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D6.3: Synthesis of reports, conceptual maps, policy briefs from WP2, WP3, WP4 and WP5

EAT
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Executive summary

CO-CREATE aims to educate and empower youth to develop policies that promote healthy food and physical activity environments for young people across Europe. To support this objective, EAT engages adolescents in meaningful dialogue with policymakers, business representatives and other relevant stakeholders about their health and wellbeing. These Dialogue Forums provide an environment for youth to discuss and refine their policy ideas. Given that each Forum explores a specific theme; background information, evidence and context are provided to participants ahead of the Dialogue. To help disseminate the knowledge generated from key CO-CREATE deliverables, this report will synthesize relevant findings from existing policies (Work Package (WP) 2), evidence (WP3), drivers of obesity (WP4), and youth-developed policies (WP5), to serve as background material for Regional Dialogue Forums. To ensure the continued transfer of knowledge, key elements of this synthesis will also be made publicly available in an open access Dialogue Forum package, to be used as background material for Forums beyond the CO-CREATE project.

This deliverable builds on similar synthesis efforts conducted by the London School of Hygiene and Tropical Medicine, which aims to demonstrate the overlap between existing evidence (WP3), the current policy landscape (WP2), and factors driving obesity as perceived by adolescents. This report provides an updated synthesis of these deliverables, with the inclusion of policy ideas developed by youth in CO-CREATE Alliances (WP5). In examining a) the policy proposals submitted by youth, b) the CO-CREATE Youth Declaration, which outlines young people's demands to European policymakers for healthier food and physical activity environments, c) the evidence, existing policies and systems maps synthesized, and d) policies discussed in previous Dialogue Forums, three policy themes emerged. These three themes are 1) restricting marketing of unhealthy food and beverages to children, 2) improving physical activity access for children and youth, and 3) improving access to nutrition education. Policy syntheses were developed to provide an overview of existing evidence, policies, obesity drivers, and insight into youth-developed policy ideas for each theme.

While the overall synthesis provides initial insight into the policy and evidence landscape for marketing restrictions, nutrition education and physical activity access, further research is needed to provide a holistic overview of the policy issues, as they relate to youth. Given the preliminary nature of these findings, the following could be further explored to deepen our understanding of the results and solidify conclusions:

- Young people's understanding of systems thinking and interventions
- Generation of high quality, systematic evidence that explores the impact of multiple nutrition and physical activity interventions in youth, examining obesity prevention or treatment strategies from a systems lens
- Systematic reviews on the impact of interventions addressing food and beverage marketing restrictions to children
- Additional research on the impact that mental health, stress, social connectivity and social media has on young people's experiences with and perceptions of weight gain
- Expansion of [MOVING/NOURISHING](#) frameworks to include locally implemented nutrition and physical activity policies to gain a full understanding of policy efforts addressing obesity prevention



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List of acronyms / abbreviations

COI	Conflicts of Interest
COSI	Childhood Obesity Surveillance Initiative
EBRB	Energy balance-related behaviours
HBSC	Health Behaviour in School-aged Children
LSHTM	London School of Hygiene & Tropical Medicine
NIPH	Norwegian Institute of Public Health
PRESS	Save the Children Norway
SSB	Sugar-sweetened beverages
SES	Socio-economic status
UvA	University of Amsterdam
WCRF	World Cancer Research Fund International
WHO	World Health Organization
WOF	World Obesity Federation
WP	Work Package
YPAR	Youth-Led Participatory Approach

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Introduction

Deliverable description

As outlined in the grant agreement number 774210 for Confronting Obesity: Co-creating policy with youth (CO-CREATE), deliverable D6.3 is described as follows: *A Synthesis of reports, conceptual maps, policy briefs from WP2, WP3, WP4, WP5. A synthesis of reports, conceptual maps, policy briefs coming from WP2, WP3, WP4, WP5 will be provided, to ensure transfer of knowledge.*

All other publicly available deliverables described in this report can be accessed through the [EU Horizon 2020 platform](#).

Objectives of deliverable

The objectives of this deliverable are as follows:

- 1) Synthesize key CO-CREATE outputs, including an overview of the current policy landscape (Work Package (WP2)), systematic review of systematic reviews (WP3), conceptual systems maps (WP4) and policy ideas developed by youth (WP5), building on a previous synthesis of WP2-4 (Deliverable 4.2)
- 2) Package the existing policies in NOURISHING and MOVING, evidence, policy briefs, and conceptual systems maps, as tailored content for the regional Dialogue Forums
- 3) Ensure the transfer of knowledge by disseminating these policy syntheses through the open access Dialogue Tool package

Background

There are currently few examples of young people being included as active agents in formulating policies and prevention strategies for tackling adolescent overweight and obesity. CO-CREATE aims to educate and empower youth to develop policies that promote healthy food and physical activity environments for young people across Europe. To support this objective, EAT engages adolescents in meaningful dialogue with policymakers, business representatives and other relevant stakeholders about their health and wellbeing. These dialogues are facilitated through a youth-led, action-focused model called the Dialogue Forum, which supports the co-creation of policies across generations and sectors. Through the development of a prototype and a continuous consultation, testing and refinement process, a Dialogue Forum model was created to facilitate in-person conversations. A digital model was later developed through a similar, but expedited, process to facilitate digital Dialogue Forums in light of COVID restrictions. Given that each Forum explores a specific theme; background information, evidence and context are provided to participants ahead of the Dialogue. This deliverable aims to help generate that information by synthesizing key CO-CREATE outputs and developing policy syntheses. These will be used in both the Regional Dialogue Forums and in the Dialogue Forum tool which will be made open access in 2022, with the aim of supporting knowledge transfer beyond the CO-CREATE project.

This report builds on similar synthesis efforts conducted by the London School of Hygiene and Tropical Medicine (LSHTM), which aims to demonstrate the overlap between existing evidence (WP3), the current policy landscape (WP2), and factors driving obesity as perceived by youth. Identifying the synergies between the outputs from deliverables in WP2-4, and the policy ideas

developed by youth in the CO-CREATE Youth Alliances (WP5) is how this deliverable expands on the aforementioned report from LSHTM. As emerging themes in the evidence, policy ideas developed by youth, and other CO-CREATE resources, this report presents policy syntheses on the following: restricting food and beverage marketing to children, improving access to physical activity, and improving access to nutrition education for children and youth. Limitations faced during the completion of this work are also outlined in the deliverable, along with reflections and further research questions.

Reminder: summary of obesity drivers and policy options (D4.2)

In 2020, a similar exercise was conducted to synthesize findings of key deliverables from WP 2, 3 and 4. This report, by the London School of Hygiene and Tropical Medicine (LSHTM), aimed to demonstrate the overlap between existing evidence (WP3), the current policy landscape (WP2), and factors driving obesity as perceived by adolescents who participated in an obesity system mapping exercise (WP4). In order to conduct this exercise, some of the key findings are first presented from each WP. Led by the World Cancer Research Fund International (WCRF International), WP2 consists of the development a physical activity policy framework, [MOVING](#), and benchmarking tool for physical activity policies. The framework details the areas that governments should take action to promote physical activity. It acts as an accompaniment to NOURISHING, WCRF's existing nutrition policy assessment framework and database. MOVING categorizes physical activity policies into six key areas:

1. Physical activity promotion in schools, the community and sport and recreation
2. Physical activity opportunities in the workplace and training in physical activity promotion across multiple professions
3. Structures and surroundings which promote physical activity
4. Transport infrastructure and active societies
5. Mass communications and behaviour change
6. Physical activity training, assessment and counselling in healthcare settings

Each of the six areas includes a number of sub-policy areas, which can be explored in the [MOVING database](#), however, these may evolve as policy scans continue. Going forward, both MOVING and NOURISHING will continue to be populated with implemented national government policies, in accordance with WCRF's inclusion criteria and verification processes. To date, there are 219 policy actions in the MOVING database and 761 policies and over 100 evaluations in the NOURISHING database

Led by the Norwegian Institute of Public Health (NIPH), WP3 includes a systematic review of systematic reviews of national and regional policy measures and interventions designed to prevent overweight and obesity among adolescents (Deliverable 3.1). This review focuses on interventions aimed at young people 10 to 19 years old. NIPH identified 13 systematic reviews that fit the inclusion criteria, largely school-based interventions, with three focused on healthy eating, six focused on physical activity, and four on both nutrition and physical activity interventions. Those holding the most promise centered around dietary behaviour interventions, such as nutrition counselling and school food policies. However, the findings were largely inconclusive, with a low to very low certainty of evidence, and reinforcement that current research needs to take a stronger systems approach,

Key findings from NOURISHING/MOVING policy framework (WP2), systematic review of systematic reviews (WP3) and youth-led policy ideas (WP5)

Building on D4.2, the following section provides a synthesis of key findings from WP2-5 deliverables, described below. Deliverables from WP4 (LSHTM) are not included in this section as key findings, including latest content, have been addressed in the D4.2 Summary. Moreover, no new deliverables have been submitted by LSHTM.

