Study on the implementation of the EU Action Plan on Childhood Obesity 2014-2020

The Childhood Obesity Study

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Preliminary summary based on unvalidated draft findings

Introduction

The Childhood Obesity Study aims to provide an overview of the efforts during the first-half period of the EU Action Plan on Childhood Obesity (2014-2020) and its state of implementation in every EU Member State as well as Iceland, Norway, Switzerland, Serbia, and Montenegro, and at the EU level. The action plan consists of eight areas of action, being:

1) Support a healthy start in life
2) Promote healthier environments, especially in schools and pre-schools
3) Make the healthy option the easier option
4) Restrict marketing and advertising to children
5) Inform and empower families
6) Encourage physical activity
7) Monitor and evaluate
8) Increase research

Information basis for this report

Findings in this draft report are among others based on telephone interviews with representatives of 28 countries held between Mid-December 2016 and January 2017. Information per country is subject to potential change as not all interview summaries have been formally validated. For 6 countries information from interviews was incomplete (Cyprus) or lacking (Cyprus, Czech Republic, Montenegro, Portugal and Serbia).

Additional sources of information are studies collected through desk research, databases provided by Directorate General for Health and Food Safety (DG SANTE) containing information that has been collected in 2014 and 2015 (APCO-database), plus information kindly provided by the WHO Regional Office for Europe, among others regarding latest available information on the Childhood Obesity Surveillance Initiative (COSI). Also available data was used from the Health Behaviour in School-aged Children (HBSC) surveys on adolescents (11, 13 and 15 years old).

This report provides information on the state of implementation for each indicator within the first seven areas of action, based both on interviews and the APCO database. This can imply:

a) (partial) fulfilment of an action, dating back from before the introduction of the action plan
b) (partial) fulfilment of an action, since the introduction of the action plan.
c) action in preparation, possibly still be contingent on the outcomes of policy processes
d) no action is initiated or supported by national authorities
e) unknown

Preliminary findings

Data on the prevalence of overweight and obesity in children under 5 years of age are scarce and not always easy to compare. The prevalence of overweight (including obesity) ranged from around 5% to 30% in the 16 countries that had some data available. More and more comparable data are available for 6-9 year old children. The prevalence of overweight (including obesity) ranged from 18% to 57%. The highest prevalence rates

(40% or higher) were found in Greece, Spain and Italy. In the other countries the prevalence of overweight was mostly between 22% and 30%. The prevalence of overweight including obesity in adolescents (11, 13 and 15 years old) ranged from 9% to 39% in the last HBSC-survey (2013/2014).

Taking a birds-eye overview of policies/strategies in the countries included in this study, a number of overarching patterns emerge (see in particular figure 2.10 and table 2.1):

- Especially in areas 1 (support a healthy start in life), 2 (promote healthier environments, especially in schools and pre-schools) and 6 (encourage physical activity) of the Action Plan on Childhood Obesity 2014-2020 the majority of countries have policies, strategies or actions for most indicators.
    - In area 1, guidance on nutrition and physical activity is generally provided to women (before), during and immediately after pregnancy; information on breastfeeding is provided and/or breastfeeding is advised or promoted. Management services for already overweight or obese children are provided less often.
    - As for promoting healthier environments (Area 2), policies, strategies or actions mainly focus at schools. In all except a few cases, policies on vending machines and energy drinks do not apply to settings other than the school environment. Also, in all countries physical education is included in the school curriculum, with most countries specifying a minimum number of hours. Nutrition education is also included in most school curricula, but is less regulated, also as the minimum number of hours is often not defined.
    - Encouraging physical activity (Area 6) also seems to be well covered, with respect to policies, the existence of national guidelines and available data on weight and height of children.
- The following three areas are relatively less developed, with a greater share of countries indicating that no action is initiated or supported at national level: Areas 3 (Make the healthy option the easier option), 4 (Restrict marketing and advertising to children) and 5 (Inform and empower families). In federal countries or where there is decentralisation of responsibilities to lower levels, this may mean that action is being taken at such levels. Per area, the following observations are worth highlighting:
    - Within Area 3 (make the healthy option the easier option) food reformulation/product improvement experiences growth across Europe. Several countries recently started reformulation initiatives, while others are planning to do so. Easy to understand labelling, such as front-of-pack labelling, is used in only 9 countries to make the healthy option the easier option. Taxation of nutritionally unbalanced products is becoming more common (existing in 7 countries and in preparation in 4 others). A subsidy on ‘healthier’ options – other than the EU fruit and vegetable scheme or the EU milk scheme – exists in Hungary (in 2017, Hungary decreased taxation on some products, for example fresh milk and eggs. There are plans to decrease taxes on fish and vegetables as well).
    - Area 4 concerns restriction of marketing of unhealthy foods to children. Actions in this area are usually based on (voluntary and industry-led) codes. National authorities are sometimes involved in their drafting. This an area that has to be further researched.
    - Within area 5 it is noticeable that nineteen counties use (national) campaigns to inform and educate the population on healthy diet and/or the importance of physical activity. A comparable number of countries have policies to support

community-based interventions, which often fall under the responsibility of subnational authorities, such as municipalities. Screening for obesity takes place in 13 countries and is quite often seen as one of the tasks of child healthcare providers and general practitioners.

- With respect to Area 7 (monitoring and evaluation), one notable finding is that participation in COSI is the one indicator that has increased the most, since the year 2014. Still, a number of countries have no future participation planned. All countries, except Cyprus, participate in the HBSC survey. Representative data on overweight and obesity among children under the age of 5 are not always readily available (although several countries measure children as part of child healthcare). Currently, national representative nutrition surveys are available in more than half of the countries. However, it is not always clear whether or not children are included in these surveys. Monitoring of physical activity is mainly covered through the HBSC-study and thus concerns adolescents only.

Regional clustering

In chapter 3 we present a graphical representation of indicators, allowing to determine if there are apparent patterns of clustering of countries. In a later version this clustering will be investigated in more detail. In this stage, the following findings stand out:

- On a number of indicators there appears to be an east-west gradient in the level in which countries have activities already before the Action Plan, versus countries that don't have such activities, at least at national level. This applies among others to
    - Provision of nutritional guidance before, during and after pregnancy (area 1)
    - Policies to virtually eliminate trans fatty acids (area 3)
    - Countries taking initiatives to reduce the marketing of foods high in fat, sugars and salt (HFSS) (area 4)
    - Use of nutrient profiles or criteria to reduce marketing of foods to children (area 4)
    - Availability of representative diet and nutrition surveys (area 7)
- For a number of the above-mentioned indicators there is also a certain North-South gradient, with Mediterranean countries more often indicating not to have any national actions in those areas.
- On other indicators there is clearly no clustering pattern. On other indicators there is clearly no clustering pattern, with both EU 15 and non EU15 countries having actions already, actions planned or no actions. It refers amongst others to:
    - Food reformulation initiatives for salt (area 3),
    - Food reformulation initiatives for sugar (area 3)
    - Policies to support community based interventions (area 5)
- An additional type of clustering worth highlighting is that between larger and smaller countries. The latter may be more dependent on import of foods, thus making some policies/strategies less obvious..

Role of the EU Action Plan on Childhood Obesity

Many countries reported that the EU Action Plan on Childhood Obesity 2014-2020 serves as a guidance document that provides directions and ideas for national policies. For countries that already had many policies, strategies or actions in the areas of action that are mentioned in the Action Plan, it also served as a justification or reference document for their national policies.

Potential lessons for policy making

- All countries are active in one or more areas of the EU Action Plan, plus a number of countries are moving from having plans to implementation.
- While some countries appear to be on the forefront, at least in terms of having certain policies or strategies, it does not necessarily mean that these plans are already fully implemented and successful.
- Voluntary cooperation between countries can be of value for all, but possibly in particular to (smaller) countries with limited resources or more dependency on import of food.
- Diversity between countries, also in terms of contextual factors, that play a role in whether or not countries have policies/strategies or not, provides an important basis for more in-depth comparison between countries.
- A thorough evaluation of what works under what conditions is needed (but falls outside the scope of this project). Can e.g. good examples of policies on procurement of foods in schools be identified, can they be scaled up and transferred to other countries or settings, and what are the barriers in doing so?

1 Introduction and Methods

1.1 Introduction

The prevalence of obesity has more than tripled in many European countries since the 1980s. Since more than a decade, action has been undertaken at both national and the European level to reverse this rising trend in overweight and obesity. Nevertheless, the proportion of children that is overweight or obese remains worryingly high. Overweight and obesity are established risk factors for multiple health problems including cardiovascular diseases, many types of cancer, musculoskeletal disorders and type 2 diabetes in particular (1). Compared to normal weight children, those who are overweight or obese are more likely to go on to become obese adults, and are at an increased risk of suffering from associated health problems. The high level of overweight and obesity in children and young people in Europe, and worldwide, is therefore an area of particular concern. See Box 1 for more background information on childhood obesity.

Box 1. Background information on childhood obesity

Overweight and obesity are established risk factors for multiple health problems including cardiovascular diseases, many types of cancer, musculoskeletal disorders and type 2 diabetes in particular (1). Compared to normal weight children, those who are overweight or obese are more likely to go on to become obese adults, and are at an increased risk of suffering from associated health problems. In addition to increased future health risks, obese children experience breathing difficulties, and are at increased risk of fractures, hypertension, elevated early markers of cardiovascular disease, insulin resistance and psychological effects (2, 3).

Because of the negative consequences of obesity on the quality of life, associated diseases, etc. and since obesity is difficult to treat once established, prevention is the main priority. Behaviours such as an increased consumption of high energy density beverages and foods, a low consumption of vegetables and fruits, less physical activity and more sedentary leisure time activities are shown to contribute to overweight and obesity (4-6). However, these behaviours are made possible and are sometimes even stimulated within the socio-cultural and physical environment in which people live (7). Children's behaviour depends much on their immediate physical and social environment (8). Obesity can therefore be seen as a normal response to an obesogenic environment. This implies that prevention of overweight and obesity in children should be implemented across the multiple contexts that can influence a child's nutrition, physical activity pattern and weight (e.g., schools, home and family, community and healthcare settings). Several reviews generally suggest that the most sustainable and beneficial effect on obesity prevention involves multiple strategies that focus on meals, classroom activities, sports, and play activities, and involve home, school or kindergarten, and community participants (9, 10). Similarly, the World Health Organisation (WHO) argues for the implementation of population-based approaches to childhood obesity prevention (11). The more an environment consistently promotes healthy behaviour, the greater the likelihood that such behaviour will occur.

Towards the Action Plan on Childhood Obesity

In 2007, the European Commission adopted the 'White Paper on a Strategy for Europe on Nutrition, Overweight and Obesity-related Health issues' in response to the challenge of supporting the Member States in this area (12). The purpose of this White Paper was to set out an integrated EU approach to contribute to reducing ill health due to poor nutrition, overweight and obesity. One of the six priority areas of this strategy concerns children and young people. The Strategy encourages action-oriented partnerships across the EU, involving as key stakeholders the Member States and the civil society. These partnerships were implemented primarily via two main instruments, the High Level Group on Nutrition and Physical Activity and the EU Platform for Action on Diet, Physical Activity and Health.

Following the informal meeting of EU Health Ministers in Dublin in March 2013, organised by the Irish EU Presidency, the Commission supported the Irish EU Presidency's proposal to mandate the High Level Group on Nutrition and Physical Activity to draw up an action plan to address overweight and obesity in children and young people. As a result, the High Level Group adopted the EU Action Plan on Childhood Obesity 2014-2020 (13). The overarching goal of this Action Plan is to contribute to halting the rise in overweight and obesity in children and young people (0-18 years) by 2020. To achieve this goal, active participation of a wide range of stakeholders is necessary. The Action Plan is a non-binding instrument and specifies a set of operational objectives that have been designed to guide the actions of stakeholders across eight priority areas (see Table 1.1).

The actions were proposed by a number of Member States and provide a basis for countries to develop policy on tackling childhood obesity. Defining national health policies remains the exclusive competence of Member States. Therefore, these actions are voluntary and should be taken forward by each of the Member States according to their own national contexts and priorities.

The Council of the EU welcomed the agreement on the Action Plan and called the EU Member States to use the Action Plan as guidance for effective action on reducing childhood obesity and for promoting good practices. The Council of the EU also asked the Commission to report back to the Council on the progress made in implementing the Action Plan midway the 2014 and 2020 and again in 2020, via the 2014 Council Conclusions on Nutrition and Physical Activity[1].

[1] http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/lsa/143285.pdf

Tabel 1.1. Areas of Action in the EU Action Plan on Childhood Obesity (13)

Area of action
1 Support a healthy start in life, including e.g.:
• counselling and support on diet and physical activity before, during and immediately after pregnancy • proper information and support on breastfeeding • guidance on complementary feeding • interdisciplinary evidence-based programmes for obese children and young people
2 Promote healthier environments, especially in schools and pre-schools, including e.g.:
• improve the uptake of healthy and high quality school meals and limit access to snacks and other supplementary less healthy food options on school premises • physical education in schools and encouragement of active breaks
3 Make the healthy option the easier option, including e.g.:
• provide appropriate information to consumers could help them to identify nutritious, affordable and convenient food options • encourage food product improvement (reformulation) • take nutritional objectives into consideration when defining taxation, subsidies or social support policies • active commuting to and from school
4 Restrict marketing and advertising to children, including e.g.:
• restrict marketing and advertising to children and young people that includes not only TV but all marketing elements, including in-store environments, promotional actions, internet presence and social media activities
5 Inform and empower families, including e.g.:
• promote and encourage family-based programmes • effectively deliver nutritional information in a more useful and easy to understand way for everyone
6 Encourage physical activity, including e.g.:
• encourage activity as early on as possible in childhood • encourage physical activity as an everyday occurrence
7 Monitor and evaluate, including e.g.:
• monitor the health status and behaviours of children and young people in relation to nutrition and physical activity in order to develop and direct targeted action • evaluate the Action Plan on Childhood Obesity at the end of 2020. • revisit the Action Plan After three years, in order to see whether objectives and actions are still relevant to its objectives
8 Increase research, including e.g.:
• improve systematic data collection • identify gaps in research and eliminate them through the funding of new projects and by improving alignment of national research agendas • disseminate research findings and turn them into innovative actions

The Childhood Obesity Study

The Childhood Obesity Study, conducted by the EPHORT consortium, aims to provide the European Commission and thereby the EU Member States with an overview of the efforts during the first-half period of the Action Plan (2014-2020) and its state of implementation in every EU Member State as well as Iceland, Norway, Switzerland, Serbia, and Montenegro, and at the EU level. The present study also offers information on the prevalence of childhood obesity in the aforementioned countries. The objectives of the Childhood Obesity Study are subdivided into four tasks and formulated as follows:

Task 1: To provide an overall assessment of the state-of-play of activities in the EU addressing childhood obesity, as defined in the 8 areas for actions of the Action Plan

> This task shall offer an overall picture of the situation of childhood obesity in the EU and identify the relevant related policy developments in each of the relevant States. It shall result in a characterisation of childhood obesity and a short description per country, including policies, activities in the 8 action areas defined in the Action Plan. This task shall furthermore produce a report on the estimated evolution/development of the rates of childhood obesity in the respective countries under the assumption of absence of additional action by extrapolating current trends.

Task 2: To provide an analysis and mapping of the state of implementation and activities carried out, on-going and/or planned in each of the Member States, in the period 2014-2020, in each of the areas for action of the Action Plan

> This task shall provide a country specific mapping on the state of implementation of the 8 key areas for action defined in the Action Plan at national level and shall include activities that have been carried out, that are on-going as well as those that are planned. This analysis shall be provided for each of the relevant States and shall be based on an in-depth analysis. The progress in the implementation of the Action Plan in each of the relevant States and in the EU shall be measured against the 2014 baseline, which is available from DG SANTE (except for Iceland, Serbia and Montenegro).

Task 3: To provide an overview and analysis of the engagement and implementation of EU Member States, the Commission and International Organisations in EU wide initiatives, projects, and joint actions in the field of nutrition and physical activity and the outcome of these initiatives in relation to the operational objectives listed under paragraph 3 of the Action Plan

> This study shall provide an assessment of the engagement in common EU initiatives/projects for each of the relevant States as well as the Commission and the WHO. Several initiatives/projects have been carried out at EU level in the last years under the EU Health Programme, such as the projects, a Member State Joint Action, operating grants and grants with international organisations. Also other EU funding programmes have provided funding for EU wide projects and initiatives in the field, such as the FP7, H2020, the EU Sport programme, and others. The analysis shall include an assessment of how the common initiatives/projects fit into the 8 action areas and shall indicate the outcome of these initiatives/projects in relation to each of the 8 action areas.

Task 4: To provide an assessment of the strengths, weaknesses, opportunities and threats for the implementation of the Action Plan and recommendations for the second half-period of the Action Plan, both at EU and national level.

> This task shall provide a summary of the previous tasks (Tasks 1-3) and shall identify strengths, weaknesses, opportunities and threats for each of the eight areas of the Action Plan in each of the relevant States (see geographical coverage above) and the EU. The study shall indicate pending weaknesses, such as if any of the 8 action areas has not been well addressed yet as well as what would be the suggested ways to address it by 2020. The task shall also analyse these points per relevant State, such as what can be areas of next steps/further improvement, as well as further recommendations for the Commission (such as types of projects, working groups, conferences, meetings).

These four work packages directly relate to the four tasks detailed - as well as the whole set-up of the service - in the Tender specifications for requesting specific services (N° CHAFEA/2016/Health/01), whereas the general frame for this service is provided for in the Framework contract N° EAHC/2013/Health/01 (lot 1: Health reports).

This draft report describes the first preliminary results for tasks 1 and 2, based on information we were able to collect and process since the start of the assignment from CHAFEA, November 17, 2016 until January 31, 2017 (and the interview with Ireland on February 13).

1.2 Methods

The study is based on a combination of desk research and consultations of experts through structured questionnaires and interviews with Competent Authorities of the EU Member States, carried out by a multidisciplinary project team.

- Firstly, desk research was executed to collect information from available reports summarizing relevant information at the EU level, as well as from country sheets prepared by the World Health Organisation Regional Office in Europe (WHO-Europe) and the World Obesity Federation (WOF). In addition, databases were provided by Directorate General for Health and Food Safety (DG SANTE), containing information that has been collected in 2014 and 2015 (APCO-database).
- Secondly, collaboration was sought with the WHO Regional Office for Europe in order to use the information of the Childhood Obesity Surveillance Initiative (COSI), the 2015-2016 European Physical Activity Focal Points Network Questionnaire (HEPA-Questionnaire) and the Global Health Survey 2016. At the time of writing this draft report, COSI data were available as well as factsheets on health-enhancing physical activity – based on the HEPA-Questionnaire in the 28 EU Member States of the WHO European Region. The Global Health Survey was recently conducted. As most parts of the questionnaire were filled in by Member States late 2016, WHO was able to provide preliminary unvalidated data on a number but not all of countries. Therefore, these data are not yet included in this version of the report.
- Thirdly, subcontractors in 28 of the 33 countries were contacted to provide information on selected indicators and to check information in the 2015 version of the APCO database. The indicators for measuring country actions, which are in line with goals of the Action Plan, were based on indicators that were developed by the European Commission and WHO. The indicators included 18 indicators that were agreed upon with the Member States and additional relevant indicators that were chosen in consultation with and checked by policy officers of the European Commission to cover all areas of the Action Plan. All indicators were transferred to an excell-based datafile, to be filled in by the Member States subcontractors. Instructions on how to fill in the survey were presented in the database. Country consultants were asked to provide the first data before January 18 themselves or provide the name of an expert to contact. Only few subcontractors/experts were able to respond. Therefore these data are not yet included in this version of the report.
- Fourthly, members of the High Level Group on Nutrition and Physical Activity of the member states were contacted and invited for an interview focussing on policies related to childhood obesity. A semi-structured interview was developed in consultation with policy officers of the European, based on the indicators mentioned before. This was used to check and confirm the already collected data and complement it with new or missing qualitative information. After the Kick-off meeting with the contractor in November 2016, an announcement letter was prepared and sent December 7, 2016 by the Commission to prepare the ground for a fruitful information gathering by the Childhood Obesity Study-research team. In this semi-structured interview, members of the High Level Group or other representatives they appointed – together named Competent Authorities (CA) in the remainder of this document - were asked to provide information on the 8 areas of action in the Action Plan, based on their expertise and involvement in activities around the prevention of childhood obesity, nutrition and/or physical activity.

The following 33 countries are included in this study, with the following country codes according to the ISO 3166-1 Alpha-3 country codes.

EU Member States: Austria (AUT), Belgium (BEL), Bulgaria (BGR), Croatia (HRV), Cyprus (CYP), Czech Republic (CZE), Denmark (DNK), Estonia (EST), Finland (FIN), France (FRA), Germany (DEU), Greece (GRC), Hungary (HUN), Ireland (IRL), Italy (ITA), Latvia (LVA), Lithuania (LTU), Luxembourg (LUX), Malta (MLT), the Netherlands (NLD), Poland (POL), Portugal (PRT), Romania (ROU), Slovakia (SVK), Slovenia (SVN), Spain (ESP), Sweden (SWE), United Kingdom (GBR)

Candidate countries: Montenegro (MNE), Serbia (SRB)

Other European countries: Iceland (ISL, EEA = European Economic Area), Norway (NOR, EEA), Switzerland (CHE)

We were able to schedule interviews with Competent Authorities in 28 of the 33 countries included in the study between December 21, 2016 and January 31, 2017, and an additional interview with Ireland on February 13. The interview with Cyprus was not complete (another ministry needed to provide information also) and no interview could be scheduled with the Czech Republic, Montenegro, Portugal and Serbia. These countries are only included in some of the figures or tables when information was available from WHO or the APCO database. Furthermore, it was not yet possible to provide country-level general descriptions of the policies on childhood obesity for each country. These will be included in the final report, expected to be published by the European Commission in 2018.

Based on the interview and the APCO database, colour codes were given for various indicators that represent the state of implementation for that indicator. When the APCO database and the interview were discordant, the interview information was leading for this draft report. Colour coding was as follows:

- Light green: (partial, when striped) fulfilment of an action, dating back from before the introduction of the action plan. This does not involve the evaluation of an action's effectiveness.
- Dark green: (partial, when striped) fulfilment of an action, since the introduction of the action plan. This does not involve the evaluation of an action's effectiveness.
- Orange: action in preparation. They may still be contingent on the outcomes of policy processes.
- Red: no action is initiated or supported by national authorities. This does not mean, however, that no action is undertaken, e.g. by local authorities, NGO's or commercial parties.
- Blue: unknown

Important note:
The preliminary results presented in this draft report are based on desk research and interviews with CA's of 27 countries, carried out between December 21, 2016 and January 31, 2017. Please note also that not all interview summaries have been reviewed by the interviewees and data are not verified yet. Furthermore, the country descriptions and the colour coding given for the different indicators are not yet approved by the Competent Authorities yet. Therefore these data are preliminary and confidential and should be interpreted as a first impression of the implementation of the action plan.

2 Childhood obesity in the EU and overall assessment of activities addressing childhood obesity

2.1 Prevalence of childhood overweight and obesity in the EU

2.1.1 Prevalence of overweight and obesity among children <5 years of age

Data on the prevalence of overweight and obesity in children under 5 years of age are scarce. In addition, different surveys use different criteria to define overweight and obesity, and studies differ in the age-ranges of children studied. As a result, the available data are difficult to compare. Therefore a clear picture on the prevalence of overweight and obesity among young children cannot be provided.

For 16 countries some data are available (AUS, BEL, BGR, CYP, CZE, FIN, FRA, GRC, IRL, ITA, LTU, NLD, POL, PRT, ESP, GBR). The prevalence of overweight (including obesity) ranged from around 5% in 2 or 3 year old children in Belgium, Czech Republic and Finland to 20-30% in Finland (5 year olds), Greece, Ireland and Portugal (4 and 5 year olds), Spain (2-4 year olds), Scotland (2-6 year olds) and Wales (3-year-olds). In most countries the prevalence of overweight was higher in girls than in boys, with the exception of Spain and Scotland.

2.1.2 Prevalence of overweight and obesity among children aged 6-9 years old

For primary school children (6-9 years) more and more comparable data are available, mainly from the Childhood Obesity Surveillance Initiative (COSI) initiated by WHO Regional Office for Europe (14). Data from the surveys in 2009/2010 and 2012/2013 were used, except for Bulgaria (2007/2008 and 2012/2013). For countries that did not take part in those COSI surveys, nationally representative data were included, where available. While WHO criteria (15) were used for countries participating in COSI, some of the other countries used different criteria for overweight and obesity, mainly the cut-off points of the International Obesity Task Force (IOTF) (16, 17). The latter mostly result in lower prevalence figures (18).

The prevalence of overweight (including obesity) ranged from 18% in 6-year-old boys in Belgium to 57% in 9-year-old boys in Greece (see Figure 2.1). The highest prevalences (40% or higher) were found in Greece, Spain and Italy. In the other countries the prevalence of overweight was mostly between 22% and 30%, with the exception of the prevalence in 7-year old girls in Portugal (36%) and in 8- or 9 year old boys in Slovenia (36-37%). In a pooled analysis of cross-sectional studies between 2006 and 2015 in Romania (19), the prevalence of overweight (including obesity) ranged from 25% in 6-year old to 36% in 9-year old children (not in figure). With some exceptions the prevalence of overweight was higher in boys than in girls.

In the countries participating in both COSI surveys (2009/2010 and 2012/2013) the prevalence of overweight (including) obesity was higher in the latter survey for several age and sex subgroups.

- 6-year old boys in Slovenia (2009/2010: 23.5%; 2012/2013: 24.9%)
- 7-year old boys in Lithuania (2009/2010: 24.4%; 2012/2013: 26.5%)
- 7-year old boys in Portugal (2009/2010: 31.5%; 2012/2013: 32.7%)
- 8-year old boys in Spain (2009/2010: 45.3%; 2012/2013: 47.5%)

- 7- and 9-year old girls in Belgium (2009/2010: 24.1% respectively 26.6%; 2012/2013: 25.4% and 28.7%, respectively)
- 7-year old girls in Slovenia (2009/2010: 24.8%; 2012/2013: 25.5%).

In all other countries the prevalence was similar or somewhat lower in 2012/2013 compared to 2009/2010. It should be noted, however, that no formal statistical testing has been done, so we cannot exclude the possibility that any of these differences are rather due to chance. Data on the fourth COSI round (2015/2016) will provide more insight into any further trends.

