters (cluster 2 in 2019 and cluster 3 in 2021) are of indicative negative opinion about the successfulness of the reformulation activities, differing in number of stakeholders responses and in rating the perceived successfulness on the Lickert scale. In 2021, the third cluster is smaller and more negative (average agreement of 1.5) than in 2019 (average agreement of 2,7).

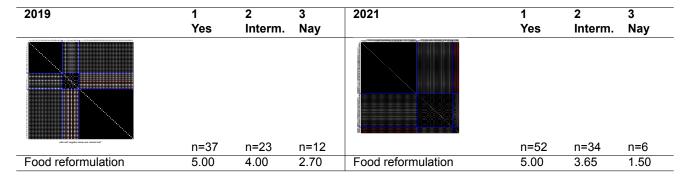


Table 37: Food reformulation, 2019 - 2021

4.3.4 Food marketing

Stakeholders were asked how do they agree on successfulness of policies measures and activities with the aim of reducing food marketing pressure to children in general, to support childhood obesity prevention.

In 2019, in comparison to 2021, only general statement on food marketing was available for agreement. One strong and big cluster was identified, completely agreeing that measures reducing food marketing pressure to children are very successful. We could notice quite supportive position of the second biggest cluster, too (with agreement of 4). It is noticeable there is a rather small cluster which

is in a strong opposition to the measures (with score 1,5, close to complete disagreement) for reducing food marketing to children

In the 2021 questionnaire, food marketing to children was more elaborated with listing seven options of individual actions for reducing food marketing pressure to children. More diversified options allowed for more diversified statements assessment, with the two more equally big supportive clusters identified. Seven indicators of food marketing measures reveals the following three clusters of responses: cluster one as the vast majority yes-sayers, cluster two are a bit less enthusiastic yes-sayers, and cluster three that stands out, being less supportive to the surveyed measures in general, with one explicit no-say. Among three clusters of respondents on the measures related to food marketing, responses to the indicator "Arrangement of food industry sponsorship of sports events" seems to be the most dividing issue. The deviation is evident in both the second and third cluster, where respondents provided the lowest assessments for the indicator; at the same time, the food industry sponsorships of sports events got the most pessimistic assessment of all the indicators.

2019 1 2021 3 Yes Interm. Nay Yes Interm. Nay n = 50n=20 n=8 n=41 n=41 n=13 Food marketing 5.00 3.70 1.5 Reduction of food marketing 4.97 4.71 2.75 pressure to children Reduction of food marketing 4.97 4.50 2.50 pressure on broadcast and online media Reduction of food marketing 2.33 4.91 4.33 pressure on product packages 2.42 Reduction of food marketing 4.94 4.38 pressure to children in retail settinas Reducing food marketing 5.00 4.38 2.55 pressure to children in urban environment Arrangement of food industry 1.83 5.00 3.76 sponsorship of sports events 4.13 2.70 Urban planning policies to 4.82 reduce food outlet density around schools

Table 38: Food marketing, 2019 - 2021

4.3.5 Consumer behaviour: Creating demand for healthy lifestyles

Stakeholders were asked how do they agree on successfulness of policies measures and activities with the aim of creating demand for healthy lifestyles by changing consumer behaviour, to support childhood obesity prevention. Social marketing campaigns were specifically exposed.

Agreement among stakeholders regarding that question is practically the same in years 2019 and 2021, the most similar attitude towards specific policy measure in the whole research.

We could notice the almost half of the stakeholders in both waves understanding social marketing campaigns as fully successful, approximately a quarter thinking the same with slight reservation (with average score of 4,00) and approximately a quarter slightly doubting (with average score a bit below

3,00) in the successfulness of social marketing campaigns. Additional research would be needed to diversify both yes-saying clusters.

2019 2 3 2 2021 3 Yes Interm. Yes Interm. Nay Nay n=44 n=27 n=21 n=40 n=30 n=19 2.25 2.58 Social marketing campaigns 5.00 4.00 5.00 4.00 Social marketing campaigns

Table 39: Consumer behaviour: Creating demand for healthy lifestyles, 2019 - 2021

4.3.6 Healthy food and food choice environments

Stakeholders were asked how do they agree on successfulness of policies measures and activities with the aim of providing healthy food and food choice environments by monitoring business action and performance, to support childhood obesity prevention.

That is the only policy measure where the biggest cluster of stakeholders is a bit positive but quite doubtful regarding that policy measure. That situation is even more obvious in year 2021. Fully yessaying cluster is smaller and in the second place. The almost completely no-saying cluster is really small, with only six stakeholders in both waves (with average score of 1,50 in 2019 and even less, of 1,33 in 2021) with such a negative attitude regarding the successfulness of the monitoring business actions and performance. Positions between fully yes-saying and almost no-saying clusters differ even more in 2021. Some more research would be needed for better understanding what are the main differences driving those diverse positions.

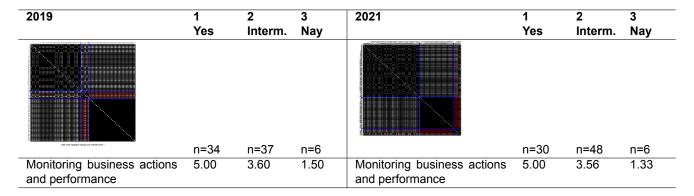


Table 40: Healthy food and food choice environments, 2019 - 2021

4.3.7 Physical activity

Stakeholders were asked to respond to the question how successful are the physical activity measures in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach. Three indicators of physical activity measures:

- Fiscal measures to promote physical activity,
- · Measures to promote PA in schools, and
- Measures to promote active transport among children

reveal the three clear clusters of responses.

Questions differ a bit between years, in 2019 there were three separate questions regarding physical activity, in 2021, a general question was added, with the same three topics organised in a form of sub questions. In 2019 we have three agreement charts and in 2021 we have one chart.

In all four agreement charts we have relatively small groups of no-sayers. They were doubting stronger in the successfulness of the discussed policy measures in year 2019 as in 2022. Among three clusters of respondents on the measures related to physical activities, responses to the indicator "Fiscal measures to promote physical activity" are the most dividing. The difference is pronounced within the third cluster (n = 7) of respondents who disagree with the potential of regulating childhood obesity by promoting physical activity through fiscal measures and express ambivalence against the general "Measures to promote physical activity in schools" and "Measures to promote active transport among children" – perception regarding this measure has substantially change from 2019 till 2022, in 2019 no-sayers were strongly convinced such measure is not successful, but in 2021 the position of "no-sayers" was neutral.

Stakeholders see the major potential in measures, to promote physical activity in schools.

Table 41: Physical activity, 2019 - 2021

1	2	3	2021	1	2	3
Yes	Interm.	Nay		Yes	Interm.	Nay
				n=60	n=24	n=7
n=42	n=44	n=9				
5.00	3.60	1.60	Fiscal measures to promote	4.67	3.57	1.57
			physical activity			
			Management and	4.07	2.04	2.00
5.00	4.00	∠.00	cal activity in schools	4.97	J.9T	3.00
n=61	n=22	n=7				
n=61 5.00	n=22 3.70	n=7 1.70	Measures to promote active	4.85	3.75	3.00
	Yes	N=42 n=44 5.00 3.60	Nay n=42	Yes Interm. Nay n=42 n=44 n=9 5.00 3.60 1.60 Fiscal measures to promote physical activity n=64 n=17 n=9 5.00 4.00 2.60 Measures to promote physi-	Yes Interm. Nay Yes n=42 n=44 n=9 5.00 3.60 1.60 Fiscal measures to promote physical activity 4.67 n=64 n=17 n=9 Neasures to promote physical activity 4.97	Yes Interm. Nay Yes Interm. n=42 n=44 n=9 n=60 n=24 5.00 3.60 1.60 Fiscal measures to promote physical activity 4.67 3.57 n=64 n=17 n=9 5.00 4.00 2.60 Measures to promote physi- 4.97 3.91

4.3.8 Urban planning

In 2021 only, stakeholders were asked how do they agree on successfulness of policies measures and activities in the area of urban planning in general, to support childhood obesity prevention. Three measures in that field were offered for alignment to the stakeholders:

- Policies for the built urban environment
- · Policies for integration of urban mobility and land use planning
- Measures to promote active transport among children

We could observe one totally yes-saying cluster of stakeholders and another one strongly yes-saying (4,00 and more). Both of them represent majority of stakeholders, only less than one sixth of them were not thinking that urban planning measures would be successful. It is indicated that measures to promote active transport among children is perceived as the most successful among all three of them.

2021 1 Nay Yes Interm. n=29 n=13 n = 47Policies for the built urban 2.71 5.00 4.00 environment Policies for integration of ur-5.00 4.00 2.43 ban mobility and land use planning Measures to promote active 4.97 4.48 2.92 transport among children

Table 42: Urban planning, 2019 - 2021

4.3.9 Addressing childhood obesity in health care settings

Stakeholders were asked how do they agree on successfulness of policies measures and activities with the aim of Capacity building for the Implementation of programs for the treatment of childhood obesity in the health sector in general, to support childhood obesity prevention.

In 2019, two alliances were composed among stakeholders regarding that statement, one with strong yes-sayers and one with opposite opinion but not very negative one. In 2021, we could observe three clusters, the biggest one of complete yes-sayers. Approximately one third of stakeholders think that capacity building for the implementation for the treatment of childhood obesity in health-care settings is a successful policy measure to prevent childhood obesity.

Table 43: Addressing childhood obesity in health care settings, 2019 - 2021

2019	1	2	3	2021	1	2	3
	Yes	Interm.	Nay		Yes	Interm.	Nay
	n=65	/	n=14		n=54	n=28	n=4
Capacity building for the Implementation of programs for the treatment of childhood obesity in the health sector	4.80	I	2.60	Capacity building for the Implementation of programs for the treatment of childhood obesity in the health sector	5.00	3.71	1.50

5 Main conclusions

The STOP (Science and Technology in childhood Obesity Policy) Project is a major initiative funded under the EU Horizon 2020 research programme launched in 2018 (http://www.stopchildobesity.eu/). The aim of the STOP project is to find the most successful and effective approaches to reduce the incidence of childhood obesity. One of the main aims of this process is to recommend to national authorities and the European Commission a sustainability plan for future stakeholder engagement in childhood obesity. To this end, STOP applied innovative engaging and participatory approaches to better understand stakeholders' views and positions. Two stakeholder surveys, first in 2019 and second in 2021, were conducted to get the insights of as many stakeholders in the areas of nutrition, physical activity and obesity as possible. The results of the surveys then interactively fed into four dialogues with stakeholders. The outcomes of the participatory experimental research will be used as the background for the recommendations for the sustainable stakeholders networking and collaboration in nutrition, physical activity, and obesity prevention at the Eu level.