WP2: Policy frameworks MOVING/NOURISHING

Researchers at WCRF developed the NOURISHING and MOVING benchmarking tools, which assess the design of policies promoting healthy diets or increasing physical activity against a set of aspirational, evidence-informed criteria. Initial findings of the application of these tools are presented in the policy brief on the effects of implemented policies and outputs across the five European CO-CREATE countries (Deliverable 2.10). The policy brief is designed in a youth-friendly way that seeks to encourage and inspire co-creation activities that will shape the policy environment. By using the benchmarking tool, the policy brief provides a sample of nutrition and physical activity policies targeted at youth, with recommendations for action. This introduces the concept of policies and how they can shape environments. Ultimately, the policy brief aims to support advocacy efforts to promote policy action in the areas of healthy diets and physical activity for youth.

Based on the sample of policies analyzed using the benchmarking tools, the policy brief illustrates that each of the five countries have varying policies, at varying strengths, in place to address childhood obesity. There was a large range of scores across policies, for example, within physical activity guidelines, from 67% (U.K.) to a low of 10% (Norway). This shows that policies within the same topic are designed very differently across Europe, with some policy areas having weaker overall policies. In some cases, physical activity guidelines had lower scores, when compared to the higher scores across countries for fruit and vegetable initiatives in schools, indicating that policies should not be viewed in isolation.

The benchmarking tool was also tested against a larger sample of policies to explore how scores and policies interact with one another. As the brief reviewed a sample of policies, it was difficult to compile the individual country scores and reflect the nuances of a country's policy landscape. The policy brief therefore highlighted the need to further refine the NOURISHING and MOVING benchmarking tools, as well as the policy index. The testing also revealed challenges with the structure of the MOVING framework, as policies could sit under a number of policy areas. As the MOVING framework informs the structure of the benchmarking tool, this also created difficulties in assessing where policies should be reviewed and which benchmarks should be utilized. The content of the framework and benchmarking tool remains the same, but the categorization of the policy areas has been updated.

Moreover, the development of the policy brief has informed the draft manuscript (Deliverable 2.9), which outlines how each of the NOURISHING and MOVING policy benchmarks have been re-

formulated to allow benchmarking of multiple policies at once. Policies are identified by a comprehensive country-level policy scan for physical activity and diet across 27 European countries, which are then added to the NOURISHING and MOVING databases. These policies will be benchmarked to develop a country-score and an overall policy index. The scoring scheme has yet to be finalized; however, these tools will allow for a cross-country comparison of policy strength.

WP3: Systematic review of systematic reviews and latest evidence

Researchers at NIPH undertook an analysis on time trends and differences in overweight and obesity rates by socio-economic status (SES) based on data from the World Health Organization (WHO) Childhood Obesity Surveillance Initiative (COSI) study among children 6-9 years old in European countries (Deliverable 3.2). The data shows an association between SES and prevalence of overweight and obesity. Based on survey year 2015/17, children of families with low SES are more likely to be overweight than children with high SES. In 2006/07, the SES differences in overweight prevalence were found in 2 out of 4 countries, and in 7 out of 10 countries in 2015/17. Findings from the COSI study show that ongoing health promotion efforts aimed at reducing overweight and obesity across all SES groups have not adequately succeeded. This report suggests that cross-country differences in the association between SES and childhood overweight and obesity prevalence should be viewed in light of variation in implemented national policy initiatives.

A comparative analysis of time trends and differences in energy balance-related behaviours (EBRB), overweight and obesity rates by SES status among adolescents in Europe and South Africa was further carried out (Deliverable 3.4). Based on data from Health Behaviour in School-aged Children (HBSC) countries and findings from South Africa, the following measures were used: overweight/obesity, diet, physical activity and SES. In 2018, the HBSC results show that more than 20 % of European adolescents lived with overweight or obesity, which has been relatively unchanged over the last decade. Adolescents with high SES are less likely to live with overweight and obesity. Overall, almost half (48%) of adolescents in the HBSC study ate neither fruit nor vegetables daily, indicating that a large group has an insufficient diet. More than 80 % of the adolescents in the HBSC study did not meet the recommendation of 60 minutes of daily physical activity. Adolescents with high SES met the recommendations to a larger extent. However, there are positive trends on adolescents' diet, showing a decline in daily consumption of sugar-sweetened beverages (SSB). In South Africa, the overall prevalence was at the same level as in the HBSC study (22%) with a higher rate among girls compared to boys. Daily intake of vegetables and fruit was significantly higher in South Africa compared to Europe. However, daily consumption of SSB has increased among South African adolescents in contrast to the trends among European adolescents.

Using the NOURISHING database, researchers at NIPH looked at time-related changes in overweight, obesity and EBRB in relation to changes in national diet and physical activity policies with a particular focus on policy actions to reduce adolescents' consumption of soft drinks (Deliverable 3.6). Although, trends of reduced soft drink consumption were observed in all five countries, no country showed reduced prevalence of overweight and obesity rates. When looking at the countries participating in the CO-CREATE project in particular, prevalence of overweight and obesity (combined) among adolescents increased in Norway, Poland and Portugal from 2002-2018, while quite stable trends were observed in the U.K. and the Netherlands. This may be explained by the findings of only one policy action targeting soft drink consumption, underscoring the need to focusing on national policies

targeting both sugar intake and EBRB. The NOURISHING database shows great cross-country variation in total numbers of national policy actions. All CO-CREATE countries had one or more policy actions addressing nutrition label standards and regulation on the use of claims and implied claims on food. Policy initiatives addressing behaviour change communication were to a greater extent observed in the U.K. and Norway. However, it is important to note the NOURISHING database policy scans for the five countries is still ongoing.

A policy brief was then developed to present the current status of research on the effectiveness of interventions targeting adolescents affected by overweight and obesity in the light on data on BMI and EBRB from the WHO COSI and HBSC studies (Deliverable 3.8). The policy brief focuses on the socio-economic differences in overweight and obesity among adolescents, and the lack of evidence of effective interventions. Data from the COSI and HBSC studies show that the inequalities in children and adolescents affected by overweight/obesity observed have persisted in most of the countries over time. A similar pattern is found for dietary behaviour and physical activity. The review concludes that the evidence-base for effective interventions to prevent overweight and obesity in adolescents is weak, potentially due to individual-level targeted interventions and the lack of structural and environmental-level interventions. The policy brief concludes with four concrete action points:

- Developing effective and coordinated policy responses which target inequalities, both in overweight and obesity, as well as in the social determinants of health.
- Cultivating a new understanding of the associations between national overweight and obesity prevalence data and national policies.
- Conducting high quality evaluations on the effectiveness of structural and environmental interventions targeting overweight and obesity among adolescents.
- Studying the differential effects of interventions targeting overweight and obesity among adolescents on different socio-economic groups.

WP5: Policy ideas developed by youth

Researchers at the University of Amsterdam (UvA) developed a recruitment and engagement protocol, which includes the CO-CREATE activities geared to recruit and train adolescents in forming the Youth Alliances, developing policy proposals and preparing for the Dialogue Forums (Deliverable 5.2). WP5 first used a Youth-Led Participatory Approach (YPAR) tailored to the local context. In the process of recruiting youth, researchers at UvA looked at the proposed criteria and procedures in relation to local opportunities and limitations.

The CO-CREATE recruitment approach explored several recruitment channels. There was a strong tendency towards established organizations as recruitment channels (schools, scouts, PRESS and a council), which proved most secure in terms of sustained and sizeable participation. Based on local recruitment strategies, the CO-CREATE country partners identified opportunities and limitations for youth recruitment, leading to the recruitment of 178 adolescents, forming 15 Alliances. Although participants are in majority female (75%) and from urban areas, these adolescents are diverse in terms of political experience, income and ethno-cultural diversity. The structure for implementing the recruitment protocol amongst the local teams varied depending on local circumstances. This allowed for an approach to better reflect each local process.



