

CoDiet

COMBATting DIET RELATED NON-COMMUNICABLE DISEASE THROUGH ENHANCED SURVEILLANCE

D6.1 Report on update to Food-EPI assessments describing policy scenarios

Deliverable number D6.1

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Task Leader	Sciensano
Prepared by	Jessie Van Kerckhove and Stefanie Vandevijvere - Sciensano
Contributors	<p>Franco Sassi – ICL</p> <p>Marco Silano and Valentina De Cosmi – ISS</p> <p>Josep Antoni Tur Mari and Cristina Bouzas – CIBER</p> <p>Marit Priinits - National Institute of Health Development, Tallinn</p> <p>Päivi Mäki - Finnish Institute of Health and Welfare, Helsinki</p> <p>Tiina Laatikainen - University of Eastern Finland and the Finnish Institute of Health and Welfare</p> <p>Maria João Gregório, Joana Carriço and Inês Castela - Directorate-General of Health of Portugal</p> <p>Monika Robnik and Mojca Gabrijelčič - National Institute of Public Health of Slovenia</p>
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Foreword

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Project Coordinator:

Itziar Tueros – itueros@azti.es | AZTI |

WP6 Leader:

Franco Sassi – f.sassi@imperial.ac.uk | PARTNER |

Task Leader:

Stefanie Vandervijvere - stefanie.vandevijvere@sciensano.be | PARTNER

Jessie Vankerckhove - jessie.vankerckhove@sciensano.be | PARTNER |

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List of abbreviations

COMP	Composition
COSI	WHO European Childhood Obesity Surveillance Initiative
DGS	Directorate-General of Health
EHIS	European Health Interview Survey
Food-EPI	Health Food Environment Policy Index
FOP	Front-of-Pack
HBSC	Health Behaviour in School-aged Children
HSPA	Health System Performance Assessment
JANPA	Joint Action on Nutrition and Physical Activity
NCD	Non-communicable diseases
NIHD	National institute for health development (Estonia)
PAOS	Publicidad, Actividad, Obesidad y Salud (Advertising, Activity, Obesity and Health)
PEN	Policy Evaluation Network
PROV	Provision
STOP	Science and Technology in childhood obesity

Executive summary

The CODIET deliverable (D6.1) reports on the analysis of the design and implementation of different policies regarding food composition, marketing restrictions to children, labeling of food products, fiscal policies, as well as the monitoring and evaluation practices in several European countries, and their linkages with health inequalities. This deliverable is for task 6.1: Benchmarking and analysis of policies to improve diets in six EU countries. This task builds on the policy benchmarking work undertaken in the H2020 Science and Technology in childhood Obesity (STOP) and Policy Evaluation Network (PEN) project, utilizing the Health Food Environment Policy Index (Food-Epi) across 11 European countries between 2019 and 2021.

The six countries' national public health agencies provided, with the help of Sciensano, an update of the evidence on the design and implementation of selected good practice policy indicators part of the Food-EPI, diving into two areas that are especially relevant in CoDiet: (1) an assessment of the extent to which the design of policies is targeted to addressing the dietary dimensions most closely linked with NCD risk in the countries of interest and (2) an assessment of the surveillance approaches countries have put in place to monitor policy impacts. Based on these data, Sciensano will develop a range of policy scenarios combining the strengths of approaches adopted in the countries observed in several key policy areas, for evaluation in task 6.3.

Most countries have some policies in place with regards to composition of foods (mostly in regards to the nutrients of concern in packaged foods (COMP1), a FOP-label (LABEL3), a form of taxation of sugar-sweetened beverages (PRICES2), restrictions on marketing of unhealthy foods towards children on different platforms (PROMO1-5) and regulations around provisions in different settings (school, PROV1 and public settings, PROV2). It is notable that most of these policies rely on a voluntary, co-regulated or self-regulated basis. Only a few policies are mandatory, like those targeting marketing to children (Portugal, Slovenia, Estonia and Spain), salt in certain bread and bread-related products (Portugal, Slovenia, Spain) or mandatory labeling if a product is high in salt (Finland) or nutritional content of meals provided in schools or other settings (Portugal, Estonia and Slovenia). Many of them are not monitored frequently, making it hard to evaluate the impact of these regulations.

Based on the information provided, we selected the best available policies implemented across multiple countries to take with us in the next phase. These will be composition 1, specifically focusing on the mandatory policies around salt, prices 2, promotion (specifically 1,2 and 4) and provision 1. The indicator label 3 on FOP labeling was not taken into the next phase, as this is a discussion that is currently taken place on higher levels within Europe. Composition 1, and then specifically salt, was chosen since some countries indicate that they have mandatory regulations in place for specific sectors (baking sector) or products (bread and bread products). In comparison, Finland uses in this case the mandatory label high in salt. It should thus be interesting to see if these have an impact in salt intake in a population. Prices 2, specifically taxation of sugar sweetened beverages, was chosen as all 6 countries have some form of taxation in place. Estonia, Finland and Spain specifically have a food group based tax on sugary/sweetened drinks (Estonia and Finland in the proposition/development phase, Spain in the implementation phase). In Spain this resulted in an increase of the tax from 10% to 21%. The other countries have nutrient based taxes on sugar or sweeteners (only in Portugal implemented). In Portugal, this resulted in an excise tax. Slovenia has a

proposition for an ad valorem tax and a sales tax aimed at consumers, and Italy has developed an excise tax and sales tax aimed at consumer, which would result in an increase in retail price of 50%. The implementation of this taxation is on hold and scheduled after 01/07/2025. Comparing the effectiveness of the different measures of taxation can be taken into account during further analysis. Promotion was taken into account, and then mainly tv and radio (PROMO1) and settings where children gather (PROMO4), because these continue to be places where children are highly exposed to unhealthy foods. A closer look is also taken at social media advertisements (PROMO2), however, it should be noted that this is also partly EU responsibility, making it a more complex puzzle for the nations to implement certain restrictions. There are countries (Portugal, Slovenia and Spain) who are actively looking into regulating social media advertisements. And lastly, provision in schools was taken into account as the different countries have different approaches (universal free meals, subsidized meals for lower SES groups, no regulations) and it is worth exploring the most beneficial approach in simulation.

Introduction

It is irrefutable that unhealthy dietary patterns, rich in sugar, saturated fat and salt and low in vegetables, wholegrains and fruits, play a vital role in the development of non-communicable diseases (1). In the European Union, NCDs represent one of the biggest burdens for public health (80%), making them the leading cause of avoidable premature deaths (2). In addition, NCDs are accompanied with substantial direct and indirect costs on the healthcare system (3). NCDs are also highly preventable diseases. It is estimated that, by using a holistic approach and tackling health inequalities across Europe will contribute to a decrease in NCD-disease burden by 70% (2).

It should be noted that the decision of eating unhealthy is not merely an individual choice. There are a number of other factors linked to this decision, like the food environment (4). The concept of the food environment encompasses a number of elements, such as the politics (subsidies and regulations), the economy (food affordability) and the structure (for example, the marketing) (5).

It is also known that certain groups are more vulnerable for unhealthy diets compared to others. People with a lower socio-economic status have been consistently observed to have on the one hand reduced access to healthy foods in an affordable manner and on the other hand higher exposure to unhealthy marketing (6,7). In designing policies, these people are often hit either the hardest (for example, by increase of taxation) or affected the least, continuing their exposure to unhealthy foods. This combination ensures that lower income populations have a higher risk of developing NCDs throughout their life course (7).

There has been a growing interest to monitor and evaluate food environments and policies around the world. In addition, there is also a growing recognition of the importance of personalized nutrition. There is thus a delicate balance between the individual and its surroundings. Whilst national governments cannot directly influence individual choices regarding food, there are several options (highlighted in the work of the Healthy Food Environment Policy Index) they can take to better the food environment and indirectly influence people's eating behaviour (4). Examples of these policies are composition targets in processed foods for the nutrients of concern (trans fats, saturated fats, added sugars and salt), marketing restrictions of unhealthy foods towards children, policies in schools to promote healthy food choices, front-of-pack labeling and taxation measures. The aim of this task was to evaluate these policy options over 6 different countries, with an additional focus on monitoring and evaluation provisions of these policies (implementation, adherence and effectiveness on health, diet, environment and cost) and an equity-focus, as it was stated above that policies are often, unintentionally, contributing to the widening gap of health inequalities.

Methods

Based on the work that was previously conducted for the STOP and PEN projects, a selection of relevant policy domains/indicators for update in CoDiet was made using a consensus-approach between different countries. For each of these indicators, a policy-mapping template was developed by Sciensano in order to obtain relevant information about each of the current policies within the different policy domains. In addition, a separate template was developed for monitoring and evaluation practices related to the different policy domains in the partner countries.

1. Included domains and indicators

The following policy-domains and related good practice policies were included in the mapping process:

Food composition

Composition 1 (COMP1): Food composition targets/standards/restrictions have been established by the government for the content of the nutrients of concern (trans fats, added sugars, salt, saturated fat in industrially processed foods), in particular for those food groups that are major contributors to population intakes of those nutrients of concern.

Composition 2 (COMP2): Food composition targets/standards/restrictions have been established by the government for the content of the nutrients of concern (added sugars, salt, saturated fat) in meals sold from food service outlets, in particular for those food groups that are major contributors to population intakes of those nutrients of concern.

Food labeling

Label 3: One or more interpretive, evidence-informed front-of-pack supplementary nutrition information system(s) endorsed by the Government, which readily allow consumers to assess a product's healthiness, is/are applied to all packaged foods (examples are the Nutri-Score and traffic lights)

Label 4: A simple and clearly-visible system of labelling the menu boards of all quick service restaurants (i.e. fast food chains) is applied by the government, which allows consumers to interpret the nutrient quality and energy content of foods and meals on sale.

Food promotion

Promo 1-5:

PROMO1

Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children including adolescents through broadcast media (TV, radio).

PROMO2

Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children including adolescents through online and social media

PROMO3

Effective policies are implemented by the government to restrict exposure and power of promotion of unhealthy foods to children including adolescents through non-broadcast media other than packaging and online/social media

PROMO4

Effective policies are implemented by the government to ensure that unhealthy foods are not

commercially promoted to children including adolescents in settings where children gather (e.g. preschools, schools, sport and cultural events).

PROMO5

Effective policies are implemented by the government to ensure that unhealthy foods are not commercially promoted to children, including adolescents, on food packages.

Food provision

Provision 1 (PROV1): The government ensures that there are clear, consistent policies (including nutrition standards) implemented in schools and early childhood education services for food service activities (canteens, food at events, fundraising, promotions, vending machines, etc.) to provide and promote healthy food choices.

Provision 2 (PROV2): The government ensures that there are clear, consistent policies in other public sector settings for food service activities (canteens, food at events, fundraising, promotions, vending machines, public procurement standards etc.) to provide and promote healthy food choices.

Food prices

Prices 1: Taxes or levies on healthy foods are minimized to encourage healthy food choices (e.g. low or no sales tax, excise, value-added or import duties on fruit and vegetables).