The objective of two stakeholders survey was to identify stakeholders networking characteristics, their positions towards different obesity policies and potentials for improved and sustainable collaboration. Overall comparison of the stakeholders shares in the sampling frame and in both survey is showing there are no major differences among shares. Two thirds of stakeholders in both our surveys were representatives of organisations labelled as non-profit formal. We should also consider the fact that sampling share of the private for-profit sector is relatively smaller but the stakeholders there are representing a substantial number of voices – we could observe rather small sample share but rather influential stakeholders' group.

We could observe stable samples with most of the stakeholders from Health, following by Research, Education and Agri-food chain. Since representatives of Health sector compose by far the largest group of players treating wicked phenomenon of childhood obesity with heterogenous attitudes, more in-depth knowledge on their perspectives was collected during the second survey. At the same time, it is obvious that STOP consortium partners and their networks are not on the radar of the Environment, Transport, Finance or banking investment and Labour sectors, despite the efforts to reach the stakeholders from those sectors, too. Further development of the multisectoral competences and further research to upgrade the understanding of drivers for engagement for the up listed sectors to public health issues is suggested. To investigate those, can provide a fertile ground for health in all policies approach in tackling childhood obesity.

Comparing stakeholders' responses regarding the relevance of the specific areas or activities preventing childhood obesity, we could observe no statistically significant differences between the two surveys. Policies of consideration were Social Marketing Campaigns, Reformulation, food taxation, labelling, and marketing, measures for treatment of childhood obesity, measures to increase physical activity and measures from private sector, contributing to tackling childhood obesity. Most respondents from both samples in 2019 and 2021 perceived measures to increase physical activity in children the most valuable, closely followed by measures to treat childhood obesity in the health sector. That is indicating the comparability of the samples regarding stakeholders' core interests and stability of the samples of the engaged stakeholders in both surveys.

The concepts of power, trust, evidence and transparency, equity and sustainability have been explored, which have emerged as important glue for stakeholders' engagement and collaboration already at the first STOP dialogues, they seems to be influencing stakeholders relationships substantially. Only few organisations perceive themselves powerful above the average. Stakeholders in general perceive the position of their organisation as influential to a moderate extent, less often it happens that their ideas and suggestions are ignored. They feel themselves most powerful at the national level, especially while organising activities or while participating in organised activities. International /global organisations perceive themselves powerful while only receiving information. Academia is perceived as the most trustworthy, followed by non-governmental organisations and public sector. Academia is most trustful in always fulfilling the agreements set Private sector and media have more challenges in achieving trust

by other stakeholders. Media seems to be most problematic partner due to unprofessionalism, private sector and media seems to be the ones who only pursue their primary goals and given agendas, who is not telling the whole story while benefiting of doing so and who exploit collaborating organisations to their advantage.

Evidence and transparency were highlighted as the key issue of trust by different stakeholder groups during the dialogues. It seems there is a strong attitude towards changing the operation of the organisation based on the newly obtained credible information, while they are often engaged to research by themselves. Organisations are also considering the issue of equity, with limited success in addressing equity issues successfully. It also seems that sustainability is high on the agenda of the organisations, operating in the areas of nutrition, physical activity, and childhood obesity in the EU at different levels.

Special attention was directed to the characteristics of the decision-making processes in preventing obesitogenic environments, where research was aiming to showcase the difference between the most promising means and most commonly used methods of action. Among five indicators, strengthening regulatory capacity was recognised as the most promising in 2021 survey.

In 2021 strengthening regulatory capacity and empowering interested networks have been more often used and were more often perceived as the most promising means to influence the policy decisions in childhood obesity.

Characteristics of the decision-making processes were grouped into two categories, one being the Soft background mechanisms for Health in All Policies and the other Advocating regulation of specific policy options. Among sectors, Health seems to be in the most neutral position towards both mechanisms, while Environmental sector seems to be most dedicated towards advocating regulation of specific policy options, with Agri-food chain being most against that the same mechanism. Education seems to be least in favour towards the soft background mechanisms, while Physical activity and sport stakeholders being most dedicated to soft approaches. Health sector stakeholders themselves are also diversified. Those stakeholders from the health sector, who engage in network building, information transfer, communications and public information provision are least supportive to the use of regulatory approaches, however they are more supportive towards soft approaches. Those who engage in research and education within health sector are not supportive to use any of both mechanisms. Health institutions engaged in policy advocacy are against the use of soft approaches and in high support of regulatory mechanisms.

Collaboration networks of stakeholders are giving additional insights into organisation of the stakeholder landscape. From organisational point of view, education, academy, and research and government type of stakeholders relatively strongly collaborate with all types of institutions. NGOs highly collaborate with Educational, Academic and research institutions, other NGOs, and professional associations. EU level organisations and Health institutions are clustered together, they collaborate with all but agrifood chain institutions. From perspective of sectors, health sector barely collaborates with organisations active in retail, catering, and tourism, while stakeholders from agri-food chain relatively strongly collaborate with the alike organisations. Research is collaborating broadly with number of stakeholders, with media, governmental, educational, professional and health organisations as well as with NGOs. Education and physical activity sector are not so much collaborating with governmental organisations and media. Health sector stakeholders among themselves highly collaborate with educational, research, health professional and nongovernmental organisations. Health stakeholders who engage in policy advocacy and network building collaborate evenly also with governmental and agri-food chain organisations and EU commission, while organisations representing patients and health professionals do practically not collaborate with governmental organisations and agri-food chain. Organisations who engage in research and education collaborate across the whole spectrum of stakeholders with exemption of retail and catering and tourism.

As problem of trust was indicated as one of the important issues in the collaborating environment of stakeholders, engaging in childhood obesity challenges, so concept of trust as a networking element was additionally explored, by using five claims: organisations are exploiting collaborating organisations to their advantage, are always fulfilling the agreements set, will not tell the whole story when they can benefit by doing so, will only pursue their primary goals and given agenda and are problematic partner

due to unprofessionalism. Academia has relatively good reputation overall and is most often perceived positively by all stakeholder groups. Relatively high level of general distrust towards others, especially private sector is present among non-governmental organisations. Public sector is differently perceived as trustful by different stakeholder groups. Private sector (agri-food chain and media) is perceived as less trustful, considering different claims. Among health sector stakeholders themselves, general structure of networks indicates some level of distrust towards private sector and media while on the other side stakeholders from NGOs and Academia present reliable collaborators. Those who engage in network building, information transfer and public information provision have stronger opinions that other stakeholders, show some level of distrust towards Academia and are the only group that believes that compared to others, public sector, NGOs, and Academia will not only pursue their primary goals. Stakeholders who represent the interests of patients are the only category who believes that everybody, but NGOs are problematic partner due to unprofessionalism.

Regarding the question, which of the policy approaches, legislation, guidelines or standards, collaborative action, fiscal measures or additional research would be most promising for successful implementation of the policies, measures and activities in changing the obesogenic environment to prevent childhood obesity, there were no mayor differences between the 2019 and 2021 surveys. In relation to fiscal measures to promote physical activities there is a significant decline in respondents' support for legislative approaches. We could notice this decline in all three major groups of the engaged stakeholders – Research, Health, and Education. There was an increase indicating for additional research to be needed in connection to the measures of food taxation, food labelling, and social marketing campaigns, expressed by stakeholders from Research, Health, Education and Agri-food chain sectors, the highest increase is noticeable in Education and Agri-food sectors. Request for additional research might slow down legislative changes and further exploration would be needed to prove such understanding of the observe change

Comparison among at present commonly used methods or practices and the most promising means or approaches in decision making processes, as perceived by the surveyed stakeholders, for successful implementation of the policies, measures and activities, has given the finding that *Strengthening regulatory capacity* and *Informing/empowering interested networks* are more often used in 2021 and more often perceived as most promising means in 2021. Organisation of scientific committees is also perceived more promising in 2021 as in 2019. Lobbying or advocating as the approach in decision making processes was more often used in 2021, but at the same time not being perceived as most promising. Also strengthened voluntary approaches are perceived somewhat higher as most promising mean in 2021.

Overall learning from the agreement on successfulness of policies is that stakeholders in majority support policy measures for prevention of childhood obesity. There are rather small clusters of stakeholders who strongly oppose specific policy option. Cross topic comparison of clusters have shown that low level attitudes group of stakeholders is often appearing together with the following main characteristics: having more stakeholders from research and agri-food chain; among health sector stakeholders being represented more often by those who engage in research and education, represent the interest of healthcare professionals, those engaged in commercial activities; being represented more often by stakeholders from professional institutions or associations.

Perceived positive shifts observed over time are that even among stakeholders being less in favour to food taxation policy measures, subsidies for healthy food options are approved, less stakeholders doubt the success of food labelling policy measures, and those stakeholders that initially haven't seen the potential of physical activity policy measures at all moved into neutral position. It would be useful to further explore, why stakeholders are not being positive regarding policy measures providing healthy food and food choices to support childhood obesity prevention, anchoring their doubts even deeper and why are stakeholders divided by arrangement of food industry sponsorship of sports events.

Findings are providing suggestions for future stakeholder research and will represent the basis for recommending the future sustainable stakeholders engagement in areas of nutrition, physical activity, and obesity at the EU level. Broad stakeholders' engagement, as implemented in present research,

could give more comprehensive understanding of the different views and standpoints regarding specific nutrition, physical activity, or childhood obesity policies. Better knowledge on the stakeholders' positions, views and modes of action allow for more successful definition and implementation of the individual policy measures and actions. Despite that and due to sometimes very diversified positions and opinions among stakeholders, achieving stakeholder agreement is not necessarily the decisive factor for introducing public health driven policies. To support policy decisions, implications for policymakers will be further elaborated in the form of short policy brief(s).