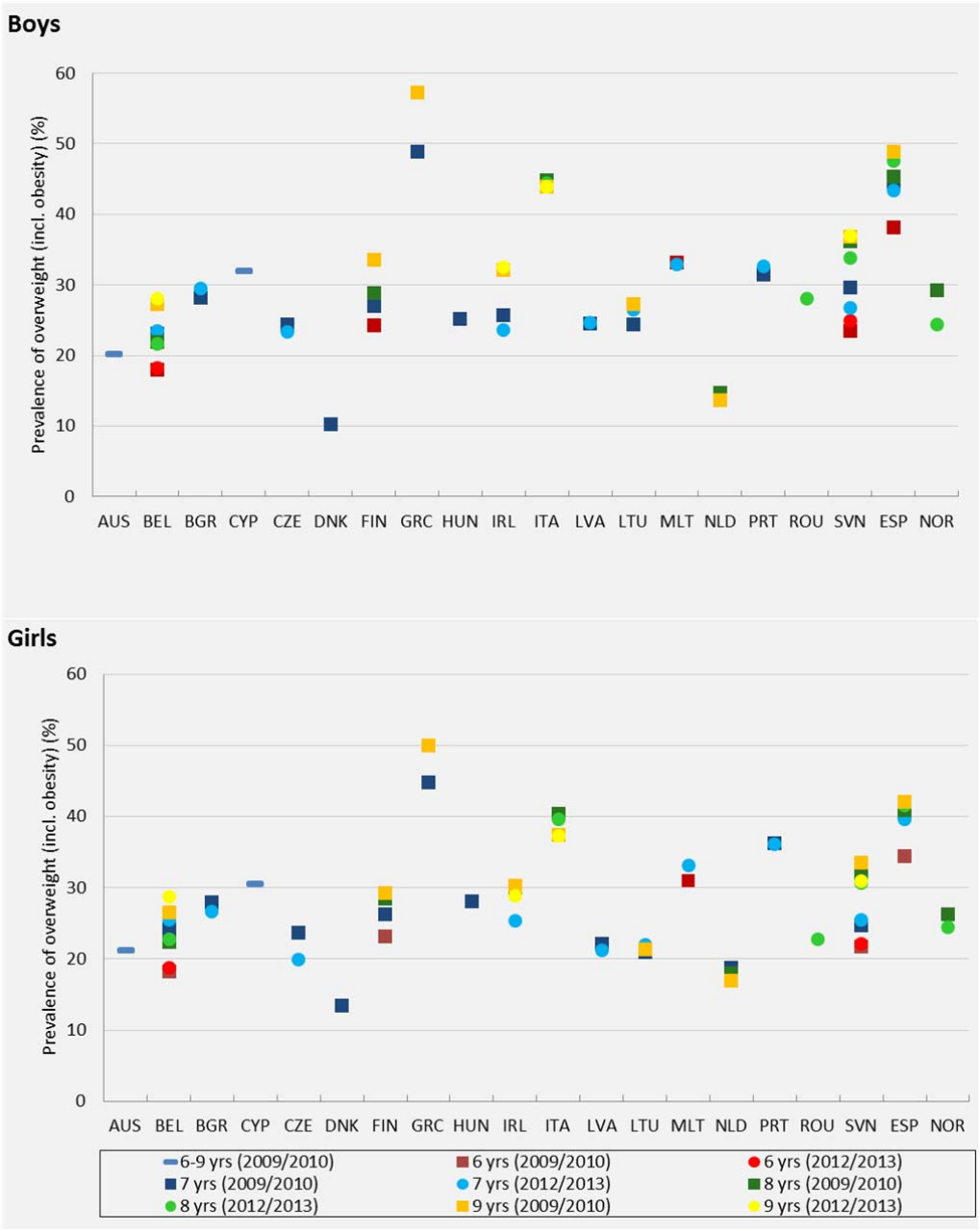


Figure 2.1. *Prevalence of overweight (including obesity) in 2009/2010 and 2013/2014 according to WHO criteria (15) among 6-9 year old boys (upper panel) and girls (lower panel) in 20 European countries. Source: COSI (2007/2008 and 2012/2013 data for BGR), except for AUS (20), CYP (21), DNK and FIN (APCO database, source unknown), NLD (22).*

2.1.3 Prevalence of overweight and obesity among adolescents

Intercountry comparable prevalence data on overweight including obesity in 11-, 13-, and 15-year-old adolescents are derived from the 2009/2010 and 2013/2014 Health Behaviour in School-aged Children (HBSC) surveys (23, 24). Data are based on self-reported height and weight. It should be noted that these were missing in some countries for > 30% of the sample (for BEL (Wallonia), IRL, LTU, GBR in both surveys and for MLT and ROU in 2013/2014). Furthermore, self-reported body weight is often underreported. A longitudinal study among US students in grades 8-12 found that the level of underreporting increased with aging in girls (25). Therefore, firm conclusions about trends cannot be drawn from these data.

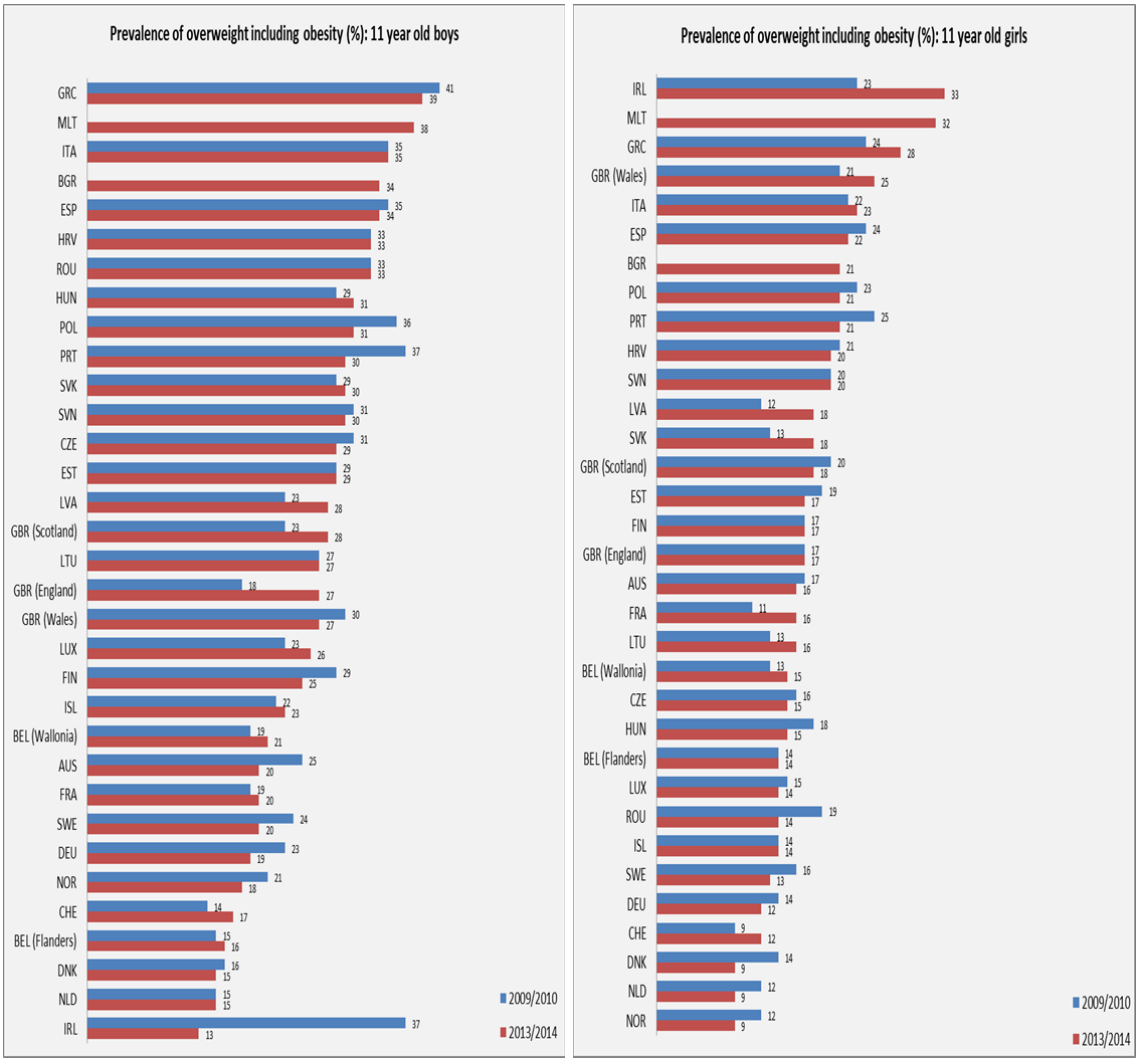


***Figure 2.2**. Prevalence of overweight including obesity in 11-year old boys and girls, according to WHO child growth curve standards (15). Source: HBSC (23, 24).*

In the 2013/2014 survey, the prevalence of overweight including obesity ranged from 13-39% in 11-year old boys and from 9-33% in 11-year old girls (see Figure 2.2). In almost all countries the prevalence was higher in boys than in girls.

In the HBSC surveys socioeconomic position at the individual level was measured by the family affluence scale (FAS), a summary index of four items: does your family own a car, van or truck? (0-2 points); do you have your own bedroom? (0-1 points); during the past

12 months, how many times did you travel away on holiday with your family? (0-2 points) and how many computers does your family own? (0-2 points). In the 2009/2010 survey in general boys and girls with a low family affluence had a higher prevalence of overweight including obesity, but differences where not always statistically significant. Only in Slovakia, the prevalence was significantly lower in boys with a low family affluence. Similar trends (but not statistically significant) were seen in Poland, Ireland and Romania (23). In the 2013/2014 survey the association between low family affluence and the prevalence of overweight including obesity was more pronounced, with more countries showing statistically significant higher prevalence among children with a low family affluence (24).

For 11 of the 31 countries that participated in both surveys the prevalence of self-reported overweight including obesity among boys was lower in the second survey than in the first (Figure 2.3). Irish 11-year old boys even reported a 24%-point lower prevalence of overweight including obesity (37% versus 14%), while Irish girls reported the largest increase. In 12 countries the prevalence of overweight including obesity among 1-year old girls was lower in the second survey than in the first survey. The largest decrease was 5%-points in Denmark and Romania). In the remaining countries the prevalence remained stable or was higher in the 2013/2014 survey.

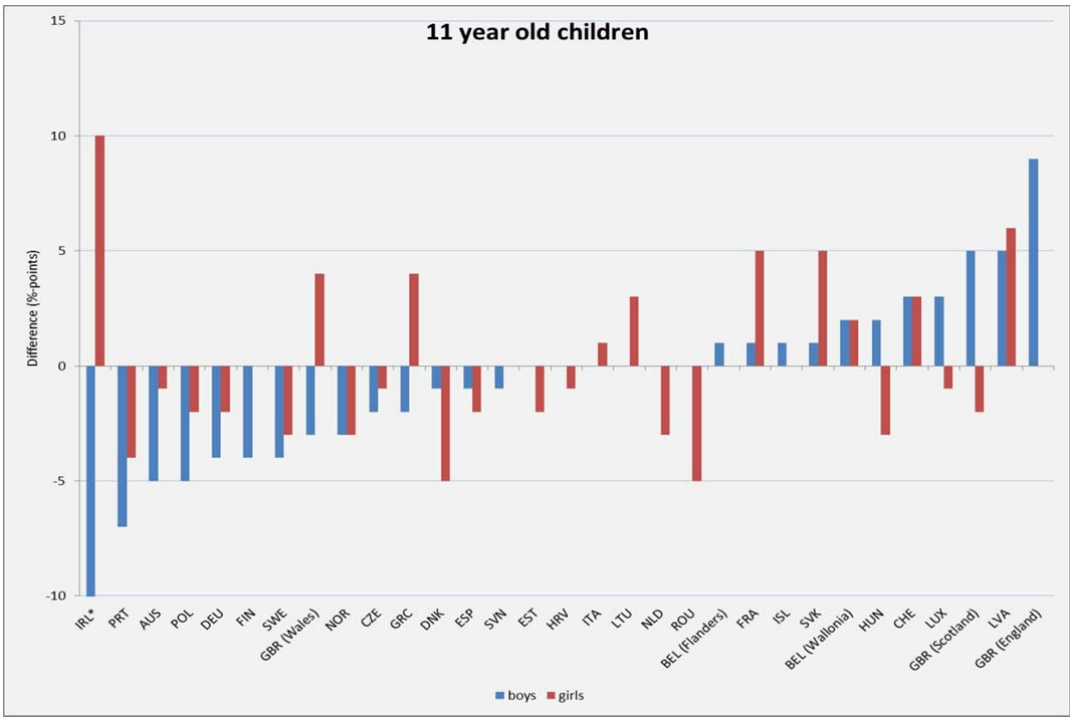


Figure 2.3. *Difference in the prevalence of overweight including obesity between 2013/2014 and 2009/2010 among 11-year old boys and girls, according to WHO child growth curve standards (15). Source: HBSC (23, 24).*

In the 2013/2014 survey the prevalence of overweight including obesity for 13-year old and 15-year old boys ranged from 11% to 36% and from 13% to 34%, respectively (see Figure 2.4 and 2.5). For girls these percentages were 8-33% and 7-26%. Prevalences were higher for boys than for girls with the exception of 13-year olds in Denmark and Ireland (same prevalence in boys and girls).

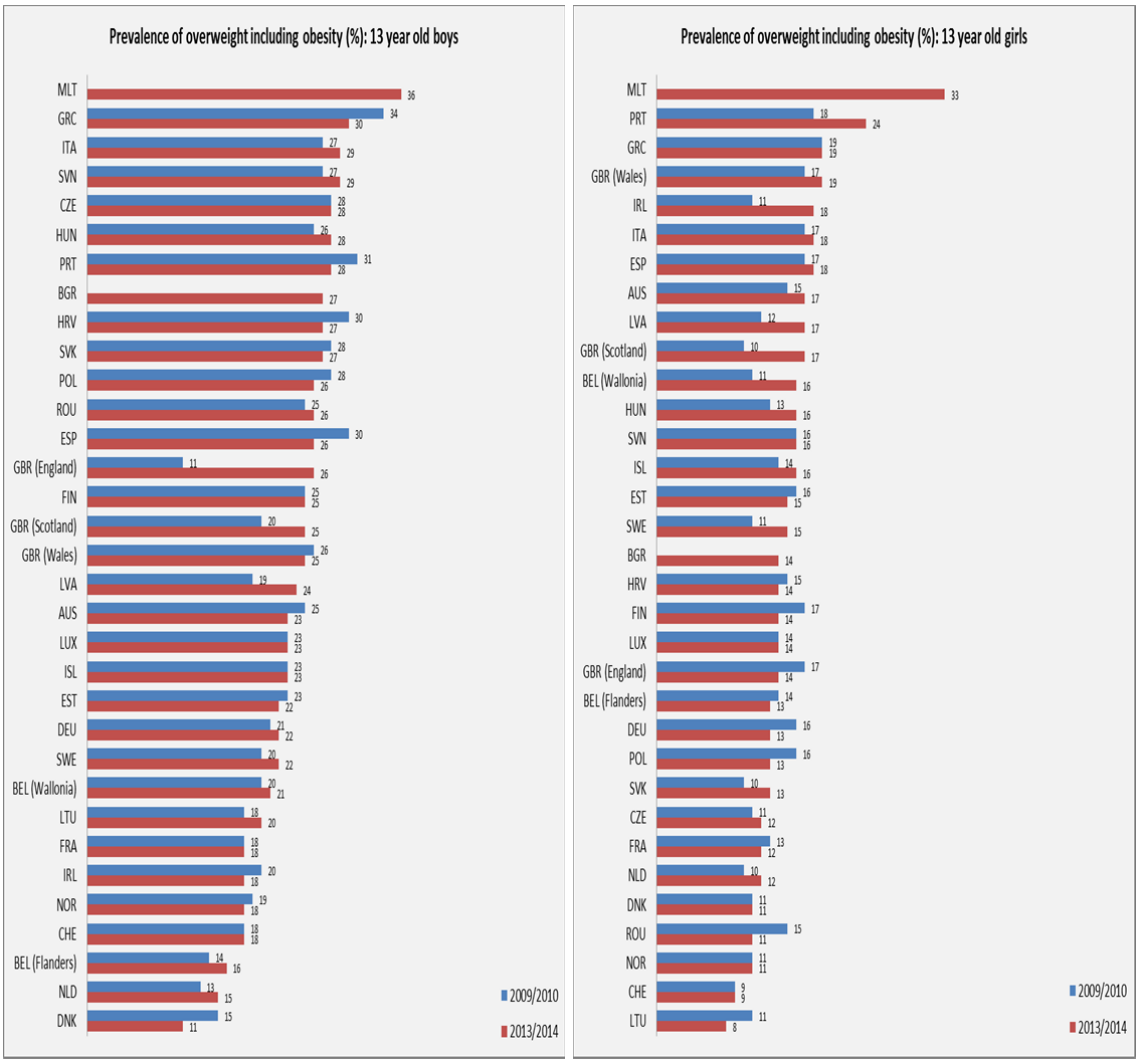


***Figure 2.4**. Prevalence of overweight including obesity in 13-year old boys and girls, according to WHO child growth curve standards (15). Source: HBSC (23, 24).*

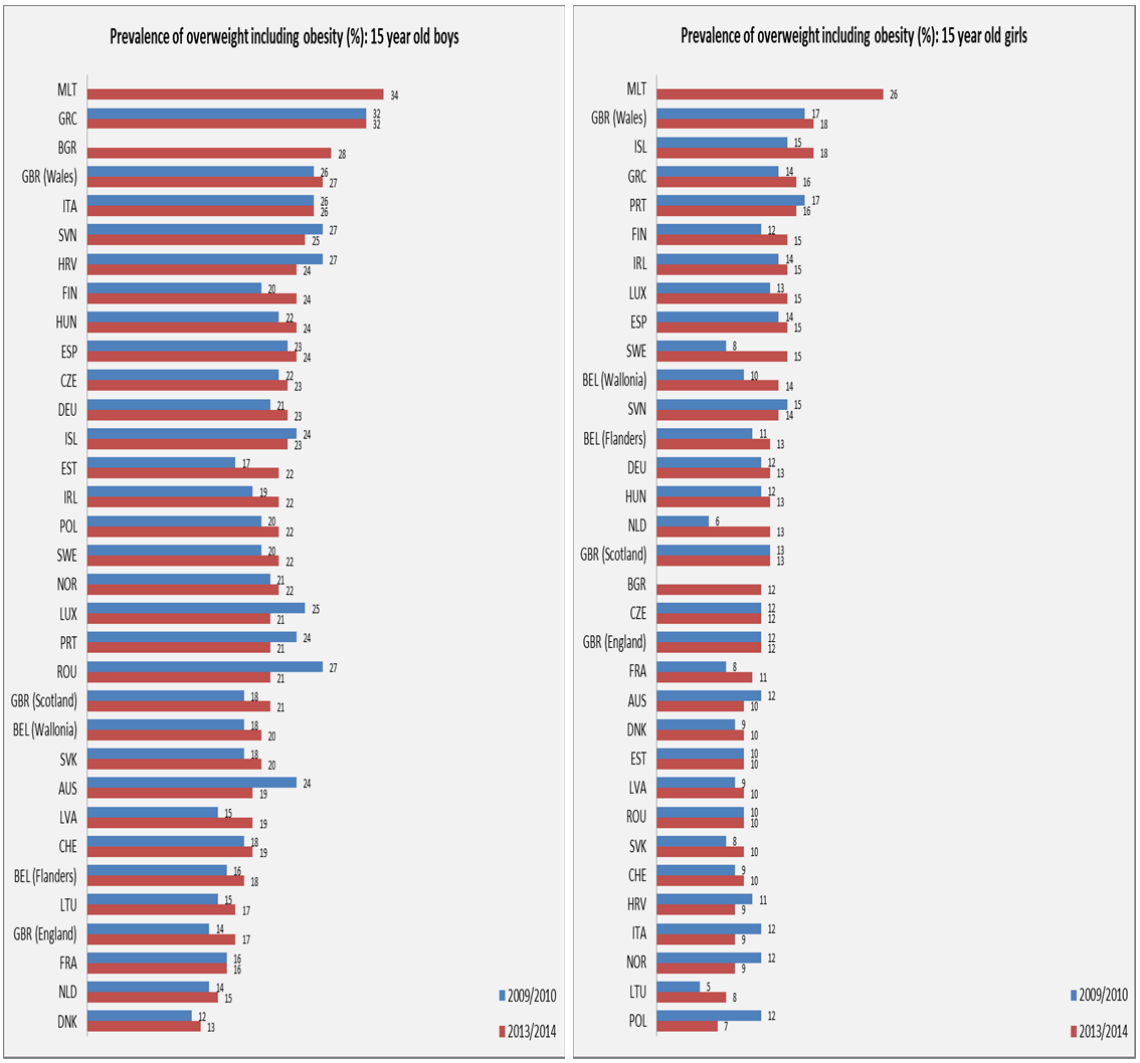


***Figure 2.5**. Prevalence of overweight including obesity in 15-year old boys and girls, according to WHO child growth curve standards (15). Source: HBSC (23, 24).*

Only for a few countries, for both boys and girls aged 11 and 13 years, the prevalence of overweight including obesity was lower in the 2013/2014 survey than in the 2009/2010 survey (Figure 2.6 and 2.7). In about half of the countries the prevalence was higher both for 15-year old boys and girls.

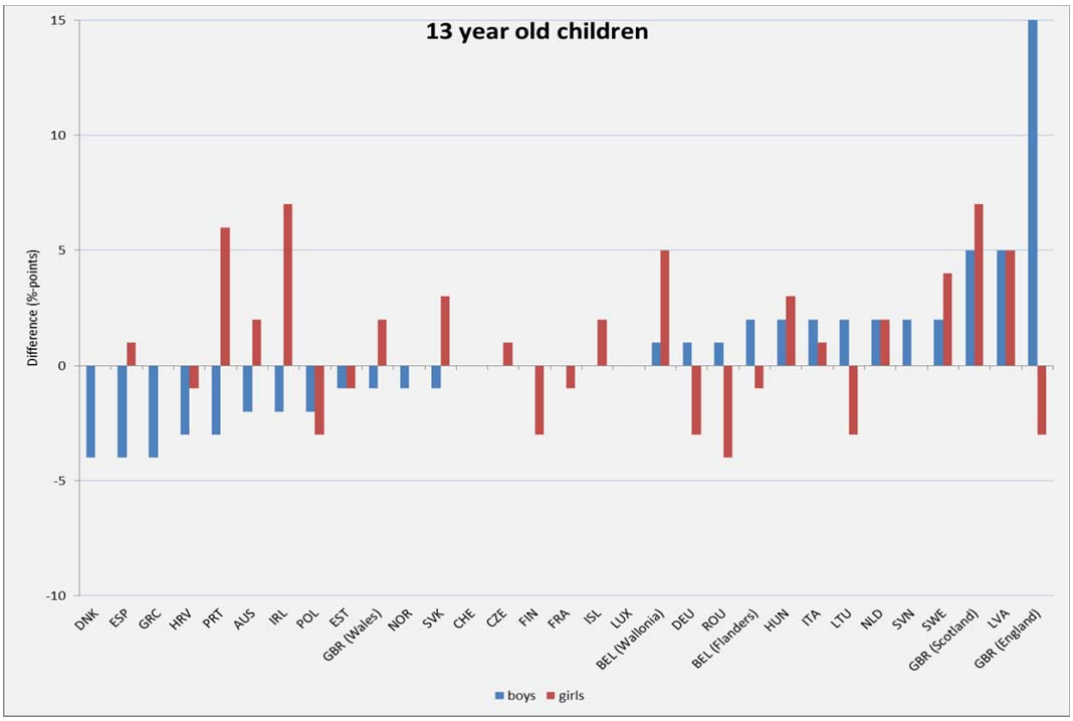


Figure 2.6. *Difference in the prevalence of overweight including obesity between 2013/2014 and 2009/2010 among 13-year old boys and girls, according to WHO child growth curve standards (15). Source: HBSC (23, 24).*

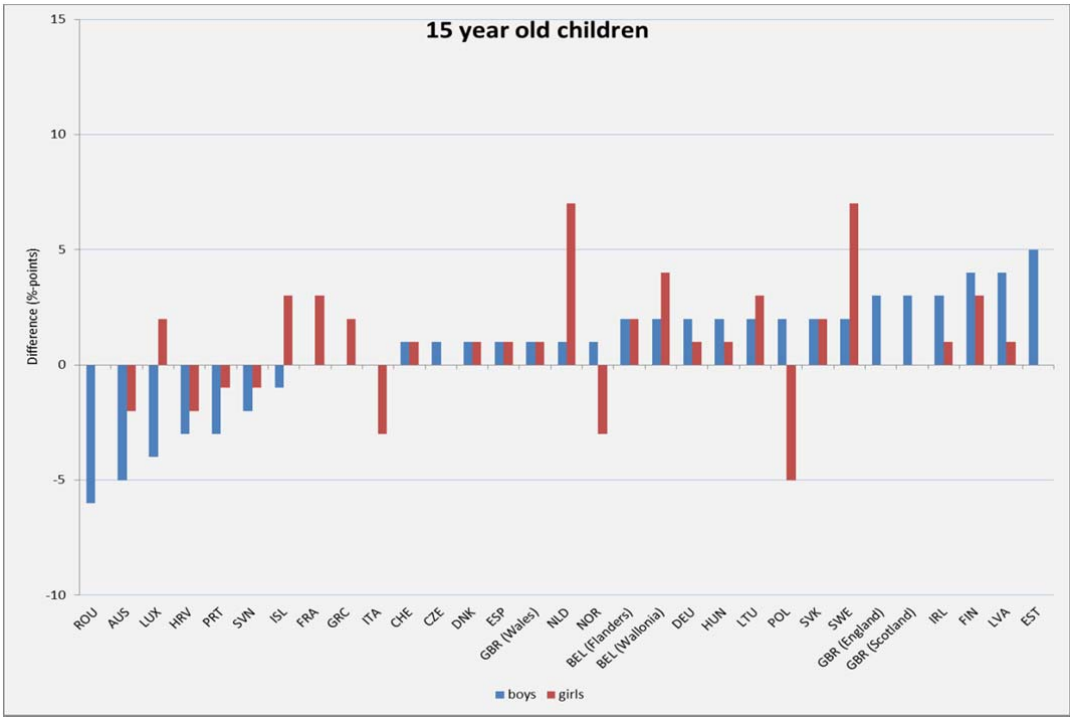


Figure 2.7. *Difference in the prevalence of overweight including obesity between 2013/2014 and 2009/2010 among 13-year old boys and girls, according to WHO child growth curve standards (15). Source: HBSC (23, 24).*

2.1.4 Projections on overweight and obesity prevalence for 2025

The World Obesity Federation has made projections on the prevalence of overweight and obesity in 2025 (26). This was done for 184 countries, including European countries, in order to assess the scale of the problem of overweight and obesity in the light of one of the targets that WHO's member states adopted in the 65th and 66th World Health Assembly. This target was 'no increase in obesity levels by 2025'. For evaluating achievement of a 'halt' in the rise in obesity 2010 was considered as the baseline. Lobstein et al. (26) used estimates of overweight and obesity from the Global Burden of Disease (GBD) programme for 2000 and 2013 to make estimates for 2010 (to match the WHO baseline year). Subsequently, these estimates were projected forward to 2025 on the basis that no effective intervention was implemented to significantly change the trend (linear projection). Overweight and obesity were defined according to the IOTF criteria. The projections only give an indication of the expected change in the prevalence of overweight and obesity between 2010 and 2025 and are not to be interpreted as truly expected prevalences in 2025.

Figure 2.8 presents the prevalence of overweight including obesity in 2000-2025 is presented for children and adolescents aged 2.0-19.9 years for all 28 countries of the European Union, and Iceland, Montenegro, Norway, Serbia and Switzerland.

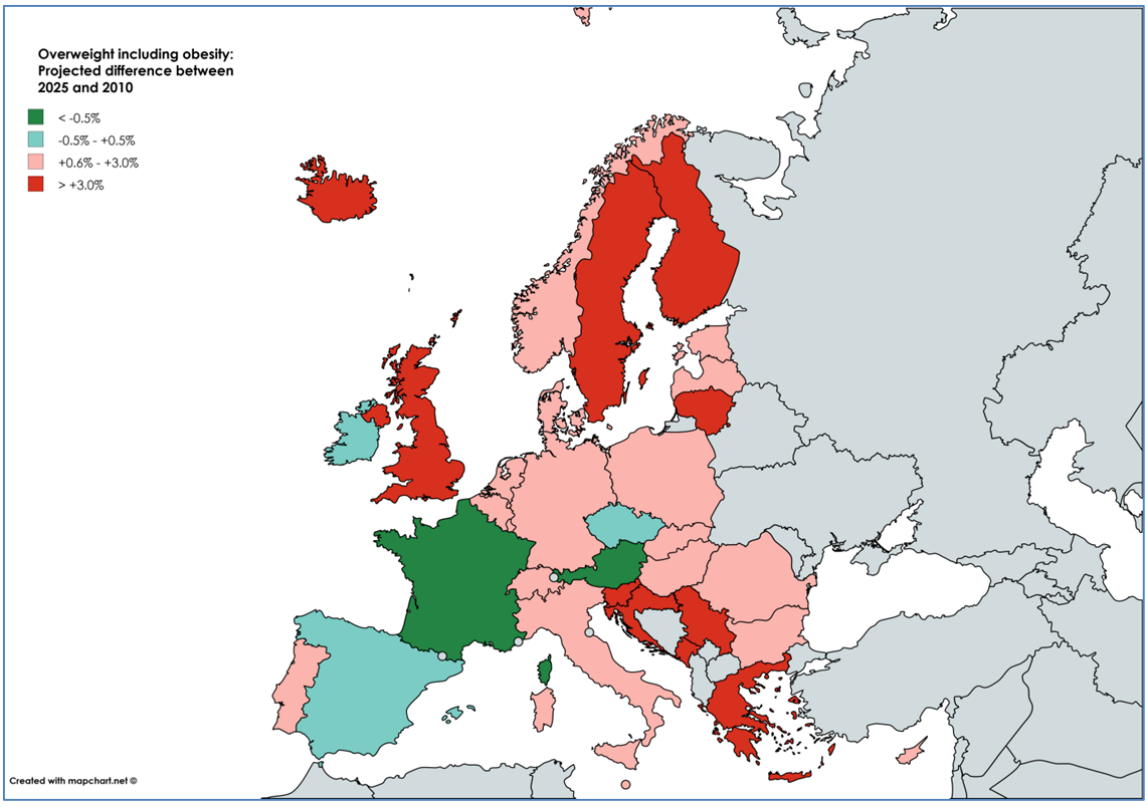


Figure 2.8. *Projected difference in the prevalence of overweight including obesity between 2025 and 2010 among 2 to 20 year old children based on estimates of the Global Burden of Disease programme (26). Based on IOTF criteria under the assumption that that no effective intervention is implemented to significantly change the trend.*

For most countries the projections showed an increase in the prevalence of overweight and obesity between 2010 and 2025. Only for 2 countries (AUS and FRA) the prevalences

were expected to be slightly lower in 2025 compared to 2010 and in 3 countries the prevalence of overweight and obesity remained more or less stable, i.e. predicted difference between -0.5% and +0.5% (CZE, IRL and ESP). The projected increase is more than 3% in 10 countries.