In order to promote capacity building, the Youth Alliances worked together as a group and integrated information gathered in WP2, WP3 and WP4 in an attempt to gain an understanding of the issue of obesity from a systems perspective. This allowed youth to get acquainted with the process of developing policy ideas while preparing themselves for the Dialogue Forums. The engagement process included a range of activities to tease out, refine, research, and prioritize policy ideas. The CO-CREATE youth were actively involved in developing and selecting training activities, such as developing surveys, to help inform their policy. The policy briefs (Deliverable 5.3) developed by youth in the Alliances form the basis of the policy synthesis in this deliverable, including identifying common themes across all policy briefs.

Policy syntheses

Background

Throughout the CO-CREATE project, a number of policy themes have emerged as prominent in the literature, policy landscape and by the youth themselves. Mental health and wellbeing, the impact of social media and online activity, access to health information, and food and beverage intake have all been identified as drivers of overweight and obesity in young people. The latter two have more traditionally been studied in the literature, identified as priority areas of action by policymakers and addressed through health interventions. More novel is the finding that mental health, stress, social connectivity and social media impacts young people's experiences with and perceptions of weight gain. This has consistently emerged across all five CO-CREATE countries. In this digital age, the impact of social media on one's health, diet and overall wellbeing cannot be understated. Further research to support the implementation of public policies that address this issue, would help reinforce a systems approach to addressing overweight and obesity in youth.

Methodology

To identify the priority themes that would serve as the basis for the following syntheses, EAT conducted a series of activities. First, we examined the policy proposals submitted by youth in the CO-CREATE Youth Alliances to identify common themes. Of the 24 policy ideas developed, 21 policies are captured under the themes identified below. These policies are presented in five briefs, one for each CO-CREATE country. Next, we looked at the CO-CREATE Youth Declaration, which outlines young people's demands to European policymakers for healthier food and physical activity environments (Appendix B). The Declaration was developed by a select group of CO-CREATE Youth representatives, the Youth Alliance, who then consulted the broader group of CO-CREATE youth and held a formal adoption meeting. The Declaration includes the following four demands, 1) stop marketing of unhealthy foods to children under the age of 18, 2) secure all children high-quality, practical based food and nutrition education in school and a healthy school cafeteria, 3) implement a sugar-sweetened beverage tax to make unhealthy foods more expensive, and 4) offer all children and adolescents free, organized physical activities at least once every week. Three of the demands are included in the syntheses below. Next, we examined which policy ideas have been discussed at Dialogue Forums, to gauge interest and momentum among the CO-CREATE youth on policy proposals, as well as identify policies that are regionally relevant and could be discussed at the Regional Dialogue Forums. These activities provided insight into the policy themes that were most commonly raised by youth, which could indicate a consensus about the policy issues they find most pressing. EAT conducted a final exercise of cross-referencing the priority policy themes with some of the existing policies in the MOVING and NOURISHING databases, evidence in D3.1, and systems maps to confirm that these were indeed of relevance in the current policy and evidence landscape.

Ultimately, three themes emerged as priority areas of action by youth themselves: restricting marketing of unhealthy food and beverages to children, improving physical activity access for children and youth, and improving access to nutrition education.



The following policy syntheses will serve as background material for the upcoming regional Dialogue Forums, and will be included in an open access version of the Dialogue Forum tool, with a public audience as the end user. This synthesis of findings includes a brief background on the policy theme, insight into some existing diet and physical activity policies within the NOURISHING and MOVING databases, relevant evidence covered in a systematic review of systematic reviews, an overview of how these themes were portrayed in the systems maps, and a full list of policy proposals developed by youth themselves (Appendices C, D and E). While we recognize that this is not a thorough overview of all existing policies, evidence and drivers of obesity, the following syntheses capture key findings from the CO-CREATE project on each policy theme.

Policy Theme 1

Restricting marketing of unhealthy food and beverages to children and youth



There is overwhelming evidence to suggest that the marketing of foods and beverages high in fat, salt, and sugar impacts children's diets, food preferences, brand affinity, nutrition knowledge, and most importantly, food intake, leading to increased consumption (2). It has therefore been identified as a policy priority by many countries. Policymakers often point to children and youth's vulnerability and inability to distinguish informative messaging from persuasive advertising as a rationale for introducing legislation on marketing to children. However, in CO-CREATE, youth themselves have identified the restriction of unhealthy food and beverage marketing to children as a policy priority for young people across Europe. In fact, youth in all five CO-CREATE Youth Alliance countries have identified one or more policies on marketing to children as their proposal of choice. The following provides an overview of existing national implemented policies, evidence, systems maps and youth-developed policies on the issue.

Existing policies

In recent years, there has been growing policy momentum for restricting food and non-alcoholic beverage marketing to children and youth. From mandatory legislation to voluntary industry pledges, greater initiative is being taken by governments, civil society organizations, and some private sector actors to protect the health, digital privacy, and rights of children. The NOURISHING policy database is a reflection of this momentum. In the database, there is a designated section on restricting food advertising and other forms of commercial promotion, with 10 sub-policy areas ranging from regulation of broadcasting; non-broadcasting communication; specific marketing techniques; specific foods or beverages using a nutrient profiling model; specific settings such as schools and health messaging. The database also covers voluntary policies, either industry-developed pledges, or collaborative efforts between government and industry. The latter often proving to be less effective in assessments of policy impact. To explore the spectrum of implemented national policies on restricting marketing to children, visit the [NOURISHING database](#). Examples of such policies in Norway and the United Kingdom are included to the right, in Figure 2.

National Policy

United Kingdom



Product placement is covered by restrictions on broadcast advertising in the UK. The 2010 UK Code of Broadcast Advertising prohibits advertising and product placement of food high in fats, sugars, and salt, as defined by a nutrient profiling model published by the Foods Standard Agency in December 2005, during and adjacent to TV and radio programmes with a particular appeal to viewers under the age of 16.

National Policy

Norway



The Broadcasting Act Section 3-1 states that advertisements may not be broadcast in connection with children's programmes, nor may advertisements on television or in audiovisual on-demand services specifically target children (under 18)

Figure 2. Examples of nationally implemented policies in the NOURISHING database

Evidence

At a time of cognitive, physical and psychological development, children and youth need food and physical activity environments that support healthy growth and habit formation. With the pervasive and invasive nature of marketing, restrictions on unhealthy food marketing to children are instrumental as part of a series of interventions to make the healthy choice, the easy choice. In a review of systematic reviews (Deliverable 3.1), interventions to promote healthy diets by reducing the impact of marketing were sought to be examined. However, given the individual-oriented and school-based interventions traditionally included in systematic reviews, there was little evidence on more structural measures like restricting marketing to children. This points to the need for more systematic evidence on the behavioural impacts of interventions addressing food and beverage marketing to children.

Youth-identified drivers of obesity: systems maps

Through the systems mapping exercise, economic and commercial influence were identified as common drivers of obesity, as perceived by youth. As seen in fuchsia in Figure 3 below, examples of commercial influence include advertising of unhealthy food, power of big food companies, profit on unhealthy food, price of unhealthy food, availability of unhealthy food, convenience of delivery of unhealthy food, unhealthy food demand, and exposure to advertising of unhealthy food. As demonstrated by the addition of yellow star (demonstrating a policy area present within NOURISHING/MOVING frameworks) and pink stars (covered in existing evidence, as per WP3 review), many commercial drivers are addressed, either directly or indirectly, through national implemented policies. However, only the demand and availability of unhealthy food are examined in the D3.1 literature, reflecting the need for additional systematic reviews on interventions that address marketing to children. The influence of select drivers, such as price and availability, on consumption of unhealthy foods also reinforces the need for interventions and policies that take a systems approach, and acknowledge the multitude of factors influencing young people's diet and physical activity.

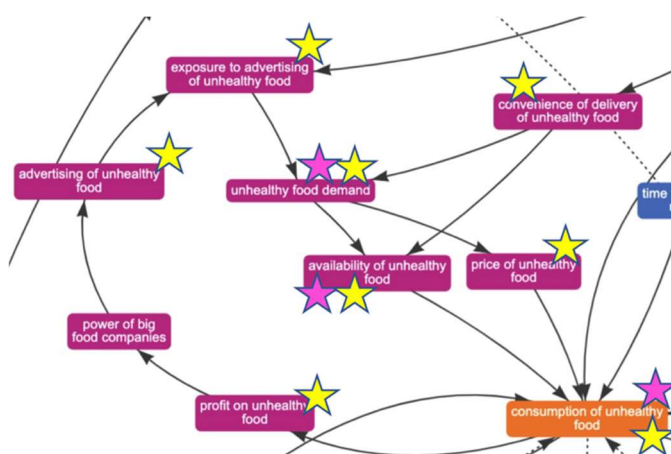


Figure 3: Subsection of Figure 1, showcasing commercial and economic drivers of obesity, as identified by youth

While we see commercial variables (fuchsia) playing a big role in driving obesogenic behaviour in youth in countries like the United Kingdom (Figure 4), we see contrasting results in Poland, where emotional and mental pressures (purple) are prominent drivers (Figure 5). Only access to healthy food was identified as a commercial driver in Poland.