References

- 1KA (no date) Orodje za anketiranje, 1KA | Spletne ankete. Available at: https://www.1ka.si/d/en (Accessed: April 11, 2022).
- Aunger, J. A. et al. (2021) "Why do some inter-organisational collaborations in healthcare work when others do not? A realist review," Systematic reviews, 10(1), p. 82. doi: 10.1186/s13643-021-01630-8.
- Batagelj, V. (1988), "Generalized Ward and Related Clustering Problems", in Classification and Related Methods of Data Analysis, ed. H.H. Bock, Amsterdam: North-Holland, pp. 67-74.
- Brinsden, H. and Lang, T. (2015) An introduction to public health advocacy: reflections on theory and practice, Food Research Collaboration Policy Brief. Available at: https://criancaeconsumo.org.br/ (Accessed: April 13, 2022).
- Brown, L. D. (1983) "Organizing Participatory Research: Interfaces for Joint Inquiry and Organizational Change," Journal of Occupational Behaviou, 4(1), pp. 9–19.
- Bryson, J. M. (2004) "What to do when Stakeholders matter: Stakeholder Identification and Analysis Techniques," Public management review, 6(1), pp. 21–53. doi: 10.1080/14719030410001675722.
- Esping-Andersen, G. (1990) The three worlds of welfare capitalism. Princeton, New Jersey: Princeton University Press
- Farrer, L., Lesnik, T. and Gabrijelčič Blenkuš, M. (2012) Report of the "health in all policies" focus area group on: SCHOOL FRUIT SCHEME, Eurohealthnet.eu. Available at: https://eurohealthnet.eu/wp-content/uploads/publications/before-2016/crossing-bridges_schoolfruitscheme.pdf (Accessed: April 13, 2022).
- Fowler, A. (2016) "Non-governmental development organisations' sustainability, partnership, and resourcing: futuristic reflections on a problematic trialogue," Development in practice, 26(5), pp. 569–579. doi: 10.1080/09614524.2016.1188883.
- Gabrijelčič Blenkuš, M. et al. (2012) Vsevladni pristop za zdravje in blaginjo prebivalcev in zmanjševanje neenakosti v zdravju, Nijz.si. Available at: https://www.nijz.si/sites/www.nijz.si/
 files/\protect\@normalcr\relaxpublikacije-datoteke/vsevladni_pristop_za_zdravje_in_
 blaginjo_prebivalcev.pdf (Accessed: April 13, 2022).
- Gabrijelčič Blenkuš, M. et al. (2020). First Childhood Obesity Stakeholder Conference and Dialogues report [Documentation from STOP project].
- Galinsky, A. D., Schaerer, M. and Magee, J. C. (2017) "The four horsemen of power at the bargaining table," Journal of business & industrial marketing, 32(4), pp. 606–611. doi: 10.1108/jbim-10-2016-0251.
- Galloway, M. K. and Ishimaru, A. M. (2020) "Leading equity teams: The role of formal leaders in building organizational capacity for equity," Journal of education for students placed at risk, 25(2), pp. 107–125. doi: 10.1080/10824669.2019.1699413.
- Gassin, A. L. (2001) "Helping to promote healthy diets and lifestyles: the role of the food industry,"
 Public health nutrition, 4(6A), pp. 1445–1450. doi: 10.1079/phn2001236.
- Gorsuch, R. (1983) Factor Analysis. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gray, R. (2010) "Is accounting for sustainability actually accounting for sustainability...and how would we know? An exploration of narratives of organisations and the planet," Accounting, organizations and society, 35(1), pp. 47–62. doi: 10.1016/j.aos.2009.04.006.

- Hoek, J. and Jones, S. C. (2011) "Regulation, public health and social marketing: a behaviour change trinity," Journal of social marketing, 1(1), pp. 32–44. doi: 10.1108/20426761111104419.
- https://www.healthpolicyproject.com/pubs/272_AccountabilitySystemsResourceGuide.pdf
- Kraak, V. I. and Story, M. (2015) "Guiding principles and A decision-making framework for stake-holders pursuing healthy food environments," Health affairs (Project Hope), 34(11), pp. 1972–1978. doi: 10.1377/hlthaff.2015.0635.
- Kraak, V. I. et al. (2014) "An accountability framework to promote healthy food environments," Public health nutrition, 17(11), pp. 2467–2483. doi: 10.1017/S1368980014000093.
- Lu, W., Wei, Y. and Wang, R. (2020) "Handling inter-organisational conflict based on bargaining power: Organisational power distance orientation matters," International journal of conflict management, 31(5), pp. 781–800. doi: 10.1108/ijcma-06-2019-0092.
- Lundvall, S. (2015) "Physical literacy in the field of physical education A challenge and a possibility," Journal of sport and health science, 4(2), pp. 113–118. doi: 10.1016/j.jshs.2015.02.001.
- Mazur, A. et al. (2013) "Childhood obesity: knowledge, attitudes, and practices of European pediatric care providers," Pediatrics, 132(1), pp. e100-8. doi: 10.1542/peds.2012-3239.
- Moise, N. et al. (2011) "Limiting the consumption of sugar sweetened beverages in Mexico's obesogenic environment: a qualitative policy review and stakeholder analysis," Journal of public health policy, 32(4), pp. 458–475. doi: 10.1057/jphp.2011.39.
- Olsen, P. I. et al (2014) "The dynamics of networked power in a concentrated business network,"
 Journal of Business Research, 67(12), pp. 2579–2589.
- Project Astahg (no date) Alpine-space.eu. Available at: https://www.alpine-space.eu/projects/astahg/en/home (Accessed: April 11, 2022).
- Revelle, W. (2022) "Procedures for Psychological, Psychometric, and Personality Research [R package psych version 2.2.3]." Available at: https://CRAN.R-project.org/package=psych (Accessed: April 11, 2022).
- Sassi, F. et al. (2018) "Equity impacts of price policies to promote healthy behaviours," Lancet, 391(10134), pp. 2059–2070. doi: 10.1016/s0140-6736(18)30531-2.
- Schnackenberg, A. K. and Tomlinson, E. C. (2016) "Organizational transparency: A new perspective on managing trust in organization-stakeholder relationships," Journal of management, 42(7), pp. 1784–1810. doi: 10.1177/0149206314525202.
- Staranje.si (2014) Staranje.si. Available at: http://staranje.si/ (Accessed: April 11, 2022).
- STOP Science and Technology in childhood Obesity Policy (2020) Stopchildobesity.eu. Available at: urlhttp://www.stopchildobesity.eu/ (Accessed: April 11, 2022).
- Swinburn, B. A. et al. (2019) "The global syndemic of obesity, undernutrition, and climate change: The lancet commission report," Lancet, 393(10173), pp. 791–846. doi: 10.1016/S0140-6736(18)32822-8.
- The PolMark Project Policies on Marketing food and beverages to children (2010) Europa.eu. Available at: https://webgate.ec.europa.eu/chafea_pdb/assets/files/pdb/2007325/2007325_deliverable_3_review_of_regulations_in_eu.pdf (Accessed: April 11, 2022).

- van Gerwen, M. et al. (2009) "Primary care physicians' knowledge, attitudes, beliefs and practices regarding childhood obesity: a systematic review," Obesity reviews: an official journal of the International Association for the Study of Obesity, 10(2), pp. 227–236. doi: 10.1111/j.1467-789X.2008.00532.x.
- Vermeer, W. M., Steenhuis, I. H. M. and Poelman, M. P. (2014) "Small, medium, large or supersize? The development and evaluation of interventions targeted at portion size," International journal of obesity (2005), 38 Suppl 1(S1), pp. S13-8. doi: 10.1038/ijo.2014.84.
- Wang, Y. et al. (2015) "What childhood obesity prevention programmes work? A systematic review and meta-analysis: Childhood obesity prevention," Obesity reviews: an official journal of the International Association for the Study of Obesity, 16(7), pp. 547–565. doi: 10.1111/obr.12277.
- Yates, J. et al. (2021) "Trust and responsibility in food systems transformation. Engaging with Big Food: marriage or mirage?," BMJ global health, 6(11), p. e007350. doi: 10.1136/bmjgh-2021-007350.
- Žiberna, A. (2007) "Generalized blockmodeling of valued networks," Social Networks, 29(1), pp. 105–126. Available at: https://www.sciencedirect.com/science\protect\@normalcr\relax/article/abs/pii/S037887330600013X (Accessed: April 11, 2022).

Appendices

A STOP stakeholders survey 2019



Invitation to engage with the STOP project, aimed at halting childhood obesity in the EU Your organisation has been identified as a key stakeholder and/or right-holder on the theme of childhood obesity. On behalf of the STOP project consortium, we would like to invite you to engage with us in a participatory process aimed at informatively exploring the most effective ways to tackle childhood obesity. The STOP project (Science and Technology in childhood Obesity Policy) is a major initiative funded under the EU Horizon 2020 research programme launched this year (http://www.stopchildobesity.eu). The aim of the STOP project is to find the most successful and effective approaches to reduce the incidence of childhood obesity, while helping children already suffering the disease to get the best support. Benefits of engaging: The current EU Action Plan on childhood obesity is set to expire in 2020, with the possibility for a new strategic framework to be defined. Lessons learned from the STOP project, including through the stakeholder engagement process, can be proposed as input for the EU's future strategic engagement in the area. Likewise, good practice policies and actions identified under STOP may be shared through the Best Practice Portal, offering the possibility to propose your projects and activities for assessment and potential inclusion. Joining the STOP stakeholders network will provide the opportunity to flexibly share your expertise and views on different areas relevant to fighting obesity as a multidimensional challenge, also by joining STOP conferences and events. You will also receive the latest, in-depth and practical insights on the topic of tackling childhood obesity, including with reference to the CO-CREATE project. Invitation to participate in STOP questionnaire: Your cooperation is really important, because views of your organisation can not be replaced by any other. By collaborating, you will make a significant contribution to the quality of the data collected and to the reliability of the results and applicability of the STOP recommendations. By thus you also contribute to the creation of arguments to achieve the goals of reducing childhood obesity in the EU. In the questionnaire, we guarantee you complete anonymity of your answers. The personal data and the identification data on your organization are not collected in the questionnaire, and the IP address tracking is disabled. All data collected with this survey will be used exclusively for the purposes of the STOP project. Your answers will be handled with care and confidentiality. The research reports will be presented to the stakeholders at different STOP events and published in summarized form at the NIJZ, ICL and project partners websites and in professional publications. Each answer counts and will provide a more complete insight into the challenges of childhood obesity, so we would like to thank you very much for participating in the survey. For further details on the project and stakeholder engagement process, please contact: stop@nijz.si or stop-management@imperial.ac.uk STOP Coordinator: Prof. Franco Sassi, Imperial College of Science Technology and Medicine (ICL) STOP WP10 coordinator: Dr. Mojca Gabrijelčič, National Institute of Public Health Slovenia (NIJZ)



Q1 - Please indicate which sector your organisation mainly operates in
○ Research
○ Health
Education
○ Agri-food chain
○ Social affairs
○ Environment
○ Transport
Built environment
O Physical activity and sports
Finance or banking investment
○ Labour
Other:
<pre>IF (1) Q1 = [4]</pre>
Q3 - Which sector of agri-food chain
O Primary agricultural production
Food processing industry
○ Retail
Others.
Other:
Q2 - Please indicate your main position in the organisation
Managerial - Directorial post
 Professional post
○ Administrative post
○ Apprentice
Other:
Q4 - How would you best define your organisation
Public (whose founder or/and owner is the state)
O Private (whose founders and/or owners are private individuals or privat legal entities)
O Public-private



Q5 - How would you best define your organisation
O Formal (formal organizations have a founding act, operating rules)
O Informal (for example, Facebook community of breastfeeding mothers
Q6 - How would you best define your organisation
O Profit (profit oriented entities)

Non-profit (operating in the general good)

Q7 - Please, indicate the relevance of the following areas or activities, listed below, for your organisation. Some of the topics and statements might be irrelevant for your organisation, in such case please mark that option.