The prevalence of obesity (without overweight) was also expected to be higher in 2025 compared to 2010 for most countries (Figure 2.9). These projections show a small decrease in the prevalence of obesity in 3 countries (BEL, CZE and HUN), rather stable prevalences (-0.2% to +0.2%) in 8 countries and increases in the remaining countries.

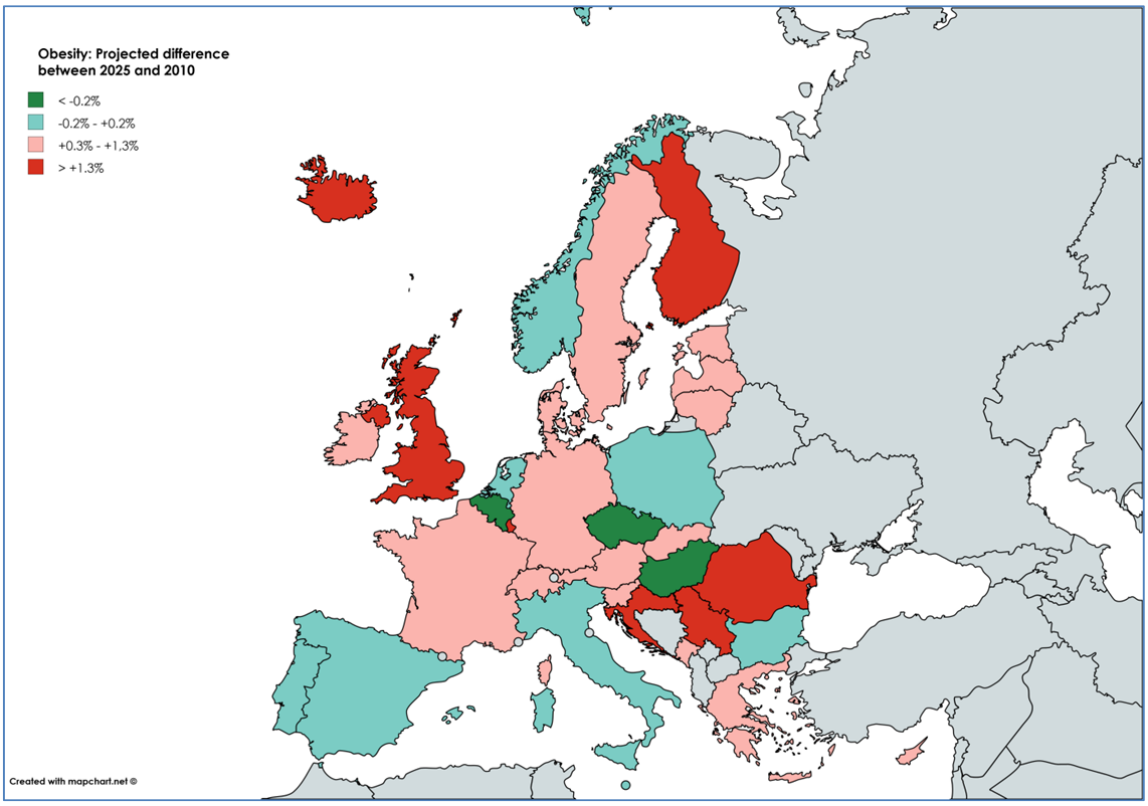


Figure 2.9. *Projected differences in the prevalence of obesity between 2025 and 2010 among 2 to 20 year old children based on estimates of the Global Burden of Disease programme (26). Based on IOTF criteria under the assumption that that no effective intervention is implemented to significantly change the trend.*

2.2 Overview of the implementation of the EU Action Plan in 33 European countries

Figure 2.10 and Table 2.1 provide a birds-eye overview of policies/strategies in 33 respectively 27 countries according to the areas of action included in the Action Plan on Childhood Obesity 2014-2020. Information from interviews is lacking for Cyprus, the Czech Republic, Ireland, Montenegro, Portugal and Serbia. These countries are not included in Table 2.1. The following indicators are included and the numbers of the indicators corresponds to the numbers in the table.

Area 1: Support a healthy start in life

1.1 Policies or strategies to ensure that women receive guidance on nutrition and nutritional status before, during and immediately after pregnancy
1.2 Policies, strategies, initiatives or actions to promote and protect breastfeeding
1.3 Policies or guidance on complementary feeding
1.4 Management services (e.g. interventions or weight loss programmes) for overweight and obese children

Area 2: Promote healthier environments, especially in schools and pre-schools

2.1 Policies on improving the children's school environment
2.2 Policies, strategies etc. on energy drinks for children
2.3 Policies, strategies etc. on vending machines
2.4 Nutrition education included in school curricula
2.5 Physical activity included in school curricula

Area 3: Make the healthy option the easy option

3.1 Policies or initiatives on reformulation for salt
3.2 Policies or initiatives on reformulation for saturated fat
3.3 Policies or initiatives to (virtually) eliminate trans fat
3.4 Policies or initiatives on reformulation for sugar
3.5 Policies or initiatives on reformulation for calories or portion size
3.6 System to monitor the level of nutrients (and thus the effect of the reformulation strategies
3.7 Mandatory or voluntary easy to understand labelling, e.g. front of pack labelling
3.8 (Policies on) food taxation for 'unhealthy' products/nutrients
3.9 (Policies on) subsidies for 'healthy' foods, other than the EU fruit and vegetable scheme or milk scheme

Area 4: Restrict marketing and advertising

4.1 Policies on marketing of foods to children
4.2 Use of nutrient profiles or criteria to restrict marketing of foods to children

Area 5: Inform and empower families

5.1 National campaigns to promote healthy diet and or increase physical activity
5.2 Policies or initiatives to support community based interventions
5.3 Policies on the integrated management of childhood obesity?
5.4 Screening programmes for childhood overweight and obesity (in primary care)

Area 6: Encourage physical activity

6.1 Policies on physical activity promotion for <18 year olds

6.2 National physical activity guidelines

6.3 Data on height and weight in children

Area 7: Monitoring and surveillance

7.1 National representative diet/nutrition surveys

7.2 National representative surveys on physical activity

7.3 Participation in COSI

***Figure 2.10**. Summary of implementation of the EU Action Plan expressed as percentage of all countries having activities in the mentioned areas.*

Table 2.1. Overview of policies/strategies according to the areas of action included in the Action Plan on Childhood Obesity 2014-2020 per country[1].

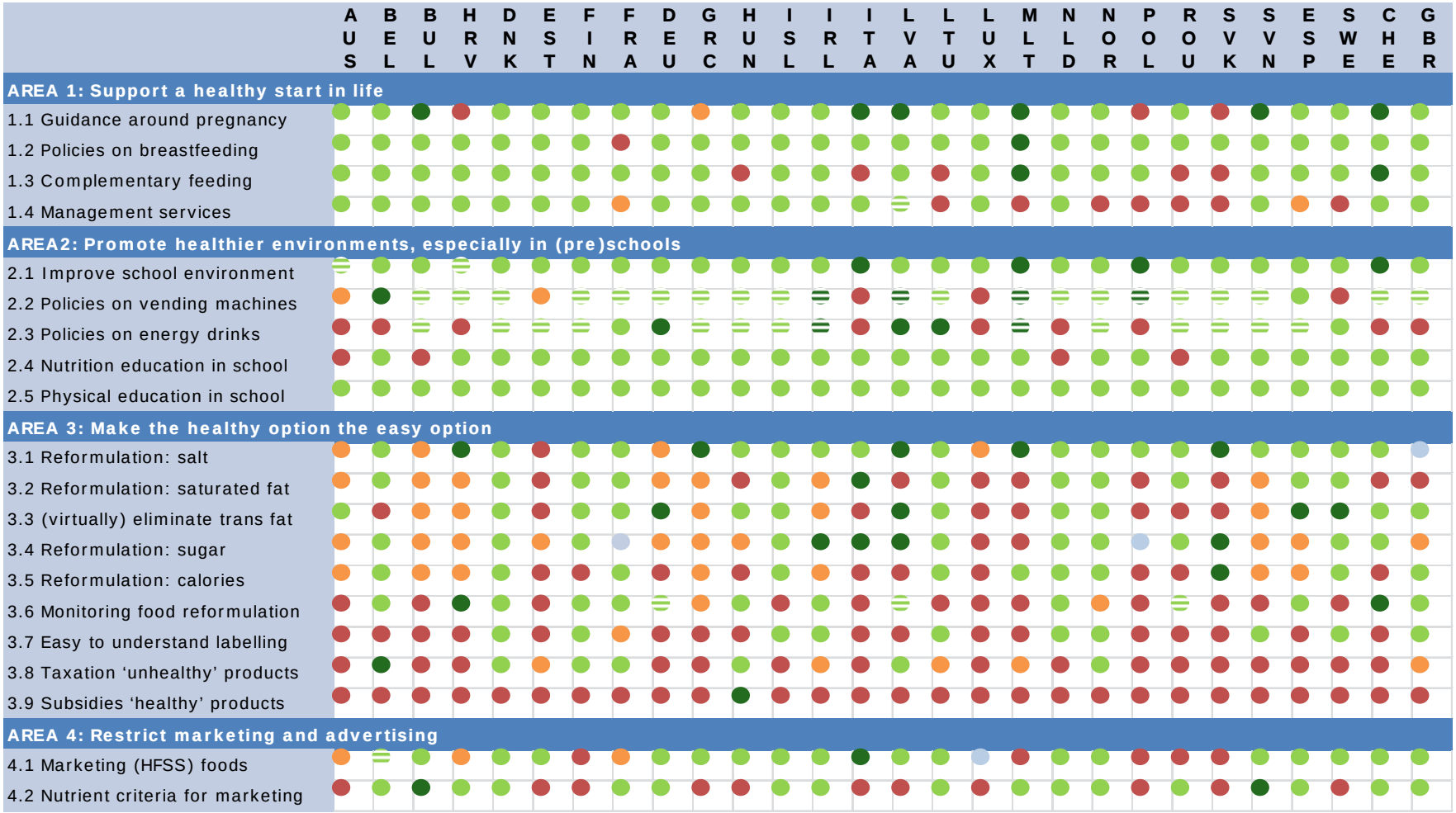
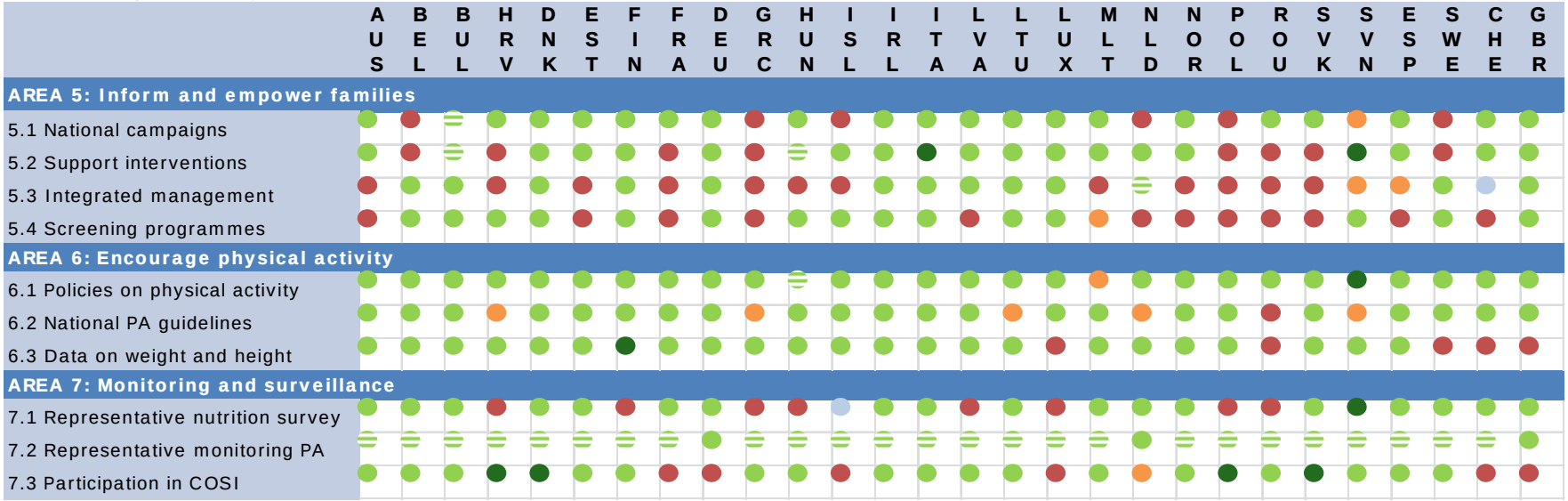


Table 2.1 continued. Overview of policies/strategies according to the areas of action included in the Action Plan on Childhood Obesity 2014-2020 per country[1].



[1] Information is lacking for Cyprus, the Czech Republic, Montenegro, Portugal and Serbia.

yes, already before EU Action plan*, partially, for example in certain settings or certain regions*, yes, since EU Action plan*, no**, in preparation or planned***, unknown

* Indicates that an action is (partially) undertaken, but does not contain an evaluation of effectiveness from our part. ** Actions may, however, be undertaken on initiative from local authorities, NGO's or private parties. *** Adoption may still be contingent on policy process.

The preliminary results presented in figure 2.10 and table 2.1 and additional information from the interviews suggest that:

- The majority of countries have policies, strategies or actions relating to area 1 of the Action Plan on Childhood Obesity 2014-2020. In general, guidance is provided to women (before), during and immediately after pregnancy and information on breastfeeding is provided and/or breastfeeding is advised or promoted. Over half of the countries provide management services for children who are already overweight or obese. In many countries, the general practitioner is the one who is responsible for the management of an obese child.
- Also the majority of countries have policies that promote healthier environments (Area 2). They mainly focus at schools. In all except a few cases, policies on vending machines and energy drinks do apply to settings other than the school environment. In all countries physical education is included in the school curriculum. In the majority of countries, a minimum number of hours is specified. Although nutrition education is also included in school curricula in all but four of the interviewed countries, it is less regulated. Often it is part of 'biology', 'home economics' or other lessons and the number of hours is not defined.
- Food reformulation/product improvement is an area that experiences growth across Europe. Several countries recently started reformulation initiatives, while others are planning to do so (Area 3). Easy to understand labelling, such as front-of-pack labelling, is used in only 9 countries to make the healthy option the easy choice. Also taxation of 'unhealthy' products is not widely used (in 7 countries), but another 4 countries have plans for a levy on sugar-containing beverages. A subsidy on 'healthier' options – other than the EU fruit and vegetable scheme or the EU milk scheme - is not considered, except by Hungary. In 2017, Hungary will decrease taxation on some products, for example fresh milk and eggs. There are plans to decrease taxes on fish and vegetables as well.
- Area 4 concerns restriction of marketing of unhealthy foods to children. Actions in this area are usually based on (voluntary) codes issued by the private sector. National authorities may or may not to some extent have been involved in these voluntary codes. Therefore, it is likely that some countries during the interview mentioned not to have any policies and others mentioned they do, while voluntary codes of conduct are in place.
- Nineteen counties use (national) campaigns to inform and educate the population on healthy diet and the importance of physical activity (Area 5). A comparable number of countries mentioned to have policies to support community-based interventions. They often fall under the responsibility of subnational authorities, such as municipalities. Screening for obesity takes place in 13 countries and is quite often seen as one of the tasks of child healthcare providers and general practitioners.
- Encouraging physical activity (Area 6) seems to be well covered, with respect to policies, the presence of national guidelines and available data on weight and height of children.
- National representative nutrition surveys are available in more than half of the countries. However, it is not always clear whether or not children are included in these surveys. All countries except one participate in the Health Behaviour in School-aged Children (HBSC) surveys and all but five countries participate in COSI. However, several countries measure certain age groups within the 6-9 year olds (COSI) and data in HBSC are self-reported. Monitoring of childhood obesity is therefore covered in part of the primary-school children and adolescents. Monitoring of physical activity is mainly through the HBSC-study and thus concerns adolescents.

Many countries reported that the EU Action Plan on Childhood Obesity 2014-2020 serves mainly as a guidance document that provides directions and ideas for national policies. For countries that already have many policies, strategies or actions in the areas of action that are mentioned in the Action Plan, it serves as a justification of reference document for their national policies. It served as an endorsement for the importance of childhood obesity in some countries, and facilitates communication with stakeholders in others. A direct influence is hardly mentioned.

3 Mapping existing policies and actions aimed at reducing childhood obesity in the EU

This chapter presents a more graphical representation of the indicators included in the APCO database, updated with information from the interviews.

3.1 AREA 1: Support a Healthy start in life

Twenty-four countries provide nutritional guidance before, during and after pregnancy (see Figure 3.1). Bulgaria, Italy, Latvia, Malta, Slovenia and Switzerland have implemented (new) guidance since 2014. In Greece, the existing guideline on nutrition during pregnancy needs to be approved and the new dietary guidelines, which will be issued in 2017, will probably include guidelines for pregnant women.

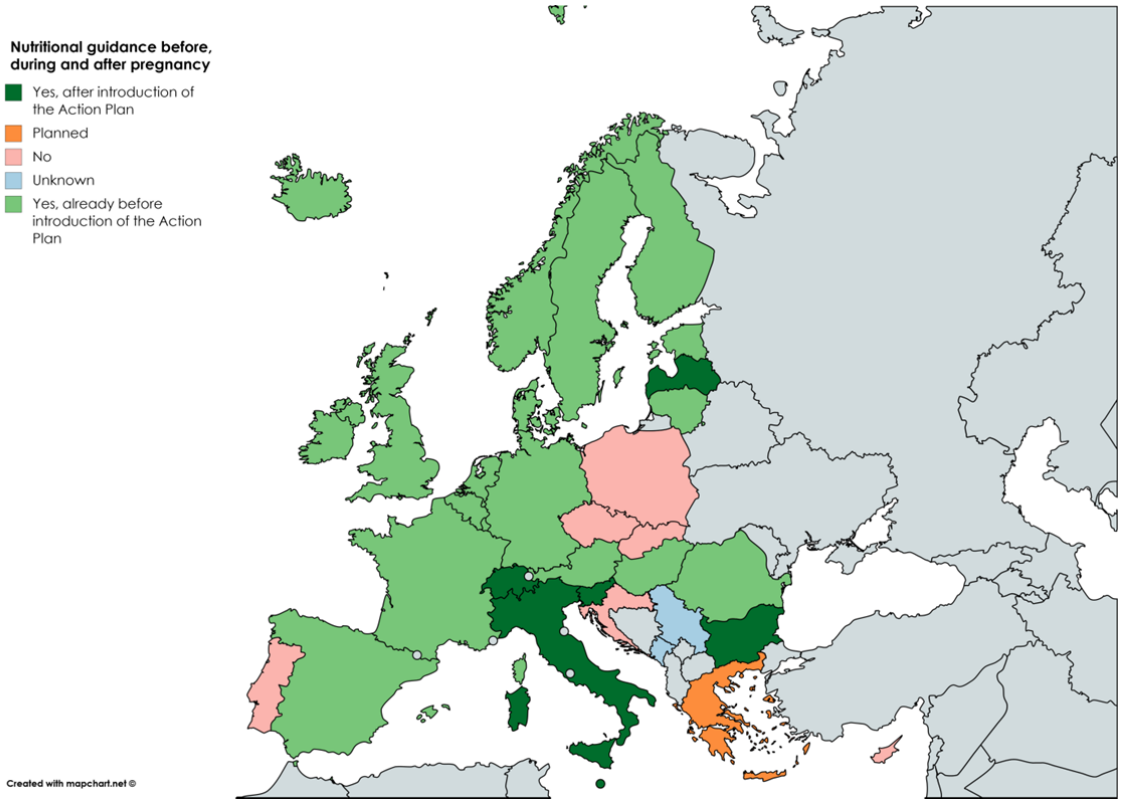


***Figure 3.1**. Provision of nutritional guidance before, during and after pregnancy in 28 EU Member states and Montenegro, Norway, Iceland, Serbia, and Switzerland.*

Breastfed infants are at lower risk of obesity and this association appears to be confined to exclusive breastfeeding (27). All countries inform mothers on the beneficial effects of breastfeeding or promote breastfeeding. France mentioned that they do provide information, but do not advice mothers to breastfeed.

National representative data on exclusive breastfeeding were obtained from WHO's country profiles on nutrition, physical activity and obesity[2] for 22 countries. For the other 11 countries data were obtained from the APCO database (BEL, DNK, CHE, EST, FIN, FRA, HUN, ITA, LVA, POL, SWE). Data in this database were provided by national representatives. Data were collected with different methods and over different time periods. For data from the APCO database the period of data collection is unknown.

The percentage of infants exclusively breastfed ranged from 0.7% to 52.4% (Figure 3.2). All data of surveys with known period of data collection originate before introduction of the Action Plan on Childhood Obesity 2014-2020 (ranging from 2003-2012).

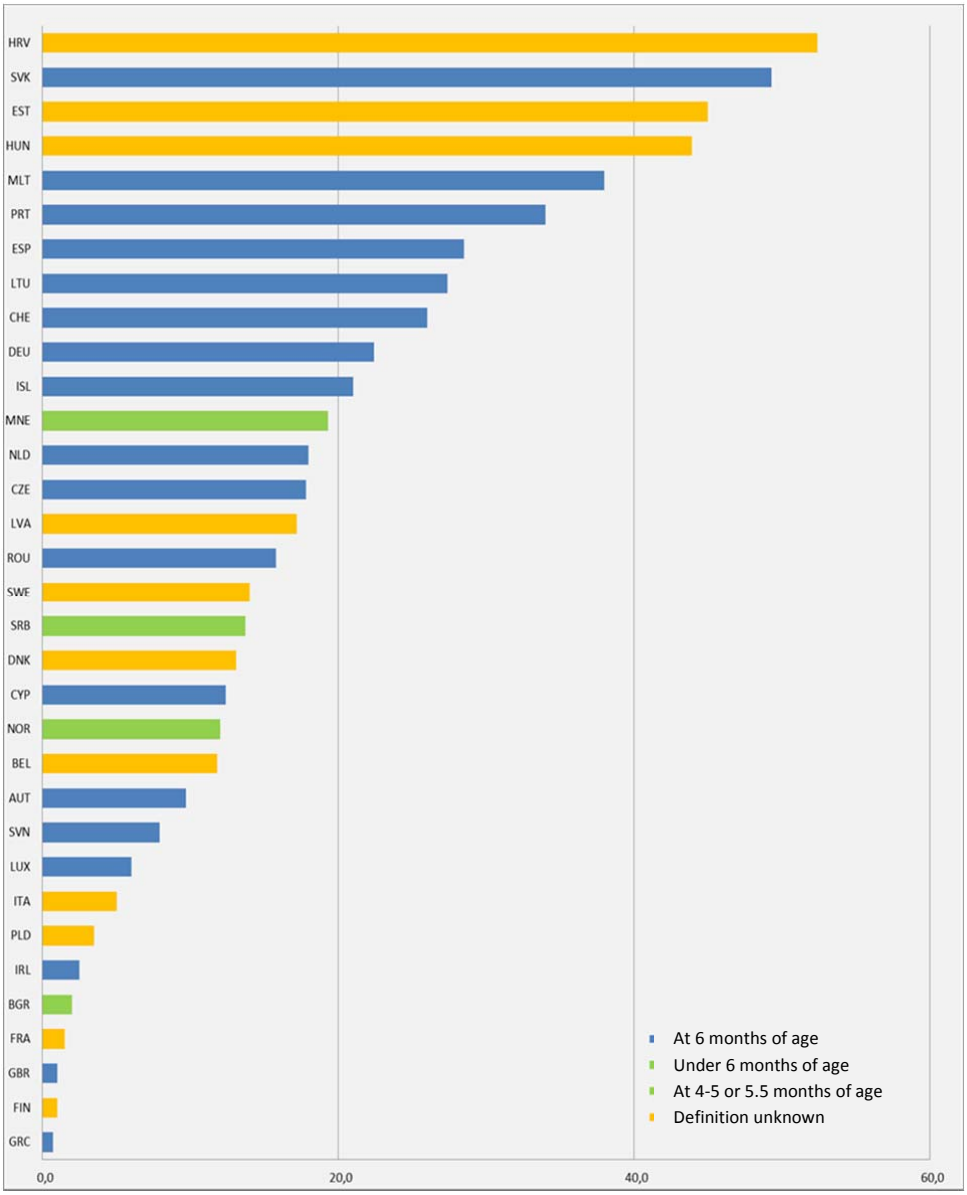


***Figure 3.2**. Percentage of children exclusively breastfed in 28 EU Member states, Montenegro, Norway, Iceland, Serbia, and Switzerland.*

[2] http://www.euro.who.int/en/health-topics/disease-prevention/nutrition/country-work

Please note that different indicators were used, i.e.:

- exclusive breastfeeding under 6 months of age: the proportion of infants aged 0–5.9 months who are fed exclusively on breast milk;
- exclusive breastfeeding at 6 (4-5 or 5.5) months of age: the proportion of infants who have been exclusively fed breast milk from birth to 6 (4-5 or 5.5) months of age.

According to our contact at DG SANTE the data obtained from the APCO-database refer to the first definition (i.e. under 6 months of age).

Guidance on complementary feeding, usually in the form of guidelines, is provided by all except five - mostly East-European - countries (see Figure 3.3).

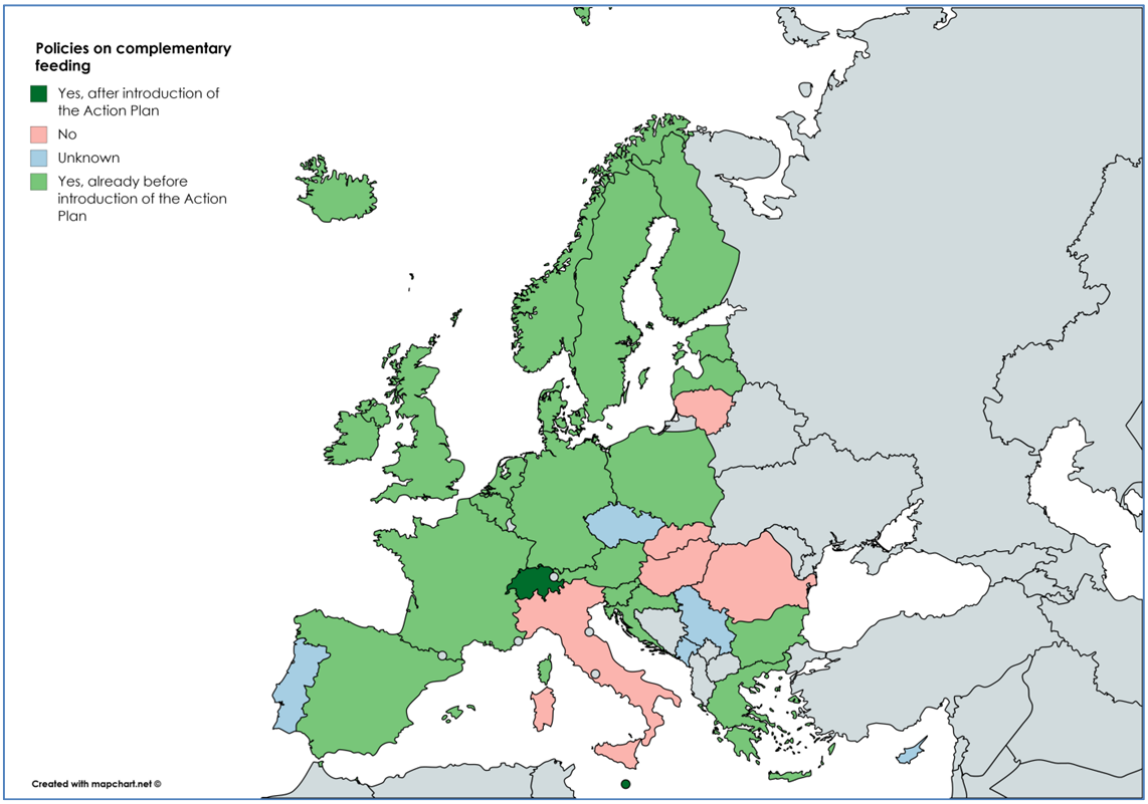


Figure 3.3. *Guidance on complementary feeding in 28 EU Member states, Montenegro, Norway, Iceland, Serbia, and Switzerland.*

3.2 AREA 2: Promote Healthier environments, especially in schools and pre-schools

Children and young people spend much of their day at school, typically consuming at least one meal a day there, either brought from home or provided by the school itself. Schools are therefore an essential environment to consider when tackling overweight and obesity in children and young people.