Prices 2: Taxes or levies on unhealthy foods (e.g. sugar-sweetened beverages, foods high in nutrients of concern) are in place and increase the retail prices of these foods by at least 10% to discourage unhealthy food choices, and these taxes are reinvested to improve population health

And the, in addition, a part on monitoring and evaluation

MONIT1

Monitoring systems, implemented by the government, are in place to regularly monitor food Environments (especially for food composition for nutrients of concern, food promotion to children, and nutritional quality of food in schools and other public sector settings), against codes / guidelines / standards / targets

MONIT2

There is regular monitoring of adult and childhood nutrition status and population intakes against specified intake targets or recommended daily intake levels

MONIT3

There is regular monitoring of adult and childhood overweight and obesity prevalence using anthropometric measurements

MONIT4

There is regular monitoring of the prevalence of NCD metabolic risk factors and occurrence rates (e.g. prevalence, incidence, mortality) for the main diet-related NCDs

MONIT5

Major programs and policies are regularly evaluated to assess their effectiveness and contributions to achieving the goals of the nutrition and health plans

MONIT6

Progress towards reducing health inequalities or health impacts in vulnerable populations and social and economic determinants of health are regularly monitored

2. Information of interest

The template was developed using literature and predetermined points of interest that could guide the simulation process for task 6.3. The survey then used different parts to organize the information that needs to be gathered and analyzed.

Part 1: is there evidence found, and if yes, who's the responsible government + related committees that developed/implemented the policy, what is contained in the policy, what is the stage of the policy, is it linked to population intake targets, and lastly the official start of the adoption and implementation.

Part 2: are there specific monitoring and evaluation provisions present for this specific policy, are there funding provisions and/or enforcement provisions.

Part 3: what is the impact and policy effectiveness (how will it be measured and what is already known) in 4 domains: health, diet, environmental and cost.

Part 4: general questions regarding equity, awareness, public support and possible negative consequences.

3. Policy implementation, monitoring and impacts

The analyses of the different policies was executed by Sciensano based on the input of the partner countries themselves. Using the input, the answers were compared in the different policy domains, to see which countries excel in certain domains and how they have designed the policy to be effective.

4. Equity, negative consequences and awareness

Also of particular interest in CoDiet, is a more individual approach. As task 6.1 encompasses policies, generally not aimed at the individual, estimating the impact on every individual is extremely difficult. It is however possible to assess the equity aspect of policies. Is the policy implemented based on the principles of universal proportionalism, as to not contribute to existing disparities, or was the equity aspect rather neglected, not taking into account that health disparities could increase. In addition, possible negative consequences of a certain policy are also investigated (known ones or estimated ones). Lastly, awareness and public support for each of the policies was investigated.

Results

1. Composition 1

As found in table 1, all countries have specific policies to improve the composition of the food supply, with regards to the nutrients of concern (trans fats, added sugars, salt/sodium and saturated fats) in place. However, most of the countries rely on a voluntary approach (Slovenia, Spain and Italy have industry self-regulation, or are on track to develop one, like Estonia. Finland and Portugal rely on co-regulation, with the exception of salt, which are mandatory standards).

For trans fats, there is now a European regulation that the maximum level must not exceed 2g per 100g of total fats. All countries take this approach, but none of them have a more strict national regulation. Portugal indicated that they do have the co-regulation in place where the aim goes towards zero grams of trans fats, but there is no monitoring in place to assess whether companies are actively trying to achieve this zero-target. Spain indicated that there is a commitment in place to reduce trans fats beyond the targets set at European level in the baking sector, but here also there are no monitoring mechanisms in place to assure that the baking sector is gradually eliminating trans fats from their products.

For added sugars, there is an overall focus to reduce the sugar content, especially in products that are consumed frequently by children (breakfast cereals, milk products, bakery products and soft drinks for example). Even though all countries have these targets in place, there was no assessment of the impact and/or policy effectiveness of these voluntary commitments, with the exception of Portugal. Portugal has monitoring mechanisms in place, where they measured between 2018 and 2021 an overall reduction of 11.1% of average sugar content in food groups included in the agreement, with soft drinks having a 16.5% reduction, the largest of the monitored food groups. It is estimated that, in Portugal, during the time period, there was an overall reduction of 6256.1 tons of sugar in the included food groups.

For salt, some countries have mandatory standards in place that apply specifically for the baking sector, for bread and bread products (Portugal, Slovenia, Spain). In addition, there are voluntary agreements, both within the baking sector to further reduce the salt content (Portugal) as with other companies for a range of processed foods. Finland uses the label “high in salt” (which is mandatory to put on the package) for a set of products, like cheeses, sausages, fish products, bread, breakfast cereals, ready meals and snack products. There are specific limits set for the high salt content of these different food products. Between 2018 and 2021 in Portugal, there was a global reduction of 11.5% of average salt content in food groups included in the agreement (potato chips and savory snacks, breakfast cereals and pizzas), with pizzas having a 22.3% reduction. For saturated fats, only in Spain and Finland there are currently guidelines or commitments with regards to the reduction of saturated fats. In Finland, the national Nutrition Recommendations and the separate Responsible Food Service Procurement Guide (2021) include the nutrition criteria for saturated fats in different components of a meal. Standards are in place for sauces, soups and porridge, pastas, risottos and pizzas, side dishes, mashed potatoes, bread spread and salad dressings. In Spain, focus is given to reduction of saturated fats in dairy products, such as yoghurt and cheeses.

Table 1: data collected on composition 1 by the different countries (parts 1-3)

	Estonia	Finland	Italy	Portugal	Slovenia	Spain
Evidence + Which nutrients of concern	Yes: Added sugars, Salt Saturated fats	Yes: Salt Saturated fats	Yes: Sugars, Saturated fats, Salt	Yes: Trans fats Salt Added sugars	Yes: Added sugars, Salt (Iodization of salt)	Yes: Added sugars, Salt Saturated fats
Responsible	Ministry of social affairs in cooperation with NIHD and other related ministries (+ industry consultation)	Ministry of Agriculture and Forestry Ministry for Social Affairs and Health The Finnish Food authority and the National Nutrition Council of Finland	Ministry of Health	Ministry of Health (through the Directorate-General of Health - DGS)	Ministry of Health and Ministry of Agriculture, forestry and food + committee to monitor the “commitment to responsibility”	Ministry of Health Spanish agency for food safety and nutrition (ASEAN) Spanish agency for medicines and health products Spanish federation of societies of nutrition, food and Dietetics Spanish national research council
Stage	In development	Implementation	Implementation	Implementation & Evaluation	Implementation	Implementation
Type of regulation	Voluntary nutrition standards	Mandatory nutrition standards through regulation (salt) Voluntary nutrition standards (saturated fats)	Industry self-regulation The Ministry of Health invited the private sector to reformulate their product, without	Nutrition standards through co-regulation	Industry self-regulation (exemption: iodization – mandatory)	Industry self-regulation / voluntary standards

			setting any threshold			
Trans fats	Only the European regulation: Commission Regulation (EU) 2019/649 restricts the trans-fat content of industrial food products.	Only the European regulation: Commission Regulation (EU) 2019/649 restricts the trans-fat content of industrial food products.	Only the European regulation: Commission Regulation (EU) 2019/649 restricts the trans-fat content of industrial food products.	DGS has signed a co-regulation agreement for the reformulation of processed foods with the Federation of Portuguese Agri-food Industries and the Portuguese Association of Distribution Companies, setting voluntary targets for reducing trans-fatty acids in a range of processed foods, in addition to the European regulation	Only the European regulation: Commission Regulation (EU) 2019/649 restricts the trans-fat content of industrial food products.	Ministry of Health: Law 17/2011 on Food Safety and Nutrition in its article 43 establishes that: In industrial processes in which "trans" fatty acids can be generated, the responsible operators will establish the appropriate conditions that allow minimizing their formation, when intended for food, either individually or as part of the food composition; They will require their suppliers to provide information on the content of "trans" fatty acids in the foods or raw materials they provide and will have information regarding the content of "trans" fatty acids in their products available to the administration.

						<p>These requirements will not apply to products of animal origin that naturally contain "trans" fatty acids.</p> <p>Spanish agency for food safety and nutrition (AESAN) developed the collaboration plan to improve the composition of food and beverages and other measures 2020</p>
Specifics				<p>Includes fats and spreads for manufacturing food products</p> <p>Linked to population intake targets, with a relevant intake target of almost zero</p> <p>Part of a multisectoral effort to reformulate the nutritional composition of processed foods with the aim to</p>		<p>Commitment to reduce trans fats in the baking industry: The baking industry could establish a sector agreement to gradually eliminate trans fats from baked goods, such as bread and biscuits. This could be achieved by substituting ingredients containing trans fats with healthier alternatives. These commitments go beyond the European regulations.</p>

				reduce obesogenic environments and diets associated NCDs		
Monitoring	Not included in the national monitoring plan – only occasional surveillance	Monitoring is performed for example through the inspection data of the food control inspection disclosure system	Not present	Not present	Not present	During 2015, a study was carried out on the content of trans fatty acids (TFA) in foods in Spain. The content of TFA, total fat and the percentage of TFA with respect to total fat in 277 foods has been analyzed
Funding	No	No	No	No	No	No
Enforcement	No	No	No	No	The competent authority responsible for the implementation of Union rules on the safety of food of non-animal origin at all stages of production, processing and distribution, as well as for the safety of food in catering, institutional and workplace catering establishments, is the administration	No

					A fine between EUR 2000 and EUR 10.000 for legal entity; between EUR 800 and EUR 5000 for private entrepreneur and between EUR 200 and EUR 1000 for responsible person of legal entity or private entrepreneur	
Impact and policy effectiveness				There are no data available on impact and policy effectiveness		<p>Most of the food groups analyzed have a TFA content and percentage of less than 2% with respect to total fat.</p> <p>In some food groups there is a decrease in TFA content compared to those found in 2010.</p> <p>No statistically significant increases in TFA content have been found in any of the food groups analyzed.</p> <p>Therefore, in Spain, it can be considered that</p>

						from a public health approach the TFA content does not represent any serious problem, and the TFA content in foods has a decreasing trend, and the levels are expected to be increasingly lower, until its practical disappearance.
Added sugars	Yes Food reformulation – targets have been set according to the guidelines agreed upon in the EU working groups	Yes Added sugar is targeted only in the Nutrition Commitment	Yes, industry self-regulation	Yes DGS has signed a co-regulation agreement for the reformulation of processed foods with the Federation of Portuguese Agri-food Industries and the Portuguese Association of Distribution Companies, setting voluntary targets for reducing sugar in a range of processed foods	Commitments by the soft drink sector	Commitment to reduce added sugars as part of a self-regulation code
Specifics	Decrease of the content of sugars by	The Nutrition Commitment is a	The Ministry of Health invited	Reduction of 10% sugar in breakfast	In 2020 additional Responsibility	Agreement between the beverage industry