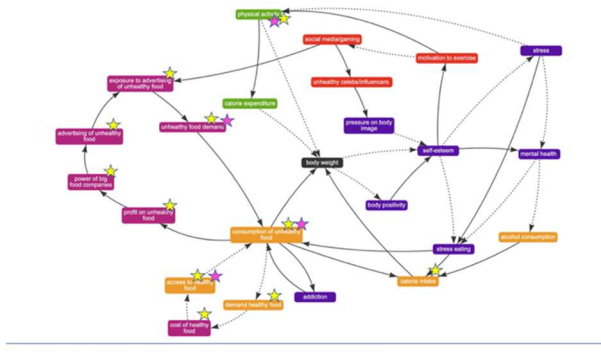


Figure 4: UK merged map showing variables covered by NOURISHING/MOVING and/or WP3 review

Figure 4. Conceptual systems maps showcasing youth drivers of obesity, as identified by young people in the U.K.

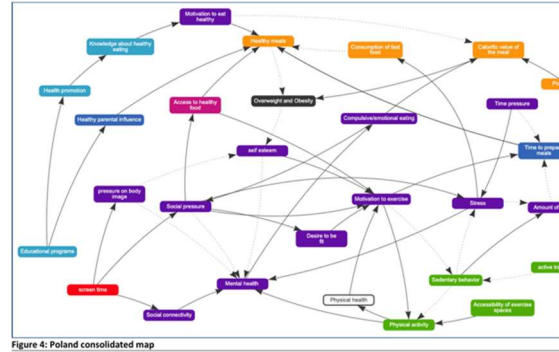


Figure 5: Poland consolidated map

Figure 5. Conceptual systems maps showcasing youth drivers of obesity, as identified by young people in Poland

Policy ideas developed by youth

All CO-CREATE countries have at least one policy that could be categorized under restrictions to the marketing of unhealthy food and beverages to children. Out of the 24 youth policies developed, seven policies fall under this theme (see Annex C for full list of policies). Examples of policies developed by youth in Portugal and the Netherlands are showcased below.

Policies developed by youth

Portugal



The Oeiras Youth Alliance in Portugal have developed a policy proposal to reduce the presence of unhealthy products at entrances, on shelves and near the cash register in commercial spaces, as well as increase the price of shelf space for unhealthy products and reduce it for healthy products.

Policies developed by youth

Netherlands



As part of a policy package, the Almere Youth Alliance in the Netherlands, have developed a policy proposal to promote healthy foods and beverages by placing them in more prominent places in supermarkets. This is suggested as an accompaniment to a sugar tax.

Policy Theme 2

Improve physical activity access for children and youth



This generation of children and youth are characterized by increased screen time through watching streaming services, smartphone use, video game playing, and computer use (1). All of this is further exacerbated by the current global lockdowns, school closures and remote learning. Easily accessible, affordable, and available physical activity services for children and youth are paramount to countering the increasingly sedentary behaviour. This is reflected in the policies developed by CO-CREATE youth, who identify cost, access to equipment and facilities, and lack of motivation as prominent barriers to being physically active. Developing local, provincial and national policies to facilitate physical activity access, including through built environments, is one of many priority policy measures, as identified by youth in CO-CREATE.

Existing policies

Newly developed as part of CO-CREATE, the WCRF's [MOVING](#) policy database provides an overview of implemented national-level policies related to active societies, active environments, active people, and active systems. The database is divided into six policy areas, the following providing information about implemented policies that aim to improve physical activity access for children and youth:

- Make opportunities and initiatives that promote physical activity in schools, the community and sport and recreation
- [Visualize and enact structures and surroundings which promote physical activity](#)
- [Implement transport infrastructure and opportunities that support active societies](#)
- [Normalise and increase physical activity through public communication that motivates and builds behaviour change skills](#)
- Give physical activity training, assessment and counselling in healthcare settings

Proper governance, surveillance, funding mechanisms, monitoring and evaluation of policy actions, and a health-in-all policies approach will promote systems-level action and help to assess impact.

National Policy Portugal



The Law No. 5/2007 guarantees the existence of physical education in the curriculum. Physical education and school sport must be promoted in the curriculum and complementary curricula, at all levels and degrees of education and teaching, as essential components of the integral training of students, specifically targeting the promotion of health and physical condition, the acquisition of motor habits and behaviours and the understanding of sport as a factor of culture. School sports activities should value the participation and involvement of young people, parents and guardians and local authorities in their organization, development and evaluation.

National Policy Poland



The School Sports Club Programme is addressed to primary and secondary school students regardless of age, gender and physical fitness. The programme aims to deliver additional physical activity (after school) carried out in the form of sports and recreational activities under the supervision of a teacher conducting physical education classes in schools. The programme is organizing and conducting regular sports activities twice a week for each participant in 60-minute training units, in groups of minimum 15 people.

Figure 6. Examples of nationally implemented policies in the MOVING database

Evidence

With growing trends in urbanization, building societies that facilitate and promote an active lifestyle is critical. In CO-CREATE, a review of the evidence has examined the effectiveness of several interventions for the promotion of physical activity in children and youth (Deliverable 3.1). Divided into three categories, the review examines structural and environmental interventions such as adequate school and public facilities for physical activity, organizational and community interventions, such as regular structured sports activities, and interpersonal and individual interventions, such as guidance on physical activity. Of the six reviews focused on interventions to promote physical activity, three focused on school-based interventions. Studies explored a variety of interventions such as changes to the school environment (improvement of safety for active transport, upgrading outdoor areas), changes to the school curricula, pedometer interventions, health and exercise programmes, and many others. Unfortunately, the strength and certainty of the evidence across the reviews was low to very low, therefore, it is difficult to draw conclusions on the success of interventions and outcomes.

Ultimately, there is a need to strengthen the evidence base on multi-faceted, multi-level physical activity interventions, particularly those that take a systems-approach. However, interventions re-designing the physical environment with more natural spaces for physical activity, and extending and improving the network of cycle paths, may encourage young people to be more physically active. The involvement of youth in the development of programmes and policies to promote physical activity may also result in improved acceptance and adherence to recommendations.

Youth-identified drivers of obesity: systems maps

Through the systems mapping exercise, physical activity (or lack thereof) was identified as a common driver of obesity, as perceived by youth. As seen in green in Figure 7 below, access to green spaces, use of green spaces, access to sports facilities, affordability of physical activities, sedentary behaviour, choices related to active transport, calorie expenditure, the amount of free time to do physical activity, and the physical activity itself were all identified as variables that supported or hindered youth's ability to be physically active. Youth from all five CO-CREATE countries identified 2-4 drivers that pertained to physical activity, with sedentary behaviour and the physical activity itself being most commonly selected.

While the majority of drivers were policy areas listed by the MOVING/NOURISHING framework, only physical activity and active transport were covered in existing evidence as per D3.1, reinforcing the need for systematic reviews that assess the collective influence of systems-level interventions, rather than siloed policies on physical activity.



Figure 7. Subsection of Figure 1, showcasing physical activity-related drivers of obesity, as identified by youth

Policy ideas developed by youth

Nearly All CO-CREATE countries have at least one policy that could be categorized under the improving physical activity access for children and youth theme. Out of the 24 youth policies developed, five policies fall under this theme (see Annex D for full list of policies). Examples of policies developed by youth in Poland and Norway are showcased below.

Policies developed by youth

Poland



The Miejska Górká Alliance in Poland have suggested the development of a mobile application to incentivize young people to be physically active. The smartphone application, FITKET, would record and measure one’s level of daily physical activity. The app will accumulate credits in accordance with the daily level of physical activity, which can be exchanged into discounts for products or services related to a healthy lifestyle.

Policies developed by youth

Norway



The Hadeland Youth Alliance in Norway developed a policy proposal which would allow students to use gyms, exercise equipment and weight-lifting rooms at upper secondary schools after school for free. During this time, a teacher/adult would be present to supervise students, help them set up the equipment correctly and ensure that there is no harassment.