All 28 countries interviewed for our study, mentioned to have policies to improve the school environment. These mainly concern mandatory or voluntary standards that are specified for school meals and other foods provided at schools. The standards often include regulations for vending machines (except for ITA, LUX, and SWE), which can be banned in total from the school premises or can contain only certain products. In several

countries policies also apply to or initiatives are ongoing on vending machines outside of schools (BEL, ESP). Two countries (AUS and EST) mentioned to have policies planned on vending machines. Only a few countries have policies on energy drinks for children that go beyond school policies (FRA, DEU, LVA, LTU, SWE).

The EU-wide school fruit scheme provides school children with fruit and vegetables. The aim is to encourage good eating habits in young people. Additionally, the scheme requires participating Member States to set up strategies including educational and awareness-raising initiatives. School year 2016/2017 is the last year of implementation of this scheme. A new school fruit, vegetables and milk scheme under a single legal framework will apply as from 1 August 2017. This will increase efficiency, enable more focused support and will enhance the educational dimension of the scheme. All 28 European countries participate in this EU programme. The percentage of schools that received school fruit in the 2013/2014 school year ranged from 9.8% (FRA and HRV) to 98% or more (SWE, GBR, MLT, LVA, FIN) (see Figure 3.4).

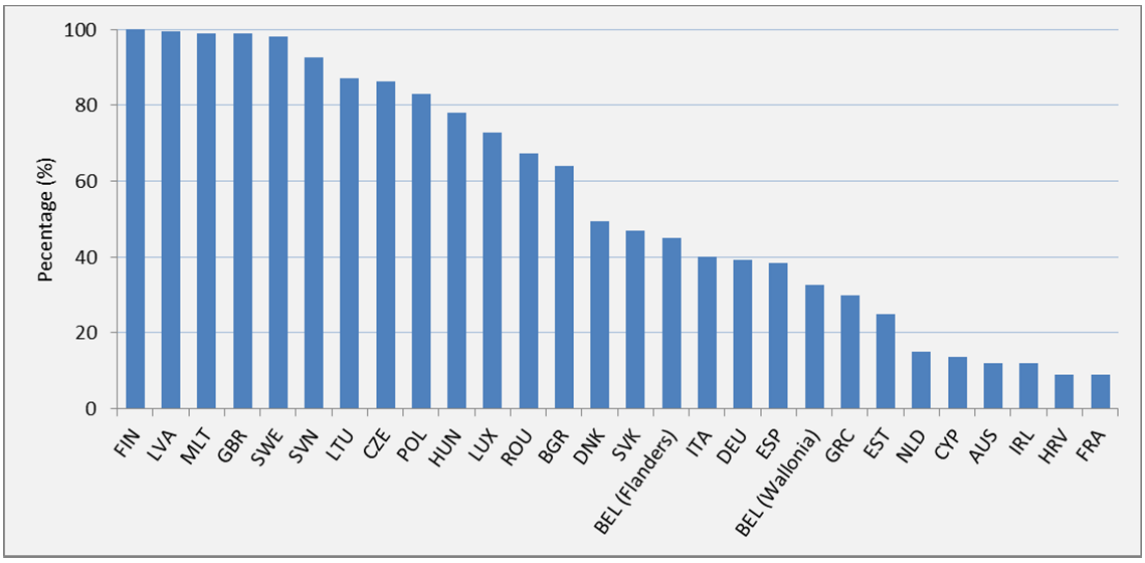


***Figure 3.4**. Percentage of schools participating in a school fruit and vegetable programme in schoolyear 2013/2014. No data available for CHE, ISL, MNE, NOR, PRT AND SRB.*

Physical education is mandatorily included in the school curricula of all interviewed countries. Often, the number of hours is specified. All but four countries (AUS, BUL, NLD and ROU) have nutrition education included in the school curricula. However, the exact number of nutrition education to be provided to school children is not specified.

3.3 AREA 3: Make the healthy option the easy option

Food reformulation/ product improvement is considered to be an important strategy to improve the nutrient intake that does not require the consumer to modify drastically his or her habitual dietary pattern. Initiatives on food reformulation/ product improvement primarily focus on commonly eaten processed foods that contribute to high intakes of salt, trans- and saturated fatty acids, salt and added sugar.

Initiatives on food reformulation are ongoing or are planned in 26 countries for salt (see Figure 3.5), in 19 countries for saturated fat (see Figure 3.6), in 25 countries for sugar (see Figure 3.7) and for calories (including portion sizes) in 20 countries (see Figure 3.8). Policies to virtually eliminate trans fatty acids are implemented or planned in 20 countries (see figure 3.9). These initiatives are in general voluntary agreements with industry.

Thirteen countries reported to monitor the level of reformulation in their country (BEL, HRV, DNK, FIN, FRA, DEU (for trans fats), HUN, LVA (only in schools), NLD, ROU (sugar in children's products), ESP, CHE and GBR). Another two countries are planning for a monitoring system (GRC and NOR).

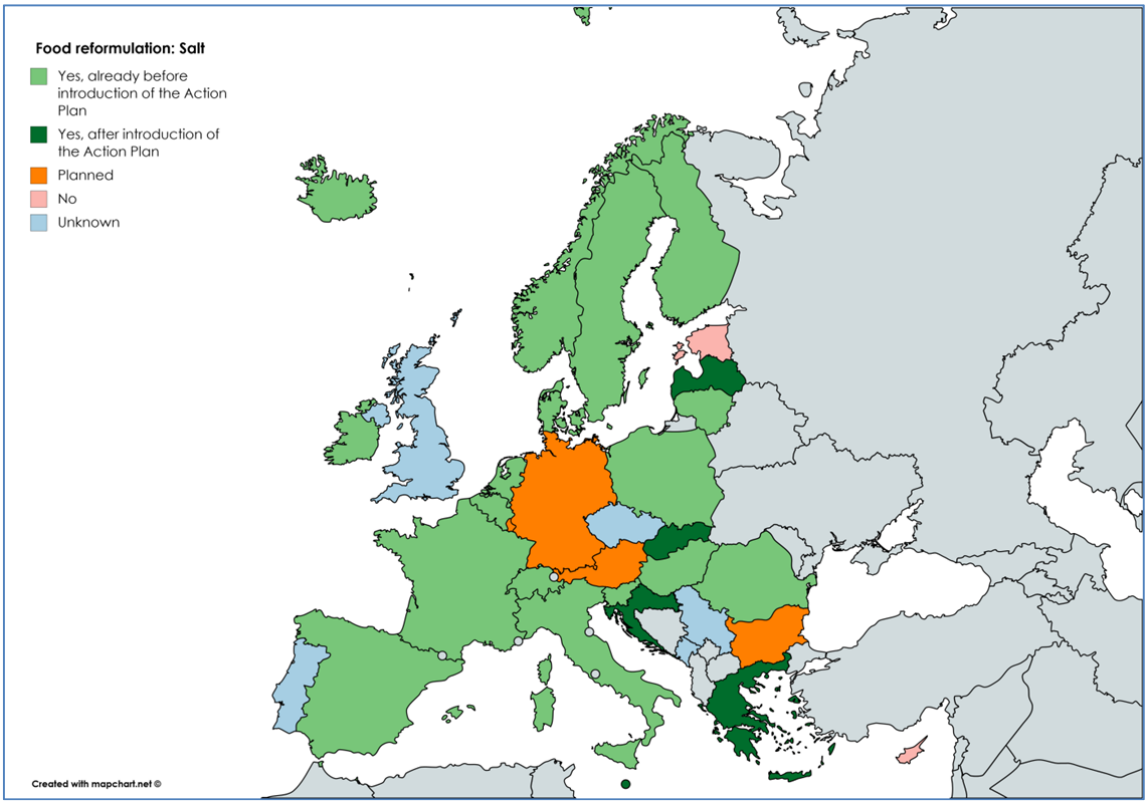


***Figure 3.5**. Food reformulation initiatives for salt in 28 EU Member states, Montenegro, Norway, Iceland, Serbia, and Switzerland.*

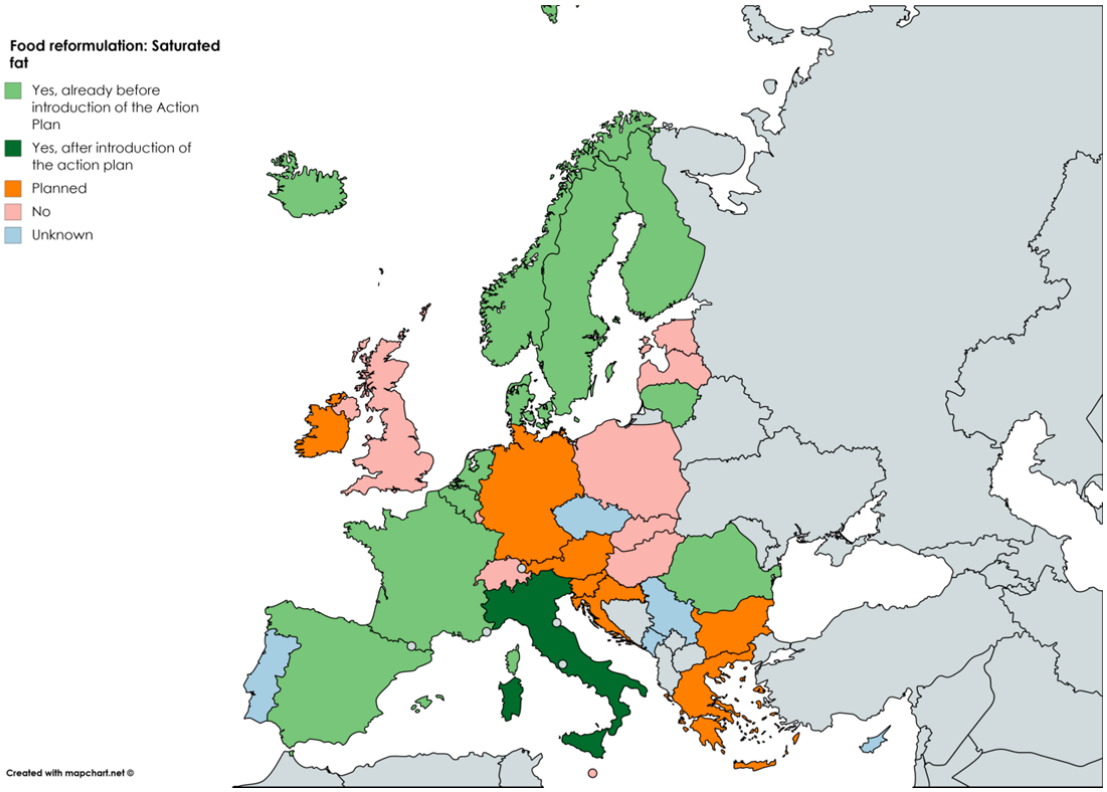


***Figure 3.6**. Food reformulation initiatives for saturated fat in 28 EU Member states, Montenegro, Norway, Iceland, Serbia, and Switzerland.*

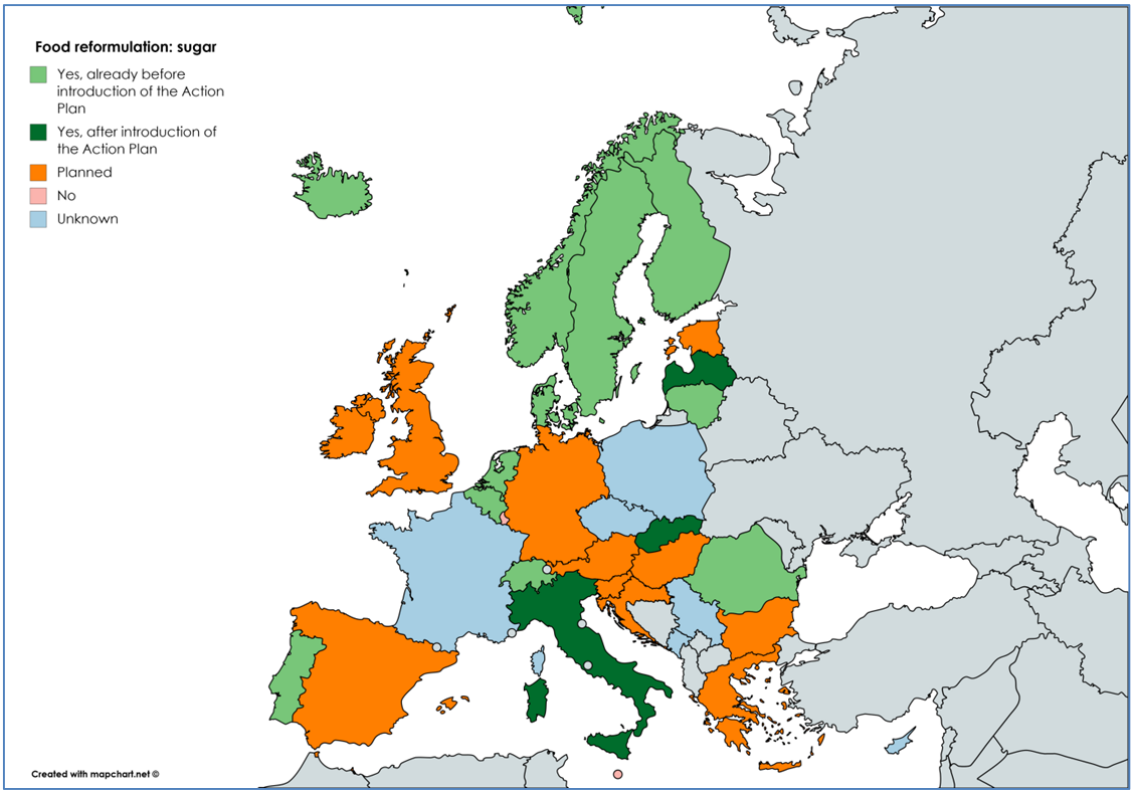


***Figure 3.7**. Food reformulation initiatives for sugar in 28 EU Member states, Montenegro, Norway, Iceland, Serbia, and Switzerland.*

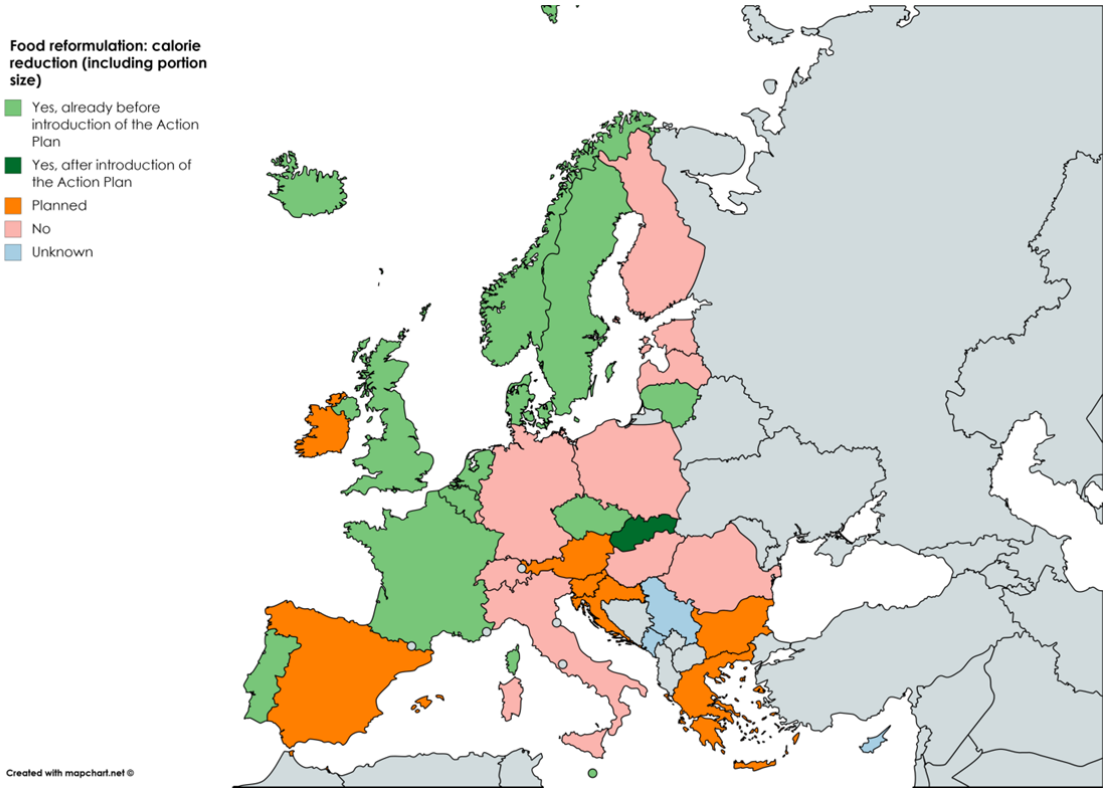


***Figure 3.8**. Food reformulation initiatives for calories/including portion sizes in 28 EU Member states, Montenegro, Norway, Iceland, Serbia, and Switzerland.*

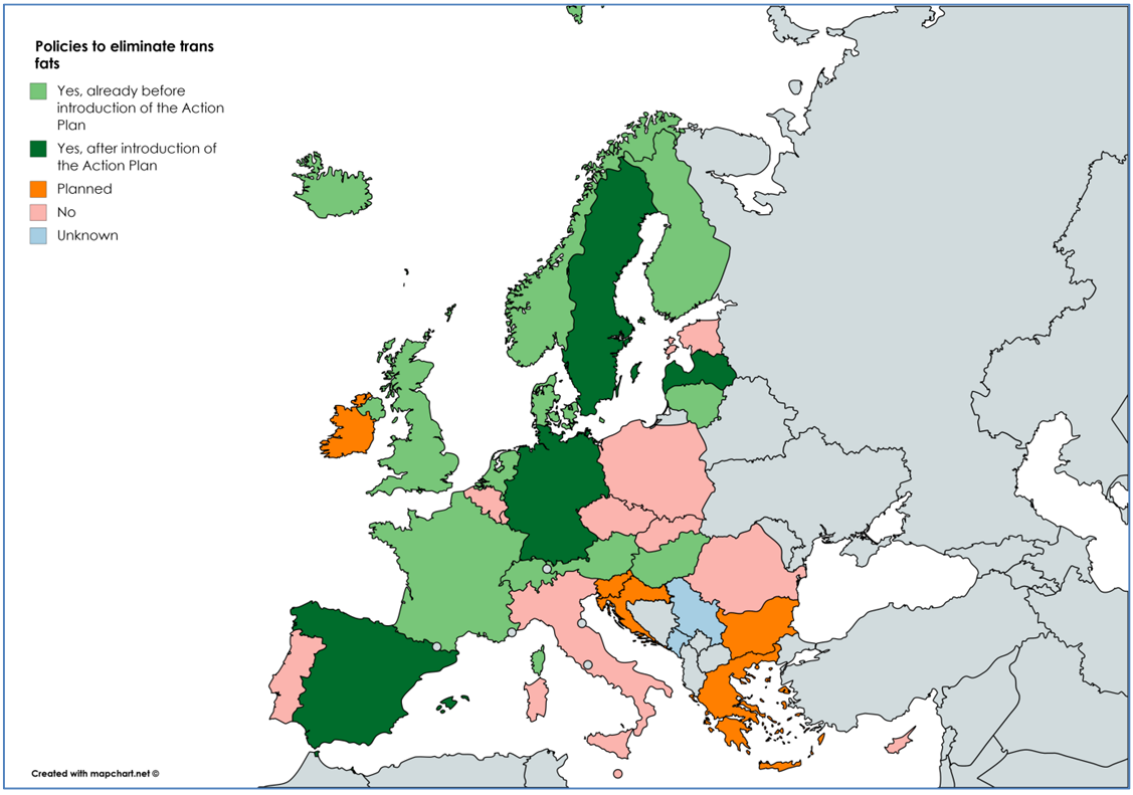


***Figure 3.9**. Policies to virtually eliminate trans fatty acids in 28 EU Member states, Montenegro, Norway, Iceland, Serbia, and Switzerland.*

Easy to understand labelling, such as front-of pack logo's, is used in nine countries to help consumers make healthier food choices (DNK, FIN, ISL, LTU, NLD, NOR, SVN, SWE, and GBR). In 2017 the Netherlands will stop with the logo, while France is planning the introduction.

Seven countries have introduced a levy on sugar and/or sweetened beverages (BEL, DNK, FIN, FRA, HUN, LVA, and NOR). Another five countries are planning to do so (EST, IRL, LTU, MLT, GBR). Hungary is the only country that has lowered tax rates for some products (fresh milk, poultry meat and eggs) and is planning to reduce tax rates for fish and vegetables as well.

3.4 AREA 4: Restrict marketing and advertising

In order to tackle overweight and obesity in children and young people, it is necessary to address the issue of marketing of foods high in fat, sugars and salt (HFSS foods) targeting those age groups (28). According to the interviews and the APCO database for countries with missing information, in 23 of the 33 countries in this study initiatives are undertaken or planned to reduce marketing of HFSS foods to children (see figure 3.10).

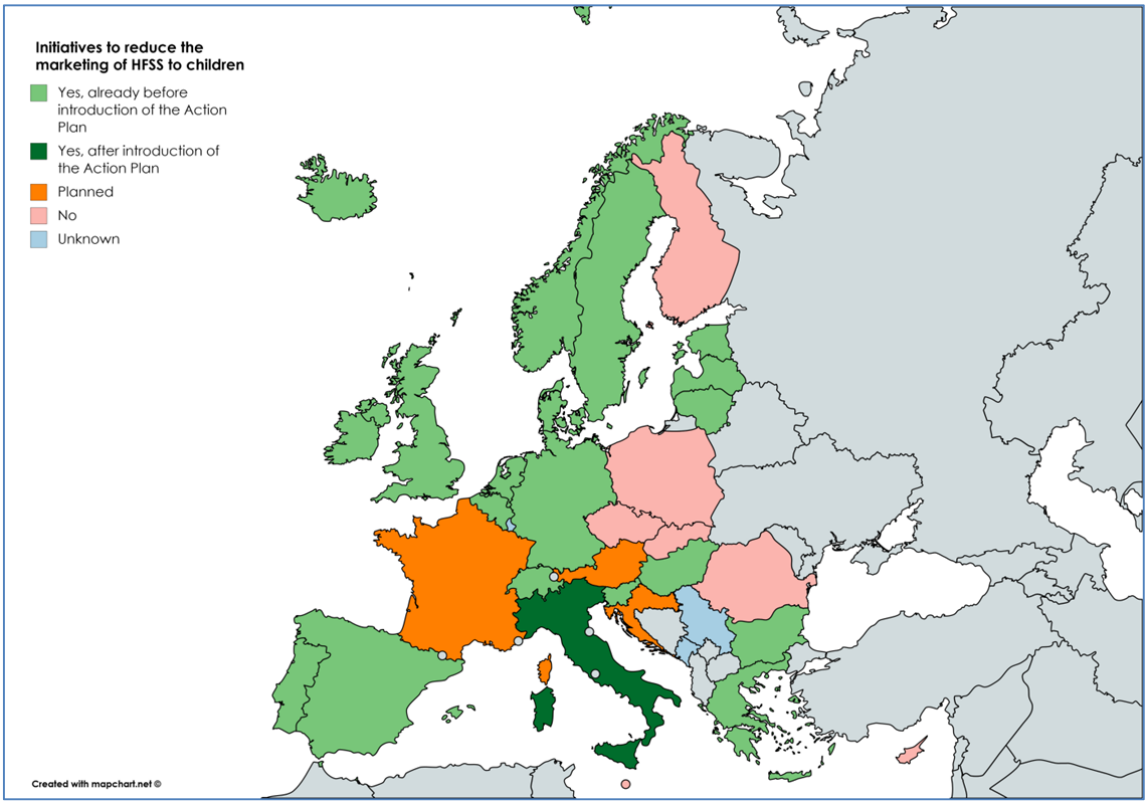


Figure 3.10. *Countries taking initiatives to reduce the marketing of foods high in fat, sugars and salt (HFSS) in 28 EU Member states, Montenegro, Norway, Iceland, Serbia, and Switzerland.*

Another objective with respect to marketing to children mentioned in the EU Action plan on Childhood Obesity 2014-2020 (13) is to define nutrition criteria to use in a framework for marketing of foods to children. Of the 33 countries included in the study, 16 reported to use nutrient profiles or criteria to reduce marketing to children (Figure 3.11). Bulgaria

and Slovenia have implemented such criteria since the introduction of the action plan. Slovenia has adopted the criteria set by WHO. Most of the countries that have adopted criteria seem to lie in Western Europe.

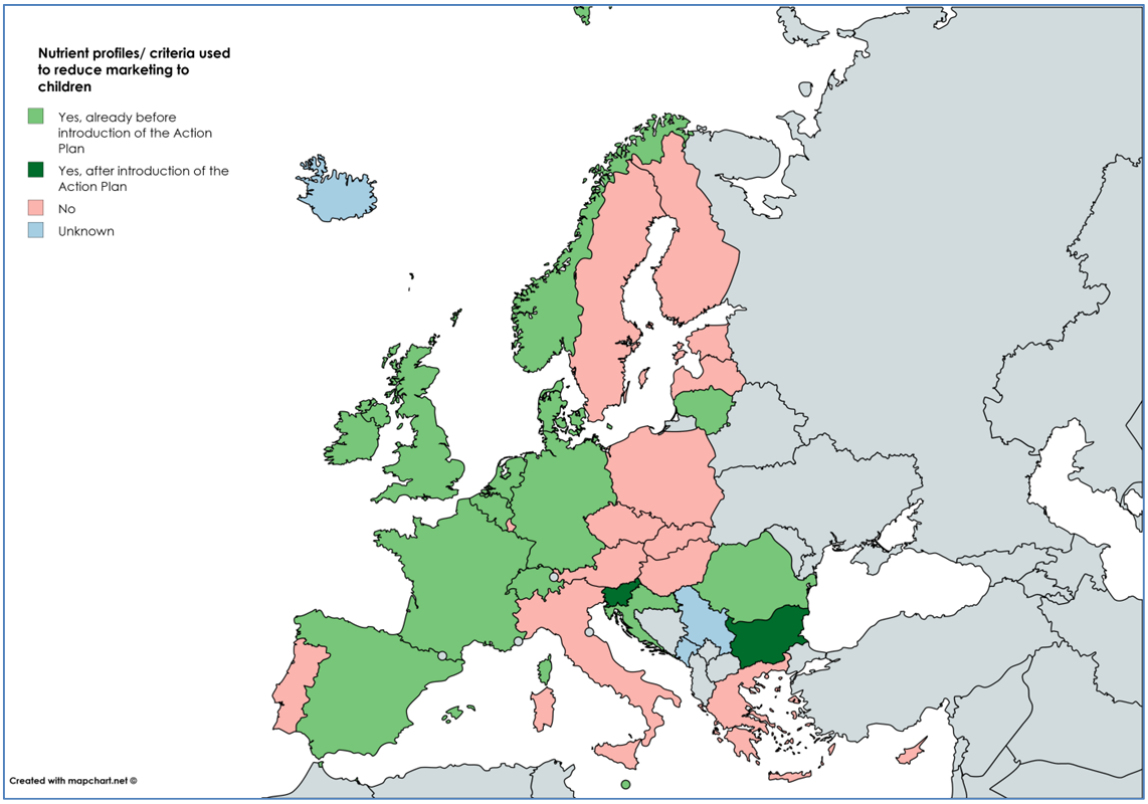


Figure 3.11. *Use of nutrient profiles or criteria to reduce marketing of foods to children in 28 EU Member states, Montenegro, Norway, Iceland, Serbia, and Switzerland.*

3.5 AREA 5: Inform and empower families

Parents are the primary individuals responsible for children and young people's health and development. They play an influential role in the formation of eating and activity habits. Furthermore, tools or initiatives that can help parents and carers to recognise when their child may be becoming overweight or obese and that can guide their response can prove useful in the prevention of further weight gain of their child. Information on the four indicators in this area of action were obtained from the interviews only and thus not available for 5 countries (CZE, CYP, MNT, PRT and SRB).