	<p>10% by 2026 and by 15% by 2030, with 2018 as the benchmark level</p> <p>Included: milk products, bakery products, breakfast cereals, soft drinks, meat products and plant-based alternatives to milk and meat products. (Food groups chosen because children consume these the most)</p> <p>The aim is to reach an agreement with the industry by spring 2024. The exact date of adoption and the start of implementation are unknown at the moment.</p>	<p>Finnish operating model which helps and encourages food business operators and stakeholders to improve the nutritional quality of the Finnish diet and to encourage nutritionally responsible practices. A target-oriented and measurable commitment provides an excellent tool for such bodies as companies and corporations to improve their own nutritional responsibility</p>	<p>the private sector to reformulate their product, without setting any thresholds</p>	<p>cereals, yoghurt and fermented milk, chocolate milk by 2022 and soft drinks and a reduction of 7% in fruit nectars by 2023 (8)</p>	<p>Pledge, committing to reduce the sugar content in soft drinks and thus the average energy yield per 100 ml of soft drinks by 5% by the end of 2025</p> <p>Included: soft drinks</p>	<p>and the government: In the beverage sector, companies could establish a voluntary agreement with the government to reduce the content of added sugars in sugary drinks. This could involve commitments to reformulate to reduce the amount of sugar in carbonated drinks and sodas.</p> <p>Also commitment to reduce added sugars in products targeted at children, such as breakfast cereals or snacks</p>
Objective	Health related: Reformulation of industrially produced food is one	Health related		Health related; Part of a multisectoral effort to reformulate the nutritional	Health related: It is a food industry project whose main purpose is	

	<p>of the keys to improving the nutrition of the population. The aim of decreasing the amounts of salt, sugar, and saturated fat is to improve people's diets (including nutrient quality) and thereby the risk of diet-related diseases. Estonia participated in the EU project Best-ReMap, which aimed to improve food quality and increase the availability of healthy food.</p>			<p>composition of processed foods with the aim to reduce obesogenic environments and diet associated NCDs. According to the IAN-AF 2015/16 study, almost one quarter of the Portuguese population had an added sugar intake above the WHO guidelines of 10% total energy intake</p>	<p>to achieve food improvement objectives. Food companies wanted to contribute to the strategic objectives of the nutrition strategy in Slovenia, especially in the area of improving the composition of food, and therefore undertook to implement self-regulatory measures in various areas (expanding the range of foods with improved composition and foods with a better nutritional composition, additional consumer information, promotion of healthy lifestyles, etc.).The aim of</p>	
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					the project is to improve the composition of food products.	
Monitoring	JANPA and Best-ReMap methodologies: the monitoring is based on the information on packaging, the food contents are not analyzed			Yes Monitoring process of this co-regulation agreement for food reformulation is conducted by Nielsen, and independent entity, and is supervised by the Portuguese National Health Institute .The main metrics used to monitor progress were the sales-weighted averages for sugar content in each category of food products by year, and total volume of sugar sold per year. Food composition data of Portuguese foods is also being monitored by EU-funded projects, in particular by	Annual progress reports by Chamber of Commerce Slovenian Chamber of Commerce and Industry is issuing annual progress reports on added sugar content in products. Progress report includes non-alcoholic beverages drinks produced by manufacturers that made a responsibility pledge.	

				EUREMO and Best-ReMaP Joint Action		
				Recurrent monitoring on annually basis		
Funding	No			No	No	
Enforcement	No			No	No	
Impact and policy effectiveness	Estonia has relied on the evidence of food reformulation in other counties.			Between 2018 and 2021, there was an overall reduction of 11.1% of average sugar content in food groups included in the agreement, with soft drinks having a 16.5% reduction, the largest of the monitored food groups. It is estimated that, in Portugal, during the time period, there was an overall reduction of 6256.1 tons of sugar in the included food groups.		
Salt/Sodium	Yes:	Yes: Regulation by the	Yes:	Yes: DGS has signed a co-	Yes:	Yes: Commitments to

	<p>Food reformulation – targets have been set according to the guidelines agreed upon in the EU working groups</p>	<p>Ministry of Agriculture and Forestry on the declaration of certain foods as high in salt</p>	<p>Industry self-regulation</p>	<p>regulation agreement for the reformulation of processed foods with the Federation of Portuguese Agri-food Industries and the Portuguese Association of Distribution Companies, setting voluntary targets for reducing salt in a range of processed foods</p> <p>Additionally, DGS has signed a protocol with the Association of Bread, Bakery and Similar Industries to reduce the salt content of bread to further than what is established by law</p>	<p>Commitments from responsible actors in the baking sector + Salt iodization</p>	<p>reduce salt in processed foods At the end of 2008, the Ministry of Health, Social Services and Equality, through the Spanish Agency for food safety and nutrition (AESAN), developed a Salt Consumption Reduction Plan (PRCS) in the population to reduce morbidity and mortality attributed to high blood pressure and cardiovascular diseases , with specific reduction objectives to progressively achieve the WHO recommendations regarding salt intake in the population</p>
Specifics	<p>Decrease the content of salt by 16% by 2026 and by 24% by 2030. 2018 is the benchmark level</p>	<p>Food packaging must include the label “high in salt” or “contains a lot of salt” if the salt content specified in the regulation is exceeded.</p>	<p>The Ministry of Health invited the private sector to reformulate their product, without</p>	<p>For bread, the nutrition standards are mandatory, maximum 1.4 gram/100 g of bread (by law, 2009) –</p>	<p>5% reduction of added salt in bread by the end of 2022 Included: bread and bread products</p>	<p>The Spanish Confederation for bakery Organizations (CEOPAN) and the Spanish Association of Frozen Dough Manufacturers</p>

	<p>Included: milk products, bakery products, breakfast cereals, meat products and plant-based alternatives to milk and meat /products</p>	<p>The National Nutrition Recommendations and the separate Responsible Food Service Procurement Guide (2021) include the nutrition criteria for salt content of different components of a meal.</p> <p>Contains the following food groups</p> <ul style="list-style-type: none"> - Cheeses with more than 1.4 weight percent - Sausages with more than 2.0 weight percent - Other processed meat products used as cold cuts with more than 2.2 weight percent - Bread with more than 1.1 weight percent - Crispbread and hardtack with more than 1.4 weight percent 	<p>setting any thresholds</p>	<p>target 1g/100g (2021)</p> <p>Others are voluntary Targets put forward</p> <p>Potato chips: 12% reduction by 2022</p> <p>Breakfast cereals: 10% reduction by 2022, in kids' cereals max 1g/100g</p> <p>Ready-to-eat soups: 0.3g//100g by 2023</p> <p>Pizzas: 10% reduction by 2022</p> <p>Ready-to-eat meals: 0.9g/100g by 2023</p> <p>All aimed at the population intake target of maximum 5g of salt / day for adults</p> <p>Health related; The excessive salt intake is one of the biggest public health risks in Portugal, as it is associated with the development of a ser of chronic diseases, namely</p>	<p>Linked to Resolution on the National Programme on Nutrition and Physical Activity for health 2015-2025, target 10g/day</p> <p>Adopted in 2019</p> <p>+ Products shall be manufactured in accordance with the provisions of this regulation no later than two years after the official start of adaptation (May 2018)</p> <p>Edible salt shall be iodized with 25 mg of potassium iodide per 1 kg of salt or 32 mg of potassium iodate per 1 kg of salt</p>	<p>(ASEMAC) agreed with the Ministry of Health in 2004 to reduce the percentage of salt used in the production of bread, which would go from 22g of NaCl/kg of flour up to a maximum of 18g of NaCl/kg of flour over a period of four years, decreasing at a rate of one from each year.</p> <p>AESAN in 2012 reached an agreement with the Spanish Confederation of Meat Retailers (CEDECARNE) and the Association of Manufacturers and Marketers of Food Additives and Supplements (AFCA) for a 10% reduction in the content over the next 2 years, average salt and 5% of the average fat content in various butchery and delicatessen products manufactured and sold in retail stores.</p> <p>AESAN in 2015 signed</p>
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		<ul style="list-style-type: none"> - Breakfast cereals with more than 1.4 weight percent - Ready meals and ready-to-eat meal components with more than 1.2 weight percent - Snack products with added salt with more than 1.4 weight percent <p>These weight percentages are based on population intake targets, that aim at a recommended salt intake of less than 5 grams per day</p>		<p>cardiovascular diseases which are the leading cause of death in the country. According to the latest National Food, Nutrition and Physical Activity Survey (2015/16), the average daily salt intake by adults in Portugal was 7.3g, above the recommended maximum of 5.0g by the WHO. Additionally, data from the 2019 Global Burden Disease shows that, of the dietary risk factors, salt consumption is the one that most contributes to the loss of years of healthy life.</p>		<p>an agreement with the Association of Snack Manufacturers (AFAP) of Spain by which the sector has committed to an additional 5% reduction in the average salt content in chips and snacks over the next five years. Limit of salt content in common bread established in the Bread Quality Standard (2019) to 1.31 grams per 100 grams in bread. Some companies may publicly commit to gradually reducing the salt content in their processed products</p>
Monitoring	JANPA and Best-ReMap methodologies: the monitoring is based on the information	Monitoring is performed for example through the inspection data of the food	Not present	Monitoring process of this co-regulation agreement for food reformulation is conducted by	Monitoring is occasionally carried out as part of research programs.	Spanish agency for food safety and nutrition (AESAN) assessed salt content

	on packaging, the food contents are not analyzed	control inspection disclosure system Recurrent analysis Salt intake is regularly measured in national population based health and nutrition surveys.		Nielsen, an independent entity, and is supervised by the Portuguese National Health Institute (INSA). The main metrics used to monitor progress were the sales-weighted averages for salt and sugar content in each category of food products by year, and total volume of sugar and salt sold per year. Food composition data of portuguese foods is also being monitored by EU-funded projects, in particular by EUREMO and Best-ReMaP Joint Action.	Monitoring of Commitments from responsible actors in the baking sector is held by Chamber of Commerce	in foods in Spain in 2009 and 2012 Data are available through the AESAN website (9)
Funding	No	No	/	No	No	No
Enforcement	No	No	/	No	No	No
Impact and policy effectiveness	Estonia has relied on the evidence of food reformulation in other countries.	In general, the salt intake in Finland and also blood pressure levels have remarkably	/	Between 2018 and 2021, there was a reduction of 11.5% of average salt	Effectiveness is monitored by consumption (dietary intake) and	Spanish agency for food safety and nutrition (AESAN) assessed salt content

		<p>declined since 1980, but it is hard to evaluate how big the impact of such regulation and policies have been.</p> <p>Salt intake is regularly measured in national population based health and nutrition surveys</p>		<p>content in food groups included in the agreement (potato chips and savory snacks, breakfast cereals and pizzas), with pizzas having a 22.3% reduction. It is estimated that, in this time period, there was a global reduction of 25.6 tons of salt in the included food groups.</p>	<p>measured using excreted sodium in 24h urine Data for 2022/2023 are not officially published yet, but are expected July/August 2024.</p>	<p>in foods in Spain; in 2009 and 2012. In 2012, the AESAN Plan Cuídate + communication campaign, less salt is more health to raise awareness among the population of the consequences that excessive salt consumption has on health and offer information to citizens so that they can make correct decisions about how to reduce their consumption of salt</p>
Saturated fats	<p>Food reformulation – targets have been set according to the guidelines agreed upon in the EU working groups</p>	<p>The national Nutrition Recommendations and the separate Responsible Food Service Procurement Guide (2021) include the nutrition criteria for saturated fats in different components of a meal.</p>	<p>Industry self-regulation</p>	<p>There are no policies regarding saturated fats</p>	<p>No</p>	<p>Yes</p>