	Irrelevant	Of low relevance	Relevant to some extent	Relevant	Very relevant
Reformulation, taxation, la- belling, food marketing	0	0	0	0	0
Social market- ing campaigns	\bigcirc	\bigcirc	\circ	\bigcirc	\circ
Development of measures in the private sector to contribute to tackling child-hood obesity	0	0	0	0	0
Measures to increase physical activity in children	0	0	0	0	0



Measures	to			
treat childhoo	od			
obesity in th	ne		\bigcirc	
health sector				

Q8 - In the opinion of your organisation, how successful are the following policies, measures and activities in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach? Please, express your agreement:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Don& #39;t know
Food taxation	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	
Food labelling	\bigcirc	\bigcirc	\bigcirc		\bigcirc	\bigcirc
Food reformula- tion	\bigcirc	0	\bigcirc	0	\bigcirc	0
Food marketing	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Social market- ing campaigns	\bigcirc	0	\bigcirc	\circ	\bigcirc	\circ
Monitoring business actions and perfor- mance	0	0	0	0	0	0
Fiscal measures to promote physical activity	0	0	\circ	0	0	0
Measures to promote physical activity in schools	0	0	0	0	0	0
Measures to promote active transport among children	0	0	0	0	0	0



Capacity build-				
ing for the				
implementation				
of programs for	\bigcirc		\bigcirc	
the treatment		O		
of childhood				
obesity in the				
health sector				

Q9 - According to your organisation, which of the following approaches would be most promising for successful implementation of the policies, measures and activities, listed below, in changing the obesogenic environment to prevent childhood obesity? You could choose more than one.

	Legislation	Establishing guidelines or standards	Supporting collaborative action	Fiscal measures	Additional research
Food taxation					
Food labelling					
Food reformula- tion					
Food marketing					
Social market- ing campaigns					
Monitoring business actions and perfor- mance					
Fiscal measures to promote physical activity					
Measures to promote physical activity in schools					

with a specific statement.



Measures to promote active transport among children							
Capacity build- ing for the implementation of programs for the treatment of childhood obesity in the health sector							
Q10 - Please, consider the following statements and indicate what the standpoint of your organisation is towards each specific statement. Your organisation might disagree, somewhat disagree, is neutral, somewhat agree or agree							
tour organisation mi	grit disagree	e, somewnat d	sagree, is neut	iai, somewnat	agree or agree		



IF (3) Q7a = [3, 4, 5]

Q11 - We are kindly asking you to express your organisation agreement with the following statements below, regarding reformulation, taxation, labelling and food marketing.

IF (4) Q7a = [3, 4, 5]

Q12 - Labels which provide an overall nutritional grade are more effective than labels which provide nutrient specific information in:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
supporting healthier consumer choice.	0	0	0	0	0
encouraging companies' price reactions.	0	\circ	0	0	0
in encouraging companies to reformulate product.	0	0	0	0	0

IF (5) Q7a = [3, 4, 5]

Q13 - Tax proportional to the nutrient content of product is more effective than the tax based on the value of product :

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
to support con-					
sumers in pur-	\bigcirc				
chasing health-	O	\bigcirc	O	O	
ier options.					
to encourage					
companies'	\bigcirc	\bigcirc	\bigcirc	\bigcirc	
price reactions.					



to encourage companies to reformulate product.	0	0	0		
IF (6) Q7a = [3, 4, 5]					
Q14 - Labelling syste	m snoula in	itegrate recomn	nenaea portior	i sizes.	
	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
	\bigcirc	\circ	\bigcirc	\bigcirc	\bigcirc
IF (7) Q7a = [3, 4, 5] Q15 - Marketing of fo to children up to:	ood high in	fat, sugar and s	alt, targeted to	o children should	l be restricted
	18 years	16 years 14	years 12 ye	ars 10 years	8 years
	\bigcirc		0 0		
IF (8) Q7a = [3, 4, 5] Q16 - For food grou	os which are	e major contrib	utors to popula	ition intakes, co	mposition tar-
gets/standards, base	ed on best p	ractice, should	be established	for the content o	of:
	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
of saturated fat in certain foods.	\bigcirc	0	0	0	\bigcirc
of sodium in cer- tain foods.	0	0	0	\circ	0
of added/free sugar in certain					



IF (9) Q7a = [3, 4,

11 (3) & 74 [3, 4, 3]	
Q17 - Would you like to highlight something else regarding reformulation, taxation, lal	belling
and food marketing?	



IF (11) Q7b = [3, 4, 5]

Q18 - We are kindly asking you to express your organisation agreement with the following statements below, regarding social marketing campaigns for reducing childhood obesity.

IF (12) Q7b = [3, 4, 5]

Q19 - Social marketing campaigns for reducing childhood obesity are more successful if they:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
target portion sizes.	\circ	0	0	0	\circ
target nutrition composition of products.	0	0	0	0	0
target physical activity options in the environments.	0	0	0	0	0
target sleep pat- terns of children.	\circ	\circ	0	0	0
target edu- cation pro- grammes and approaches.	0	0	0	0	0
target social media use among children.	0	0	0	0	0
target self- confidence and body image.	0	0	0	0	0

IF (13) Q7b = [3, 4, 5]

Q20 - Would you like to highlight something else regarding social marketing campaigns for reducing childhood obesity?



IF (15) Q7c = [3, 4, 5]

Q21 - We are kindly asking you to express your organisation agreement with the following statements below, regarding business impact assessment

IF (16) Q7d = [3, 4, 5]

Q22 - Entities in agri-food chain are performing different actions in supporting creation of healthy food environments. Business impact assessment of those actions should concentrate most to the:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
performance in					
core business in-	\circ	\bigcirc	\bigcirc	\bigcirc	\bigcirc
dicators.					
established					
processes for			\bigcirc		
implementing			O		
commitments.					
established					
monitoring and					
evaluation of					
commitments	O	\cup	O		
implementa-					
tion.					
transparency of					
actions and op-		\bigcirc	\bigcirc	\bigcirc	\bigcirc
erations.					

IF (17) Q7c = [3, 4, 5]

Q23 - The role of the food industry is



	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
to fund research on nutrition and health.	0	0	0	0	0
to support pro- fessional and/or scientific events and awarding.	0	0	0		0
to support nutrition education / healthy diet oriented programs.	0	0	0	0	0
to support programs, activities and events in relation to physical activity or active living.	0	0	0	0	0
to be involved in the development of nutrition, physical activity and/or obesity policies or regulations.	0	0	0		0
to be engaged in obesity prevention.	0	0	0		0
IF (18) Q7b = [3, 4, 5] Q24 - Would you like to highlight something else regarding business impact assessment?					



IF (20) Q7d = [3, 4, 5]

Q25 - We are kindly asking you to express your organisation agreement with the following statements below, regarding policy actions, enhancing physical activity in children.

IF (21) Q7d = [3, 4, 5]

Q26 - Following fiscal policy options are successful for supporting the increase of physical activity in children:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
Investments in youth physical activity should be subsidised.	0	0	0	0	0
Reduced tax rates should be applied to equipment for exercise.	0		\circ	\bigcirc	0
Municipalities should finan- cially support sport-for-all programmes.	0		\odot	\bigcirc	0
Schools should be aided by state and municipalities to improve their infrastructure for PA/sports.					0

IF (22) Q7d = [3, 4, 5]



Q27 - Schools across EU could offer numerous opportunities for increasing physical activity in children:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
Extracurricular physical activity should be offered to all children free of charge within the obligatory school curricula.	0				0
One hour of physical education per day should be mandatory for all children throughout primary and secondary school.					
Schools should provide active learning and active breaks during school time.	0	0		0	0
Obligatory short breaks in sitting should be introduced throughout primary and secondary school.			0		



School curricula					
need to include					
lessons about					
the benefits	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
of PA (outside					
physical educa-					
tion lessons).					

IF (23) Q7d = [3, 4, 5]

Q28 - Active transport is offering children numerous opportunities for being physically active, with clear responsibilities for different sectors, levels or stakeholders:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
Active mobility should become a policy beacon in mobility and land use planning, especially in urban environments.	0		0		0
Active commuting to school for children under 12 should be encouraged under supervision by adults.			0		0



Promotion and					
implementation					
of active trans-					
port to school	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
should be made					
obligatory for					
schools.					
IF (24) Q7d = [3, 4, 5]					
Q29 - Would you like	to highligh	t something els	e regarding po	licy actions, en	hancing physi-
cal activity in childre	n?				



IF (26) Q7e = [3, 4, 5]

Q30 - We are kindly asking you to express your organisation agreement with the following statements below, regarding measures to treat childhood obesity in the health sector

IF (27) Q7e = [3, 4, 5]

Q31 - If obesity in child is detected, the main challenge for appropriate treatment in health system is:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
lack of time of health professionals.	0	0	0	0	0
lack of human resources.	\bigcirc	\bigcirc	\bigcirc	\circ	\circ
lack of financial resources.	\circ	\circ	\circ	0	0
lack of education/knowledge of health professionals.	0	\circ	0	\circ	0
lack of under- standing of the need for team work.	0	0	0	0	0

IF (28) Q7e = [3, 4, 5]

Q32 - If we want to manage obesity effective, the most promising approach is:

Disagras	Somewhat	Noutral	Somewhat	A 2142 2
Disagree	disagree	Neutral	agree	Agree



to establish common standards for managing obesity in health sector	0	\ominus	0	0	0
to increase general knowl- edge among all healthcare professionals.	0	0	0	0	0
to provide the obesity specialisation of dedicated healthcare professionals.		0	0	0	0
to establish harmonized collaboration among family doctor/GP and specialistic level	0	0	0	0	0
to establish harmonized collaboration of health professionals with kindergartens and schools Other:	0	0	0	0	
Otrier.	\cup	\cup	\cup	\cup	\bigcirc



to establish					
harmonized					
collaboration					
among health	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
professionals					
and extended					
family					
IF (29) Q7e = [3, 4, 5]					
Q33 - Would you like	e to highlight :	something else	regarding me	asures to treat	childhood obe-
sity in the health se	ctor?				