National campaigns are tools to inform individuals about nutrition and physical activity. Of the 28 countries interviewed, 21 have some form of campaign running and one is planning campaigns (SVN). Six countries (BEL, GRC, ISL, NLD, POL and SWE) reported not to have national campaigns.

Community-based interventions to prevent overweight, promote physical activity and/or healthy nutrition often fall under the responsibility of subnational authorities, such as municipalities or regions. Nineteen countries mentioned to support such community-based interventions in several ways, for example by providing funding (see Figure 3.12).

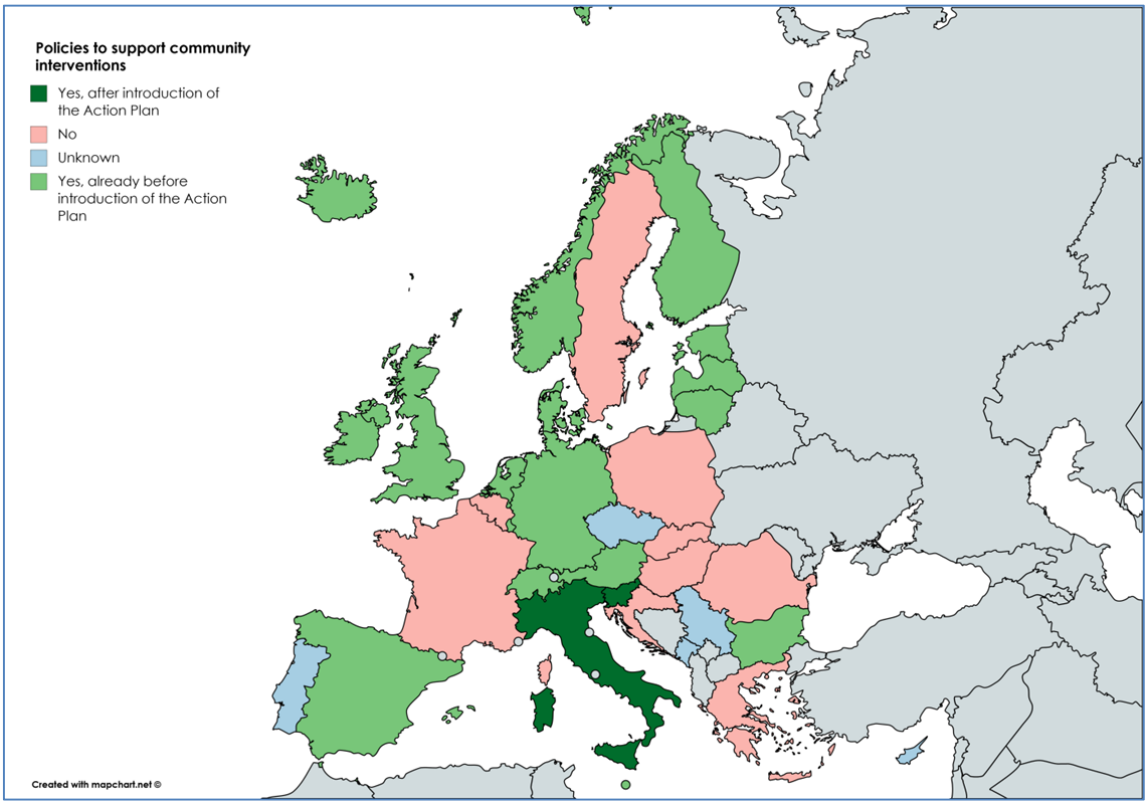


Figure 3.12. *Policies to support community based interventions in 28 EU Member states, Montenegro, Norway, Iceland, Serbia, and Switzerland.*

Screening for obesity is in place in 15 countries (BEL, BUL, HRV, DEU, DNK, FIN, HUN, ISL, IRL, ITA, LTU, LUX, SVN, SWE and GBR) often implemented in systems of child healthcare or mentioned as task of general practitioners. Malta is investigating whether they can use a monitoring study in all schools as a way to identify obese children and offer them help. A pilot is expected in 2017, which can then be rolled out in 2018.

3.6 AREA 6: Encourage physical activity

Physical activity plays a vital role in maintaining health. This paragraph provides an overview of the situation on selected physical activity indicators in children and adolescents. Most of the data come from the factsheets on health-enhancing physical activity of the WHO European Region[3] complemented with information from the interviews.

All countries mentioned to have a policy on physical activity promotion issued or planned (MLT) that (also) aims at children under the age of 18 years. Nearly all countries indicated that they have recommendations for physical activity, often those as set out in WHO's Global Recommendations on Physical Activity for Health. Seven countries reported to be working on (updated) national recommendations on physical activity for children (CYP, HRV, GRC, LTU, NLD, PRT, SVN).

[3] http://www.euro.who.int/en/health-topics/disease-prevention/physical-activity/country-work

In 30 countries (except for CYP, MNE and SRB) physical activity levels are assessed through the Health Behavior in School-aged Children (HBSC) study. In general, at the age of 11, 13 and 15 years, boys more often reach the WHO's physical activity recommendation than girls (Figure 3.13 (2009/2010) and Figure 3.14 (2013/2014)). The percentage of boys reaching the WHO's physical activity recommendation ranged from 10% (ITA) to 43% (IRL) in 2009/2010 and from 11% (ITA) to 47% (FIN) in 2013/2014. Among girls it ranged from 5% (ITA) and 35% (IRL) among girls in 2009/2010 and from 5% (AUS, ITA, PRT) to 34% (FIN). In general, the percentage of boys and girls reaching the WHO's physical activity recommendation was higher among 11-year old than among 15-year olds. Generally, 13-year old body and girls have intermediate values.

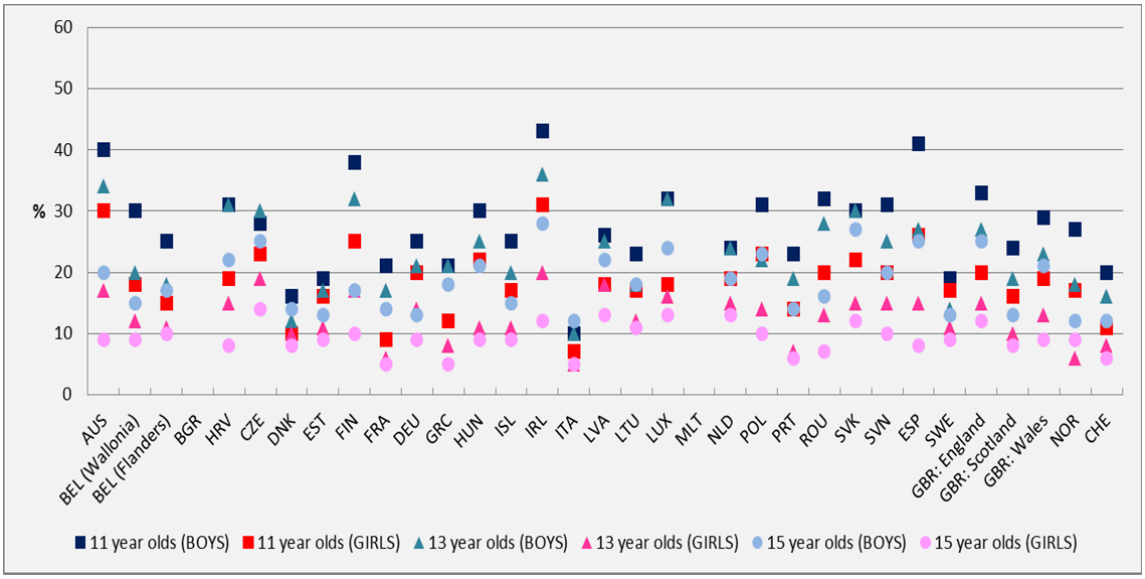


Figure 3.13. *Percentage boys (blue) and girls (pink) aged 11, 13 and 15 years reaching WHO's physical activity recommendations in* ***2010/2011*** *by county (HBSC study).*

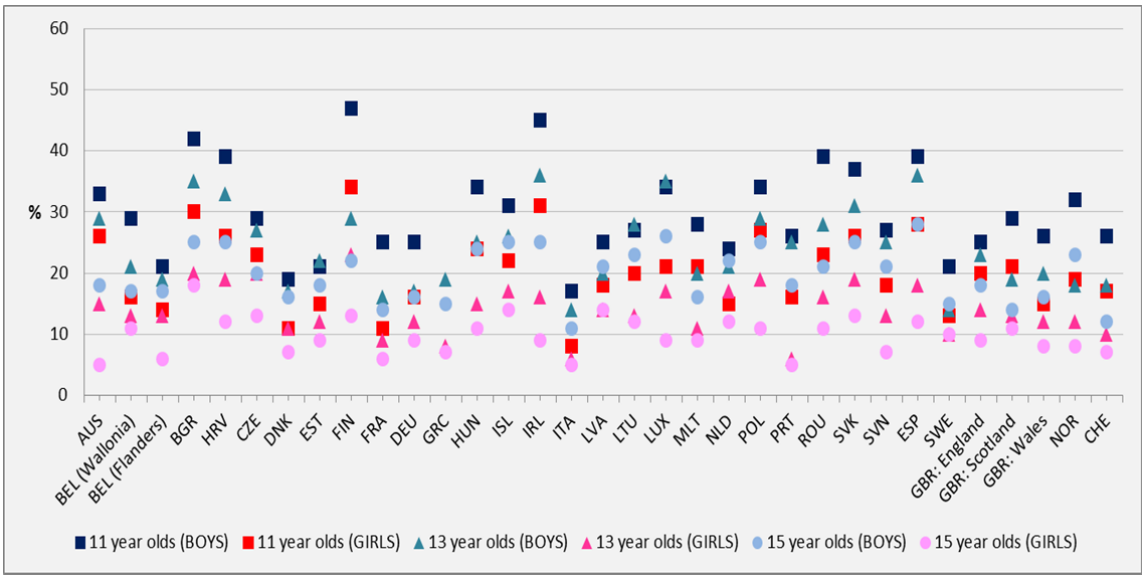


Figure 3.14. *Percentage boys (blue) and girls (pink) aged 11, 13 and 15 years reaching WHO's physical activity recommendations in* ***2013/2014*** *by country (HBSC study).*

For 28 of the 30 countries participating in the HBSC study, (except BGR and MLT) data were available from 2009/2010 as well as from 2013/2014. Four-year differences in the percentage boys and girls reaching WHO's physical activity recommendation are presented in Figure 3.15. Differences ranged between -8% (GBR: England) and +11% (NOR). In 7 countries, for all age and sex groups the prevalence of children reaching the recommendations was higher in 2013/2014 than in 2009/2010 (HRV, ISL, HUN, LTU, POL, ROU, CHE). In 2 countries (AUS and GBR: Wales) the percentage in 2013/2014 were lower than in 2009/2010 for age and sex groups. For all other countries higher as well as lower percentages were observed depending on the age and sex group.

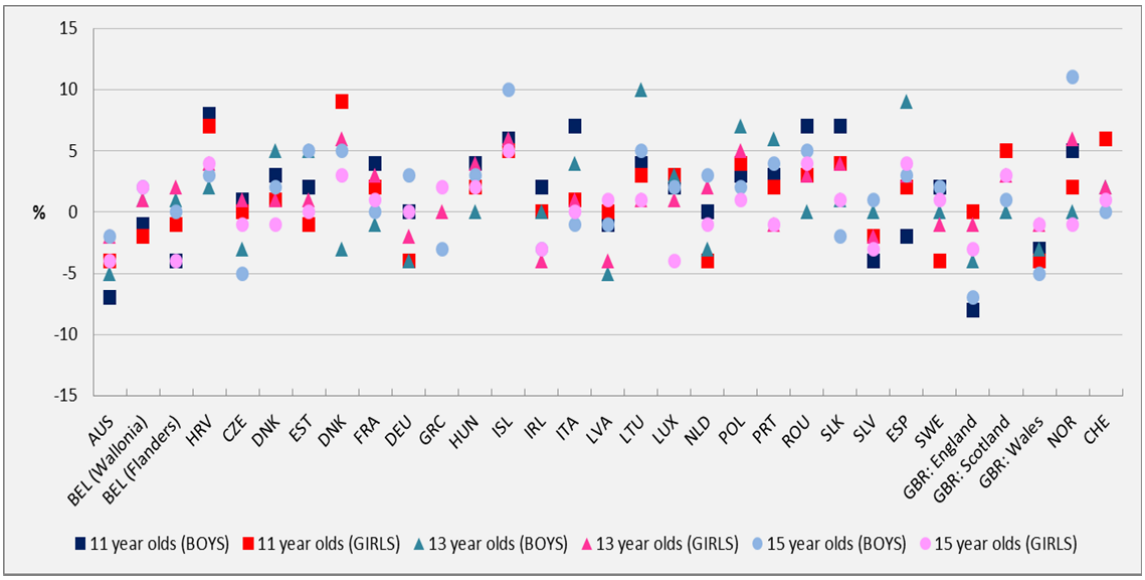


Figure 3.15. *Four-year differences in the percentage boys and girls aged 11, 13 and 15 reaching WHO's physical activity recommendations in 2013/2014 as compared to 2009/2010 by country (HBSC study).*

For 27 of the 28 EU countries (except for GRC), information on the implementation of national or subnational schemes promoting active travel to school was available from the NOPA database of WHO (www.whonopa.eu). A total of 9 countries reported having implemented such schemes (AUS, BEL, CZE, DNK, FIN, HUN, IRL, ITA, GBR). For 3 countries schemes for active travel to school are foreseen to be implemented within the next 2 years (BGR, LVA, SLV).

3.7 AREA 7: Monitoring

It is important to monitor obesity, nutrition and physical activity in children and young people in order to develop and direct targeted action. Monitoring procedures tend to vary by country, however, making it difficult to compare results directly.

The WHO Regional Office for Europe has established the Childhood Obesity Surveillance Initiative (COSI) that aims to routinely measure overweight and obesity in primary school children (6-9 years). This enables the evaluation of trends and comparison between countries within the European Region. In the 2015/2016 round of the Childhood Obesity Initiative (COSI) 25 countries participated (see Figure 3.16), 11 more than in the round before (2012/2013). The nine countries indicated in dark green participated for the first

time in the 2015/2016 round. The Netherlands is currently exploring the possibility to join COSI. More countries, however, reported to have data on weight and height in children (Figure 3.17; source APCO database). From the sources available is not possible to evaluate how representative and comparable those surveys are across countries.

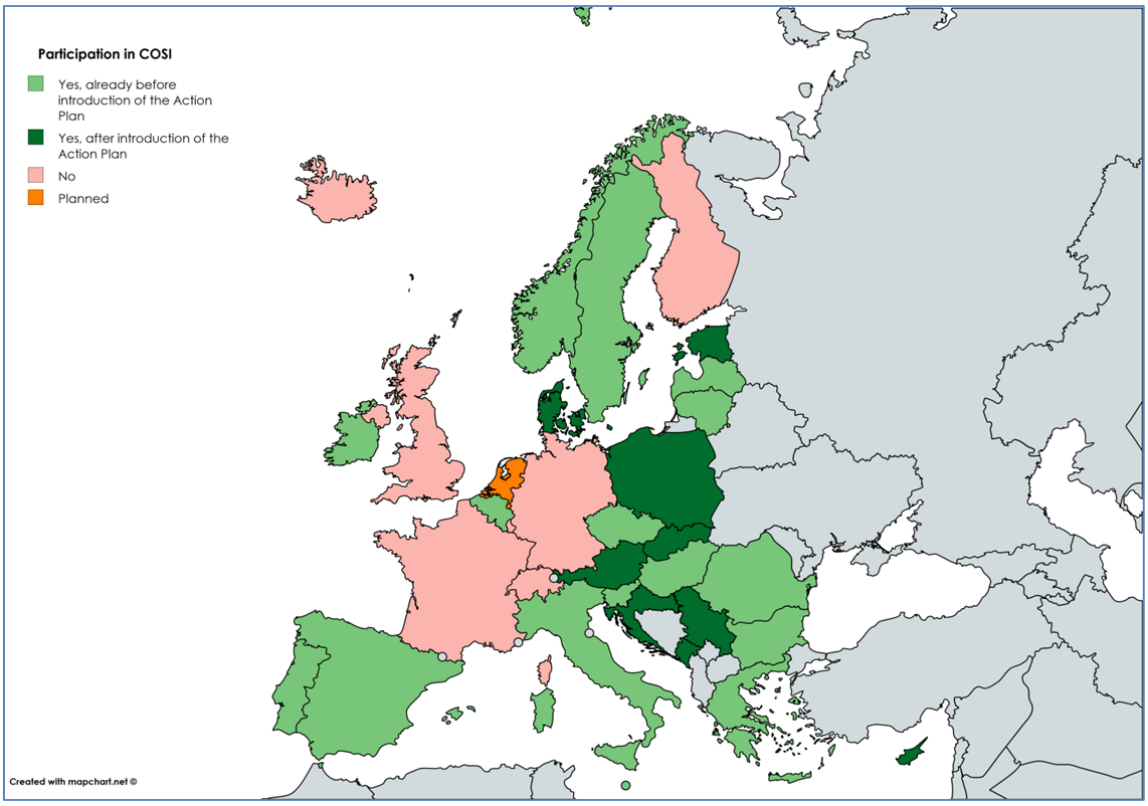


***Figure 3.16**. Participation in the Childhood Obesity Surveillance Initiative.*

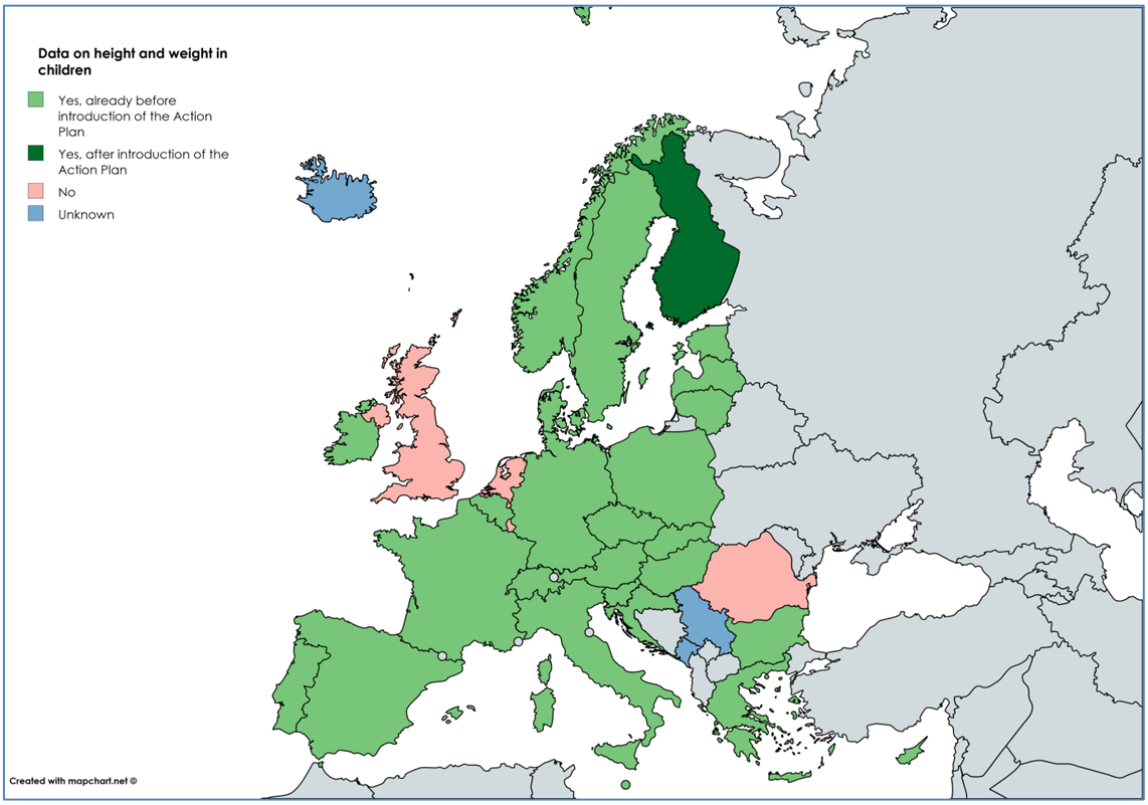


***Figure 3.17**. Availability of data on height and weight in children in 33 European countries*

Figure 3.18 shows whether or not countries have routine representative diet and nutrition surveys, according to the information in the APCO database. Nineteen countries reported to have representative surveys. However, it is not clear whether or not children are included in all of these surveys. The Competent Authority of Finland, for example, mentioned in the interview that children are not included in their surveys. This may apply to more countries. From the APCO-database it became clear that most countries have regional or national food composition databases available (see Figure 3.19).

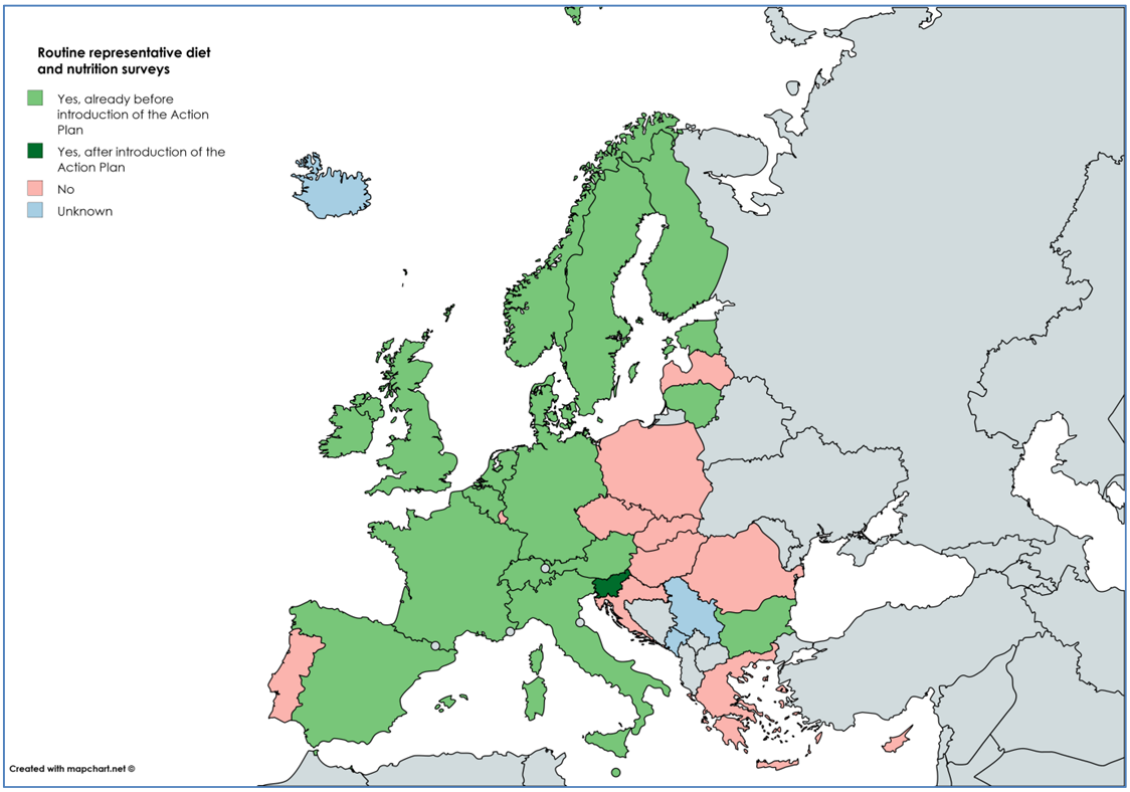


Figure 3.18. *Availability of representative diet and nutrition surveys in 33 European countries.*

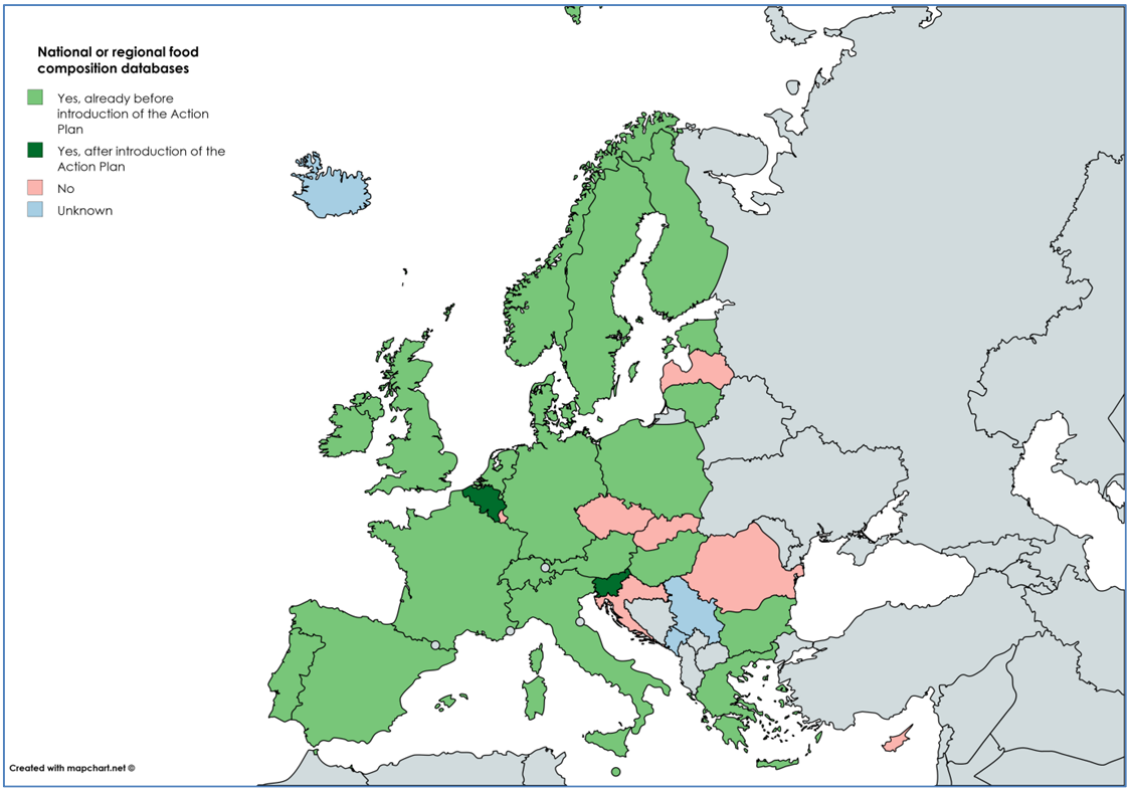


Figure 3.19*. Presence of national or regional food composition databases in 33 European countries.*

4 Country level overviews on the implementation of the EU Action Plan

4.1 Austria

Based on the interview[4] conducted with the Austrian Competent Authority we learned that Austria has no separate action plan for childhood obesity. Policies for (childhood) obesity prevention, as well as those for non-communicable diseases are covered by a National Action Plan Physical Activity, adopted in 2013 and the National Action Plan on Nutrition, adopted in 2010. The latter is updated every few years (i.e. 2013 and 2017).

The National Action Plan Physical Activity contains strategies on promotion of physical activity, sports and health for everyone. There are no specific actions for children below 18 years of age. The National Action Plan on Nutrition does include special initiatives for children <18 years. This includes a health promotion program for pregnant and lactating woman, and children until 3 years ('Healthy eating from the start', 2008- until now) and 'project school cafeteria' (2011- until now). This project about providing healthy school snacks is going on in 4 regions and it probably will go on for years. Socioeconomic differences in (childhood) obesity and health are addressed by trying to reach all groups with the policies. Information should be easily accessible (via Ministries). Information materials are provided free of charge in different languages (e.g. English, Turkish, ex-Yugoslavian languages) and are written in easy to understand language.
For nutrition, there is the Austrian nutrition committee with different working groups. There is one on pregnant and lactating women, and one on small children. Experts are from different organizations like ministries, the Austrian Health and Nutrition Agency, health care professionals, consumer organisations, and interest groups. They develop guidelines and information materials (e.g. for hospitals on breastfeeding, baby food). They also developed the Pyramid for lactating women and guidelines for the breast milk bank in hospitals.

The 'Healthy eating from the start' project already addresses babies and toddlers, but attention should also be paid to older children. Therefore, Austria focusses more on kindergartens and primary schools (children aged 3-10 years). Because there were no actions yet in nutrition with respect to childhood obesity, they concentrate especially on nutrition.