Policy Theme 3

Improve access to nutrition education for children and youth



Most schools have canteens, cafeterias and vending machines, but the types of food products available are not always healthy. As such, many students buy food in cafés outside school or go to fast-food restaurants during their lunch break. This statement is reinforced by the CO-CREATE youth who have expressed that they have little knowledge about healthy eating and limited skills and time to prepare healthy food. Consequently, young people often eat foods high in sugar, salt and fat, and may not fully comprehend the impact this has on their health. This is reflected in the policies developed by the CO-CREATE youth, who identify the importance of building knowledge on food, cooking skills and nutrition to make more conscious and healthy choices in their everyday lives.

Existing Policies

The NOURISHING policy database has a designated section on behaviour change communication with 3 policy areas, including 15 sub-policy areas ranging from nutrition education in school, community-based education, communication of dietary guidelines and nutrition advice and counseling in health care settings. These policy areas showcase existing policies in different countries, which present similarities with the policy ideas developed by the CO-CREATE youth. Cooking skills, identified as one sub-policy area, is also raised by three youth alliances in Portugal, the Netherlands and the U.K., with policy ideas such as cooking classes in schools and online, as well as council funded cooking classes for young people. Nutrition education on curricula is another sub-policy area that is prevalent in four policy ideas developed by youth in Norway, Poland and Portugal, including policy ideas such as more information about healthy eating, healthy food and a healthy lifestyle in school, regular meetings with dietitian and nutritionist in school, and nutrition and food curriculum.

National Policy

Finland



Education is a key part of awareness raising on health issues in Finland, and compulsory classes in health education and home economics are part of basic education. Home economics includes food preparation, meal planning (taking nutritional recommendations into account) and how to interpret food labelling and assess the reliability of different type of nutrition information.

National Policy

Australia



The Australian Curriculum addresses food and nutrition education in both the Health and Physical Education and Design and Technologies curriculum. Students learn about food production, the benefits of healthy eating and the preparation of healthy foods, as well as how culture and context shape what they eat.

Figure 8. Examples of nationally implemented policies in the NOURISHING database

Youth in Poland developed a policy idea on health events in public spaces, which parallels the sub-policy area on community-based nutrition education. In addition, youth in the Netherlands developed a two-folded policy idea on healthy food in school canteens made by the young people themselves, presenting aspects of both nutrition education and public procurement. This policy idea has similarities with two sub-policy areas: cooking skills and healthy meals with comprehensive nutrition standards for all school children. As stated in the Youth Declaration (Appendix B), nutrition education and healthy school canteens are interlinked, i.e., there is no point teaching students to eat healthy if their school cafeteria does not serve healthy food. To explore the spectrum of implemented national policies on access to nutrition education, visit the [NOURISHING database](#).

Evidence

Based on a systematic review of systematic reviews (Deliverable 3.1), there is a sample of evidence that looks at the effectiveness of interventions that promote access to nutrition education, which is categorized under interventions to promote healthy eating behaviours. Two reviews reported mainly beneficial effects of public health interventions on SSB consumption in adolescents when combining educational/behavioural and legislative/environmental interventions. This points at the effectiveness of combining educational and other types of interventions, rather than carrying out siloed initiatives, and draws attention to the significance of access to nutrition education, and thus the relevance of the policy ideas developed by youth.

The review concludes that the evidence base for the effectiveness of interventions to prevent overweight and obesity in youth is weak, potentially due to a larger pool of interventions targeting individual-level behaviour, rather than structural and environmental issues. Although, the policy ideas developed by CO-CREATE youth on access to nutrition education largely address individual-level interventions, and less of structural/environmental interventions, the policy ideas can be seen as complimentary to existing policies.

Youth-identified drivers of obesity: systems maps

The systems maps reinforce the understanding of policies not operating in silos and highlight variables that youth themselves identified as drivers of obesity, and how they are interconnected. As seen in light blue in Figure 9 below, all variables in the all-country system maps related to nutrition education/knowledge are covered in the NOURISHING framework. However, certain variables that are indirectly linked to a limited and/or a lack of access to knowledge are not included in the NOURISHING framework, in both or either directions. These variables include healthy parental influence (might influence knowledge), time to prepare meals (result of limited knowledge), and motivation to eat healthy (might influence knowledge and/or a result of limited knowledge).

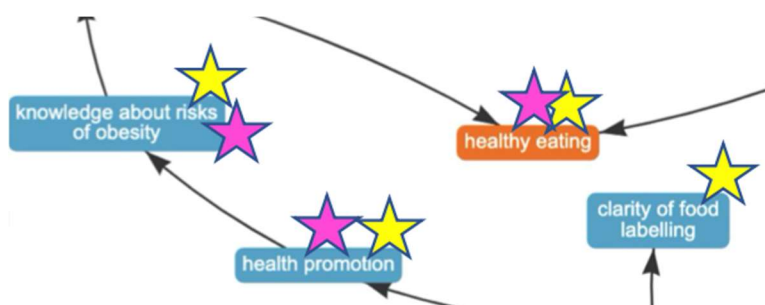


Figure 9. Subsection of Figure 1, showcasing nutrition education-related drivers of obesity, as identified by youth

As seen in dark blue in Figure 10 below, home life variables in the systems maps are given less attention in existing evidence, as per WP3 review, such as teenage cooking skills, home-cooked meals and healthy parental influence, as well as the knowledge variable clarity of food labelling (see previous light blue variable in Figure 9). In reference to the COSI and HBSC database, a small sample of studies show that the inequalities in children and adolescents affected by overweight/obesity have persisted in most of the countries studied over time, with a similar pattern found in dietary behaviour. As evidence denotes the benefits of policies operating in an interconnected manner, home life variables, which points at socio-economic status and levels of inequality, should be acknowledged within the sphere of access to nutrition education. As a concluding remark, a cohesive systems-level perspective is rather absent in interventions that address access to nutrition education for children and youth, i.e., a gap between existing evidence, systems maps and policy briefs.

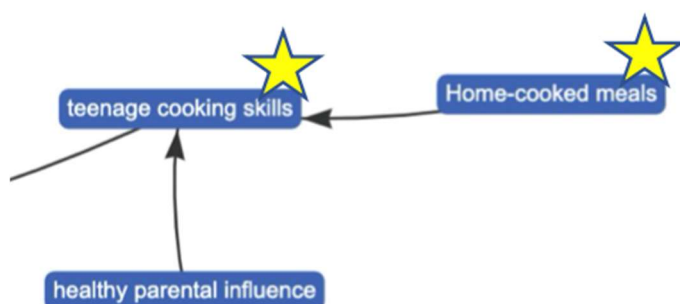


Figure 10. Subsection of Figure 1, showcasing home life-related drivers of obesity, as identified by youth

Policy ideas developed by youth

All CO-CREATE countries have at least one youth-led policy idea that can be categorized under the policy theme access to nutrition education for children and youth (Deliverable 5.3). Out of the 24 policy ideas developed by youth, nine policy ideas fall under this theme (see Annex E for full list of policies). Examples of policies developed by youth in Portugal and Poland are showcased below.

Policies developed by youth

Portugal

The Cascais Youth Alliance in Portugal developed a policy idea on nutrition, food and cooking skills to be incorporated in the Citizenship and Civic Education curriculum. This policy idea aims at encouraging the adoption of a healthy and informed diet among young people in their everyday lives, as well as demystifying the difficulty and cost associated with healthy eating. By improving the knowledge of young people about nutrition and health and by developing cooking skills for a healthy diet, this will contribute to the empowerment of young people and increase self-confidence.

Policies developed by youth

Poland

The Wroclaw Youth Alliance in Poland developed a policy idea focusing on health events in public spaces to create awareness and encourage healthy eating. Accessible and open activities, such as healthy cooking classes and consultations with specialists, has further been suggested as public events. This policy idea highlights that education and knowledge-building is not merely confined to the school setting.

Limitations and reflections

While this deliverable aims to synthesize key findings from the policies in WP2, evidence in WP3, systems maps in WP4 and policy briefs in W5, varying methodologies, data sources, and inputs create limitations to this exercise. First, the deliverables focused on policies at different levels, i.e., local and/or national-level, making it challenging to carry out direct comparisons of evidence, system maps and policy briefs. Moreover, given the sequence of the project, youth in the CO-CREATE Alliances did not have access to all relevant policy and evidence-related deliverables to inform their policy ideas. Youth were also invited to suggest ideas and provide input based on their own life experiences. Both of these reasons could explain why the policy ideas developed by youth have a greater focus on individual action, rather than systems-level interventions. Though preliminary, this finding could also illustrate that young people believe the onus is on individuals to maintain a healthy lifestyle, rather than on society/governments to build environments that make the healthy choice, the easy choice. Policymakers and educators could benefit from this knowledge; however, further analysis needs to be conducted to draw more conclusive findings, particularly on youth's understanding of systems interventions and developing ideas that address them.