		Nutrition Commitment also considers saturated fats				
Specifics	Decrease the content of saturated fat by 5% by 2026 and by 10% by 2030. 2018 is the benchmark level Included: milk products, bakery products, meat products and plant-based alternatives to milk and meat products.	<p>The action recommendation from the Ministry of Social Affairs and Health in 2010 requires that the criteria for the nutritional quality of public food services are strict and cover the entire meal.</p> <p>It considers different components of meals including bread spread and salad dressings</p> <p>Soups and porridge (1g/100g) Pastas, risottos and pizzas (<2g/100g) Sauces (<3.5g/100g) Side dishes pasta (<0.7g/100g) Mashed potatoes (<0.7g/100g) Bread spread (<33%) Salad dressings (<20%)</p>				Voluntary commitment to a reduction of saturated fats in dairy products: Another company could implement a reformulation program to reduce saturated fats in their dairy products, such as yoghurts and cheeses, through ingredient substitution or changes in the production process.
Monitoring	JANPA and Best-ReMap methodologies: the	Occasional surveys on public food services (Single analysis)	Not present			

	monitoring is based on the information on packaging, the food contents are not analyzed					
Funding	No	No				No
Enforcement	No	No				No
Impact and policy effectiveness	Estonia has relied on the evidence of food reformulation in other countries	Saturated fat intake is regularly measured in national population based health and nutrition surveys In general, the intake of saturated fats in Finland and also LDL levels have remarkably declined since 1970s, but it is hard to evaluate how big the impact of such regulations and policies have been				
Coherence with other policies	Implementing multiple different policies and interventions is the only possibility to change food environment and decrease diet-related health risks. Food reformulation	Coherence with all other nutrition related policies in Finland		This measure is part of the National Program for Healthy Eating Promotion (PNPAS) and is aligned with axis 1 of the multisectoral Integrated Strategy for the Promotion of Healthy Eating	Resolution on the National Programme on Nutrition and Physical Activity for Health 2015-2025	The codes may also include restrictions on the advertising of unhealthy foods targeting vulnerable groups such as children and adolescents.

	<p>is in coherence with “Estonia 2035” strategy, National Health plan 2020-2030, Cancer Control Action Plan 2021-2030 and the Green Book of Nutrition and Physical Activity</p>		<p>(EIPAS) to "modify the environment where people choose and buy food by modifying the availability of food in certain physical spaces and promoting the reformulation of certain categories of food". PNPAS is national health priority program and EIPAS is a interministerial strategy of 7 different ministries (Finance, Internal Affairs, Education, Health, Economy, Agriculture, and Sea Ministries). This measure is also considered in the National Strategy for Food and Nutrition Security.</p>		
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2. Composition 2

For composition 2, considering the regulation of the content of nutrients of concern in meals sold from food service outlets, there is only one policy present in Finland, specifically with regards to the composition of student meals sold in student restaurants.

Table 2: data collected on composition 2 by the different countries

	Estonia	Finland	Italy	Portugal	Slovenia	Spain
Evidence + specifics	No	<p>Yes</p> <p>There are strictly defined criteria for student meals to meet general health and nutritional quality requirements.</p> <p>Government Decree (54/2012) on the criteria for supporting the meals of higher education students. The decree is applied when granting the state subsidy referred to in Section 49 of the Student Financial Aid Act (65/1994) to student restaurants to reduce the price of student meals (per meal subsidy). One of the conditions is that the student meals meets general health and nutrition quality requirements.</p> <p>This applies to all catering services for students</p>	No	No	No	No

Responsible		The Ministry for Social Affairs and Health Social Insurance Institution				
Stage		Implementation				
Nutrients of concern included		Trans fats are solely regulated through the Commission Regulation (EU) There are specific nutrition criteria for salt content of different components of a meal. This also concerns the state subsidy for student meals (Mandatory nutrition standards through regulation)				
Monitoring		Yes Social Insurance Institution ensures that student meals meet the requirements regarding meal content and pricing. The requirements are based on the decree concerning meal subsidies. Additionally, student meals must comply with the recommendations for higher education student dining				

3. Label 3

For the participating countries, there are 3 main labels that are put forward as possible front-of-pack labels. On the one hand, there is the Nutri-Score, an interpretative label (10) which is used in Spain and recently adopted by Portugal, but also in the introductory phase in Slovenia. On the other hand, there is the Nutri-inform battery in Italy, a non-interpretative label (10–12) which was developed by the Ministry of Health, Ministry of Agriculture and of Food Sovereignty, Ministry of Enterprises and Made in Italy. Lastly, Finland uses the Heart symbol, administered by the Finnish Heart Association, which is also an interpretative label. Estonia is waiting for the proposal for a European harmonized FOP, that was promised within the Farm to Fork strategy. The European Commission was supposed to present its draft regulation regarding this in the fourth quarter of 2022. However, so far they have not done it and the future timeline is unknown. Overall, many countries are in favor of establishing a mandatory EU-wide FOP system (e.g. Nutri-Score type of marking) that would help to achieve health, climate and environmental goals. A FOP system would encourage industries to change food composition and it would help consumers make better food choices. If the Commission fails to adopt the draft, Estonia will consider establishing and implementing such a system independently. Portugal has made the decision to adopt the Nutri-Score FOP-label, as, according to recent data, 40% of the population does not understand the nutritional information displayed in food labels (with an even bigger percentage in those with lower levels of education) and there is a 3-5 times higher likelihood of choosing a healthier food product when a supplementary nutrition information system was present (13).

Also in Slovenia, where they are introducing the Nutri-Score, there are some remarks. They noticed that outside of Slovenia, a number of such symbols are used, which are most commonly appearing on the front of the food packaging. They state that the criteria for the allocation of such symbols must be consistent with the dietary guidelines, considering the public health aspects and at the same time must also address the expectations of consumers and the food producers.

In addition, as indicated in COMP1, Finland has also a symbol for products high in salt: The Ministry of Agriculture and Forestry Regulation on the Declaration of Certain Foods as Heavily Salted 1010/2014. The regulation applies to all food intended for final consumers as well as food intended for delivery to institutional kitchens. The packaging of food must bear the label “heavily salted” or “high in salt”, if the salt content specified in the regulation is exceeded. The regulation takes into account a new calculation method for salt content based on the total amount of sodium in the food, and therefore the thresholds for heavily salted designation changed when the regulation came into force on December 13, 2016.

Table 3: Data collected on label 3 by the different countries

	Estonia	Finland	Italy	Portugal	Slovenia	Spain
Evidence	No Waiting for the European	Yes The Heart Symbol administered by the Finnish Heart	Yes: in 2020 Italy notified the European Commission a front	Yes: The Dispatch n.3637/2024, of April 4 th from the Ministry of Health establishes the Nutri-Score	Yes: the introduction of the Nutri-Score is in the	Yes, Nutri-Score is implemented in Spain

	initiative on FOP, promised within the Farm to Fork strategy	Association is a label found on food packaging and in restaurants, indicating that the product or meal is a healthier option for your heart. It indicates that the product is a healthy choice within its own category	of package label scheme called the Nutri-Inform Battery. This scheme is based on the graphical representation of a battery, whose charged percentage reflects the rate of the recommended daily allowance of energy and the above-mentioned nutrients provided by a serving size of the packed food.	system as a public health measure to promote healthy diets (to be implemented within 120 days of publication) DGS will lead the adoption process which will include hearing public and private stakeholders, establishing the implementation framework, developing awareness campaigns, defining monitoring and evaluation provisions	preparation phase Criteria for using the symbol as an additional labelling of foods with better nutritional composition	
Responsible		Finnish Heart Association	Ministry of Health, Ministry of Agriculture and of Food Sovereignty, Ministry of Enterprises and of Made in Italy + Italian National Institute of Health and Council of Researcher in Agriculture	Ministry of Health DGS	Ministry of Health National institute of public health Slovenia, Nutrition institute, Chamber of commerce, Consumer Association of Slovenia	Ministry of Consumption
Stage		Evaluation (the Finnish Heart Association)	Evaluation – ongoing studies on impact assessment	In development	Proposed	Implementation

		evaluates the second policy)				
Type		Voluntary label Interpretative label	Nutrient specific label Non-interpretative label, not mandatory Identifies both healthy and unhealthy food	Nutrient specific label Interpretative Not mandatory	Nutrient specific label Interpretative but not mandatory Identifies both healthy and unhealthy food + Additionally, reference intake is also used	Nutrient specific label Interpretative Not mandatory
Specifics		The heart symbol takes into account the total amount of fat, saturated fat, sugar, salt and fiber. The criteria are different for different food products.	The Nutri-inform Battery gives information on energy, total and saturated fats, sugars and salt, with respect to daily recommended allowances for healthy individuals, as in Reg. 1169/2011	The Nutri-Score system is a front-of-pack food labeling designed to provide consumers with a quick understanding of the nutritional quality of a product. It consists of a five-color and letter scale ranging from A (dark green) for the healthiest foods to E (dark red) for the least healthy.	Contains information on saturated fat, sugar, salt and dietary fiber content	The Nutri-Score system is a front-of-pack food labeling designed to provide consumers with a quick understanding of the nutritional quality of a product. It consists of a five-color and letter scale ranging from A (dark green) for the healthiest foods to E (dark red) for the least healthy.
% of products with label	Imported products have the FOP label		5% (Nutri-Inform Battery)	Not implemented yet, but some manufacturers/retailers have voluntarily applied it to their	For now, only imported foods have Nutri-Score labels	Several manufacturers and retailers in Spain have chosen to

	that is used within other countries. Some Estonian producers also use a FOP, but it is more an exception than a rule. Overall, most products sold on the Estonian market don't have any FOP labelling.			products, even before the dispatch		adopt the Nutri-Score system on their products as part of their efforts to promote transparency and informed consumer choice
Monitoring and evaluation		The Finnish Heart Association evaluates the number of products with the Heart Symbol and restaurants using it in their meals	The producers and distributors who want to use the Nutri-inform Battery on their products should notify the adoption to the MoH by email. In addition, a help desk at MoH is available to design the specific Nutri-inform Battery schemes	Not defined yet (but part of the development process)	Yes, there will be a one-time survey	Voluntary

Funding		No	No	Not defined yet	No	No
Enforcement		No	No	Not defined yet	No	No
Impact and policy effectiveness		The Heart Symbol and GDA are the most known FOP labels among Finnish consumers: 67% of the respondents report being at least somewhat familiar with Heart Symbol and 60% report the same for GDA. By comparison, Nutri-Score and Keyhole are less known in Finland with 7 and 4% awareness rates, respectively (14,15)	It is measured as a percentage of products available on shelves with the Nutri-inform Battery	Not defined yet (but part of the development process)	The symbols labeled foods are more attractive to consumers, and they are also an important element of the labeling, which helps them decide on the food purchase.	
Coherence		In line with other Finnish nutrition policies		This measure is part of the National Program for Healthy Eating Promotion (PNPAS) and is aligned with axis 2 of the multisectoral Integrate Strategy for the Promotion of Healthy Eating (EIPAS) to “improve the quality and accessibility of information available to consumers to inform and empower citizens for healthy food choices”.	Resolution on the National Programme on Nutrition and Physical Activity for Health 2015-2025.	
Public support		Yes	High	According to a Health Impact Assessment (HIA) study,		This voluntary implementation has

		<p>The awareness of the Heart Symbol among the population was assessed several years ago.</p>		<p>published in 2019, there was a consensus among citizens, experts and stakeholders about the relevance of FoP labelling as a public health strategy and about the need of a Government-endorsed policy on this topic. Moreover, according to a study conducted in 2018, 77,0% of the Portuguese population agree with the implementation of this measure to promote a healthy diet.</p>		<p>been well-received by some consumer groups and public health organizations who see Nutri-Score as a useful tool for encouraging healthier eating habits.</p>
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4. Label 4

Concerning label 4, some countries have indicated that they have a system in place to provide food information of non-prepacked food. However, a specific policy or regulation introduced by government for labelling menu boards of quick service restaurants is not present at the time in any of the countries. Estonia is working on a national regulation, regarding food information for non-prepacked foods, which incorporates three different types: food sold loose in a supermarket, food that is packaged at the consumer's request and food that is sold prepacked for direct sale. One of the amendments would be providing nutritional information for foods (energy and nutrients) sold prepacked for direct sale, and a menu board is one of the options of how to present it. In Slovenia, there is a proposition for promoting the healthy offer in catering establishment offering subsidized student meals, and possibly other catering establishments. This by means of the Right Choice symbol. In theory, quick service restaurants can obtain this label, however, it will be very difficult, as the conditions to achieve these label is to offer at least one nutritionally preferable meal.