For Austria the EU Action Plan on Childhood Obesity 2014-2020 helps for argumentation to get funding for projects from the regions (e.g. School cafeteria project which has no fixed budget). Furthermore it gives directions and ideas about actions that can be implemented and how.

[4] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan

yes, already before EU Action plan*, partially, for example in certain settings or certain regions*, yes, since EU Action plan*, no**, in preparation or planned***, unknown

* Indicates that an action is (partially) undertaken, but does not contain an evaluation of effectiveness from our part. ** Actions may, however, be undertaken on initiative from local authorities, NGO's or private parties. *** Adoption may still be contingent on policy process.

4.2 Belgium

Based on the interview[5] conducted with the Belgian Competent Authority we learned that Belgium has no separate action plan for childhood obesity. At the federal level, Belgium has a "Federal nutrition and health plan" (2006- no end date). This plan includes several domains, for example:

- Engagement of the private sector (e.g. to improve quality of food)
- Improvement of different settings at schools and at work
- Breastfeeding and young infants
- Nutrition
- Scientific research, including a study on nutrition among the population
- Physical activity

General recommendations on actions for children or age groups are included in the plan, but there are no specific recommended actions on childhood obesity. At the federal level, Belgium's priority topics include 1) improving food supply, 2) improving nutrition, 3) maintaining the food consumption survey, including children (3-17 years) and collection of data on body mass index, and 4) development of nutrition research (performed by universities and research centres). Belgium has a task force at federal level on food reformulation, nutrition and the food survey. Other topics are managed by the other level of government. Furthermore, since 2014, concrete prevention and promotion actions happen at governmental/regional level of each of the 4 regions (Flemish, French, German and Brussels (with two different governments)). The Flemish government has recently launched a new programme on health prevention, which includes a specific objective concerning better food habits, physical activity, schools and food at work. The French region and Brussels are currently preparing an action plan on (healthy) nutrition. At the community or regional level, health inequalities are addressed in projects and programmes. At the federal level, Belgium wants to improve the food supply for persons in need, i.e. the "food bank"/food aid for deprived persons. Therefore, food procurement procedures will be improved. Furthermore, by food reformulation, all people including those with a lower socio-economic status will benefit from product improvement.

[5] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan.

[1] In Flanders, [2] in Wallonia. ● yes, already before EU Action plan*, ● partially, for example in certain settings or certain regions*, ● yes, since EU Action plan*, ● no**, ● in preparation or planned***, ● unknown

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4.3 Bulgaria

Based on the interview[6] conducted with the Bulgarian Competent Authority we learned that Bulgaria has no separate action plan for childhood obesity, but a National programme on prevention of non-communicable diseases (2014-2020). It includes the areas of nutrition, physical activity, tobacco and alcohol and non-communicable diseases. Prevention of childhood obesity is part of it. This programme includes several strategies:

- Increasing awareness and education on nutrition, with the aim to develop healthy nutrition.
- Capacity building of medical professionals, such as medical doctors and dieticians. This includes providing training courses to professionals so they can provide appropriate nutrition information and education in kindergarten and schools.
- Collaboration with relevant stakeholders, such as schools, food industry and communities.
- Implementation and supplementation of regulations and compliance with regulations.
- Monitoring in the nutritional area (dietary intake and overweight).

In the policies that are relevant to childhood obesity health inequalities are not much addressed, but there are actions targeting the Roma population. In Bulgaria, childhood obesity is a problem and the priority is to apply national regulations and to adjust them to European regulations. For example, a document on food procurement for healthy nutrition at school is being prepared under the Maltese EU presidency. If this document includes other guidelines than the current Bulgarian regulations, the Bulgarian regulations will be revised. Further plans are to develop nutrition profiles and food standards and to issue a new guideline on infant nutrition for health care providers who give advice on breastfeeding.

Under the Ministry of Health, the National Centre of Public Health and Analyses works together with 28 regional health inspectorates. Everything that is happening in the nutrition area and under this programme has been developed in the National Centre of Public Health and Analyses, approved by the Ministry of Health, and then implemented in the field. Furthermore, this National Centre of Public Health educates regional health inspectorates. Regional health inspectorates make information materials in each region, based on information of the Ministry of Health. They perform a lot of actions in the region and work together with medical doctors and in the area of nutrition.

[6] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan

yes, already before EU Action plan*, partially, for example in certain settings or certain regions*, yes, since EU Action plan*, no**, in preparation or planned***, unknown

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4.4 Croatia

Based on the interview[7] conducted with the Croatian Competent Authority we learned that the Ministry of Health and Social Care issued a National Action Plan for Overweight Prevention and Treatment in 2010. The Action Plan aims to encourage the extension and intensity of the activities related to health promotion and prevention of chronic diseases, and the complexity of the causes and consequences of excess body weight. In 2012 the National Strategy for the development of Health 2012-2020 was published. This strategy included nutrition and physical activity. In July, 2015 the 'National Programme Healthy Living' was published, which deals with health promotion and lays out actions for the whole population from babies to elderly. This programme includes several topics, relevant for the prevention of childhood obesity:

- Education on physical activity, nutrition, mental and sexual health, mainly directed at children
- Health and physical activity directed to the whole population, including children. Activities are meant to be implemented locally, but across all counties of the nation. For example 'Walking towards health' is a programme introducing walking as a cheap way to be physically active.
- Provision of equipment to schools that have no gym or sports hall, so children can be active in the hall or the classroom.
- Introducing easy to understand labelling to enable consumers to make healthier choices.
- Health and environment. In this area they try to mould how families spent their leisure time, raising awareness about healthy nutrition and increasing physical activity.

Activities in the National Programme are adapted to all socioeconomic groups. They should not infer any additional costs, i.e. facilities will be free of charge. This enables Croatians with lower socioeconomic status to participate. For all areas of the National Programme, working groups exist. No formal coordination mechanism exists for childhood obesity.

In 2014, the Ministry of Agriculture issued the National Strategy for the Implementation of the School Fruit and Vegetable Scheme. The strategy aims to permanently increase the share of fruit and vegetables in the nutrition of school children in order to prevent early-onset obesity and other diseases caused by inadequate nutrition. Furthermore, in 2016 a strategy on the reduction of salt was adopted and plans for the reduction of trans fats and sugar are in preparation. Furthermore, in 2016 a new working group on good marketing practices was installed in the Ministry of Health. Intention of this working group is to have a policy document on marketing within the coming years.

The EU Action Plan on childhood Obesity is considered to be an important document for Croatia. Since the publication, the Ministry of Health has shown increased awareness. Croatian government sees childhood obesity as an issue, but is not very high on the agenda. It is a big achievement that the National Programme is now adopted. It facilitated participation in the Childhood Obesity Initiative (COSI) since 2015 and adoption of the National Programme Healthy Living. Also the EU salt reduction strategy helped adoption of national plans.

[7] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan

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4.5 Denmark

Based on the interview[8] conducted with the Danish Competent Authority we learned that Denmark adopted a national action plan on obesity in 2003 (no end date). This action plan provides recommendations on the prevention and treatment of overweight and obesity. Denmark does not follow this plan anymore. There was a working group consisting of representatives of several ministries, but unfortunately the group did not succeed. Since 2013 there is a health promotion package on overweight. It does not focus, however, on obesity, so this package is not reaching obese children and adults. This package includes amongst others recommendations for municipalities and recommendations for the school environment. Also for physical activity a health promotion package exists since 2012, as well as a health promotion package on food and meals. An action plan on nutrition was adopted in 2016. It includes specific actions for children under the age of 18 years, next to actions for adults and elderly. It contains guidelines for the work of the Danish Veterinary and Food Administration, and comprises a lot of activities with respect to nutrition, such as salt reduction, dietary recommendation and recommendation for food in school canteens. It takes a multi stakeholder approach for all activities, in which civil society, government institutions, NGO's and the private sector work together. The priority topics of the Danish Ministry of Health/Danish Health Authority with respect to obesity are the following:

- Monitoring the level of prevalence of overweight and obesity to get insight into the problem and to compare it with other countries.
- Identification and early intervention.

With respect to nutrition, priority topics focus on two groups. These are children and vulnerable groups. For children, nutrition education is considered to be important as well as the availability of healthy foods. The focus on vulnerable groups is meant to address health inequalities.

Currently the Danish Ministry of Health/Danish Health Authority are preparing a plan on obesity, which is focussing on both children and adults. This was initiated because obesity is not covered well in the current policies. In 2016, a mapping of interventions for tackling obesity was performed. In 2017 a literature review will be produced to get insight into effective interventions. Subsequently, recommendations for the regions will be developed that describes models of interventions that municipalities can implement (planned in 2018). Furthermore, spring 2017 new school recommendations on nutrition will be implemented. These are voluntary guidelines and there will be a labelling system for schools that follow the recommendations. In 2018, new mandatory recommendations on nutrition will be issued for day care, which will to a large extent be the same as for schools. These will be easier to follow than the existing day care recommendations.

Denmark stands behind the EU Action Plan on Childhood Obesity 2104-2020. Danish' actions and policies are and were already in line with the action plan goals. The action plan did not have direct influence on Danish policy making, but indirect it provides more focus and awareness for the topic of childhood obesity. It is supportive and it creates discussion.

[8] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan

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4.6 Estonia

A general description of the policies related to the prevention and management of childhood obesity will be included in the final report, expected to be published by the European Commission in 2018. However, an overview according to the various areas of action mentioned in the EU Action Plan is provided below.

Overview according to the various areas of action mentioned in the EU Action Plan

yes, already before EU Action plan*, partially, for example in certain settings or certain regions*, yes, since EU Action plan*, no**, in preparation or planned***, unknown

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4.7 Finland

Based on the interview[9] conducted with the Finnish Competent Authority we learned that the National Institute for Health and Social Welfare launched 'The National Obesity Programme 2012–2018' in 2012. This programme covers many issues on the prevention of overweight in children, such as physical activity promotion. It aims to achieve a downward trend in obesity in order to improve health and welfare and to maintain the population's functional and work ability. Among the main programme targets are: 1) reduce the number of children and young people who grow up as obese adults and 2) reduce the differences in obesity prevalence among population groups. Because the first 1000 days are considered to be important for the development of obesity, Finland focusses on early prevention. Therefore, the major topic is lifestyle counselling in families with children, including among others counselling on nutrition, physical activity, sleep. Many other topics are, however, also important, such as catering in schools and day care, reformulation and marketing unhealthy foods at children and adolescents. In the Finnish health policies one of the main targets is to decrease inequalities in non-communicable diseases and related factors. Especially at the community and city level, quite many actions are addressing specific target groups.

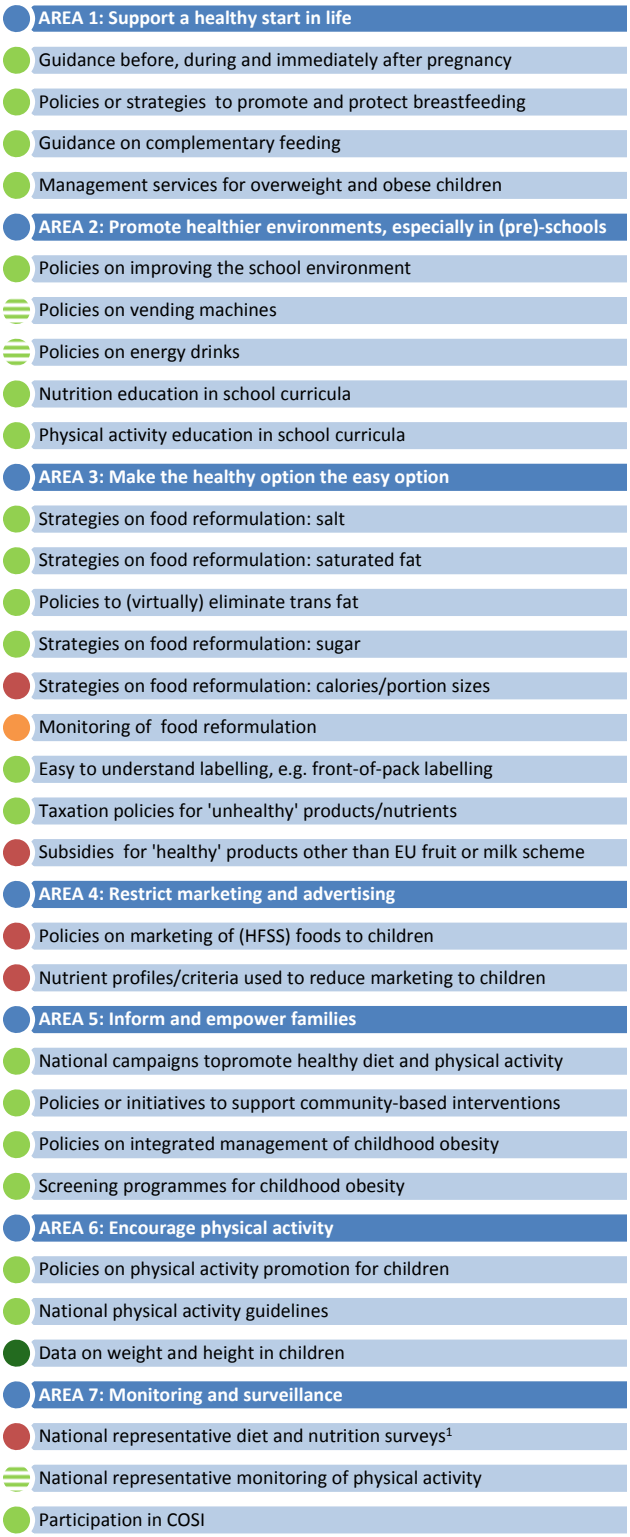
The National Institute for Health and Welfare is coordinating centre for the National Obesity programme in Finland. Advisory groups and groups of stakeholders have regular meetings. NGOs are very important and active partners of the Finnish government. They receive funding from several Ministries to run programmes. One of the big programmes that are funded by the Finnish government is 'Resource for families'. The Finnish Heart Association together with the Finnish Diabetes Association runs the programme to implement the nutrition recommendations in child health care and school care.

The Ministry of Social Affairs and Health is working on a key programme that concerns the implementation of the nutrition and physical activity recommendations. It also includes reformulation issues, and other topics such as mental health and alcohol consumption. This programme is expected to be launched in sept 2017.

The topic of childhood obesity is already on the Finnish agenda for 5-10 years. Nevertheless, the EU Action Plan on Childhood Obesity stimulates Finnish policy makers to go further with their actions on the prevention of childhood obesity. It serves as an important background document to negotiate with the Ministry and stakeholders. Besides this, it provides examples from other countries and facilitates development of policies together with other countries, which is very important for some areas, such as reformulation.

[9] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan



[1] Finland has representative nutrition surveys, but not in children. ● yes, already before EU Action plan*, ◒ partially, for example in certain settings or certain regions*, ● yes, since EU Action plan*, ● no**, ● in preparation or planned***, ● unknown. * Indicates that an action is (partially) undertaken, but does not contain an evaluation of effectiveness from our part. ** Actions may, however, be undertaken on initiative from local authorities, NGO's or private parties. *** Adoption may still be contingent on policy process.

4.8 France

Based on the interview[10] conducted with the French Competent Authorities we learned that there is no separate Action plan on Childhood Obesity in France. Since 2001 France has a National Nutrition and Health Programme (PNNS). In December 2012, the Ministry of Health published the 2011-2015 Programme. Policies on childhood obesity are covered by this Programme and include strategies for nutrition, physical activity and non-communicable diseases. For the prevention of childhood obesity a diversity of synergic and complementary strategies is needed (health in all policies approach). Each one is important but cannot achieve the results without the other. Some need legislation, other education and communication by public agencies, other some voluntary actions by NGO's or the private sector within the frame given by the PNNS. The PNNS involves the ministries in charge of health, national education, sports, consumer affairs, social cohesion, and higher education and research to promote healthy eating as part of nutritional prevention. The PNNS has a steering-commission that is formed by representatives of all relevant ministries, and public health agencies (for food security, health monitoring, and health promotion). Within a "follow up committee" involving also local authorities, economic actors, NGO's, the sports sector the strategies and actions are discussed regularly (around 4 times a year). Development and implementation of specific actions lies within health agencies, such as the National Institute for Prevention and Health Education. Everyone can develop and implement intervention programmes. However, if you want to have national impact you can go through a system of validation from national authorities. In January 2016, a health law was adopted in France. This law is now being implemented and prevention of obesity is an important focus.

France is now rethinking new objectives for the PNNS, based on - among others –data of a national survey in 2015. Expectedly, these new objectives will be defined in 2017. Additionally, in 2017 decisions on front of pack labelling are expected and new national food based dietary guidelines will be issued. These will apply to the general population. Specific guidelines for children are expected in 2018. At the national level there is no specific action to diminish the gradient of socio-economic differences in health. It is expected that all policies adopted or to be adopted altogether have some response to the issue of socioeconomic differences. For example, taxing sugar-sweetened beverages is intended to have some effect, because they are consumed more by lower socioeconomic groups and because at the same time education is done on the health impact of overconsumption of sugars. Regulation of marketing unhealthy foods to children may also help, as children with lower socioeconomic status are known to watch more television. Generally speaking there is much more focus on health inequalities at the local level. For the group of deprived families France is working on improving the quality of the foods provided in the National food aid programmes.

In France, the EU Action plan on Childhood Obesity 2014-2020 serves as useful guideline with proposals for action. Depending on the situation, Parliament or the Ministry will decide to do more than suggested in one area or less in another. Furthermore, the Action Plan serves as general endorsement of the importance of tackling childhood obesity that can be used in negotiations at the national and regional level, but also in discussions with other international organisations like WHO.

[10] Note that the results for this and all other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and early January 2017 and have therefore not yet been accorded by interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan

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4.9 Germany

Based on the information provided by the German Competent Authorities we learned that Germany adopted The National Action Plan "IN FORM – German national initiative to promote healthy diets and physical activity" in 2008. “IN FORM” is about promoting a healthy lifestyle. It aims to bring lasting improvements in dietary and exercise habits in Germany by 2020 for the whole population. Children and adolescents are an important target group and health promotion and prevention of childhood obesity are integral parts of “IN FORM”. Prevention of non-communicable diseases is also covered. With “IN FORM”, in particular, children and adolescents in facilities of daily life - kindergartens and schools – are addressed. It contains a host of activities that address young families, children and adolescents with adapted target-group oriented communication. To date more than 200 projects have been supported by the Federal Ministry of Food and Agriculture (BMEL) and the Federal Ministry of Health (BMG) under the “IN FORM” initiative. These two ministries are the lead ministries of this national action plan. Other Federal and Länder ministries and various partners from civil society participate in “IN FORM”. There are many stakeholders such as the IN FORM Secretariat, the IN FORM work groups (with a focus on different topics) and task force (with all relevant stakeholders of the civil society), the national departments and the task force consisting of the national departments and the Länder (Bund-Länder-Gruppe).

The priority topics are healthy upbringing (the first 1000 days) and a healthy diet and dietary education in childcare facilities and schools, because they seem to represent key aspects according to the current state of scientific knowledge in the field of childhood obesity. Activities focus on health promotion and prevention, the creation of healthy environments and settings (particularly focusing on the family, day-care centre, school, and community), setting-based prevention, promotion of research, as well as the dissemination of evidence-based knowledge about these topics. By promoting a healthy diet, dietary education and physical activity in childcare facilities and schools, we reach almost all children irrespective of their parents' origin and income. By doing so health inequalities are addressed.

From 2017 – 2019, “IN FORM” will be evaluated in order to assess the effectiveness of the projects as well as the overall structure of the programme. In this context, further need for action will be identified. In the years to come activities will mainly concentrate on establishing and stabilising measures and projects supported under the “IN FORM” initiative in the longer term, disseminating findings and results, and promoting both the exchange of experiences and networking between actors within the projects. The successful transfer of knowledge into practice is an important goal.

Besides “IN FORM”, the Preventive Health Care Act entered into force on 25th July 2015. It strengthens the basis for enhanced co-operation among the social security institutions, the Laender, and the local authorities in the areas of prevention and health promotion for all age-groups and in multiple life settings. With the assistance of this law, early detection screening among children, young persons and adults will continue to be developed. The Federal Ministry of Health (BMG) established in 2015 a funding priority in order to promote research in the field of childhood obesity.

Overview according to the various areas of action mentioned in the EU Action Plan

[1] for salt. ● yes, already before EU Action plan*, ◒ partially, for example in certain settings or certain regions*, ● yes, since EU Action plan*, ● no**, ● in preparation or planned***, ● unknown

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4.10 Greece

Based on the interview conducted with the Greek Competent Authorities we learned that Greece does not have a national action plan on childhood obesity, physical activity, nutrition or non-communicable diseases. On the internet a national nutrition policy document can be found, but this document has not been officially approved in terms of action planning and implementation. The newly introduced National Nutrition Policy Committee is planning to work in this area. The committee is planning to cooperate with other ministries (e.g. Ministry of Education), national authorities (e.g. National Food Authority) and other stakeholders such as the food industry. In addition, the Institute of Childs' Health is responsible for some programmes, such as breastfeeding promotion.

For 2017 and upcoming years main activities of the National Nutrition Policy Committee will be education for women (e.g. during pregnancy and parents), for children and elderly on nutrition, food reformulation, and updating of the national nutrition guidelines from 1999. With this focus, the Ministry of Health continues to work on the priority topics it already had before 2014, which are 1) the promotion of a healthy start of life, especially breastfeeding and 2) the promotion of healthy environment in schools (pre-, primary and secondary schools). Greece has no specific policies addressing health inequalities relevant to childhood obesity, except for a programme in which healthy school meals are provided in especially lower socio economic areas.

The EU Action Plan on Childhood Obesity helps to set priorities for the national nutrition policy commission and to indicate the best practices that can be used in the context of Greece.

Overview according to the various areas of action mentioned in the EU Action Plan

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4.11 Hungary

Based on the interview[11] conducted with the Hungarian Competent Authorities we learned that a national plan on nutrition has been drafted several years ago as part of the National Health Strategy (2014-2020). Some parts of this plan have been implemented (e.g. actions on salt reduction, healthy nutrition). As part of the National Health Strategy, also a national plan on the prevention of non-communicable diseases has been drafted. The main priority for this plan is to prevent chronic heart disease and early mortality and to manage chronic heart disease. Both plans target the whole Hungarian population; there are no specific actions for children below the age of 18 years. In addition, Hungary has a National Strategy for Sports from 2007–2020 and a new strategy from 2009-2024. One objective is good physical activity for children and students and to raise awareness of healthy lifestyles. Central coordination for these plans is the Ministry of Human Capacities. Under this ministry, there are two main governmental institutions covering the topic of childhood obesity, nutrition or physical activity promotion, i.e. the National Institute of Nutrition and the National Institute of Health Development. The National Pharmacy and Nutrition Institute serves as a centre of excellence in the area of nutrition. This institute performs, implements and evaluates all the national surveys on nutrition and provides summaries of the data to government and stakeholders.

Based on earlier studies, especially in schools, it is concluded that dietary habits and physical activity are not optimal in Hungary and form a risks for children's' development. Therefore, healthy diet and physical activity are priority topics together with mental health. Schools are an important setting, because schools are proven to be the most common settings in which behaviours can be changed. The government supports "healthy catering" in nurseries, kindergartens and schools of children with a low social economic status. They financially support healthy catering for these groups of children – with 3 free meals per day.

The EU Action Plan on Childhood Obesity 2014-2020 has mainly facilitated the monitoring of the implementation of Hungarian plans and serves as a good framework to ask the government to act. In addition, this document is very supportive in communicating to different stakeholders in the country.

[11] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan

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4.12 Iceland

A general description of the policies related to the prevention and management of childhood obesity will be included in the final report, expected to be published by the European Commission in 2018. However, an overview according to the various areas of action mentioned in the EU Action Plan is provided below.

Overview according to the various areas of action mentioned in the EU Action Plan

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4.13 Ireland

A general description of the policies related to the prevention and management of childhood obesity will be included in the final report, expected to be published by the European Commission in 2018. However, an overview according to the various areas of action mentioned in the EU Action Plan is provided below.

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4.14 Italy

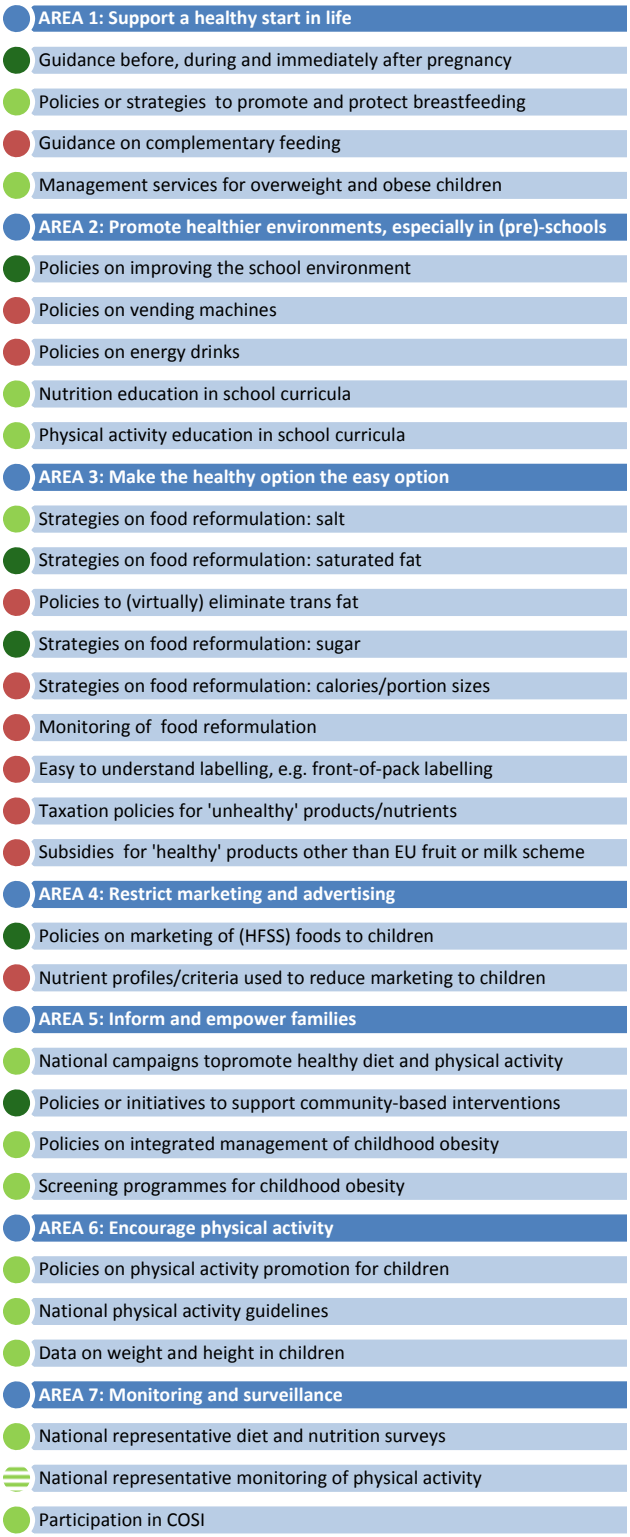
Based on the interview[12] conducted with the Italian Competent Authorities we learned that Italy has a national prevention plan that runs from 2014 to 2018. This national prevention plan addresses many topics including actions on overweight and childhood obesity and physical activity. Italy has strategy actions to prevent the increase on childhood obesity. The national prevention plan contains the 'program on gaining health'. This program is a government initiative, led by the Ministry of Health, and adopted in 2007. It follows the health in all policies approach and aims to reduce and prevent non-communicable diseases by acting on the main modifying risk factors such as an unhealthy diet, lack of physical activity and alcohol consumption. Part of the cross-section approach is to promote a healthy lifestyle among children and adults. In particular the consumption of fruit and vegetables and increased physical activity is promoted, as well as the reduction of salt intake. Actions on childhood obesity are coordinated by a commission including representatives of different ministries and representatives of other stakeholders. Schools are an important setting to implement actions and thus important collaborators.

Both national strategies and the national prevention plan are part of the ethical program of Italy. In the ethical program protection of vulnerable people is included. At the local level many actions are ongoing to decrease health inequalities.

The strategies on the prevention of overweight and obesity started in Italy already in 2005. The EU Action Plan on Childhood Obesity 2014-2020 provided a framework of actions that have been important for the implementation of strategies on healthy diet and physical activity in Italy. It has increased the priority of this topic in Italy.