BLOCK (30) (Characteristics of decision – making processes in reverting obesogenic environments)

Q34 - Policy decision making processes are complex, with different means of influence. We are kindly asking you to express your organisation views on the means of influence in the policy decision making processes in childhood obesity.

 ${\tt BLOCK\,(30)\,(\,Characteristics\,of\,decision\,-\,making\,processes\,in\,reverting\,obesogenic\,environments}\,)$

Q35 -

subject

According to your organisation what are the most promising means to influence the pol

	Lea 1	ist 2	3	4	Most5
strengthening					
regulatory ca-	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
pacity					
strengthening					
the voluntary	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
approach					
funding ca-					
pacity building					
workshops for	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
professional					
associations					
facilitate (e.g.					
financially sup-					
porting) re-	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
search on the					



defining public						
health driven re-						
lationships be-						
tween national	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	
governments						
and the global						
food industry						

BLOCK (30) (Characteristics of decision – making processes in reverting obesogenic environments)

Q36 -

According to your organisation what are the most promising means to influence the pol

Least 2 3 4 5

lobby or advo- cate directly policy mak- ers for specific policy options	0				0	
lobby or advo- cate directly in- fluential experts for specific pol- icy options	0	0	0	0	0	
lobby or advo- cate via NGO's for specific pol-	0	0	0	0	\bigcirc	

BLOCK (30) (Characteristics of decision – making processes in reverting obesogenic environments)



Q37 -

What are in your organisation opinion the most promising means to influence the policy

	Lea 1	ist 2	3	4	Most 5
develop some "consortium" of actors having similar inter- est on policy options	0	0	0	0	0
organise a scientific committee of experts on the subject					0
informing and empowering interested networks	0	0	0	0	0
organise some events with the participation of the policy makers	0	\circ	0	0	0
strenghtening the involvement of adolescents (target group) in decision mak- ing processes	0	0	0	0	0

BLOCK (30) (Characteristics of decision – making processes in reverting obesogenic environments)



Q38 - For your organisation, how important are the following attributes of multi-stakeholder collaboration in decreasing childhood obesity?

	Not important at all	Not important	Neutral	Important	Very important
understanding of the necessity of the joint multi- stakeholder approach	0	0	0	0	0
readiness to collaborate with other stakeholders	0		0	0	0
capacities and resources which stakeholders have available to cooperate with others	0		0	0	
necessary skills and knowledge stakeholders possess to improve coop- eration	0	0	0	0	
capacities and resources available to cooperate	0		0	0	0



willingness to work on a multi-sectoral initiatives	0	0	0	0	0	
level of trust among stake- holders	0	0	0	0	0	
accountability in multi- stakeholder relationships	0	0		0	0	
influence of drivers for action (economic, public health,)	0	0	0	0	0	
consideration of health inequalities and social determinants	0	0	0	0	0	
consideration of sustainability and environ- mental issues	0	0	0	0	0	
BLOCK (30) (Characteris	stics of decisior	n – making pr	ocesses in rever	rting obesogenio	c environments	
Q39 - What, in the opinion of your organisation, are the main challenges in providing healthy						
food, regular physical a	activity and lo	w levels of s	edentary beha	viour for childr	en and adoles-	
(Please, list your organ	isation priority	y challenges	, with key word	ls or in a few sh	ort sentences)	
			-			

BLOCK (30) (Characteristics of decision – making processes in reverting obesogenic environments



)					
Q40 - Would you li	ike to highlight	t something els	se regarding ch	ildhood obesit	y?
BLOCK (30) (Charac	cteristics of deci	sion – making p	rocesses in reve	rting obesogen	ic environments
)					
Q41 - How powerfu	ul do you perce	eive the positio	n of your organ	isation in the	policy decision-
making processes	regarding chil	dhood obesity	?		
Multiple answers are po	ossible				
	Not at all	Slightly	Powerful	Very	Extremely
	powerful	powerful	Fowerial	powerful	powerful
Regional level					
National level					
European level					
International/Glob	pal _				
level					

B STOP stakeholders survey 2021





Invitation to participate in STOP questionnaire

Your organisation has been identified as a key stakeholder and/or right-holder on the theme of childhood obesity. On behalf on the STOP project consortium, we would like to invite you to participate in the second stakeholder questionnaire.

By collaborating, you will make a significant contribution to the quality of the data collected and to the reliability of the results and applicability of the STOP recommendations. Your input will also contribute to the creation of arguments to achieve the goals of reducing childhood obesity in the EU. In the second stakeholder survey, questions linked to public food procurement are also included (covered by the Best-ReMaP project).

In the questionnaire, we guarantee you complete anonymity of your answers. Personal data and identification data on your organization are not collected in the questionnaire, and the IP address tracking is disabled. All data collected with this survey will be used exclusively for the purposes of the STOP and the Best-ReMaP projects. Your answers will be handled with care and confidentiality. The research reports will be presented to the stakeholders at different STOP events and published in summarized form at the NIJZ, ICL and project partners' websites and in professional publications.

Each answer counts and will provide a more complete insight into the challenges of childhood obesity. We therefore would like to thank you in advance for participating in the survey.

The survey should take no more than 25 minutes to complete. For further details on the project and stakeholder engagement process, please contact: stop@nijz.si or stop-management@imperial.ac.uk

STOP Coordinator: Prof. Franco Sassi, Imperial College of Science Technology and Medicine (ICL) Best-ReMaP Coordinator and STOP WP10 coordinator: Dr. Mojca Gabrijelčič, National Institute of Public Health Slovenia (NIJZ) *The STOP project (Science and Technology in childhood Obesity Policy), 2018 – 2022, is a major initiative funded under the EU Horizon 2020 research programme launched this year (http://www.stop-obesity-project.eu/). The aim of the STOP project is to identify the most successful and effective approaches to reduce the incidence of childhood obesity, while helping children already suffering from the condition to get the best support. STOP is part of the EU's Research Programme for Sustainable Food Security, and involves over 30 research and government agency partners across Europe, the United States and New Zealand. The products of the



research are the responsibility of the authors: the European Commission is not responsible for any use that may be made of them.

*The Best-ReMaP is a joint action of EU Member States on diet and nutrition with a special focus on children (https://bestremap.eu/). The project started in October 2020 and will run for three years. The main aim is to adapt replicate and implement practies that have been proven to work in the areas of food reformulation, food marketing and public procurement of foods in public settings.

Q1 - Please indicate which sector your organisation operates in:

Note: & nbsp; Multiple answers are possible. Please sort by priority. To do this, & nbsp; & nbsp; drag up to three options from left to the right spaces.

Available categories:		Ranked categories:				
	Research	1.				
	Health	2.				
	Education	3.				
	IF (1) Q19b					
Q2 - Wh	ich organisation do you represent?					
○ Health	ncare provider (primary care and seco	ondary care)				
O Pharn	nacist					
○ Health	ncare professional representative org	anisation				
Patier	nt representative organisation					
○ Medic	cal students' organisation					
O Diseas	se-specific organisation					
O Public	c health organisation					
○ Health	n equity organisation					
○ Resea	rch and education organisation					
O Public	authority (healthy ministry, institute	of health)				

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O Community health initiative (non-formal)



Health in social institutionsHealthcare and medical nutrition industrOther:	Y
F (1) Q19b	
Q4 - What are the main activities of your	
Note: Multiple answers are possible. Please sort by pri	iority. To do this,& nbsp;& nbsp;drag up to three options from left to
he right spaces.	
Available categories:	Ranked categories:
Work with patients in healthcare settings	1.
Engage in research and education	2.
Represent the interests of patients	3.
IF (2) Q19d	
Q3 - Which sector of agri-food chain do yo	ou operate in?
Primary agricultural productionFood processing industry	
Retail	
Food organisation (for example in public	institutions)
Catering and tourism in the agri-food cha	ain
○ Food consumers associations	
Other:	

Q5 - How would you define your organisation from an organisational point of view?



Note: sort by predominant organisational structure. To do this, drag up to three options from left to the right spaces.

Availab	le categories:	Ranked categories:
	EU level organisation	1.
	State government	2.
	Intermediate or regional government	3.
l		
Q6 - Plea	se indicate your position in t	the organisation:
○ Manag	erial - Directorial post	
O Profess	sional post	
O Admin	istrative post	
○ Apprer	ntice	
Other:		



Q7 - How would you best define your organisation? Q8 -O Public (whose founder or/and owner is the state) O Private (whose founders or/and owners are private individuals or privat legal entities) O Public-private Q9 -O Formal (formal organizations have a founding act, operating rules) O Informal (for example; Facebook community of breastfeeding mothers) Q10 -O Profit (profit oriented entities) Non-profit (operating in the public interest) Q11 - To what extent is the work of your organisation related to the childhood obesity? O Very related O Quite related O Partly related O A bit related O It is nor related at all O Do not know Q12 - Please, indicate the relevance of the following areas or activities, listed below, for your organisation. Some of the topics and statements might be irrelevant for your organisation, in such case please mark that option. Completely Of low Relevant to Very relevant Relevant irrelevant relevance some extent Reformulation. taxation, la- \bigcirc \bigcirc belling, food marketing



Food procure					
Food procure- ment in public	\circ	\bigcirc	\circ	\bigcirc	\bigcirc
sector					
Social market-	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
ing campaigns					
Development of measures in the					
private sector					
to contribute to	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
tackling child-					
hood obesity					
Measures to					
increase phys-					
ical activity in	O	O	O	O	O
children					
Measures to					
treat childhood		\bigcirc		\bigcirc	\bigcirc
obesity in the					
health sector					

Q13 - (1/2) In the opinion of your organisation, how successful are the following policies, measures and activities in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach? Please, express your agreement:

	Disagree	Somewhat Disagree		Somewhat	Agree	Do not
		disagree	Neutral	agree	9	know
Food taxation	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Taxation of HFSS						
(high in fat, salt						
or sugar) prod-		O	O	O	O	O
ucts						
Subsidies for e.g.						
fruit and vegeta-	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
bles						