Regarding the quality and quantity of evidence, given its low strength and the limited number of systematic reviews that report on the child and youth sub-population, the evidence base for each policy theme is limited. For the purpose of the Dialogue Forums, EAT may want to expand the evidence scope beyond D3.1. Finally, not all 24 policy ideas developed by youth naturally fall within the three policy themes identified. However, for the purpose of simplifying the content for external use, it seemed reasonable to identify the most common themes emerging from the policy ideas. The overall conclusions from this exercise are therefore exemplifying in nature, and not entire representations of the policy landscape and youth perspectives.

Conclusion

Through the Dialogue Forums, youth and adult participants are equally enabled to have an informed discussion on a policy theme of choice. Systematic evidence, conceptual systems maps, and insight into the existing policy landscape, all key CO-CREATE outputs, make this informed dialogue possible. Deliverable 6.3 carried out a synthesis of findings from key CO-CREATE deliverables in WP2, WP3, WP4 and WP5 to serve as background material for the Dialogue Forums, as well as independent Dialogue Forums beyond the CO-CREATE project. Anchoring the Dialogue Forums in evidence and policy serves a dual purpose: to educate young people about the importance of evidence-based policy, and to enable them to develop feasible policy ideas that can transition from idea to implementable solution. The synthesis of key deliverables related to the existing policy landscape (WP2), the systematic review of evidence (WP3), the conceptual systems maps (WP4) and the policy ideas developed by youth (WP5), provided insight into policy areas of greatest interest to youth, and areas that warrant further research and development of interventions such as the impact of social media and mental health on one's experiences with and perceptions of weight gain. While preliminary, these findings could help inform and guide action for policymakers and educators to help build healthier food and physical activity environments for and with young people.



Appendix

- A. Work Package 4 all-country merged systems map
- B. CO-CREATE Youth Declaration
- C. Full list of youth-developed policy ideas on restricting marketing to children
- D. Full list of youth-developed policy ideas on improving physical activity access to children
- E. Full list of youth-developed policy ideas on improving access to nutrition education

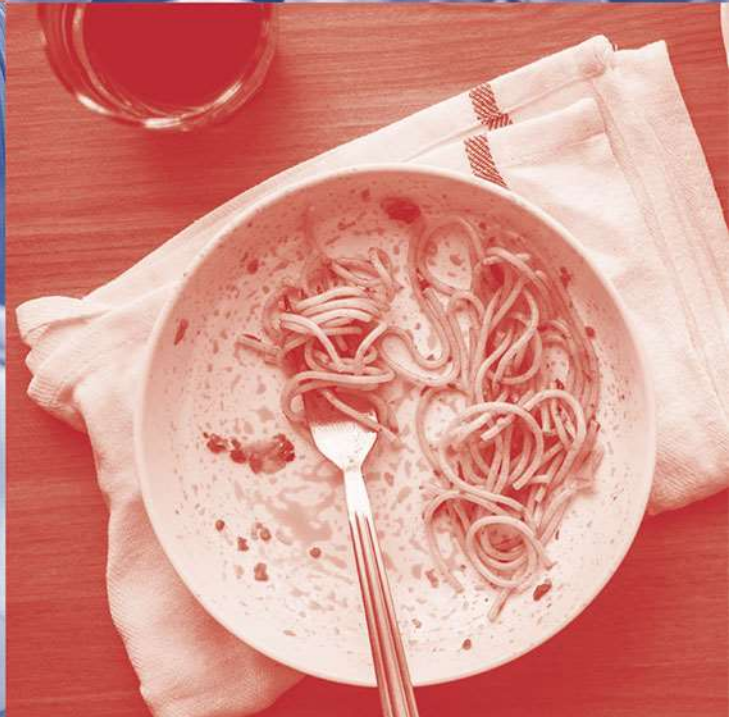
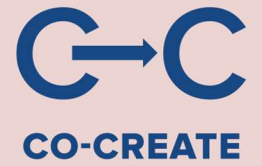


References

1. Chaput, JP., Willumsen, J., Bull, F. et al. 2020. “WHO guidelines on physical activity and sedentary behaviour for children and adolescents aged 5–17 years: summary of the evidence”. *Int J Behav Nutr Phys Act* 17, 141.
2. World Cancer Research Fund International. 2020. *Building Momentum: lessons on implementing robust restrictions of food and non-alcoholic beverage marketing to children.*



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Appendix A – All-country merged systems maps

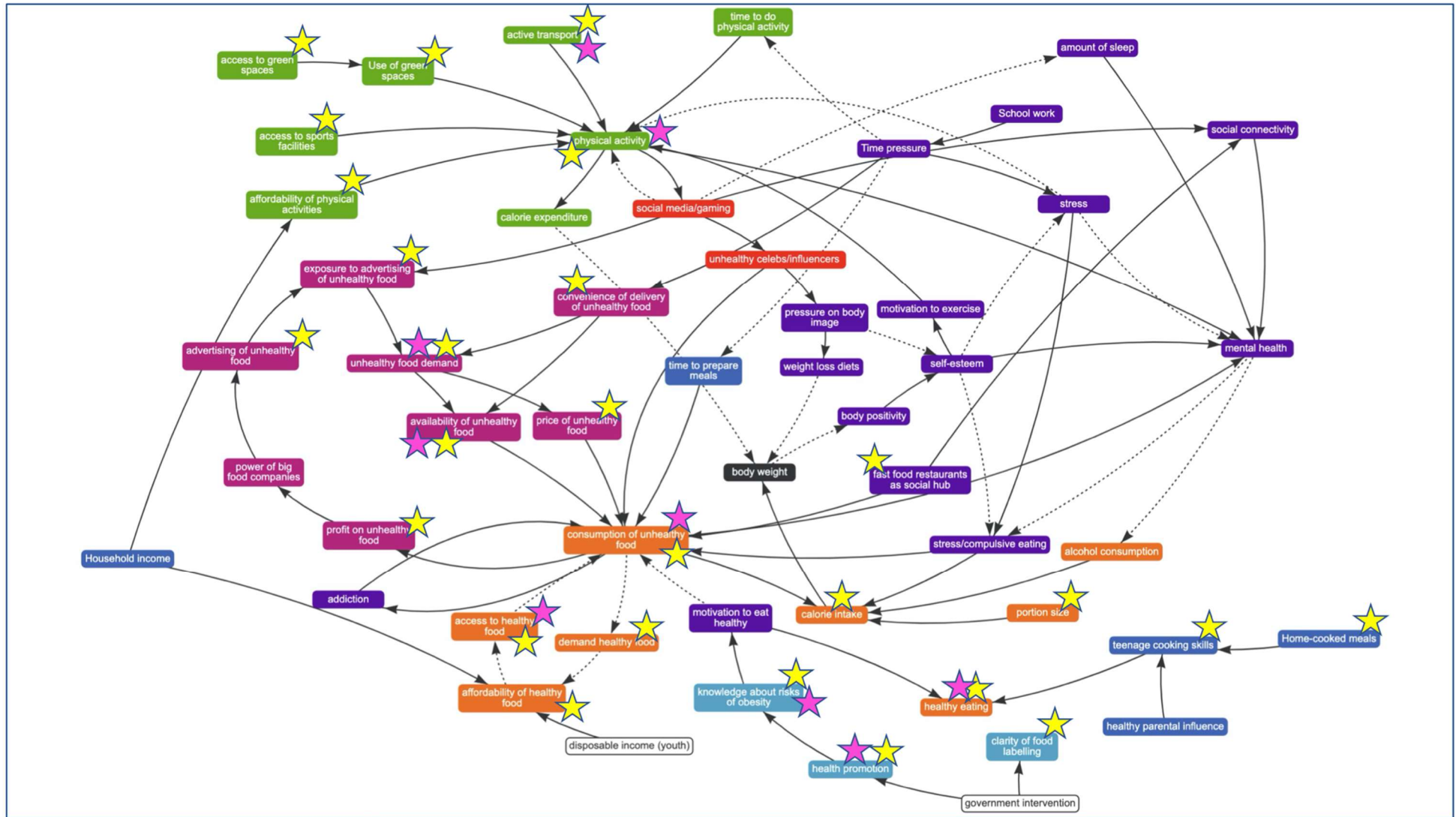


Figure 4: All countries merged map showing variables covered by NOURISHING/MOVING and/or WP3 review

The CO-CREATE Youth Declaration: Time to Act and Ensure Good Health for All

We need our politicians and stakeholders to act and bring the childhood and adolescent obesity epidemic to an end!