Table 4: data collected on label 4 by the different countries

	Estonia	Finland	Italy	Portugal	Slovenia	Spain
Evidence	Yes: requirements to provide food information of non-prepacked food The aim of the draft regulation is to change the national regulation stipulating the requirements to provide food information of non-prepacked food. The changes in the regulation would apply to food that is prepacked (without the presence of the consumer) on the sale premises for direct sale, including both retail trade and catering (e.g. restaurants) with the exemption described below regarding small businesses. The nutrition declaration should be provided directly near the food or at the point of sale on the packaging of the food, on the label attached to it or through a physical device (e.g. an informal paper sheet). It could be presented on menu boards	No	No	No	Yes The Right Choice symbol (originated from the "Dober tek, študent" ("Bon appétit, Student") project, and was initially introduced in restaurants offering subsidized student meals. However, today, any restaurant can apply for the Right Choice symbol. To receive certification and the right to use the Right Choice symbol, a food service provider must successfully complete theoretical and practical training on preparing healthy meals (a three-hour workshop). After receiving the symbol, the restaurant must offer at least one meal (lunch) daily that meets the criteria for a healthy choice. These criteria relate to the quantity, composition, and ratio of ingredients. Preference is given to local, seasonal, and organic products, as	No There is no specific nationwide mandatory system for labeling menu boards in quick service restaurants, only for allergenics

					<p>well as cooking methods that do not harm or reduce the nutritional value of the meal. The use of natural ingredients is encouraged for seasoning, while industrial thickeners and flavor enhancers are limited.</p> <p>Experts from the National Institute of Public Health (NIJZ) review the menu of each restaurant or catering establishment and evaluate the meals based on portion size, food selection, preparation methods, and the added value of selected ingredients (local, organic, seasonal). The menus are assessed through detailed recipes with ingredients and preparation methods (for each dish serving 10 people). The additional value of the used ingredients must also be indicated, referencing qualities like organic, local, seasonal, quality certifications, and fresher options with less fat and salt. The provider must also submit a statement on the added value of the ingredients used to prepare the meals, as well as a certificate of completion for the required training.</p>	
Responsible	Ministry of Regional Affairs and Agriculture				Ministry of Health Chamber of Tourism and Catering of Slovenia Student Organisation, Chamber of Commerce, Chamber of Agricultural and Food Enterprises, National Institute of Public Health	Ministry of Health & Regional Ministries of Health (Autonomous Communities)

Coherence	<p>The planned changes are in accordance with the Public Health Act, which aims to protect public health, prevent illnesses and promote health.</p> <p>The planned changes contribute to achieving the objectives of the Farm-to-Fork strategy and support the food safety objective in the Estonian Agriculture and Fisheries Strategy 2030 (consumers have a high level of food safety awareness and make choices that support their health). The regulation supports the objectives of the "Estonia 2035" strategy , including shaping people's attitudes and behaviours so that it preserves health and the environment; encouraging healthy lifestyle choices is an important aspect of the strategy. In addition, the planned changes contribute to achieving sub-objective "health-promoting choices" in the National Health Plan 2020-2030 - one solution is to stop the growth rate of overweight and obese people and increase the number of people following the principles of a balanced diet.</p>					
Stage	In development				Proposed	

<p>Specifics</p>	<p>As it is still in development, and now with a change of Minister it is back at phase 1, it is not possible to provide any specifics.</p>			<p>The Right Choice symbol is awarded only to specific dishes or combinations of verified individual elements of dishes – protein, starch, salad, soup. Fast-food outlets could also be considered for the symbol, but they must offer at least one healthy dish to qualify. The symbol is awarded to a specific dish and not to the restaurant as a whole. The aim of the Right Choice symbol is to facilitate healthier choices for consumers among a restaurant's offerings.</p> <p>Dishes are labeled with the Right Choice symbol (the logo of the symbol), which on its own guarantees that they represent a healthy choice according to the previously described criteria. No additional information regarding energy values or similar details is provided alongside the symbol, as it is assumed that the consumer understands the meaning of the symbol (a balanced, healthy, and appropriately composed in terms of energy meal. which contains: fresh and/or cooked vegetables, lean types of white and red meat, whole grain starch foods, and salad. It is nutritious, ensuring the intake of all the nutrients the body needs; it is prepared with appropriate heat treatments (boiling, stewing, baking with moderate amounts of quality fats, etc.); it</p>	
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					includes the added value of organic, seasonal, and local ingredients.)	
Type	<p>Mandatory nutrition standards through regulation</p> <p>The amount of the nutrients should be given per 100 g/mL, per portion or per consumption unit. If the nutritional information is given per portion or consumption unit, the size of it should be defined in close proximity to the nutrition declaration. The nutritional information shall be presented, if space permits, in tabular format with the numbers aligned. In cases where there is not enough space, the nutritional information may be given sequentially (i.e. linearly). Information shall be easily visible and clearly legible (minimum font size is not defined)</p>				<p>Voluntary nutrition standards</p> <p>A restaurant wishing to obtain the Right Choice symbol must work with the NIPH to draw up an example of nutritionally appropriate menus. The NIPH shall review the energy and nutritional adequacy of the meals</p>	
Information included	<p>Energy and Nutrient</p> <p>Legibility and visibility</p> <p>The nutrients included: fatty acids, including saturated fatty acids, carbohydrates, sugar, proteins and salt contents</p>				Energy and Nutrient	
Monitoring	Yes: the Estonian Agriculture and Food Board will include oversight of these changes in their yearly national monitoring plan				No	No
Funding	Yes: for monitoring and evaluation				Yes, for implementation	No

Enforcement	No				No	No
Impact and policy effectiveness	The safety and quality of consumed food and the possibility of making conscious and healthy choices are important factors influencing the health of the population. The planned regulation will contribute to promoting the population's health				As more and more people in Slovenia eat in restaurants, there is a need to increase the interest of caterers and service users in healthy catering. To facilitate the choice of healthy offers in catering and tourism, criteria for meals have been developed to help promote the Healthy Offer recognition Certificate.	

5. Promotion

Different countries have different policies for different media when it comes to marketing to children. The most implemented option (mandatory or voluntary) is restricting marketing of unhealthy foods to children via broadcast media (TV, radio). Estonia relies here on the Code of Conduct, which contains mandatory rules for all members of the Association of Estonian Broadcasters with regards to advertisement and marketing to children. Broadcasters who are not part of the Association can voluntarily implement the same rules. In Finland, there is the Consumer Protection Act and the Food Act. However, in Finland, unhealthy food is not defined in the law or in official guidelines, making it impossible to have enforceable public regulations. The Consumer Protection Act does include an explicit provision regarding marketing aimed at minors or generally reaching minors, where the evaluation of marketing is based on ethical grounds. Marketing to minors is considered contrary to good manners. Regarding official guidance, the most significant is the Consumer Ombudsman's directive on 'Children and Food Marketing' (2004, revised 2015). This directive outlines key issues (such as children's and youth programs, free toys, soft drink and many vending machines in schools) and employs morally but not legally binding language. In Portugal and Slovenia, there are mandatory legislations and regulations in place that clearly specify what is allowed and what is not allowed and for whom and during which time slot. And lastly, in Spain, there is the PAOS code, a Code of self-regulation following recommendations made by the authorities (ASEAN). The code does not define an explicit ban, but rather some key considerations. Italy has no regulation in place.

The age range of these restrictions is children up to 12 in Estonia, children up to 15 in Slovenia and Spain, up to 16 in Portugal and minors in Finland. Both Slovenia and Estonia use the WHO model to define the nutrient profile mode to determine which foods cannot be marketed to children, Portugal developed its own nutrient profile mode based on this WHO model. Countries have also monitoring mechanisms in place, but only in Portugal and Spain, there are enforcement provisions in place for non-compliance.

TV and radio marketing is the most regulated option, but often these regulations or codes or ethical grounds also extend to online/social media and packaging (social media: Finland, Portugal and Spain / packaging: Finland and Slovenia). Slovenia is exploring the possibility of regulating advertisement through social media, using the ClickTool application.

Other media (not packaging and online/social media) is restricted in Portugal, under form of printed media directed at children. For Spain, the PAOS code also is in place here.

Lastly, in Spain, Slovenia, Finland, Portugal and Estonia, there are also regulations on advertisement in settings where children gather. Mainly schools are targeted, but in Portugal and Spain, also the school surroundings, sport clubs and events are targeted.