Food labelling	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Front of pack nutrition la- belling	0	0	0	0	0	\bigcirc
Food reformula- tion	\circ	\circ	\circ	\bigcirc	0	\bigcirc
Reduction of food marketing pressure to children	0	0	0	0	0	0
Reduction of food market-ing pressure on broadcast and online media	0	0	0	0	0	0
Reduction of food marketing pressure on product packages	0	0	0	0	0	0
Reduction of food market-ing pressure to children in retail settings	0	0	0	0	0	0
Reducing food marketing pres- sure to children in urban envi- ronment						0
Arrangement of food industry sponsorship of sports events	0	0	0	0	0	0



Urban planning				
policies to re-				
duce food outlet	\bigcirc	\bigcirc		
density around				
schools				

Q46 - (2/2) In the opinion of your organisation, how successful are the following policies, measures and activities in changing the obesogenic environment to prevent childhood obesity, as a part of comprehensive approach? Please, express your agreement:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Do not know
Social market- ing campaigns	\bigcirc	0	\bigcirc	0	\bigcirc	\circ
Monitoring business actions and perfor- mance	0	0	0	0	\circ	0
Food procure- ment in public sector	0	0	\circ	0	0	0
Fiscal measures to promote physical activity	\circ	0	\circ	0	0	0
Measures to promote physical activity	0	0	0	0	0	0
Policies for sus- tainable urban mobility	0	0	\circ	0	\circ	0
Policies for the built urban environment	0	0	\circ	0	0	0



Policies for integration of urban mobility and land use planning	0	0	0	0	0	0
Measures to promote active transport among children	0	0	0	0	0	0
Capacity building for the implementation of programs for the treatment of childhood obesity in the health sector		0	0	0	0	

Q14 - (1/2) According to your organisation, which of the following approaches would be most promising for successful implementation of the policies, measures and activities, listed below, in changing the obesogenic environment to prevent childhood obesity? You could choose more than one.

	Legislation	Establishing guidelines or standards	Supporting collaborative action	Fiscal measures	Additional research
Food taxation					
Taxation of HFSS					
(high in fat, salt					
or sugar) prod-			Ш	Ш	
ucts					
Subsidies for e.g.					
fruit and vegeta-					
bles					



Food labelling			
Front of pack nutrition la- belling			
Food reformula- tion			
Reduction of food market- ing pressure to children			
Reduction of food marketing pressure on broadcast and online media			
Reduction of food marketing pressure on product packages			
Reduction of food market- ing pressure to children in retail settings			
Reducing food marketing pres- sure to children in urban envi- ronment			
Arrangement of food industry sponsorship of sports events			



Urban planning			
policies to re-			
duce food outlet			
density around			
schools			

Q47 - (2/2) According to your organisation, which of the following approaches would be most promising for successful implementation of the policies, measures and activities, listed below, in changing the obesogenic environment to prevent childhood obesity? You could choose more than one.

	Legislation	Establishing guidelines or standards	Supporting collaborative action	Fiscal measures	Additional research
Social market- ing campaigns					
Monitoring business actions and perfor- mance					
Food procure- ment in public sector					
Fiscal measures to promote physical activity					
Measures to promote physical activity in schools					
Policies for sus- tainable urban mobility					



Policies for the built urban environment							
Policies for the integration of urban mobility and land use planning							
Measures to promote active transport among children							
Capacity building for the implementation of programs for the treatment of childhood obesity in the health sector							
BLOCK (3 Q15 - Policy decision are kindly asking policy decision ma	on ma you to ıking I	aking posess	ess your orga	anisation view ood obesity.	s on the means		
	Acco	rding to	your organi	sation what are	e the most promi	ising means to infl	uence the po
	1 2	2 3	4 5				
strengthening regulatory ca- pacity	0 (0	0 0				



strengthening
voluntary ap- O O O O
proaches
lobby or advo-
cate directly for
specific policy
options
organise a sci-
entific commit-
tee of experts on
the subject
informing and
empowering OOOO
interested net-
works

BLOCK (3) (Koncepti)

Q16 - How powerful do you perceive the position of your organisation in the policy decision-making processes regarding childhood obesity at different levels?

Note: Use a scale from 1 (not at all powerful) to 5 (extremely poweful) to rate each of the elements below

	1 - Not at all powerful	2	3	4	5 - Extremely powerful	Do not know
Local level	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	
Regional level	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
National level	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
European level	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	
International/Glok level	0	0	0	0	0	0

BLOCK (3) (Koncepti)

Q17 - Define the way your organization works at each level in the field of childhood obesity:



Note: & nbsp;mark the predominant way of working of your organisation at respective level on topics related to the child-hood obesity

	Not operating at that level	Passive mode of operation - we receive information	Active mode of operation - we participate in organized activities	Active mode of operation - we lead and organize (part of) the activities
Local level	\bigcirc	\bigcirc	\bigcirc	
Regional level	\circ	\circ	\circ	\circ
National level	\bigcirc	\bigcirc	\bigcirc	\bigcirc
European level	\bigcirc	\bigcirc	\bigcirc	\circ
International/Glob level		0	0	0

BLOCK (3) (Koncepti)

Q18 - In relation to other organisations with which we cooperate:

	Never	Rarely	Sometimes	Very often	Always	Do not know
It happens that our ideas and suggestions are ignored	0	0	0	0	0	0
We perceive the position of our organisation as influential	0	0	\circ	0	0	0

BLOCK (3) (Koncepti)

Q19 - We are kindly asking you to express your organisation agreement with the following statements below, regarding childhood obesity:



	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Do not know
In our organization we are engaged in research and publication of research results	0	0	0	0		0
In our work, we have already encountered doubts about the credibility of information sources	0	0	0	0		0
We change the operation of our organization on the basis of newly obtained credible information	0	0	0	0	0	0
Quality information channels have been established on the impact of COVID-19 in the field of childhood obesity						

BLOCK (3) (Koncepti)

Q20 - EQUITY



We are kindly asking you to express your organisation agreement with the following statements below.

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Do not know
We include the aspect of health inequalities in our activities	0	0	0	0	0	0
In our work, we always evaluate the inclusion of the aspect of inequality	0	\circ	0	0	0	0
It is not always easy to consider equitable ap- proach in our actions	0	0	0	0	0	0
Our measures to address in- equalities are always success- ful	0	0	0	0		0

BLOCK (3) (Koncepti)

Q21 - SUSTAINABILITY

Please define the frequency in relation to the principle of sustainability in the operation of your organisation:

					Do not
Never	Rarely	Sometimes	Very often	Always	
					know



	0				
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
Koncepti) e to highlig	ıht somethir	ng else regar	ding childho	ood obesity?	
	() () Koncepti)	C C	C C C C C C C C C C C C C C C C C C C	 Compared to the compared to the compa	

BLOCK (4) (Sodelovanje z deležniki)

Q22 - COOPERATION WITH OTHER ORGANISATIONS

How often do you cooperate with the below institutions (with tasks related to the field of childhood obesity)?



	Never	Rarely	Sometimes	Very often	Always	Do not know
EU Commission	\bigcirc	\bigcirc	\circ	\bigcirc	\bigcirc	\bigcirc
State govern- ment	0	0	\circ	0	\bigcirc	0
Intermediate or regional govern-ment	0	0	0	0	0	\circ
Local govern- ment	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Educational institution	\bigcirc	\circ	\circ	\bigcirc	\bigcirc	\bigcirc
Academic and research institution	\circ	0	0	0	0	0
Professional institution	\bigcirc	\circ	\circ	\bigcirc	\bigcirc	\circ
Health institu- tion	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Agriculture or food production	\bigcirc	\circ	\bigcirc	\bigcirc	\bigcirc	\circ
Food processing industry	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Retail	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Catering and tourism	\bigcirc	\bigcirc	\circ	\bigcirc	\circ	\circ
Media	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Non- governmental organisation	0	0	0	0	\circ	\circ
Professional association	0	\circ	0	0	0	0

BLOCK (4) (Sodelovanje z deležniki)

childhood obe-

sity.



Q23 - What do you	ı think would	d improve coo	peration w	vith the before	mentioned	institutions?
BLOCK (4) (Sodelo	vanje z delež	źniki)				
Q24 - What do you	u think are t	he major obst	acles to ac	hieving better	cooperatio	n?
BLOCK (4) (Sodelo	vanie z delež	źniki)				
Q26 - The COVID-1		,	ened our co	ollaboration wi	th other sta	keholders in
the field of childhe						
○ Yes	3					
○ No						
Other:]				
		1				
BLOCK (4) (Sodelo	-	•				
Q27 - With which			organisatio	n increased/de	ecreased yo	ur collabora-
tion during COVID)-19 pandem	ic?				
BLOCK (4) (Sodelo	-	•				
Q25 - What do you	ı think abou	t stakeholder	collaborat	ion at Europea	n level in th	e future:
	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Do not know
Increased multi-						
sector coop-						
eration due to						
COVID-19 will re-						
main the norm			\bigcirc		\bigcirc	\bigcirc
in addressing						
challenges in						
the field of						



In the future,
European collaboration in the
field of childhood obesity
will be more
necessary than



IF (6) Q11b = [3, 4, 5]

Q41 - At the beginning of the survey you indicated that food procurement in public sector is relevant area of action for your organisation. Therefore, we are kindly asking you to answer to few additional questions regarding food procurement in public sector.

IF (6) Q11b = [3, 4, 5]	
Q42 - To what extent is the work of your organisation	n related to the food procurement?
Overy related	
Quite related	
O Partly related	
○ A bit related	
O It is not related at all	
O Don& #39;t know	
IF (6) Q11b = [3, 4, 5]	
Q43 - How would you primarily identify role of your or	ganisation in food procuring processes?
My organisation	
operates as procuring entity	
operates as providing entity	
is engaged in the overall procuring processes and no	ot implementation
advocates for better food procurement processes	
Other:	
IF (6) Q11b = [3, 4, 5]	
Q44 - What are the essential criteria to be included i	n food procurement procedures?
Note: Please sort by priority. To do this,& nbsp;& nbsp;drag all options	s from left to the right spaces.
Available categories:	Ranked categories:



Transportation (length,	1.	
type of transportation)	·	
D. I		
Packaging (e.g.		
recycled, big packing,	2.	
no packaging for		
fruit/vegetable)		
Fairly traded good		
(e.g. Global Gap	3.	
standard)	5.	
Staridard		
Sustainable food		
(should be verifiable/		
certificated, e.g. quality	4.	
schemes, ecological		
scheme)		
, , , , , , , , , , , , , , , , , , ,		
Freshness (e.g. not		
defrosted meat, fresh	5.	
fruit)		
B ·		
Price	6.	
Sensory evaluation	7.	
Food waste prevention	8.	
Social entrepreneurship	9.	
Other	10.	