Did you know that the percentage of children and adolescents in the world who lives with overweight and obesity has doubled since the 1970's?ⁱ The World Health Organization (WHO) actually lists childhood obesity as one of the most serious public health challenges of the 21st century.ⁱⁱ Obesity often comes with severe consequences. Firstly, living with obesity as a child, makes one more likely to continue living with obesity in adulthood.ⁱⁱⁱ Secondly, overweight and obesity is associated with numerous health challenges and diseases, including diabetes, some types of cancer and cardiovascular diseases.^{iv}

The increased number of people living with obesity is a direct consequence of changes in our society's food systems. Foods high in refined carbohydrates, sugars, saturated fats and meat as well as processed, energy-dense foods have become more available and cheaper, making it more accessible, especially to the poorer part of the population.

But obesity is preventable! Individual based interventions have long been the main focus of overweight prevention. Yet, data shows that while the awareness of factors that can lead to obesity has increased, the number of people living with obesity has not decreased.^v It is time to stop framing obesity as a question regarding the individual, but rather a challenge that should be addressed at the system level. In other words: we need a systematic change, where the healthiest choices become the preferred ones!

The time to act is now! COVID-19 has highlighted the importance and urgent need of including obesity in countries' national health guidelines. In responding to the pandemic, our state leaders now have the chance to build back better. This is in line with the UN Sustainable Development Goals, which as one of its targets aims to reduce one third of premature mortality from non-communicable diseases through prevention by 2030.^{vi}

By portraying overweight and obesity as something the individual is responsible for, one does not only promote interventions with limited success but could also inflict weight stigma. Weight stigma is considered to have psychological consequences, such as increased depression and decreased self-esteem. Such mental health problems might also negatively affect the health of individuals because they can make it harder to eat healthy and stay active.

Rather, a structural approach that addresses the root causes of overweight and obesity is needed.^{vii} That is why we are urging governments to develop whole-of-society, sustained and coherent nutrition- and physical activity-related policies. That is also why this document does not address individuals but policy makers, who are the ones in position to change the structures that are affecting the lives of individuals.



We, as young people, are the only ones who know what it is like to be young today. To reach our goal of ending obesity among adolescents, policy makers and stakeholders need to work *with* us, so that we - together - can develop policy interventions to prevent obesity. Preventing obesity is a complex process that requires action on all policy fields and the involvement of several actors. We have identified four demands we see as crucial starting points towards ending obesity among adolescents.

1) Stop all marketing of unhealthy foods to children under the age of 18 years

We are demanding that all states in Europe regulate and stop all marketing of unhealthy food products to children under the age of 18.

Studies have found that children are extensively exposed to marketing of unhealthy products and that this has an influence on their food preferences and consumption patterns.^{viii} In light of this evidence, WHO recommends states to implement the necessary measures to reduce marketing and exposure to marketing of unhealthy products.

We are therefore demanding that all states in Europe stop all marketing to children under the age of 18 of energy-dense, nutrient poor foods that are high in fat, sugar or salt and brands associated with such products. The categorisation of such foods should be based on nutrition guidelines established by WHO. The regulation should apply to all commercials which are broadcasted before and after TV-shows targeting children and mass communicated messages where children are considered to be especially vulnerable due to overall communication and presentation cues (such as use of language and design, representation of children or characters that are familiar to children, inclusion of free gifts, toys or collectible items with appeal to children) and placement (in areas where children stay or are likely to spend time) including, and especially considering, digital marketing.

2) Secure all children high-quality, practical based food and nutrition education in school and a healthy school cafeteria

We are demanding that all European states ensure all children access to high-quality, practical based food and nutritional education in school.

To eat healthy, one basic requirement is that one knows what food is healthy and what food is not, and that one knows how one can prepare healthy food. The Food and Agriculture Organization (FAO) to the United Nations promotes educational strategies and learning activities as important steps towards improved diets, especially where it is complemented with healthy food environments.^{ix} According to FAO, it is important that such education supports creative learning and goes beyond being classroom-based, only giving generic nutrition information, but rather promotes practical learning, skill development, opportunities to deal with food and practice in real life settings (as markets, cafeterias and homes). The education should be evidence-based, promote children and youth's health and wellbeing, while empowering them to become active agents of change in their local food systems.



The nutritional education must be supported by healthy school cafeterias. There is no point in teaching students to eat healthy if their school cafeteria does not serve healthy food. Schools should set a healthy example for their students by only selling and serving food in accordance with WHO nutritional recommendations and not being allowed to serve products violating these guidelines.

We therefore demand that all European states ensure that all children are given high-quality, practical based food and nutrition education in school, that enables children to eat healthy and empowers them. Nutritional education must be supported by a healthy food environment at school and school cafeterias should therefore not be allowed to sell or serve unhealthy food.

3) Implement a sugar-sweetened beverage tax to make unhealthy foods more expensive

We are demanding that European states implement a sugar sweetened beverage tax. The tax should increase the prices on sugar sweetened beverages by 20%, in addition to taxing drinks by the amount of sugar per litre.

Today, sugar sweetened beverages are cheap and easily accessible. Sugar sweetened beverages have no nutritional value but they contribute to high sugar intakes.^x Systematic reviews show that an increased intake of free sugars, especially in the form of sugar sweetened beverages, leads to unhealthy weight gains.^{xi}

Studies have suggested that increased prices on sugar sweetened beverages can decrease the consumption of such products.^{xii} This can again push the beverage industry to produce products with less sugar. The UK, Mexico, France and Norway are among the states that have already taken bold measures to tax sugar sweetened beverages in an effort to build healthier societies - now it is time for more states to follow!

In line with the WHO,^{xiii} we demand that all European states implement a tax on sugar sweetened beverages that tax these products 20% of their transaction value in addition to a tax on the amount of sugar per litre bought. The tax should apply to all sweetened beverages, such as sodas, flavoured milk, energy drinks and flavoured waters.

4) Offer all children and adolescents free, organized physical activities at least once every week

We are demanding that all European states offer free and inclusive organised physical activity programmes for all children and adolescents at least once every week.

Research shows that more than 80% of adolescents in school age globally did not meet the recommendation of at least one hour of physical activity per day.^{xiv} This is considered to have severe health implications.

Participation in organised physical activity programmes for children in kindergarten and first grade has been found to be likely to lead to smaller increases in body weight.^{xv} At the same time, attending organised sporting activities can be expensive and require costly equipment.



We therefore demand that European states offer all children and adolescents free organised physical activities. The activities must be organised so that all children can participate, no matter their gender, ethnic background, health and functional ability and socioeconomic background. Where equipment is needed to attend the activity, lending schemes must be put in place so that everyone can participate.

The programmes can be organised as school activities or extracurricular activities. It should be fun for young people to participate. Schools should be organised so that young people can participate in these activities. This entails that students could be given less homework, if they participate in these activities.

The time to act is now!

Obesity has serious negative implications for public health. Yet, no country in the world is on track to meet WHO's target of 'no increase in obesity prevalence by 2025'. The COVID-19 pandemic has given us a chance to change our societies. We cannot simply go back to normal - but need to build back better!

To successfully prevent overweight and obesity among children and adolescents, a structural, whole-of-society approach, built in collaboration with young people, is needed. This entails complex measures on different fields of policy. We have here raised four action points we see as a crucial first step towards preventing obesity.

The time to act is now! Finding and implementing successful measures to prevent obesity among adolescents will require that youth, civil society, governments and the private sector come together. We are ready - and hope you will stand with us in the fight for a society where everyone can live healthy lives!



About this document

This document has been drafted and adopted by youth that have taken part in the CO-CREATE project. CO-CREATE is a research project, aiming to prevent overweight and obesity among adolescents by working with youth to provide knowledge and policy ideas to make the healthiest choices the preferred ones. In the project, youth and researchers have come together in Youth Alliances for Overweight Prevention in England, the Netherlands, Norway, Poland and Portugal. Here, we have developed policy ideas to combat the obesity epidemic. It is representatives from these alliances that have drafted this document, and youth from all of the alliances have been given the opportunity to make amendments and take part in the adoption of our demands.

About the CO-CREATE Project:

CO-CREATE, a five-year (2018-2023) research project funded through an EU Horizon 2020 grant, aims to reduce the prevalence of obesity among adolescents in Europe through policy actions to promote a healthier food and physical activity environment. CO-CREATE's vision is that before 2025, the rise in adolescent obesity will have come to a halt.

The project brings together a consortium of 14 international research and advocacy organisations, across 10 countries to generate new insights to childhood obesity, and its relation to implementation of policies.