Table 5: Data collected on the different aspects of promotion by the different countries

	Estonia	Finland	Italy	Portugal	Slovenia	Spain
PROMOTION1 : broadcast media (TV, radio)						
Evidence	Yes: Code of Conduct: Responsible advertising regarding food and drink in children’s programs	Yes	No	Yes	Yes: Media law & Audiovisual Media Services Act	Yes: The “PAOS” Code refers to the Spanish Code of Self-Regulation on Food and Beverage Advertising directed at Children and Adolescents
Specifics	The primary purpose of the code of conduct is to contribute to the safeguarding of children’s health and to support balanced nutrition. Different national laws contain provision that limit the marketing of foods and drinks among other to children and adolescents. The channels of the Estonian public broadcaster ERR are all advertisement free. Most of the other TV and radio channels are members of the	Consumer Protection Act (38/1978) and Food Act (297/2021). These are the most important legislations. Unhealthy food is not defined in the law or in official guidelines, making it impossible to have enforceable public regulations. Consumer Protection Act (38/1978) does not specify the marketing of unhealthy foods, but Section 2, Paragraph 2 includes an explicit provision regarding marketing aimed at minors or		Ban for television programs and services, and on-demand audio-visual communication services and radio, including advertising breaks in the commercial breaks of these programs. The ban also applies to advertising broadcast in cinemas for films intended for children under 16. Additionally, the law imposes digital marketing restrictions and bans advertising in schools	Media law: advertisements whose main target audience is children may not contain content that could harm their health and mental and physical development. Advertisement must not encourage children to buy products by exploiting their inexperience Audiovisual Media Services act: Providers must design rules of conduct about foods that contain nutrients and substances with a nutritional or physiological effect, the	PAOS Code: a self-regulatory initiative aimed at controlling and promoting responsible advertising practices related to food and beverages targeting children and adolescents. It addresses concerns about childhood obesity by establishing guidelines for advertising content, nutritional criteria, and promotional activities. The objective is to encourage healthier food choices among the younger population and contribute to public

	<p>Association of Estonian Broadcasters</p>	<p>generally reaching minors. The provision concerns the evaluation of marketing on ethical grounds, taking into account the age and developmental stage of minors generally reached by the marketing, as well as other circumstances</p> <p>Marketing to minors is considered contrary to good manners</p> <p>Regarding official guidance, the most significant is the Consumer Ombudsman's directive on 'Children and Food Marketing' (2004, revised 2015). The directive outlines key issues (such as children's and youth programs, free toys, soft drink and cany vending machines in schools) and employs</p>			<p>excessive consumption of which is not recommended in the whole diet and make them public. The rules of conduct must be formulated in such a way that children are enabled to develop healthy eating habits published by the minister responsible for health</p>	<p>health efforts to combat obesity.</p>
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		<p>morally but not legally binding language.</p> <p>In terms of self-regulation: especially the Food Industry Federation's marketing guidelines and the EU Pledge by multinational companies are central</p>				
Responsible	<p>Association of Estonian Broadcasters Ministry of Culture in cooperation with Ministry of Social Affairs and NIHD</p>	<p>Ministry of Justice Ministry of Agriculture and Forestry</p>		<p>Initiative by the Portuguese Parliament, implementation involves the Directorate-General of Health, Ministry of Health and the Consumer Directorate-General, Ministry of Economy</p>	<p>Ministry of Health Ministry for Culture – media directorate</p>	<p>Ministry of Health Social Services and Equality Spanish Agency for Food Safety and Nutrition The Federation of Food and Beverage Industries Association for Self-Regulation of Commercial communication Distribution sector, Hospitality and catering</p>
Stage	Implementation	Implementation		Implementation and evaluation	Implementation	Implementation
Type	<p>Industry self-regulation Mandatory for the members of the Association of Estonian Broadcasters, voluntary for others</p>	<p>Legislation and regulation + Industry self-regulation</p>		<p>Mandatory legislation and regulations (law 30/2019 of 23th of April)</p>	<p>Legislation and regulation - mandatory</p>	<p>The strategy followed by AESAN and authorities is to stimulate industries to follow the recommendations, by means of self-regulation and then avoiding punishment. The</p>

						strategies are based on the Spanish Law 17/2011 on Food Safety and Nutrition Legislation and regulation are not voluntary, they are based in the Spanish Law 17/2011 on Food Safety and Nutrition
Age groups	Exclusive ban towards children, up to 12 years Targeted to children is defined in the Advertising Act as “children are the main audience of the advertisement”	Only mentioning of minors		Only children up to 16 years old Children’s programs or programs for children of which a minimum of 25% audience includes children under 16 years old	Exclusive ban towards children, up to 15 years Targeted to children is defined as ads whose primary target audience is children, suitable for all children with parental guidance, unsuitable for children under the age of 12 / 15 / 18	Exclusive ban towards children, up to 15 years Targeted to children is defined by PAOS as advertising and marketing efforts specifically directed at children and adolescents
Specific time slot	Children’s programs are all programs whose audience, according to a television audience study recognized in Estonia, is at least 50% children	No		Minimum of 25% audience includes children under 16 years old, and respective commercial breaks	Yes Program content that is not suitable for children under 15 can be broadcast after 8 p.m. and no later than 5 a.m. Program content that is not suitable for children under 18 can be broadcast after 11 p.m. and no later than 5 a.m.	Yes: Restrictions may be placed on advertising during television or radio programs that are specifically designed for children. This could include cartoons, educational programs or other content created for a younger audience

					Not when the promoted product is intended and/or appeals specifically to children	Some regulations may consider limiting food and beverage advertising during school hours Evening and Prime: some regulations might also address advertising during evening or prime time when families are more likely to be watching television together
Independent nutrient profile mode	WHO model	No		All foods that fit within the nutrient profiling model developed; DGS has developed a nutrient profiling model (published in Dispatch No. 7450-A/2019) based on the WHO nutrient profile model – WHO Regional Office for Europe Nutrient Profile Model – to which changes were introduced, with the objective of aligning the limits for some nutrients in some of the food categories, with the values defined	WHO NPM (2015) adapted for Slovenia	No

				by legislation from the European Union. Other changes reflect the targets of the agreements made by Portugal in the context of food reformulation, as well as an analysis of the nutritional composition of foods available on the Portuguese market and the limits imposed by the present law.		
What's included	<p>All unhealthy products</p> <p>No use of characters and public figures popular among children.</p> <p>The advertisements may not:</p> <p>a) directly incite children to enter into transactions independently or exploit their trust in their parents, teachers or other persons;</p>	Not defined		<p>Advertisement of HFSS foods must not include characters, drawings, celebrities, mascots or others, associated with children's programs.</p> <p>Advertisement of HFSS foods must not:</p> <ul style="list-style-type: none"> - encourage excessive intake; - belittle non-consumers; - create a sense of urgency or pressing need in consuming the advertised product; 	<p>All unhealthy products</p> <p>No success into implementation of the amendment to the law, addressing celebrities and cartoon characters</p>	<p>Only products aimed at children</p> <p>No explicit ban, but some key considerations</p> <p>Limiting use of animated characters, mascots or figures that are especially appealing to children</p> <p>Considering restrictions on the use of celebrities or popular figures that may have a strong influence on children and adolescents</p> <p>Evaluating the use of premium offers, gifts, toys or other incentives</p>

	<p>b) encourage excessive food consumption;</p> <p>c) use promotional offers irresponsibly;</p> <p>d) use aggressive or misleading commercial practices (e.g misleading nutritional value).</p>			<ul style="list-style-type: none"> - convey the idea of ease of purchase, minimizing costs; - convey the idea of benefit associated with its exclusive or exaggerated intake, compromising the importance of a varied and balanced diet and a healthy lifestyle; - associate the consumption of the product with gaining status, social success, special skills, popularity, success or intelligence; - include characters, drawings, celebrities, mascots or others, associated with children's programs; - communicate HFSS foods' characteristics as beneficial for health, omitting the harmful effects of the intake of foods high in energy, salt, sugar, saturated fats and trans fats. 		<p>that may encourage the purchase of less healthy food and beverage products</p> <p>Addressing marketing techniques that exploit “pester power” – strategies designed to encourage children to persuade their parents or caregivers to buy specific products</p>
Health messages	No health messages required	No		Yes	Advertisement should contain health messages	No health messages required

Monitoring	<p>Yes</p> <p>Best practice council of the Association monitors that its members comply with the code of conduct. The Association will not assess the impact of the restrictions</p>	<p>No</p>		<p>Yes</p> <p>Aggregation of relevant indicators regarding food intake patterns in children under 16 years old, characterization of food marketing targeted at them and their general health status. There is a monitoring system in place on an annual basis with monitoring studies being conducted for specific channels every year. In this monitoring studies the data collection is being done using the WHO protocols for food marketing monitoring and monitoring studies for TV food marketing were conducted in 2020 and in 2021. It is also in place annual actions to monitor the law compliance by the competent authority (Consumer Directorate-General). The last</p>	<p>Yes, but not regularly funded and provided. Mainly, they are provided by Slovene Consumer Organization of SCO as a part of BEUC activities</p>	<p>AUTOCONTROL, as the self-regulatory body, plays a crucial role in monitoring compliance with PAOS. It oversees the advertising practices of participating companies to ensure adherence to the established standards.</p> <p>+</p> <p>Compliance monitoring: Regular assessments of industry compliance with the PAOS guidelines</p>
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				action to monitor the law compliance conducted by Consumer Directorate-General was conducted in 2020.		
Funding	No	No		No	Yes Monitoring and evaluation and implementation	
Enforcement	No	No		Yes Infractions will be punished with fines of 1750€ to 3750€, in case of an individual, or of 3500€ to 45000€ if committed by companies. The Consumer Directorate-General are responsible for monitoring compliance.	No	AUTOCONTROL may take corrective actions or impose sanctions in cases of non-compliance with PAOS guidelines. These actions can include requesting modifications to advertisements or, in extreme cases, reporting non-compliant practices to relevant authorities
Impact and policy effectiveness	WHO is currently monitoring TV advertisements of food and drinks to evaluate how many of those are targeted at children and how many of these in turn are actually allowed	Not known		Not included	Overall administrative and inspection control over the implementation of this law is carried out by the Ministry for culture (Media law) and the Agency for Communication Networks and Services of	Collection of data on advertising practices (prevalence and content) Consumer awareness and understanding (surveys) Industry participation

	according to the WHO's model of nutritional criteria. No additional effectiveness evaluation planned in Estonia (16)				the Republic of Slovenia (Audiovisual Media Services Act) Specific implementation of the Nutrient Profile Model and restriction of marketing of unhealthy foods are not under the control, the only controlled issue is the fact that TV provider is or restricting the adds or providing warnings.	Monitoring health outcomes Public feedback Analyzing shifts in advertising strategies Impact on children's food choices
PROMOTION2: online and social media						
Evidence	No	Yes: the information in PROMO1 (industry self-regulation and morally correct advertising to minors) also extends to PROMO 2	No	Yes	Yes: Use of application in development (from JA Best ReMaP) – Click Tool Application, screening child's electronic devices	PAOS code also applies to promotion 2
Responsible				It was an initiative of the Portuguese Parliament and the implementation involves the Directorate-General of Health, Ministry of Health and the Consumer Directorate-General, Ministry of Economy.	National institute of Public Health	Ministry of Health, Social Services and equality Spanish Agency for Food Safety and Nutrition

Stage				Implementation and evaluation	In development (waiting for permission ethics committee)	Implementation
Type				Mandatory, legislation and regulations (Lax 30/2019 of 23th of April)	Co-regulatory response All online media platforms included	Legislation and regulation are not voluntary, they are based in the Spanish Law 17/2011 on Food Safety and Nutrition
Age groups				Children up to 16 years old	Exclusive ban toward children up to 18	Exclusive ban towards children, up to 15 years Targeted to children is defined by PAOS as advertising and marketing efforts specifically directed at children and adolescents
Included				Websites, webpages, apps and social media profiles with content intended for children up to 16 years old Same considerations as for PROMO1	All ads, about unhealthy products, appearing on screen	Only products aimed at children No explicit ban, but some key considerations Limiting use of animated characters, mascots or figures that are especially appealing to children Considering restrictions on the use of celebrities or popular figures that may have a strong