IF (6) Q11b = [3, 4, 5]

Q45 - We are kindly asking you to express your organisation agreement with the following statements below.



	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Don& #39;t know
Stakeholders involved in procuring processes have enough knowledge on food quality (e.g. quality schemes, certificates)	0					
Stakeholders involved in procuring pro- cesses have enough knowl- edge on pro- curement legis- lation	0	0	0	0		0
The information on providing and procuring entities is sufficiently presented and linked	0	0	0	0		0



There is enough time/ resources for the people who deal with (healthy) food procurement in the procuring institutions	0		0	0	0	
We experienced that some stakeholders misused procurement procedure for their benefit	0		0	0	0	
We encourage free market ini- tiative against regulated pub- lic procurement procedures	0		0	0	0	0
Current food public pro- curement reg- ulations are restrictive and complex for providers and "end users"	0	0	0	0	0	0



There is a need to change marketing standards towards a more sustainable approach (towards change \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc of present legislated marketing standards of unsatisfactory quality of vegetables and fruit - e.g. shape, size)



BLOCK (5) (Zaupanje)

Q28 - Building trust is a process based on the experience of past collaborations. We are kindly asking you to express your organisation agreement with the following statements below.

BLOCK (5) (Zaupanje)

Q29 - Academia (educational, research, professional organisations):

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
exploit collab- orating organi- sations to their advantage	0	0	0	0	\circ
always fulfill the agreements set	\bigcirc	\circ	\bigcirc	\circ	\circ
will not tell the whole story when they can benefit by doing so	0	0	0	0	\circ
will only pursue their primary goals and given agenda	0	\bigcirc	\circ	0	0
they are a prob- lematic partner due to unprofes- sionalism	0	0	0	0	0

BLOCK (5) (Zaupanje)

Q30 - Comment:						

BLOCK (5) (Zaupanje)



Q31 - Organisations operating within government at any level:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
exploit collab- orating organi- sations to their advantage	0	0	0	0	0
always fulfill the agreements set	\bigcirc	\circ	\circ	\circ	\circ
will not tell the whole story when they can benefit by doing so	0	0	0	0	\bigcirc
will only pursue their primary goals and given agenda	0	0	0	0	0
they are a prob- lematic partner due to unprofes- sionalism	0	0	0	0	0

BLOCK (5) (Zaupanje	e)	
---------------------	-----	--

Q32 - Comment:

BLOCK (5) (Zaupanje)

Q33 - Private sector organisations:

Disagree	Somewhat		Somewhat	
	disagree	Neutral	agree	Agree



exploit collab- orating organi- sations to their advantage	0	0	0	0	0
always fulfill the agreements set	0	\bigcirc	0	0	\circ
will not tell the whole story when they can benefit by doing so	0	0	0	0	0
will only pursue their primary goals and given agenda	0	0	0	0	0
they are a prob- lematic partner due to unprofes- sionalism	0	0	0	0	0

BLOCK (5) (Zaupanje)

BLOCK (5) (Zaupanje)

Q35 - Media:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
exploit collab- orating organi- sations to their advantage	0	0	0	0	0



always fulfill the	\bigcirc				
agreements set					
will not tell the					
whole story					
when they can	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
benefit by doing					
SO					
will only pursue					
their primary					\bigcirc
goals and given					
agenda					
they are a prob-					
lematic partner					
due to unprofes-	O				
sionalism					

BLOCK (5) (Zaupanje)

Q36 -	Comment:			

BLOCK (5) (Zaupanje)

Q37 - Non governmental organisations:

	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree
exploit collab-					
orating organi-	\bigcirc	\bigcirc		\bigcirc	
sations to their					
advantage					
always fulfill the			\bigcirc	\bigcirc	
agreements set					



Q39 - Name the orga	nisation you	represent (op	tional)		
BLOCK (4) (Sodelovar			tional)		
Q38 - Comment:					
BLOCK (5) (2	Zaupanje)				
due to unprofes- sionalism					
they are a prob- lematic partner	\circ	0	0	0	0
agenda					
will only pursue their primary goals and given	\circ	0	0	\circ	0
when they can benefit by doing so	O	O	O	O	O
will not tell the whole story					

C STOP WP10 statements

STOP WP10 statements

In the STOP WP10 we are composing a list of STOP stakeholders (GDPR¹). The protocol used for identification of stakeholders is used to engage stakeholders and right-holders which are, and those that may not be in the first plan, when discussing the drivers of childhood obesity.

We do hope that comprehensive list of STOP stakeholders would help us identifying facilitating and inhibitory factors for stakeholder's engagement and activation. We would also like to increase the understanding of the need for change of the paradigm on obesitogenic environment among stakeholders. The participatory engaged stakeholders might more actively participate in the formulation, implementation and use of a specific policy, since they might better embrace the policy cycle process.

After the composition of STOP list, we are going to invite the stakeholders to express their attitudes towards specific statements in the form of a questionnaire. We would not like to compose very plain and straightforward statements but would like to compose the statements, which would help us to better and more in depth understand different positions of stakeholders and overcome the present positive or negative attitudes towards specific "obesitogenic" issues. Stakeholder's answers will hopefully enable us to group stakeholders according to their position and attitude toward a specific statement and will help us understand how the alliances among stakeholders and rightholders regarding a specific statement are composed.

We are asking partners of STOP WPs 4 - 8 to help us with formulation of these statements. The goal is to compose 2 - 3 statements per WP.

As an example, here is a proposed claim for the WP4 topic on regulation and fiscal policies. "It is important to maintain consumer's privilege to choose the differently sweet beverages."

This "indicative" statement for a WP4 is based on a set of identified incentives and disincentives, defined in WHO document titled "Incentives and disincentives for reducing sugar in manufactured foods". The idea when searching for the statements is to find the "indicators" (or indicating positions towards a specific statement) that will help us to segmentise the stakeholders.

The instruction for the stakeholder representative regarding the response will be formed in a following way:

Please, indicate whether the specific statements relevant for your organization. If the statement is relevant, please assess the standpoint for your organization, on the scale from 1 to 7, where 1 represents strong disagreement and 7 strong agreement with the statement. Number 4 represents a neutral standpoint of your organisation towards a statement.

Bellow you could find a template for a structured response.

Not	Strong	Disagre	Somewh	Neutral	Somewh	Agree	Strongl	
relevant	ly	e	at		at agree		y agree	Don't
for my	disagr		disagree					_
organizati	ee							know
on	1	2	3	4	5	6	7	

Dear colleague, if you wish to discuss the preparation of suitable statements, or need any kind of assistance on the task, do not hesitate to contact us at: stop(at)nijz.si.

¹ In line with GDPR as decsribed in the stakeholders identification protocol

D STOP Stakeholders Contact Collection Protocol



STOP STAKEHOLDERS

Contact collection protocol

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Dear partners,

We are jointly composing the STOP stakeholders list. We would like to address as many relevant stakeholders as possible. We would like to explore not just the usual suspects but also those who are more *in the shadow*, or neglected at the moment. To achieve this, we are using structured approach, that identifies all potential main drivers of obesity on one hand and all the spheres of society on the other.

- I. We are looking for the following **societal spheres**, where an individual organisation acts as a (see Figure 1):
 - 1. Non-profit public formal organisations (e.g., National Institute of Public Health: 1)
 - 2. Profit making private formal organisations (we would not like to engage individual organisations but umbrella organisations like Food-DrinkEurope, which are borderline: 2, 4)
 - 3. Public private partnerships (like to some extent European Innovation Partnership EIP FOOD: 3)
 - 4. Non-profit formal organisations (e.g., European Public Health Alliance: 4)
 - 5. Informal economy (e.g., Ombudsman: 5)
 - 6. Informal providers of different services (e.g., scouts: 6, 4)
 - 7. Non-profit informal networks (e.g., associations of parents in local communities: 7, 4)

For more detailed descriptions of the societal spheres see the descriptions bellow.

- II. The pool for searching the stakeholders/right-holders is based on 7 fields defined in the Obesity System Influence Diagram (see Figure 2):
 - a. Biology (research institutions and labs performing clinical studies, pharmaceutical industry, etc.)
 - b. Food production (Agrifood chain)
 - c. Food consumption (nutrition, dietetics, behavioural drivers, etc.)
 - d. Individual activity (socialization & education, etc.)
 - e. Activity environment (urban planning, facilities in communities, etc.)
 - f. Individual psychology (psychology, psychiatry, patients NGOs, etc.)
 - g. Societal influences (traditional and digital media, youth organisations, etc.)

¹Some organisations are at the borderline of societal spheres. Thus, when we attribute them with the descriptive sphere, we could attribute them with more than one of the seven spheres (up to three).





Protocol

- 1. Please, consider the contents of your respective work packages and choose the relevant fields from the Obesity System Influence Diagram (a-g).
- 2. By using the welfare mix (triangle), we are encouraging you to identify and add at least one potential stakeholder/right-holder per societal spheres (1-7).

If you chose one relevant field try to provide contact information for at least 7 stakeholders.

- We are encouraging you to enter as many stakeholders as possible into the form
- Do not mind if the stakeholder contact is already listed in the spreadsheet. The data will be checked and cleaned by STOP staff.
- According to GDPR, the provided list of stakeholders should only include official contact information of institutions. Information on the existence of informal contact is provided in separate column. Informal contacts will be managed separately by work-package representatives.

By using this process we will try to engage stakeholders that are not the usual suspects to hopefully bring new views, ideas and solutions to childhood obesity policies and solutions.





Entering the data

The data is entered into spreadsheet available on a Box platform of a STOP project

https://imperialcollegelondon.box.com/s/vquuw0p6tgtorie39nz0wezbrsf165pb

	About organisation (Contact								
													Nonformal	
Info provider -								First				Telephone	contact	societal
STOP partner	Acronym	Organisation name	Website	Address 1	Address 2	City	Country	name	Surname	position	Email	number	(yes/no)	spheres
WP10 - UL-FSS	NIJZ	National Institute Of Public Health	http://nijz.si	Trubarjeva 2		Ljubljana	Slovenia	Nina	Pirnat	director	info@nijz.si	+386 1 2441 400	Yes	1

We present an example of researcher from University of Ljubljana entering data of Slovenian National Institute of Public Health as relevant stakeholder:

Use the first column to identify yourself: enter the work package number which forms the base for the stakeholder identification and add additional identifiers so WP10 staff will be able to contact you if needed.