For more information on CO-CREATE visit: www.co-create.eu

ⁱ <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>

ⁱⁱ <https://www.who.int/end-childhood-obesity/en/>

ⁱⁱⁱ <http://www.imid.med.pl/images/do-pobrania/fimid-poradnik-web.pdf>

^{iv} <https://www.cdc.gov/obesity/adult/causes.html>

^v <https://www.wcrf-uk.org/uk/latest/press-releases/awareness-not-enough-prevent-obesity>

^{vi} <https://www.un.org/development/desa/disabilities/envision2030-goal3.html>

^{vii} <https://www.worldobesityday.org>

^{viii} <https://www.who.int/dietphysicalactivity/marketing-food-to-children/en/>

^{ix} <http://www.fao.org/school-food/areas-work/based-food-nutrition-education/en/>

^x http://s3-eu-west-1.amazonaws.com/wof-files/Implementing_sugar-sweetened_beverage_taxes_-_Consideration_for_European_policymakers.pdf

^{xi} https://www.who.int/elena/titles/commentary/ssbs_childhood_obesity/en/

^{xii} <https://apps.who.int/iris/bitstream/handle/10665/260253/WHO-NMH-PND-16.5Rev.1-eng.pdf;jsessionid=A671F2B0037F0A9755FBBA89B907E83C?sequence=1>

^{xiii} <https://apps.who.int/iris/bitstream/handle/10665/260253/WHO-NMH-PND-16.5Rev.1-eng.pdf;jsessionid=A671F2B0037F0A9755FBBA89B907E83C?sequence=1>

^{xiv} <https://pubmed.ncbi.nlm.nih.gov/22869403/>

^{xv} file:///C:/Users/Margrete%20Katanasho/Downloads/poa120003_713_718.pdf



Appendix C

Policy ideas developed by youth in the five CO-CREATE countries on restricting marketing of unhealthy food and beverages to children and youth.

Policy theme 1: Restrict marketing of unhealthy food and beverages to children and youth

CO-CREATE country	Policy idea
The Netherlands	<p><i>Sugar tax: making unhealthy food more expensive and healthy food cheaper</i></p> <ul style="list-style-type: none"> Introducing sugar tax in the Netherlands per gram of sugar as an incentive for the food industries to lower the amount of sugar in drinks, and supermarkets to promote healthy foods.
Norway	<p><i>Change the price and placement of food products in shops</i></p> <ul style="list-style-type: none"> Change the price of healthy and unhealthy foods, first locally, then expand the scheme to other municipalities, other counties and ultimately all over Norway. Reduce the price of healthy food (such as fruit and salad) and increase the price of unhealthy food (such as sweets, biscuits and fizzy drinks). <p><i>Limit the digital marketing of unhealthy products aimed at children under the age of 18</i></p> <ul style="list-style-type: none"> Develop stricter and more specific regulations for advertising which targets children, as well as regulations against the sponsorship of unhealthy food products by food chains/companies. <p><i>Reduce obesity by reducing portion sizes</i></p> <ul style="list-style-type: none"> Introduce two bag sizes for sweets: an individual-sized portion and a family-sized portion, which should be clearly indicated on the packaging. Introduce a maximum plate size for food to be served on.
Poland	<p><i>Healthy shelves: changing the product visibility in stores</i></p> <ul style="list-style-type: none"> Reorganization of food products in stores, so that healthy products are highly visible and recognizable. This includes large supermarkets properly arranging food products in the store shelves and identifying specific criteria that divide food products into healthy and unhealthy.

Portugal	<p><i>Limit the marketing of unhealthy food products</i></p> <ul style="list-style-type: none">• Change marketing in supermarkets by restricting marketing that promotes unhealthy food and encouraging marketing promoting healthy food.
UK	<p><i>Social media and healthy food promotion</i></p> <ul style="list-style-type: none">• Use social media as a tool to promote healthy foods and healthy eating by creating school-, local- and/or national-level social media accounts that are primarily geared towards young people with a focus on making appealing content to generate many young followers.

Appendix D

Policy ideas developed by youth in the five CO-CREATE countries on improving physical activity access for children and youth.

Policy theme 2: Improve physical activity access for children and youth

CO-CREATE country	Policy idea
The Netherlands	<p><i>Young people exercise for free in the gym, swimming pool and around their own neighbourhood</i></p> <ul style="list-style-type: none"> • Encourage sport clubs and swimming pools, supported by the municipality, to offer young people the opportunity to exercise for free twice a week, and provide sports equipment to young people which they can use to exercise at home or in their neighbourhood.
Norway	<p><i>Easy and affordable access to facilities in upper secondary schools in their municipality</i></p> <ul style="list-style-type: none"> • Allow students to use gyms, exercise equipment and weight-lifting rooms at upper secondary schools after school, including a teacher/adult present in order to supervise students, help them set up the equipment correctly and ensure that there is no harassment.
Poland	<p><i>Gym passes for youth</i></p> <ul style="list-style-type: none"> • Improve young people's sense of well-being and self-acceptance through increased physical activity. Encourage physical activity by improving access to those places where young people can be active by lowering the price and making them available through partnerships with schools. <p><i>Mobile App: FITKET - doing physical activity and collecting credits for health food shops or gyms</i></p> <ul style="list-style-type: none"> • A smartphone application to record and measure one's level of daily physical activity. The app will accumulate credits in accordance with the daily level of physical activity, which can be exchanged into discounts for products or services related to a healthy lifestyle.
Portugal	<p><i>Physical activity for all - Mobile App</i></p> <ul style="list-style-type: none"> • Public-private partnerships between schools, city halls, gyms, sport clubs and public transportation to enable access and practice of physical activity. In addition, an app would be created to motivate young people.

Appendix E

Policy ideas developed by youth in the five CO-CREATE countries on improving access to nutrition education for children and youth.

Policy theme 3: Improve access to nutrition education for children and youth

CO-CREATE country	Policy idea
The Netherlands	<p><i>Kitchen take-over: warm, healthy food in school canteens - made by the young people themselves</i></p> <ul style="list-style-type: none"> Provide healthy and warm food in healthy school canteens by incorporating students' knowledge of and preferences for healthy food based on their different backgrounds and dietary habits at home, as well as producing a cookbook that other school canteens can use and to teach young people how to cook. <p><i>Cooking classes for young people in schools and online</i></p> <ul style="list-style-type: none"> Organize cooking lessons at schools to teach youngsters how to prepare food, learn about the origin of products, and what food is healthy, and create online platforms using social media to learn and inspire young people to cook healthy recipes.
Norway	<p><i>More information about healthy eating, healthy food and a healthy lifestyle for upper secondary schools</i></p> <ul style="list-style-type: none"> Incorporate the subject diet and how it affects the body into the curriculum in upper secondary school and provide students in upper secondary school with visual and digital tools that can be used throughout life, even after finishing school.
Poland	<p><i>Fit, fresh and fast: regular meetings with dietitian</i></p> <ul style="list-style-type: none"> Organizing regular workshops with nutrition specialists within school settings/curriculum for students. The aim of the policy is to draw attention among high school students to the problem of obesity, as well as presenting solutions on how to prevent obesity. <p><i>Saturday awareness - health events in public spaces</i></p> <ul style="list-style-type: none"> Create awareness and encourage healthy eating through events in public spaces, including healthy cooking activities and consultations with specialist.
Portugal	<p><i>Nutritionist in schools</i></p> <ul style="list-style-type: none"> Introduce nutritionists in schools to monitor and manage the range of food available at the canteens and cafeterias and vending machines, as well as develop workshops and educational sessions with adolescent-friendly content about food and nutrition. To give young people easy access to a nutritionist when needed.

	<p><i>Cooking classes in schools</i></p> <ul style="list-style-type: none"> • Provide cooking classes both at and outside school in order to encourage young people to cook their own food in a healthy way, thereby reducing the likelihood of eating fast food and buying ready-to-eat products. <p><i>Nutrition and food curriculum</i></p> <ul style="list-style-type: none"> • Incorporate nutrition and cooking themes in the Citizenship and Civic Education curriculum to encourage adoption of a healthy and informed diet among young people in their everyday lives, demystify the difficulty and cost associated with healthy eating and to empower young people and increase self-confidence by improving their knowledge about nutrition and health and by developing cooking skills for a healthy diet.
UK	<p><i>Council funded cooking classes for young people</i></p> <ul style="list-style-type: none"> • Free cooking classes for young people, provided by local council, that focus not only on technical cooking skills but also on practical skills, such as budgeting and meal planning. The classes are to be provided at various local locations (schools, community centres) and include a 'take-home kit' with ingredients and recipes.