[12] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan



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4.15 Latvia

Based on the interview[13] conducted with the Latvian Competent Authorities we learned that the topics of (childhood) obesity, nutrition, physical activity and non-communicable diseases are covered by the Public Health Strategy 2014-2020. This strategy takes a multi-sectorial approach, as these topics are all interrelated. This policy has two main directions for action: reducing the spread of non-communicable diseases and pregnant women. In Latvia non-communicable diseases are the main cause of death. These diseases are influenced by nutrition and physical activity, starting from birth to adulthood. Therefore a life-course approach is very important and health promotion for all, including children is priority in Latvia. Important in this respect are nutrition and physical activity. In the Public Health Strategy extensive programmes to address health inequalities are planned targeting unemployed, children and other vulnerable groups. These programmes will be on healthy nutrition, sufficient physical activity etc. Another future action is to revise the national nutritional norms, including those for pregnant women and children. It is not known exactly when they will be issued.

Several multi-sectoral councils that are involved in the implementation of the Public Health Strategy are installed in Latvia. All relevant sectors are represented in these councils, which include the coordinating council and advisory council within the Ministry of Health, the maternal and child health advisory council, the food industry council in the Ministry of Agriculture.

The EU Action Plan on Childhood Obesity 2014-2020 facilitated the development of the Latvian Public Health Strategy 2014-2020 and other policy documents. In general, Latvian policy documents are planned based on EU documents.

[13] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan

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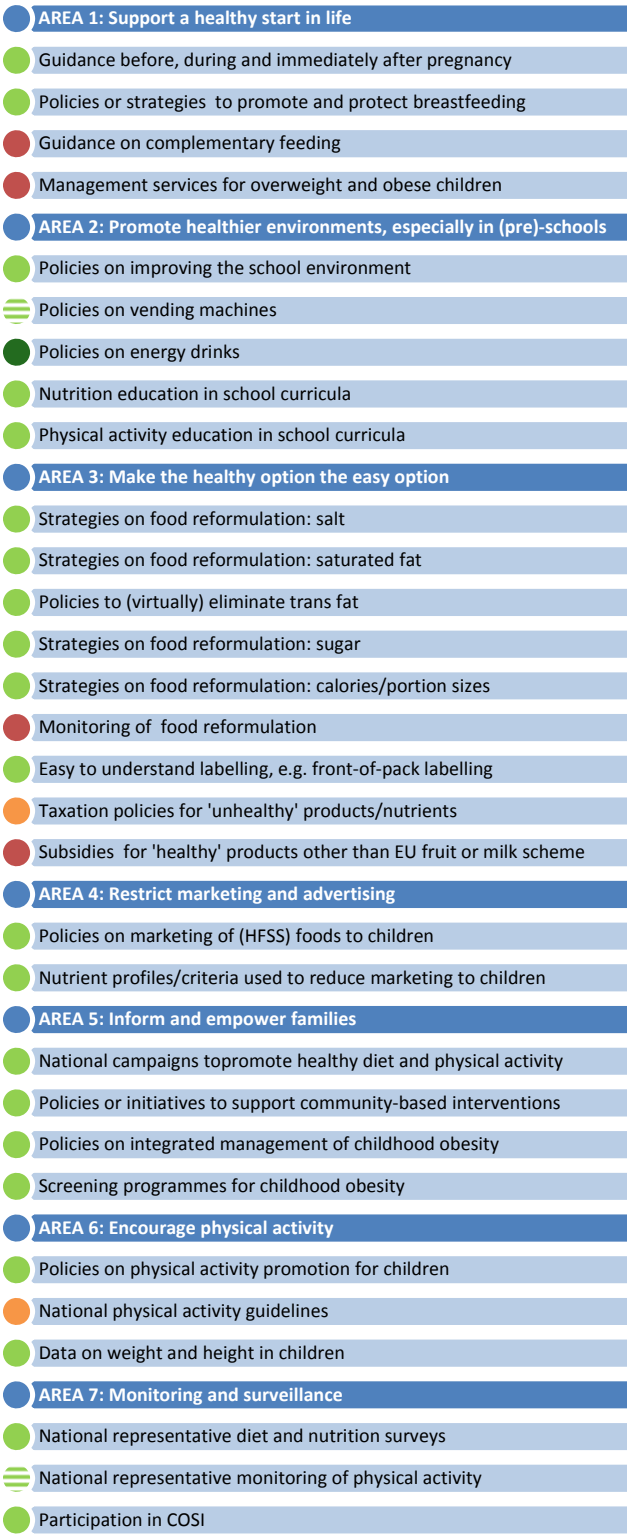
4.16 Lithuania

Based on the interview conducted with the Lithuanian member of the High Level Group on Physical Activity and Nutrition we learned that the topic of (childhood) obesity is covered in the general Health Policy of Lithuania (National Health Strategy 2014-2025, State Public Health Development Programme 2016-2023, etc.). This policy also has a chapter on nutrition, therefore the State Food and Nutrition Strategy State Action Plan for 2003–2010 is no longer ongoing. The Ministry of Health is the responsible coordinator. At the Parliament level there is a Health Affairs Committee and a Committee for Youth Affairs. Additionally, there is a National Committee on Physical Activity and Sports. Lithuania has a National Sport Development Strategy for 2011—2020, which serves as a national policy strategy on physical activity, specifically addressing 'Sports for All' promotion. This is supplemented by the Interinstitutional Action Plan for the Implementation of the 2011—2020 National Sports Development Strategy. Together, these plans aim to create conditions for greater inclusion in sports and physical activity in Lithuania. Three main themes make up the strategy: increasing general public awareness of the benefits of physical activity; promoting healthy lifestyles through physical activity, physical education (PE) and sports; and creating the right conditions for citizens to engage in sports and exercise. More specifically, this includes initiatives to encourage young people to participate in voluntary sports activities; recommendations that establish and implement minimum standards for local sports and health infrastructure; and environmental restructuring to encourage children, adolescents and elderly people to participate in healthy lifestyles and sports. Also Action Plans for non-communicable diseases, i.e. for cancer, for coronary heart disease and for diabetes include strategies that are relevant for the prevention of obesity, as obesity is interrelated with these diseases.
Every year additional actions and/or policies are initiated to improve the general Health Policy of Lithuania. The new government of Lithuania (installed last autumn) asked to improve the already implemented health education at schools. Furthermore, the policies on nutrition at schools will be improved. Now Lithuania is planning to set additional maximum levels for certain nutrients (sugar, salt) at schools

Childhood obesity is not considered a very important topic in Lithuania as Lithuanian children are relatively slim. However, the prevalence of obesity is slightly increasing so Lithuania tries to tackle it as early as possible, primarily through education and nutrition in schools. Priority areas are school nutrition (school meals and education), provision of free milk and fruit at school, promotion of physical activity and limitation of trans fat in foods. There are no specific legal acts or policies to address children's health inequalities. Lithuania is a small country and there are little inequalities, so there is no need for specific action.

The EU Action Plan on Childhood Obesity 2014-2020 strengthens Lithuanian activities, because when they draft national plans they can refer to the Action Plan

Overview according to the various areas of action mentioned in the EU Action Plan



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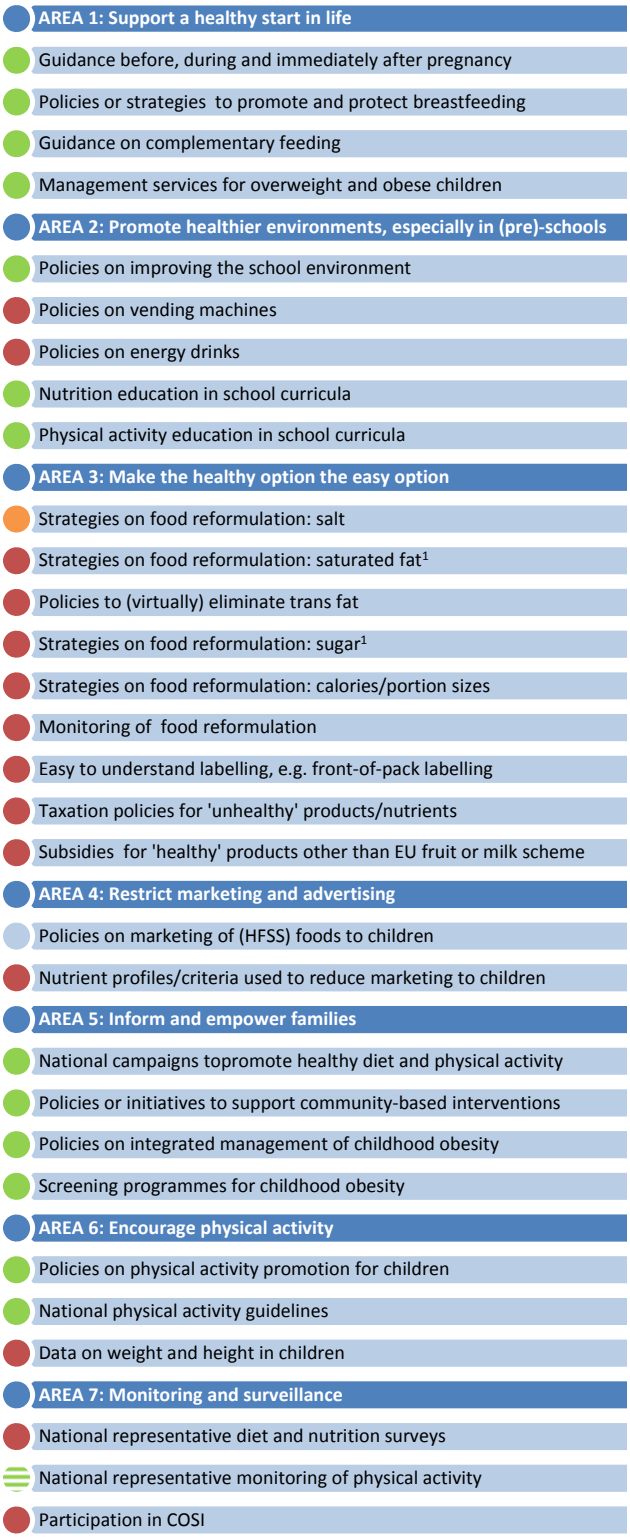
4.17 Luxembourg

A general description of the policies related to the prevention and management of childhood obesity will be included in the final report, expected to be published by the European Commission in 2018. However, an overview according to the various areas of action mentioned in the EU Action Plan is provided below.

Overview according to the various areas of action mentioned in the EU Action Plan



[1] There will be in next action plans, but no preparatory work is being done yet ● yes, already before EU Action plan*, ◒ partially, for example in certain settings or certain regions*, ● yes, since EU Action plan*, ● no**, ● in preparation or planned***, ● unknown. * Indicates that an action is (partially) undertaken, but does not contain an evaluation of effectiveness from our part. ** Actions may, however, be undertaken on initiative from local authorities, NGO's or private parties. *** Adoption may still be contingent on policy process.

4.18 Malta

Based on the interview conducted with the Maltese member of the High Level Group on Physical Activity and Nutrition we learned that in Malta, policies on the prevention of childhood obesity are incorporated in several health policies. In 2010 a strategy on non-communicable diseases, including obesity was launched. 'A Healthy Weight for Life: A National Strategy for Malta 2012-2020' was issued in 2012 by the Superintendence of Public Health Ministry for Health, the Elderly and Community Care. The Maltese authorities develop strategies and policies through a whole-of-government and whole-of-society approach. They take a life-course approach to obesity prevention and they focus a lot of the policies and actions to children. Malta adopted the 'Whole school approach to a healthy lifestyle', which includes policies and strategies on healthy eating and physical activity in February 2015. Besides this, the Food and Nutrition Policy and Action Plan for Malta 2015 – 2020 was launched in 2014. This action plan focusses on the wider aspects of food and nutrition.

A National Policy for Sport in Malta & Gozo 2017-2027 has been drafted and is now open for public consultation that will run until January 31, 2017. There is also the HEPA strategy, which is an internal document to be used by the lifestyle council.

In January 2016 an advisory council has been set up that works inter-sectoral on obesity and non-communicable diseases. This council advises the Minister of health on strategies and possible new legislation. Beginning 2017 there are several plans. First, there is a wish for an even stronger focus on the life course approach and focus on promising initiatives to strengthen them. Second, there are plans to have legislation on foods that are allowed to be sold in schools and those that are not. Currently, there is a policy in place on this topic. Third, evaluation of the availability of potable water in schools in ongoing with the aim of having measures in place to have a supply of freely available drinking water to all schools. Fourth, in 2016 a pilot project has been carried out focussing on increasing skills of children, starting already very young, so they learn about healthy foods. This will be taken up by all schools.

As there is still a rising trend in obesity in Malta, it is necessary to stop (and curb) this trend. Therefore, the Maltese strategy takes a life course approach, starting very young, and also focussing on young mothers to be, so children get a healthy start in life. Increasing skills is an important aspect of the strategies. Statistics in Malta clearly show that they follow the world-wide observation that people with lower socioeconomic status have higher obesity rates. Addressing lower socioeconomic groups is a key priority when tackling the whole problem of obesity. Therefore a number of initiatives are ongoing that specifically address people with lower socioeconomic status. These initiatives have a family approach and focus on skills development, for example by group talks. September 2016, a specific unit on health inequalities has been set up. WHO supports this unit.

The EU Action Plan on Childhood Obesity 2014-2020 is guiding the implementation group so they can focus on those strategies that are most successful.

Overview according to the various areas of action mentioned in the EU Action Plan

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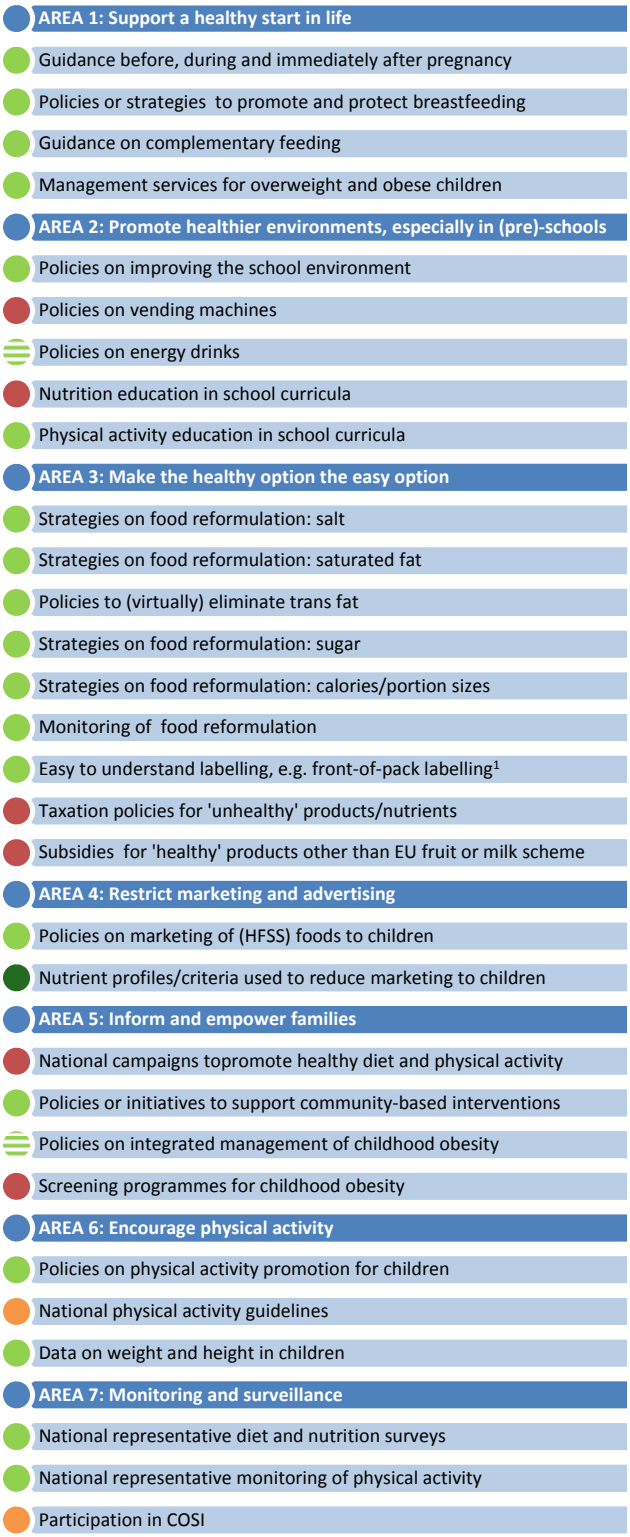
4.19 The Netherlands

Based on the interview conducted with the Dutch Competent Authorities we learned that the Netherlands do not have national plans for the prevention of childhood obesity with specific aims and targets. Since before 1980, the Netherlands has the target to change the increasing prevalence of overweight and obesity among children into a decreasing trend. The policy and strategy on childhood obesity is stable and existing programmes are already going on for some years. Nutrition, physical activity and other relevant priority topics, such as sleep are addressed with an integral approach at the local level. An integral approach at the local level is important as it seems the most effective approach to solve the complex problem of (childhood) obesity. The approach includes several national community based interventions implemented at the local level at a voluntary basis. In these interventions, several areas, such as nutrition (e.g. healthy schools and healthy school canteens), physical activity, child/day care are integrated. These programmes are financed by the Ministry of Health, Welfare and Sport. JOGG is the Dutch acronym for Jongeren Op Gezond Gewicht (Young People at Healthy Weight). It is a programme that aims to create an environment that reinforces healthy lifestyle choices of children and teenagers. Most of the municipalities participating in JOGG (around 25% of all communities in January 2016) are municipalities with health inequalities. “Gezond in” is a special programme for municipalities to reduce health inequalities. Furthermore, there are more smaller or local programmes addressing health inequalities.

Dutch Government finances several institutes that address or coordinate activities, relevant for the prevention of childhood obesity. The Health Council of the Netherlands is an independent scientific advisory body for government and parliament. Among other things, they develop nutrition guideline (updated version issued November 2015) and norms for physical activity and sedentary behaviour. The Netherlands Nutrition Centre develops practical guidelines on nutrition (based on the formal guidelines) and provides consumers with scientifically sound, independent information on healthy, safe and sustainable food choices. The Netherlands Youth Institute is the Dutch national institute for compiling, verifying and disseminating knowledge on children and youth matters.

Overview according to the various areas of action mentioned in the EU Action Plan



[1] Healthy choices logo will disappear in 2017. ● yes, already before EU Action plan*, ◒ partially, for example in certain settings or certain regions*, ● yes, since EU Action plan*, ● no**, ● in preparation or planned***, ● unknown. * Indicates that an action is (partially) undertaken, but does not contain an evaluation of effectiveness from our part. ** Actions may, however, be undertaken on initiative from local authorities, NGO's or private parties. *** Adoption may still be contingent on policy process.

4.20 Norway

From the interview[14] with the Norwegian Competent Authorities we learned that Norway has a national strategy on non-communicable diseases that runs from 2013 to 2017. One of the goals of this strategy is to stop the increase in the prevalence of obesity. The national strategy consists of two parts. The first part concerns health promoting strategies on nutrition, physical activity, tobacco and alcohol. The second part focusses on the healthcare system. Topics are early intervention and (secondary) prevention and the use of lifestyle in treatment and rehabilitation of patients with non-communicable diseases. Goals have been set, as well as ways how to obtain them in society and in healthcare. Goals are, for example, an increase the proportion of the population that knows and follows the national dietary guidelines, maintain the high level of awareness of the keyhole label, reduce the salt consumption, and help children and young people establish healthy eating habits.

The Norwegian authorities consider it important to have a healthy lifestyle from the beginning of life, as it influences children's health and their behaviours later in life. Therefore education and providing information on healthy nutrition and physical activity during pregnancy and childhood are priorities. For a long time Norway is working on the promotion of breastfeeding. In addition, 'consultation clinics' (i.e. health centres where the mother and children go during pregnancy and a few years after children are born) provide much information to (future) parents on nutrition and physical activity. Every child is going to these 'consultation clinics' as well as to kindergartens and (pre-)schools. By focussing on these settings Norway reaches all children, which is considered to be important for reducing health inequalities.

The Norwegian government is now developing a national action plan on nutrition, which will be launched in March 2017 and will be in place until 2020/2021. It has a special focus on children and will include different actions on the promotion of healthy nutrition, such as implementation of nutrition guidelines in kindergartens and (pre-)schools and revising the nutrition guidelines in kindergartens. Furthermore, the Norwegian government has developed a national action plan on outdoor recreation, which is a follow up of the white paper published on this topic in 2016. Physical activity promotion for children will probably part of it.

The Norwegian national centre for food, health and physical activity, established in 2013, is responsible for the promotion of healthy nutrition and physical activity in Norway. It is contributing to networks and cooperation across disciplines and education and showing how nutrition and physical activity can be naturally integrated across disciplines. Furthermore it is amongst others responsible for the development and dissemination of knowledge, and the provision of experience-based support and guidance material.

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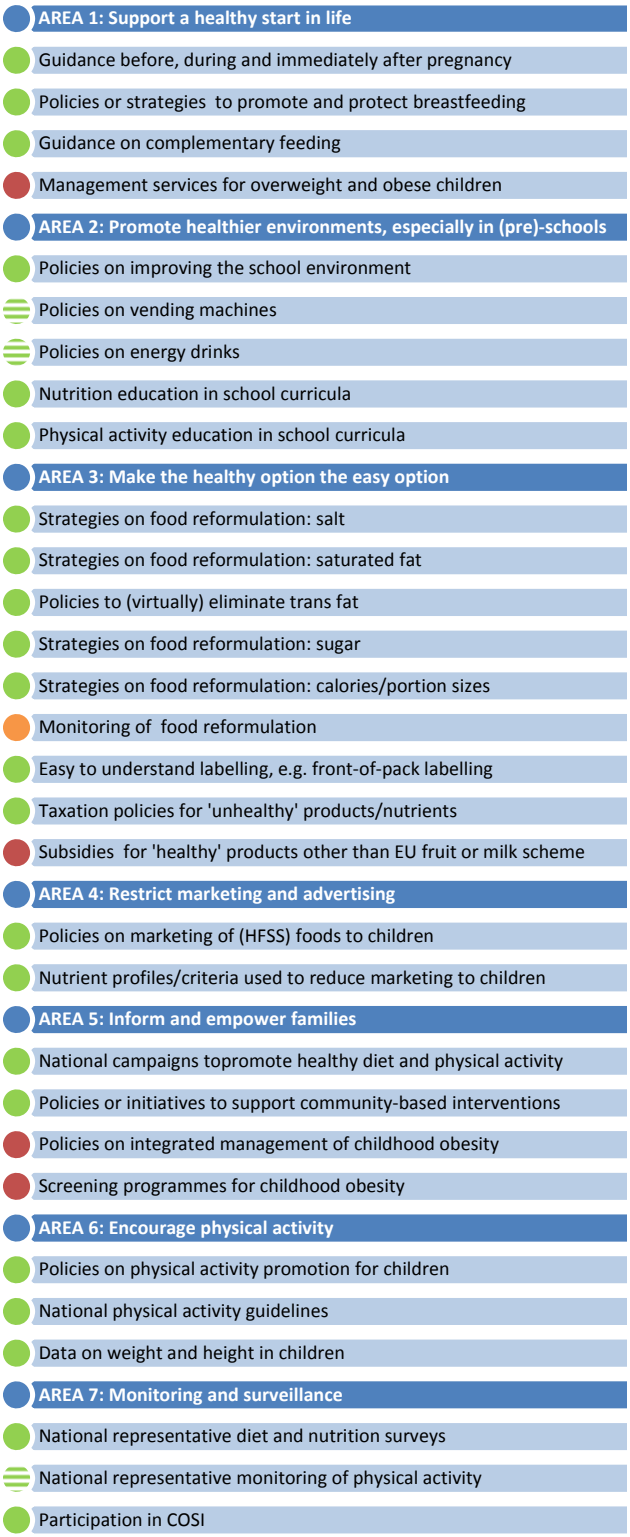

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4.21 Poland

Based on the interview conducted with the Polish Competent Authorities we learned that Poland does not have a National Action Plan on Childhood Obesity. Physical activity promotion, nutrition and nutritional status are integrated in two governmental priority documents, i.e. the 'Act on Public Health' from September 11, 2015 and the 'regulation of the Council of Ministers from August 4, 2016 on the National Health Programme for the period 2016-2020'. In these documents there are operating tasks on the improvement of nutrition and physical activity. These operating tasks are directed at the global population, but there are smaller tasks for children as well. In the National Health Programme the following tasks are mentioned: 1) promotion of proper nutrition and physical activity especially in schools and preschool institutions, 2) improvement of the availability of advice on nutrition and dietetic given to pregnant women and parents of children from 0-5 by health professionals, 3) programmes aimed at the reduction of body mass among people with overweight and obesity and 4) epidemiologic studies on the prevalence of overweight and obesity in Poland as well as financial support for such projects. Health inequalities are not directly addressed in projects on nutrition of physical activity. However, the National Health Programme supports smaller and more deprived areas in the country with the plans in the programme. The Ministry of Health is responsible for realisation of the National Health Programme, and several institutions are designated to realise particular tasks, among them the National Food and Nutrition Institute.

The National food and nutrition institute recently reported to the Polish Ministry of Health about the project "School friendly to nutrition and physical activity". It is a certification programme about the improvement of nutritional education and physical activity to reduce overweight and obesity and to improve the educational opportunities of children and adolescents. They are waiting for the decision of Polish Ministry of Health on the implementation of the project.

Probably, the EU Action Plan on Childhood Obesity 2014-2020 did not directly stimulate development or implementation of policies yet. For the Polish government the actions/policies are implemented in the national health programme and in the Law on public health.

Overview according to the various areas of action mentioned in the EU Action Plan

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4.22 Romania

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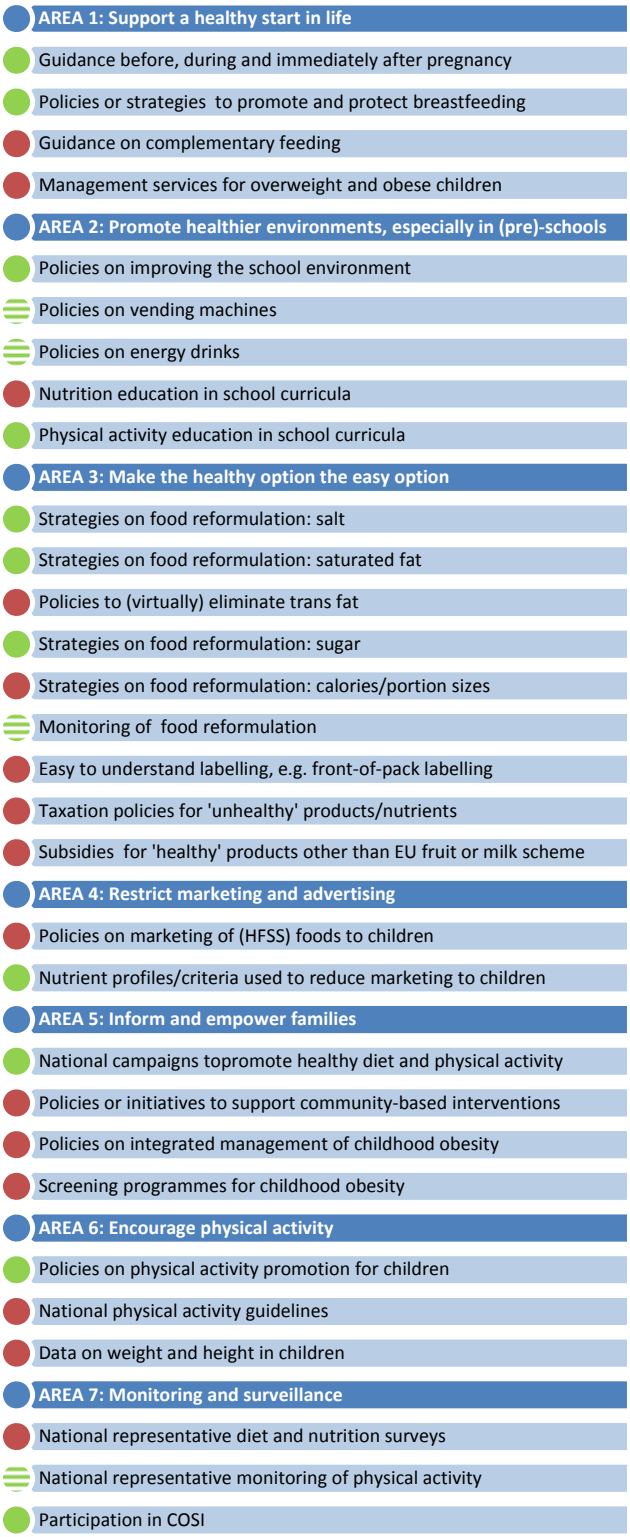

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4.23 Slovakia

Based on the interview conducted with the Slovakian Competent Authorities we learned that Slovakia has a National Action Plan for Obesity Prevention, running from 2015 to 2025. There is a part on children, describing several activities for children, which cover most areas of action of the EU Action Plan on Childhood Obesity 2014-2020. Furthermore, the National Health Promotion programme and Strategic framework of care for health for the years 2014 – 2030 was adopted in 2013. This programme addresses noncommunicable diseases as priority topics. Slovakia is in the process of developing a national action plan for physical activity promotion (2017-2020) and a national action plan for food and nutrition (2017-2025) is in the process of being adopted by Slovakian Government. There is intersectoral cooperation between the Ministry of Health, Ministry of Education, and the Ministry of Social Efforts, to improve the effects of the action plans. The public Health authority of the Slovak Republic has a working group/advisory board that coordinates and makes new proposals on obesity prevention. It also monitors the activities of the action plan on obesity prevention. The working group cooperates with research institutes and universities, but there is room for improvement to make the working group more effective. The Ministry of Education plans to improve personal capacities of this working group.