Enter the information on stakeholder, Acronym, Name, Web-page, Address...

Provide the contact information. To be GDPR compliant, provide only generic contact address of organisation (e.g. info@...), PR office or other office that is relevant and eligable to comunicate with STOP project. If you have informal contacts with organisation that could be used during the project please indicate this in a dedicated column. If we will need this contact in future (in line of GDPR), we will ask you for help.

Considering chosen relevant field(s), enter the societal sphere(s) to which identified stakeholder belongs (1-7).

			About organisat				
	Info provid STOP part		Acronym	Orgar			
WP10 – UL-FSS			NIJZ	Nationa			
	About org	anisa	ation				
	Acronym	Orga	anisation n	ame			
	NIJZ	Natio	nal Institute C	of Publ			

Contact					
First name	Surname	position	Email		
Nina	Pirnat	director	info@n		

_			Org
	Telephone number	Nonformal contact (yes/no)	soc spł
si	+386 1 2441 400	Yes	
	l		l

Nonformal	
contact	societal
(yes/no)	spheres
Yes	1





Typology of STOP stakeholders and welfare mix

Welfare mix as a concept was developed to enable the identification differences among the groups of the welfare states (Esping-Andersen, 1990). Since then, welfare mix was used and upgraded for the needs of understanding of different spheres of society in different contexts. In the case of AHA.SI project (www.staranje.si) it was used to identify the project stakeholders, operating in social spheres in different areas of active and healthy ageing in Slovenia (Kobal Tomc, 2014). For the purposes of the STOP project, we are using the welfare mix for identification of as many relevant stakeholders in the area of obesity as possible, not just usual suspects but also those who are more "in the shadow" or neglected at the moment. To achieve this, we are using a structured approach, identifying all potential main drivers of obesity on one hand and all the spheres of society, defined by the welfare mix, on the other.

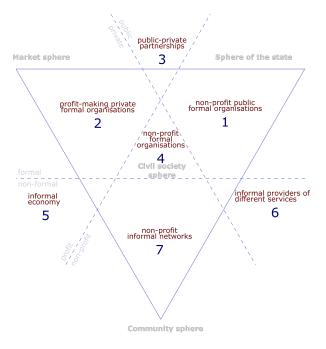


Figure 1: Welfare triangle (adapted from: Pestoff, 1992)

The typology:

1. Non-profit public formal organisations

E.g., governmental sectors and structures, public institutes and universities, chambers, public companies, parties.

Non-profit public formal organisations provide public service activities. They are regulated and appear in different legal forms (Pukšič, 2006), which conceptually covers the sphere of state, is based on a hierarchy in formal rights, it is financed from (predominantly) public resources (Kobal Tomc, 2014).





Public provision of social welfare services depends upon political decision (Pestoff, 1992).

2. Profit-making private formal organisations

E.g., food processing industry, leisure time industry, cooperatives. Profit-making private formal organisations which conceptually correspond to the market, are based on the search for profit and market prices. Profit-making private formal organisations are considering the economic power providing significant funding (WHO, 2001). Private provision is undertaken on an economical basis (Pestoff, 1992).

3. Public-private partnership

Public-private partnerships can cover different types of long-term contracts with a wide range of risk allocations, funding arrangements and transparency requirements. Infrastructure public-private partnerships as a phenomenon can be understood at five different levels: as a particular project or activity, as a form of project delivery, as a statement of government policy, as a tool of government, or as a wider cultural phenomenon. Common themes of public-private partnerships are the sharing of risk and the development of innovative, long-term relationships between the public and private sectors (Pestoff, 1992). In the health sector, public-private partnership commonly refers to any partnership in (global) health involving government and/or inter-governmental institutions and industry (Asante and Zwi, 2007). The public private partnerships have to be public health driven, transparent, without conflict of interests and independently monitored.

4. Non-profit formal organisations

E.g., professional associations and counselling, charitable organizations, faith-based organizations.

Non-profit formal organisations are common concepts for public administration, for social activities and voluntary organizations, operating mainly by public funding without or with profits. They invest profits back into the business, for expanding or raising the quality of services. Non-profit formal organizations are goals oriented, social, open, dynamic and composite systems. Their role is to identify and meet the needs of various stakeholders (Evers, 1995), promoting accountability and transparency, raising awareness, building knowledge and other capacities, sharing good practices of experience shaped programmes, policies and strategies, incubating solutions, encouraging citizens engagement and representation of marginalized groups, including solidarity support (World Economic Forum, 2013).

5. Informal economy

E.g., labour unions and labour organizations representing workers, different inspectorates, ombudsmans.

From public health perspective informal economy has multiple damaging effects on individuals and families with children. (Precarious) workers have no formal contract with employers, no systematically formalized working conditions, gets irregularly and unevenly paid, have no forum to





express their grievances, have less fixed hours of work and mostly earn hand to mouth, are not covered by any kind of social security system and have poor knowledge about the need to protect themselves socially and economically in the sense of health promotion and disease prevention (FundsforNGOs, 2018). Thus, precarious workers with less formalised and less regular incomes stay in social distress of bad healthy habits, and if young parents, together with their children. Non formal economy players are difficult to address and engage, but there are a number of stakeholders which are dealing with informal economy challenges such as labour unions and labour organizations representing workers, different inspectorates, ombudsmans and possibly others.

6. Informal providers of different services

E.g., entrepreneurs employing innovative and/or market-oriented approaches for social and environmental outcomes, grassroots associations and activities at local level, cooperatives owned and democratically controlled by their members, voluntary organisations.

Informal providers of different services like alternative strands of organising life can be "organized" but do not necessarily have physical, legal or financial structures (WHO, 2001). They are not well setled and institutionalised, facing plurality of freely organised interests (Evers, 1995). For instance, there is a growing need for voluntary actions in daily life (Pestoff, 1992), including also the need for supporting parents and children, especially the parental role in first 1000 days, as one of the key drivers for decreasing the effects of obesogenic environment. In such cases, the success of voluntary organisations, incorporated into respective hierarchical social order and "mixed" economy depends on their capacity to bridge the different rationales of bureaucracies, market and economy (Evers, 1995). It might be the case that states or the private for-profit sector may play a key role in the establishment of some informal providers of different services or provide significant funding, which is calling into question their independence from the state and private sectors (WHO, 2001).

7. Non-profit informal networks

E.g., informal social networks and community building, online groups and activities including social media communities, social movements of collective action and/or identity, which can be online or physical, personal relationships. (World Economic Forum, 2013)

Networked citizens are increasingly involved in partnerships with governments and businesses, and are engaged in official consultation processes. They have started to change the interface and expectations of civil society empowerment. The scale of social networks and the speed of information transfer, through increasing access to the Internet, social media and mobile phone technology has shifted the paradigm of citizen expression (WHO, 2001). Informal networks and civil (resistance) movements, enabled by mobile and social technologies, signpost a new era of citizen engagement, traditional institutions of "organized" civil society have played critical roles as supporters, facilitators and funders. Development and implementation of technology became a social tool with different functions





to express ideas and visions, for policy consultation and empowerment. Proliferation of voices online is a new way of raising knowledge, forming attitudes and initialising action and thus gains a major political, societal and technological / scientific impact (Danish Board of Technology Foundation, 2018).

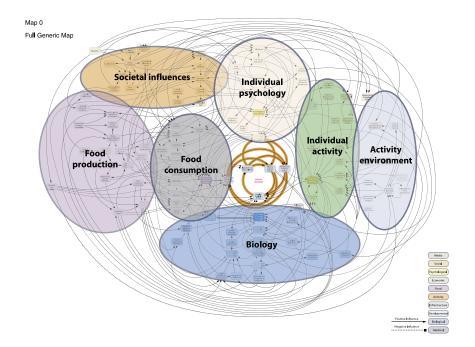


Figure 2: Obesity System Influence Diagram (FORESIGHT, 2007, page: 121)



References

- Asante AD, Zwi AB (2007) Public-private partnerships and global health equity: prospects and challenges. Indian J Med Ethics 4(4):176–180
- Danish Board of Technoology Foundation (2018) Web-page. (Obtained, 23.07.2018), URL http://www.tekno.dk/articles/citizen-participation/?lang=en
- Esping-Andersen G (1990) The three worlds of welfare capitalism. Princeton, New Jersey: Princeton University Press
- Evers A (1995) Part of the welfare mix: The third sector as an intermediate area. Voluntas: International Journal of Voluntary and Nonprofit Organizations 6(2):159-182
- FORESIGHT (2007) Tackling Obesities: Future Choices Project Report. URL http://www.safefood.eu/SafeFood/media/SafeFoodLibrary/Documents/Professional/All-island%200besity%20Action%20Forum/foresight-report-full_1.pdf
- FundsforNGOs (2018) What is the difference between formal economy and informal economy? (Obtained, 23.07.2018), URL https://www.fundsforngos.org/development-dictionary/what-is-the-difference-between-formal-economy-and-informal-economy
- Kobal Tomc B (2014) Tipologija deležnikov projekta AHA.SI (Tipology of the AHA.SI project stakeholders). (Obtained, 23.07.2018), URL http://www.staranje.si/sites/www.staranje.si/files/upload/images/blaginjski_trikotnik_teoreticni_okvir_za_mrezenje_aha.si_2014_1.pdf
- Pestoff VA (1992) Third sector and co-operative services—An alternative to privatization. Journal of consumer policy 15(1):21–45
- Pukšič M (2006) Regulativa, organizacija in vodenje v lekarnah = Regulation, organization and management of pharmacies. Farmacevtski vestnik 55:66-77, URL http://www.dlib.si/details/URN:NBN:SI:doc-TBOCTVS6
- (2001)Strategic The role of civil society in alliances – Society health. Civil Initiative External Relations and Govern-(Obtained, 23.07.2018), URLhttps://www.dgs.pt/ Bodies. participacao-da-sociedade-civil/legislacao-e-regulamentos/ regulamentos-e-recomendacoes-internacionais/ strategic-alliances-the-role-of-civil-society-in-health-pdf. aspx
- World Economic Forum (2013) The Future Role of Civil Society. (Obtained, 23.07.2018), URL http://www3.weforum.org/docs/WEF_FutureRoleCivilSociety_Report_2013.pdf