						<p>influence on children and adolescents</p> <p>Evaluating the use of premium offers, gifts, toys or other incentives that may encourage the purchase of less healthy food and beverage products</p> <p>Addressing marketing techniques that exploit “pester power” – strategies designed to encourage children to persuade their parents or caregivers to buy specific products</p>
Monitoring				<p>Yes,</p> <p>Aggregation of relevant indicators regarding food intake patterns in children under 16 years old, characterization of food marketing targeted at them and their general health status. There is a monitoring system in place on an annual basis with monitoring studies being conducted for specific channels every year. In</p>	Yes, mobile application	No

			<p>this monitoring studies the data collection is being done using the WHO protocols for food marketing monitoring and monitoring studies for digital food marketing were conducted in 2020, 2021 and 2022. In 2022, it was implemented the "investigate exposure" step of the WHO CLICK framework that enabled the data collection of children's direct exposure to digital food marketing, in particular of paid-for ads. Reality Meter was the IA tool used in this study. It is also in place annual actions to monitor the law compliance by the competent authority (Consumer Directorate-General). The actions to monitor the law compliance conducted by Consumer Directorate-General</p>		
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				were conducted in 2021-2023.		
Funding				No	Yes Monitoring and evaluation and implementation	No
Enforcement				Yes Infractions will be punished with fines of 1750€ to 3750€, in case of an individual, or of 3500€ to 45000€ if committed by companies. The Consumer Directorate-General are responsible for monitoring compliance.	No	No
PROMOTION3: non-broadcast media other than packaging and online/social media						
Evidence	No	Yes: the information in PROMO1 (industry self-regulation and morally correct advertising to minors) also extends to PROMO 3	No	Yes Printed publications directed at children up to 16 years old	No	No
Responsible				It was an initiative of the Portuguese Parliament and the implementation involves the Directorate-General of Health, Ministry of		

				Health and the Consumer Directorate-General, Ministry of Economy.		
Stage				Implementation and evaluation		
Type				Mandatory: legislation and regulations (Law 30/2019 of 23th of April)		
Age groups						
Included				All foods that fit within the nutrient profiling model developed; DGS has developed a nutrient profiling model (published in Dispatch No. 7450-A/2019) based on the WHO nutrient profile model – WHO Regional Office for Europe Nutrient Profile Model – to which changes were introduced, with the objective of aligning the limits for some nutrients in some of the food categories, with the values defined by legislation from the European Union. Other changes reflect the		

			<p>targets of the agreements made by Portugal in the context of food reformulation, as well as an analysis of the nutritional composition of foods available on the Portuguese market and the limits imposed by the present law.</p> <p>Extension to logos of companies distributing unhealthy foods</p>		
Monitoring			<p>Yes</p> <p>Aggregation of relevant indicators regarding food intake patterns in children under 16 years old, characterization of food marketing targeted at them and their general health status. There is a monitoring system in place on an annual basis with monitoring studies being conducted for specific channels every year. In this monitoring studies the data collection is</p>		

				being done using the WHO protocols for food marketing monitoring. It is also in place annual actions to monitor the law compliance by the competent authority (Consumer Directorate-General).		
Funding				No		
Enforcement				Yes Infractions will be punished with fines of 1750€ to 3750€, in case of an individual, or of 3500€ to 45000€ if committed by companies. The Consumer Directorate-General are responsible for monitoring compliance.		
PROMOTION4: settings where children gather						
Evidence	Yes: Advertising Act & Consumer Protection Act	Yes	No	Yes	Yes: School meals act – Prohibition of food and drink vending machines in the area of educational institutions. School guidelines with recommendations 2010	Yes: Spanish Law 17/2011 on Food Safety and Nutrition

Specifics	Protecting children from harmful advertising	In addition to the Consumer Protection Act there are Consumer Ombudsman's guidelines (2021) on Marketing and Commercialism in Schools, Educational Institutions and Early Childhood Education. The purpose of this guideline is to inform businesses about how they can operate within the limits set by consumer protection law concerning schools, educational institutions and early childhood education		<ul style="list-style-type: none"> - In pre-schools, basic and secondary schools; - In public playgrounds; - Within a radius of 100 meters from pre-schools, basic and secondary schools' entries (with the exception of advertising elements displayed in commercial establishments, namely brands on outdoor furniture, awnings or signs integrated into the establishment); - In sporting, cultural and recreational activities organized by pre-schools, basic and secondary schools. 	This act provides high-quality school nutrition, which influences the optimal development of pupils and students, the development of awareness of healthy nutrition and eating culture, upbringing and education for a responsible attitude towards oneself, one's health and the environment and enables pupils and students to have access to healthy school nutrition and providing equal opportunities for students from socially less stimulating environments	PAOS Code: a self-regulatory initiative aimed at controlling and promoting responsible advertising practices related to food and beverages targeting children and adolescents. It addresses concerns about childhood obesity by establishing guidelines for advertising content, nutritional criteria, and promotional activities.. The objective is to encourage healthier food choices among the younger population and contribute to public health efforts to combat obesity.
Responsible	Ministry for Economy and Communication in cooperation with other ministries	Consumer Ombudsman		It was an initiative of the Portuguese Parliament and the implementation involves the Directorate-General of Health, Ministry of Health and the Consumer Directorate-	Ministry of education	Spanish agency for food safety and nutrition Ministry of Health, Consumer Affairs and Social Welfare Ministry of Agriculture, Fisheries and Food Scientific committee on food safety

				General, Ministry of Economy.		National Health Council
Stage	Implementation	Implementation		Implementation and evaluation	Implementation	Implementation
Type	<p>Legislation and regulation</p> <p>Prohibited in pre-school child care institutions, basic schools, upper secondary schools and vocational educational institutions. The Advertising Act does not explicitly prohibit advertising in sports and cultural events for children</p>	Guidelines		Mandatory Legislation and regulations (Law 30/2019 of 23th of April)	<p>Legislation and regulation</p> <p>On the territory of schools and educational institutions and on the surface belonging to their school premises (also kindergartens, institutions for the upbringing and education of children and adolescents with special needs, dormitories for students, student dormitories and in the Center for school and extracurricular activities)</p>	<p>Legislation and regulation</p> <p>Preschools, schools, sport events, sport clubs, educational centers, educational and health programs, universities and higher education institutions, nutritional education programs, extracurricular activities and school events, training courses and workshops and public health programs</p>
Age included	<p>Children up to 18 years</p> <p>Advertising which target group primarily children shall take into account their unique physical and mental state resulting from their age</p>	Children up to 18		Children up to 16 years	1 -19 year old	
Included	All marketing prohibited	Preschools		All foods that fit within the nutrient profiling	All food and drink marketing	Unhealthy food and drink marketing

	<p>+ Ban on imitating well-known people or characters applies only to advertising alcohol</p> <p>+ Ban on imitating the voice of well-known persons or characters or the voice of persons or characters known from films, tv, music or entertainment programs or events directed principally at children</p>	<p>Schools (primary and secondary)</p> <p>All marketing is included in the guidelines</p>		<p>model developed; DGS has developed a nutrient profiling model (published in Dispatch No. 7450-A/2019) based on the WHO nutrient profile model – WHO Regional Office for Europe Nutrient Profile Model – to which changes were introduced, with the objective of aligning the limits for some nutrients in some of the food categories, with the values defined by legislation from the European Union. Other changes reflect the targets of the agreements made by Portugal in the context of food reformulation, as well as an analysis of the nutritional composition of foods available on the Portuguese market and the limits imposed by the present law.</p>	<p>Healthy food advertisement present</p>	
Monitoring	Yes: the consumer protection and	No		Yes	Yes: Inspectorate of Education	Yes: compliance monitoring, inspections,

	<p>technical regulatory authority supervises advertisement</p>		<p>Aggregation of relevant indicators regarding food intake patterns in children under 16 years old, characterization of food marketing targeted at them and their general health status. There is a monitoring system in place on an annual basis with monitoring studies being conducted for specific channels every year. In this monitoring studies the data collection is being done using the WHO protocols for food marketing monitoring and the monitoring study for outdoors food marketing around schools was conducted in 2023. It is also in place annual actions to monitor the law compliance by the competent authority (Consumer Directorate-General).</p>		<p>data collection, health outcomes</p>
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Funding	Yes, for monitoring and evaluation	No		No	Yes, for monitoring, evaluation and implementation	Yes: for monitoring and evaluation and implementation
Enforcement	Yes: fines up to 300 fine units (1 unit = 4 euro) For a legal person, a fine up to 50.000 euros	No		Yes Infractions will be punished with fines of 1750€ to 3750€, in case of an individual, or of 3500€ to 45000€ if committed by companies. The Consumer Directorate-General are responsible for monitoring compliance.	Yes, up to 2000 euro	No
PROMOTIONS: Food packages						
Evidence	No	Yes		No	Yes: an industry code	No
Specifics		The Consumer Ombudsman issued the directive 'Children and Food Marketing' as early as 2004, which was supplemented in 2015. The directive outlines key issues (such as children's and youth programs, free toys, soft drink, and candy vending machines in schools) and employs morally but not			Aim is expanding the offer of foods with an improved composition and foods with a more favorable nutritional composition, promoting an healthy lifestyle	

		<p>legally binding language, while referring to both the Convention on the Rights of the Child and the Finnish Constitution.</p> <p>For example, under the Consumer Protection Act, a parent's right to upbringing is violated if an advertisement directly urges a child with phrases such as 'buy', 'try', 'get', 'experience', attempting to persuade the child to convince the parent to purchase the product. The main message focuses heavily on appealing to the child's emotions through a game, cartoon character, free toy or competition instead of the product itself</p>				
Responsible					Chamber of Agricultural and Food Companies	
Stage		Implementation			Implementation	
Type					Industry self-regulation	

Included					Only products aimed at children – the promoted product is intended and/or appeals specifically to children	
Monitoring		No			Yes: internal monitoring	
Funding		No			Yes: monitoring, evaluation and implementation	
Enforcement		No			No	

6. Prices 1

Currently, in none of the countries there is a minimization of taxes on healthy foods to encourage healthy food choices, nor is it on the agenda. In the countries, all foods and drinks, without any exceptions, are taxed with a standard rate of value-added tax.

Portugal introduced the 0% VAT in April 2023 for a duration of 8 months. The objective in this case was to reduce the impact of rising inflation on a basket of essential, healthy food products. The tax was replaced in 2024 to its original level (6%). However, the price increase was lower than expected (app. 4.2%).

It is important to highlight that maybe changes can be on their way, as the EU now allows member states to reduce VAT to 0% for healthy and sustainable foods (17).

Table 6: data collected on prices 1 by the different countries

	Estonia	Finland	Italy	Portugal	Slovenia	Spain
Evidence	No		No	Yes: There was a 0% VAT tax from April 2023 until December 2023	No	No
Specify				The Portuguese government implemented a transitional fiscal measure to reduce the impact of inflation. Law n° 17/2023 of April 14 th exempted from VAT the imports and supply of certain food products part of a healthy food basket. For this purpose, the Ministry of Health defined a set of healthy food products present in the Food Wheel Guide to be subjected to the 0% VAT rate. DGS also developed a guiding manual to capacitate the population to make healthy choices with the VAT-free food		
Food groups included				<ul style="list-style-type: none"> - Cereals, cereal products and root vegetables (bread; potatoes in their natural state; fresh and dried pasta (excluding stuffed pasta); rice). - Vegetables: fresh, chilled, dried, frozen, even if previously cooked (onion; tomato; cauliflower; lettuce; broccoli; carrot; courgette; leeks; pumpkin; turnip greens; Portuguese cabbage; spinach; turnip; peas). - Fruits in their natural state (apple; banana; orange; pear; melon). - Dried pulses (red bean; black-eyed peas; chickpeas). - Dairy (cow's milk; yogurt; fermented milks; cheese). 		