From a medical point of view, nutrition and physical inactivity are the main risk factors for non-communicable diseases. Therefore, nutrition and physical activity are included in the National Programme on Obesity Prevention as priority topics for the health sector (Ministry of health and health authorities). From the point of view of the education sector, education itself is one of the main determinants of health. Therefore, for the Ministry of Education priority topics include general education for teachers, parents and children about healthy lifestyles and about nutrition. The focus is on informal education, provided during leisure time activities after school in. There is already attention for adding this topic in formal education in the future. Health inequalities are not addressed directly in the action plans or policies. A health promotion programme for vulnerable groups existed in 2009, but finished now.

The question how the EU Action Plan on Childhood Obesity facilitates development or implementation of any of the policies is difficult to answer. It might have some influence, but nobody measures when and how it facilities development or implementation.

Overview according to the various areas of action mentioned in the EU Action Plan

yes, already before EU Action plan*, partially, for example in certain settings or certain regions*, yes, since EU Action plan*, no**, in preparation or planned***, unknown

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4.24 Slovenia

Based on the interview[15] conducted with the Slovenian Competent Authorities we learned that following a government resolution, the National Programme for Nutrition and Health Enhancing Physical Activity (HEPA) 2015—2025 has been adopted in Slovenia in 2015. As part of the National Programme, the Slovenian Ministry of Health has adopted one comprehensive Action plan on nutrition and physical activity (2015-2025), which is also relevant to children below the age of 18 years. Childhood obesity prevention is part of this action plan. The plan defines ten areas of action:

1. Nutrition, in line with guidelines
2. Improvement of the food offer
3. Healthy choices for socially disadvantaged and vulnerable groups
4. Local sustainable food supply and food safety
5. Food labelling and marketing
6. Encouraging health enhancing physical activity in different life periods
7. Creating environments that support physical activity
8. Increase the role of primary health care and hospitals in prevention and health promotion to prevent chronic diseases and obesity
9. Education and research on nutrition and physical activity
10. Provide information and raise awareness about nutrition and physical activity within the general population and subgroups in the population

All actions in Slovenia take health inequalities into account and there are specific actions targeting lower socio economic and vulnerable groups (see area 3 of the Slovenian action plan). For example, people in need get food via reserves of the government, and it is important that they are provided with healthy food.

The National Programme is led by the Ministry of Health that is also the main coordinating authority for the action plan. An inter-sectoral group has developed the action plans and works on the implementation. Next to this, task groups will be composed and active on specific topics when there is a need for it. Next to ministries (e.g. Ministry of Finance, Ministry of Education, Ministry of Public Administration, Ministry of Social Affairs and Family) also other organisations are involved in the task groups, such as NGOs, consumer organisations, academics, industries and paediatrics clinics.

Slovenia had a comprehensive evaluation of the previous nutrition policy and less extensively for the physical activity policy. Amongst others, the lessons learned from this evaluation were used to set priorities topics and settings. The health system is one of the priority settings. The main priority topics for 2017 and 2018 are the following:

- Nutrition in early childhood, e.g. breastfeeding and complementary feeding.
- Marketing of food to children.
- Physical activity in the school system.
- Implementation of improved and new programmes for the prevention and management of childhood obesity.

In the near future, a more comprehensive approach for food reformulation is planned. A draft report “Healthy choice is the easy choice” (2017-2025) will hopefully be adopted within a few months. It will include legislation on trans fatty acids. Several industries, like

[15] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

dairy and bakery, will probably agree soon on reformation agreements. Furthermore, Slovenia is planning to update policies for food procurement.

The EU Action Plan on Childhood Obesity provides support and is definitely encouraging. Slovenia participated actively in the preparation of the action plan, so it is 'hand-in-hand' work together with the input of other countries.

Overview according to the various areas of action mentioned in the EU Action Plan

[1] Existed already, but has been improved. ● yes, already before EU Action plan*, ◓ partially, for example in certain settings or certain regions*, ● yes, since EU Action plan*, ● no**, ● in preparation or planned***, ● unknown. * Indicates that an action is (partially) undertaken, but does not contain an evaluation of effectiveness from our part. ** Actions may, however, be undertaken on initiative from local authorities, NGO's or private parties. *** Adoption may still be contingent on policy process.

4.25 Spain

Based on the interview conducted with the Spanish Competent Authorities we learned that there is no national action plan on childhood obesity in Spain. However, since 2005 the NAOS Strategy (Nutrition, Physical activity, and Prevention of Obesity Strategy) of the Spanish Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN) focuses on several approaches to promote a healthy diet and improve physical activity in order to prevent obesity. It was launched by the Ministry of Health, Social Services and Equality and further strengthened in 2011 by the Spanish Law 17/2011 on Food Safety and Nutrition. The NAOS strategy takes a holistic and comprehensive approach from different settings (school, family and community, enterprise, health and working environment) coordinating and empowering synergy between different public and private stakeholders. Prevalence of obesity among 6-9 year old children in Spain is high, although it decreased significantly since 2011 from 26.2% to 23.2%. The prevalence of obesity remained stable, so the prevalence of overweight including obesity has been reduced since 2011 (from 44.5% to 41.2%). So, it is confirmed that the temporal obesity trend among 6-9 year old children has switched in Spain. These data reinforce the necessity to continue encouraging policies to achieve further decrease in overweight and obesity and to monitor further trends with further information collection. Education and making the choice for healthier options easier are important ways to improve diet and physical activity. Therefore, there are several priority topics in Spain:

- Information and education
- Special promotion in school environment (Law 17/2011 article 40)
- Reformulation and make easy healthier options
- Involvement in providing information to families
- Promote and empower interventions, initiatives and programmes close to the citizens (in the community, health centre, social environments)
- Co-regulation of food and beverages advertising directed to minors (PAOS code)
- Monitoring of childhood obesity trough the WHO Childhood Obesity Surveillance Initiative (COSI)

Socioeconomic differences and health inequalities are always taken into account when developing strategies. In the framework of The Observatory for Nutrition and Obesity, epidemiological data on nutrition and obesity are collected and analysed by gender and socioeconomic factors. The results are used to improve strategies and prioritize most vulnerable groups. The information is transmitted to regional authorities and to others stakeholders.

The NAOS Strategy (AECOSAN) is planning to start new campaigns, such as campaigns on sugar and breastfeeding in the next future. Furthermore NAOS Strategy works together with regional authorities (Health and Education authorities), medical professionals in primary health care and other sectors to look for effective actions, interventions and good practices that can be implemented for the prevention of childhood obesity.

Since 2008, the NAOS Strategy is working jointly with the Regional authorities of Health of the Autonomous Communities through a technical working group, in the areas of responsibility of each Administration. The working group also liaises with national and regional authorities of Agriculture and Education when issues concerning them are addressed. The group develops joint initiatives for which consensus or shared criteria are needed to facilitate better, more uniform implementation or development in Spain. This

concerns initiatives on issues addressed in Law 17/2011 on Food Safety and Nutrition, on programmes to promote healthy diets, nutrition and physical activity for the prevention of obesity or on European lines of action, etc. After discussions in the technical working groups, technical conclusions are transferred to others commissions, integrated by General Directors, who take the final decision.

Physical activity promotion is managed by several institutions, i.e. the Ministry of Health, Social Services and Equality (including AECOSAN and another Directorate), the High Council for Sports (CSD), and the corresponding regional authorities (Health, Education and Sports). CSD is the focal point for the HEPA working group (WHO), established in 2015. The working group brings together representatives from various ministries and autonomous communities, and is primarily tasked with aligning the activities of the different government actors, gathering information and analysing data for all issues relating to HEPA.

For Spain, the EU Action Plan on Childhood Obesity is a very useful framework to help implement or strengthen national policies. It also facilitates the adoption of measures if there is an European perspective. Referring to an EU plan facilitates discussions with various stakeholders (e.g. industry). Furthermore, information and best practices can be shared with other countries in a constructive and positive way.

Overview according to the various areas of action mentioned in the EU Action Plan

yes, already before EU Action plan*, partially, for example in certain settings or certain regions*, yes, since EU Action plan*, no**, in preparation or planned***, unknown

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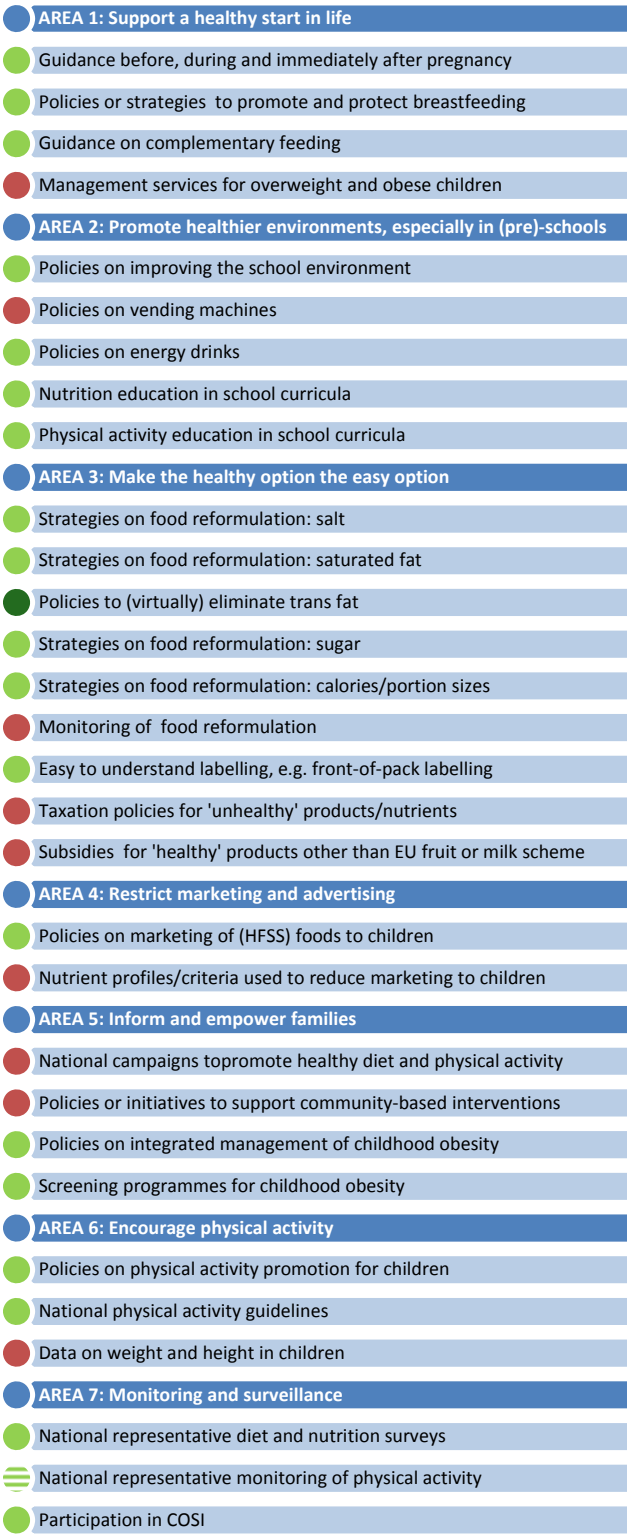
4.26 Sweden

A general description of the policies related to the prevention and management of childhood obesity will be included in the final report, expected to be published by the European Commission in 2018. However, an overview according to the various areas of action mentioned in the EU Action Plan is provided below.

Overview according to the various areas of action mentioned in the EU Action Plan



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4.27 Switzerland

Based on the interview[16] conducted with the Swiss Competent Authorities we learned that Switzerland has adopted a strategy and an Action Plan on non-communicable diseases in 2016. It includes several actions targeted to children in the area of prevention and health promotion, health care and health in businesses. School is an important setting. There are projects included for children in different age groups, ranging from 0 year olds, to 12-18 year olds. An action plan on nutrition will be released at the end of 2017. This action plan will address the general population and several target groups, i.e. mothers, pregnant women, children and elderly. Improvements of the "Swiss Nutrition Policy 2013–2016", which will be reviewed this summer, are important input for the action plan. Guidelines on physical activity, specifically targeting 0-3 year olds and elderly will soon be issued.

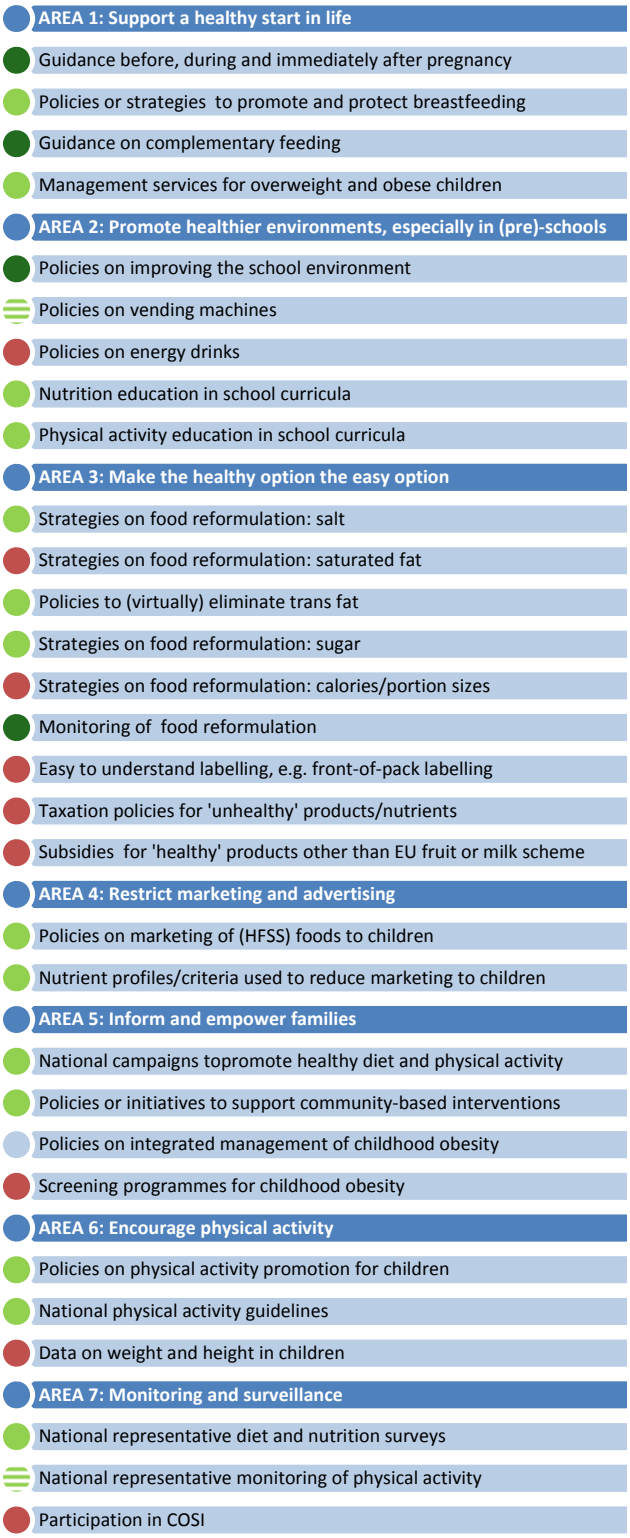
Supporting a healthy start in life is a very important area of action for the Swiss national authorities. More specifically, important topics are to support breastfeeding, complementary feeding and the development of physical activity and nutrition guidelines for children. These are the priority areas because of the notion that the first 1000 days since conception are important for health. Furthermore, Switzerland puts a lot of effort in working together with several partners, such as health professionals, and the Cantons. The latter are important partners in the promotion of health as Switzerland is federally organised.

Health inequalities are addressed by promoting a healthier environment in schools and pre-schools, by educating parents and by education children already from a young age onwards. Implementation in this field largely lies at the Cantons, but national authorities can facilitate by the development of guidelines, stimulation of the development of healthier foods and restrictions on marketing. The Federal Commission on Nutrition provides the Swiss Government with scientific information, e.g. for the development of such (nutrition) guidelines, and make recommendations to the Federal Food Safety and Veterinary Office (FSVO) and health ministers. Furthermore, there are several platforms on the prevention of non-communicable disease, e.g. on nutrition and a task force on public health that covers the topics of nutrition and physical activity promotion. These groups provide the possibility to exchange information, to develop an evidence base and to see which projects do work well.

Switzerland cannot officially adopt the EU Action Plan on Childhood Obesity, but they do support the Action Plan. The EU action plan was an important basis and facilitated the development of the aforementioned strategies on nutrition and non-communicable diseases.

[16] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan



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4.28 United Kingdom

Based on the interview[17] conducted with the British Competent Authorities we learned that the Department of Health published on 18 August 2016 'Childhood obesity: a plan for action'. This is the government's plan to reduce England's rate of childhood obesity within the next 10 years by encouraging industry to cut the amount of sugar in food and drinks and primary school children to eat more healthily and stay active. The launch of this plan represents the start of a conversation, rather than the final word, although clear goals and firm actions are described. The UK has chosen those policies that would have the most impact and will be most efficient to implement. These include:

- Introducing a soft drinks industry levy
- Taking out 20% of sugar in products
- Supporting innovation to help businesses to make their products healthier
- Developing a new framework by updating the nutrient profile model
- Making healthy options available in the public sector
- Continuing to provide support with the cost of healthy food for those who need it most
- Helping all children to enjoy an hour of physical activity every day
- Improving the co-ordination of quality sport and physical activity programmes for schools
- Creating a new healthy rating scheme for primary schools
- Making school food healthier
- Clearer food labelling
- Supporting early years settings
- Harnessing the best new technology
- Enabling health professionals to support families

The UK expects that all policies will have some effect on health inequalities, as they will affect lower socioeconomic groups more. As a first major step towards tackling childhood obesity, a soft drinks industry levy will be introduced across the UK. In England, the revenue from the levy will be invested in programmes to reduce obesity and encourage physical activity and balanced diets for school age children.

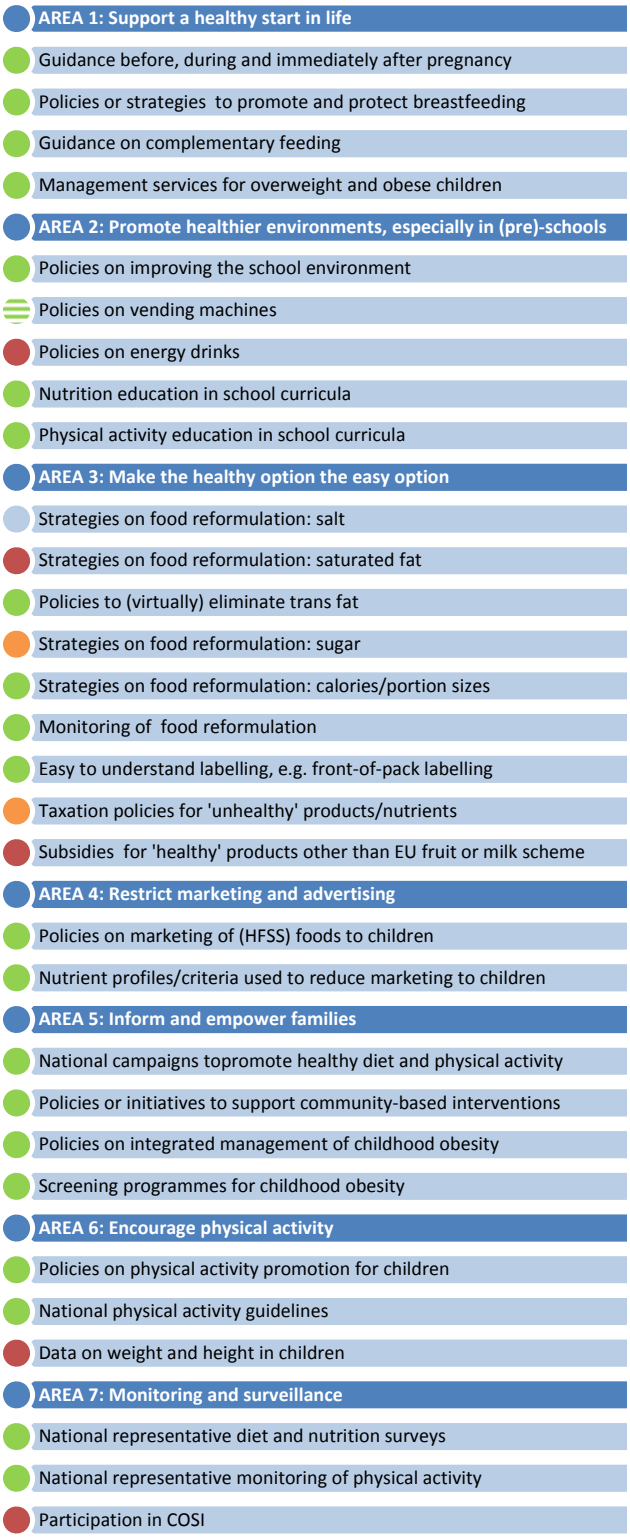
For the Childhood Obesity Action Plan a cross-governmental steering group has been installed, including representatives from the Department of Health, The Department of Education, and Public Health England, etc. This group cannot issue policy documents but is more a management group that sees that the actions in the Action Plan are being carried out. Furthermore, various working groups address specific technical topics included in the Action Plan.

The National Institute for Health and Care Excellence (NICE) published 'National guidance on the prevention of overweight and obesity in adults and children' in England and Wales in 2006 and updated them in 2015. Furthermore, the National Health Services (NHS) is mandated for preventing and treating non-communicable diseases and specific goals are determined. However, how to reach these goals is up to NHS, local authorities and health care providers. NICE issues a lot of guidelines and protocols for GP's and other health care professionals to support them.

The EU Action Plan on Childhood Obesity 2014-2020 acts as a benchmark and reference for the UK to see whether what they have planned is in line with other countries and to see whether other countries move in the same direction. The EU Action Plan had no direct influence on the development of the National Action Plan.

[17] Note that the results for this and other interviews are preliminary and pending on change, as all interview have been conducted in late December 2016 and January 2017 and have therefore not yet been accorded by all interviewees.

Overview according to the various areas of action mentioned in the EU Action Plan



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References

1. Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K, Adair-Rohani H, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet. 2012;380(9859):2224-60.
2. Reilly JJ, Kelly J. Long-term impact of overweight and obesity in childhood and adolescence on morbidity and premature mortality in adulthood: systematic review. Int J Obes (Lond). 2011;35(7):891-8.
3. Gurnani M, Birken C, Hamilton J. Childhood Obesity: Causes, Consequences, and Management. Pediatr Clin North Am. 2015;62(4):821-40.
4. Rennie KL, Johnson L, Jebb SA. Behavioural determinants of obesity. Best Pract Res Clin Endocrinol Metab. 2005;19(3):343-58.
5. Pereira MA. Sugar-sweetened and artificially-sweetened beverages in relation to obesity risk. Adv Nutr. 2014;5(6):797-808.
6. Boulos R, Vikre EK, Oppenheimer S, Chang H, Kanarek RB. ObesiTV: how television is influencing the obesity epidemic. Physiol Behav. 2012;107(1):146-53.
7. Swinburn BA, Sacks G, Hall KD, McPherson K, Finegood DT, Moodie ML, et al. The global obesity pandemic: shaped by global drivers and local environments. Lancet. 2011;378(9793):804-14.
8. Huang TT, Glass TA. Transforming research strategies for understanding and preventing obesity. JAMA. 2008;300(15):1811-3.
9. Lobstein T, Jackson-Leach R, Moodie ML, Hall KD, Gortmaker SL, Swinburn BA, et al. Child and adolescent obesity: part of a bigger picture. Lancet. 2015;385(9986):2510-20.
10. Wang Y, Wu Y, Wilson RF, Bleich S, Cheskin L, Weston C, et al. Childhood obesity prevention programs: comparative effectiveness review and meta-analysis. Comparative effectiveness review no. 115. . Rockville, MD: Agency for Healthcare Research and Quality; 2013. Report No.: Report No.: 13-EHC081-EF.
11. World Health Organisation. Population-based approaches to childhood obesity prevention. Geneva: World Health Organisation; 2012.
12. Commission of the European Communities. White paper on A Strategy for Europe on Nutrition, Overweight and Obesity related health issues. Brussels; 2007. Contract No.: COM(2007) 279.
13. EU Action Plan on Childhood Obesity 2014-2020. 2014.
14. Wijnhoven TM, van Raaij JM, Spinelli A, Starc G, Hassapidou M, Spiroski I, et al. WHO European Childhood Obesity Surveillance Initiative: body mass index and level of overweight among 6-9-year-old children from school year 2007/2008 to school year 2009/2010. BMC Public Health. 2014;14:806.
15. de Onis M, Onyango AW, Borghi E, Siyam A, Nishida C, Siekmann J. Development of a WHO growth reference for school-aged children and adolescents. Bull World Health Organ. 2007;85(9):660-7.
16. Cole TJ, Bellizzi MC, Flegal KM, Dietz WH. Establishing a standard definition for child overweight and obesity worldwide: international survey. BMJ. 2000;320(7244):1240-3.
17. Cole TJ, Lobstein T. Extended international (IOTF) body mass index cut-offs for thinness, overweight and obesity. Pediatr Obes. 2012;7(4):284-94.
18. Kunesova M, Vignerova J, Parizkova J, Prochazka B, Braunerova R, Riedlova J, et al. Long-term changes in prevalence of overweight and obesity in Czech 7-year-old children: evaluation of different cut-off criteria of childhood obesity. Obes Rev. 2011;12(7):483-91.
19. Chirita-Emandi A, Barbu CG, Cinteza EE, Chesaru BI, Gafencu M, Mocanu V, et al. Overweight and Underweight Prevalence Trends in Children from Romania - Pooled Analysis of Cross-Sectional Studies between 2006 and 2015. Obes Facts. 2016;9(3):206-20.
20. Mayer M, Gleiss A, Hausler G, Borkenstein M, Kapelari K, Kostl G, et al. Weight and body mass index (BMI): current data for Austrian boys and girls aged 4 to under 19 years. Ann Hum Biol. 2015;42(1):45-55.

21. Savva SC, Kourides YA, Hadjigeorgiou C, Tornaritis MJ. Overweight and obesity prevalence and trends in children and adolescents in Cyprus 2000-2010. Obes Res Clin Pract. 2014;8(5):e426-34.
22. Schonbeck Y, Talma H, van Dommelen P, Bakker B, Buitendijk SE, Hirasing RA, et al. Increase in prevalence of overweight in Dutch children and adolescents: a comparison of nationwide growth studies in 1980, 1997 and 2009. PLoS One. 2011;6(11):e27608.
23. World Health Organisation. Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study : International report from the 2009/2010 survey. Copenhagen: World Health Organisation; 2012.
24. World Health Organisation. Growing up unequal: gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-aged Children(HBSC) study: International report from the 2013/2014 survey. Copenhagen: World Health Organisation; 2016.
25. Clarke P, Sastry N, Duffy D, Ailshire J. Accuracy of self-reported versus measured weight over adolescence and young adulthood: findings from the national longitudinal study of adolescent health, 1996-2008. Am J Epidemiol. 2014;180(2):153-9.
26. Lobstein T, Jackson-Leach R. Planning for the worst: estimates of obesity and comorbidities in school-age children in 2025. Pediatr Obes. 2016;11(5):321-5.
27. Campbell MK. Biological, environmental, and social influences on childhood obesity. Pediatr Res. 2016;79(1-2):205-11.
28. World Health Organisation. Marketing of foods high in fat, salt and sugar to children: update 2012–2013. Copenhagen: WHO Rgeional Office for Europe; 2013.