				<ul style="list-style-type: none"> - Meat and offal: fresh or frozen (pork; chicken; turkey; beef). - Fish: fresh (dead or alive), chilled, frozen, dried, salted, in brine, excluding smoked or tinned (cod; sardines; hake; mackerel; golden bream). - Tinned tuna. - Chicken eggs, fresh, dried or preserved. - Fats and oils (olive oil; edible vegetable oils and blends; butter) - Vegetable-based drinks and yogurts, without milk or dairy, made from nuts, cereals, fruits, pulses or vegetables. - Dietary products meant for enteral nutrition and gluten free products for people with celiac disease. 		
Monitoring				A monitoring committee was established, composed of 8 entities, with the Economic and Food Safety Authority (ASAE) in charge of monitoring the effective reduction of VAT on food products covered by this measure.		
Impact and policy effectiveness				It was not evaluated, but there was an effective reduction of price of the food products included in this measure. By September 2023, that reduction was estimated to be around 10%		
Coherence				By increasing financial access to healthy foods, this policy was aligned with one of PNPA's missions to stimulate the physical and economic availability of healthy foods and it was applied just to healthy foods, showing the alignment of this policy with health promotion.		

7. Prices 2

There is indication in different countries that additional taxation on unhealthy foods is something that governments are exploring. In Portugal and Spain, it is implemented, in Italy, it is on hold, in Estonia and Slovenia, it is still under proposition. In Spain, Finland and Estonia, those would be food group based taxes specifically targeting sugar-sweetened beverages (and additionally in Finland sweets and chocolate). In Slovenia, Portugal and Italy, these are nutrient based taxes, specifically on sugar or other sweeteners (and in Slovenia also on salt).

Table 7: data collected on prices 2 by the different countries

	Estonia	Finland	Italy	Portugal	Slovenia	Spain
Evidence	Yes	Yes	Yes	Yes	Yes	No
Food group based tax or Nutrient based tax	Food group based – tax on sweetened drinks	Food group based tax on Soft Drinks	Nutrient based – tax on sugar sweetened beverages, and beverages sweetened with added sweeteners (natural or synthetic origin) and having an alcoholic strength by volume not exceeding 1.2%	Nutrient based – tax on sugar or other sweeteners	Nutrient based – tax on sugar and salt	Food group based tax: a tax on sugary drinks
Specifics	The proposal to tax sweetened drinks (containing both sugar and/or sweeteners) is in the very early stages, so we do not have many details yet. The	The Act on Soft Drink Tax (1127/2010) applies to beverages that are non-alcoholic or contain a low amount of alcohol, such as juices, lemonades, mineral	Sugar Tax 160/2019, comma from 661 to 676/ Tax is to be paid by the national producers or distributors or by the consumers. Tax is intended for	On February 1, 2017, the Law No. 42/2016 of 28 of December on the 2017 State Budget came into effect, mandating that non-alcoholic beverages containing added sugar or other sweeteners are subjected to a tiered tax.	Amendment of Rules on the implementation of the VAT Act is under preparation. It provides for a higher tax on foods with a higher sugar content and a tax	According to the General State Budget Law for the year 2021, there was an increase in the tax on sugary drinks from 10% to 21%.

	<p>Government is determined to impose such a tax, however, we cannot predict whether the National Assembly approves it or not. In 2017, the Estonian National Assembly already adopted a law to tax sweetened drinks, but the President did not give her seal of approval.</p>	<p>waters, and coffee drinks. The Act on Soft Drink Tax was amended in the spring of 2023, but the changes have not yet come into effect. The enactment of the changes will be stipulated later by a government decree after approval has been obtained from the European Commission. Until then, the current law will remain in force. The soft drink tax will be tiered based on the sugar content of the beverage, changing from the current two tax categories to six tax categories</p> <p>According to the government's 2024 proposal, the general value-added tax (VAT) rate in Finland will</p>	<p>non-alcoholic beverages. The sugar tax is due at €10 per hectoliter, for the finished products and at €0.25 per kilogram, for products designed to be used after dilution. The sugar content threshold: 25g/liter for finished products or 125g/kg for products to be used after dilution. This tax also applies to artificially sweetened beverages, according to a conversion table of sugar sweeteners</p>	<p>This tax was revised in 20189 to increase to number of taxation tiers to maintain the incentives to food reformulation, and again in 2023, updating the amount per tier according to the inflation rate. The main goal of these taxes was to reduce the consumption of SSBs, as almost half of the Portuguese children and adolescents have a sugar intake above the maximum recommended by the WHO and SSBs are among the foods/beverages that most contribute to the Portuguese population's sugar intake</p>	<p>on certain foods with a higher salt content. Additionally, tiered tax on sugar sweetened beverages is in consideration</p>	
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		be increased, and sweets and chocolate will be moved to the general VAT rate, rising from 14 percent to 25.5 percent.				
Responsible	Ministry of Social Affairs in cooperation with NIHD and Ministry of Finance	Ministry of Finance	Ministry of Finance Ministry of Health	Ministry of Health Ministry of Finances Ministry of Economy Monitoring Committee: working group composed of representatives from the Secretary of State of Commerce, the Tax and Customs Authority, the DSG and the Directorate-General for Economic Activities	Ministry of Finance Ministry of Health National institute of Public Health	Ministry of Finance Ministry of Health
Coherence				This measure is part of the National Program for Healthy Eating Promotion (PNPAS) and is aligned with axis 1 of the multisectoral Integrated Strategy for the Promotion of Healthy Eating to “modify the environment where people choose and buy food by modifying the availability of food in certain physical spaces and promoting the reformulation	Part of the Resolution on the National Programme on Nutrition and Physical Activity for Health 2015-2025	

Stage	Proposed	In development	In development	Implementation	Proposed	Implementation
Details	<p>The draft law is pending in Parliament, the second reading is about to begin. Currently, it is foreseen to enter into force at the beginning of 2026. The tax will be imposed on</p> <p>*Sweetened drinks containing sugar more than 5g per 100 ml</p> <p>*Drinks sweetened with sweeteners</p> <p>The tax will be tiered depending on the level of sugar and/or sweeteners content</p>	<p>Excise tax</p> <p>At the moment the excise tax on sugar-free products is half that of beverages containing sugar.</p> <p>New:</p> <p>The excise tax on soft drinks containing more than 0.5 percent sugar is 32 cents per liter of the finished beverage. For other soft drinks, the excise tax is 13 cents per liter. The health guidance included in the excise tax on soft drinks will be strengthened. The soft drink tax will be tiered based on the sugar content of the beverage, changing from the current two tax</p>	<p>Excise tax and Sales tax aimed at consumer</p> <p>No specific excise tax on producer level</p> <p>Volumetric tax</p> <p>No exemptions</p> <p>Increase in retail price (50%)</p> <p>Start: 1-7-2025</p>	<p>Excise tax – Tiered tax</p> <p>For non-concentrated beverages: 1.16€ / hl, 6.95€/hl, 9.26€/hl, 23.18€/hl depending on the sugar content (based on total sugar) being, respectively, less than 25g/l, less than 50g/l and equal to or greater than 25g/l, less than 80g/l and equal to or greater than 50g/l or equal to or greater than 80g/l/</p> <p>For concentrated products presented in liquid form (e.g. syrups): €6.08/hL, €36.47/hL, €48.62/hL and €121.56/hL, depending on the sugar content being, respectively, less than 25 grams per litre; less than 50 grams per litre and equal to or greater than 25 grams per litre; less than 80 grams per litre and equal to or greater than 50 grams per litre; or equal to or greater than 80 grams per litre.</p>	<p>Ad valorem tax</p> <p>Sales tax aimed at consumer</p> <p>A change to the rules is being prepared to exclude foods with a higher sugar content from the reduces VAT rate (9.5%)</p> <p>Currently: uniform VAT rate</p> <p>Exemptions present, listed in the Rules</p> <p>Increase from 9.5% to 22%</p>	

		<p>categories to six tax categories.</p> <p>The lowest tax rate will continue to apply to sugar-free drinks, as is currently the case. The tax on sugar-free drinks will be reduced from the current 13 cents to 9 cents per liter. In the new tax proposal for sugary drinks, the tax amount will be 16, 24, 32, 40, or 48 cents per liter, regardless of whether the drink contains added sugar or only naturally occurring sugar.</p> <p>The new policy on sweets and chocolate concerns the value added tax i.e. is sales tax aimed at consumer.</p>		<p>For concentrated product presented in the form of powder, granules, or other solid forms: €10.13/hL, €60.78/hL, €81.04/hL and €202.61/hL per 100 kilograms net weight, depending on the sugar content being, respectively, less than 25 grams per litre; less than 50 grams per litre and equal to or greater than 25 grams per litre; less than 80 grams per litre and equal to or greater than 50 grams per litre; or equal to or greater than 80 grams per litre.</p> <p>The excise tax is due solely by producers/distributors, but reflects on final price</p> <p>Drinks exempt from this tax are non-alcoholic drinks such as milk or dairy alternative beverages, fruit juices and nectars and drinks for special dietary needs or nutritional supplements</p>		
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		Exemption: Unpackaged drinks prepared for immediate sale at the point of food delivery are excluded from the tax.				
Objective		Health related The rationale for the legal changes takes into account the health effects of excessive sugar consumption	Revenue is earmarked for public health	Health related The main goal of these taxes was to reduce the consumption of SSBs, as almost half of the Portuguese children and adolescents have a sugar intake above the maximum recommended by the WHO, with over 40% of adolescents reporting a daily intake of SSB. Additionally, SSBs are among the top 3 food/beverages that most contribute to the Portuguese population's sugar intake	Health related and finance related Revenue not earmarked for public health	No indication that the revenue is earmarked for public health
Monitoring		Monitoring of sales and consumption habits	Not present	Yes The monitoring committee was in charge of collecting and analyzing data and indicators pertaining to the impact of this taxation, namely on SSB prices, public health, food companies and	Not present	No

				revenue. A formal impact assessment was carried out once, however, there is a yearly evaluation of the tax regarding volume of sales and distribution of SSB sales by tax tier		
Use of revenue				The revenue if fully channeled to the National Healthcare System's budget and since 2023, it was defined that a part of the revenue of this tax should be used for health promotion measures		
Impact and policy effectiveness		In Finland, population health surveys are carried out regularly. These data can then be used in evaluation of f.e. obesity, nutrition, food habits, ...		In the first year of implementation, there was a drop of 4.% in SSB sales, and a reduction of almost 50% in the sales of drinks with a sugar content above 8g/100mL, either due to the reformulation of products, to the transference to the consumption of other drinks taxed at a lower rate or to an acquired preference for consuming lower sugar beverages. Between 2016 and 2017, there was a reduction of 15% in the total volume of sugar consumed, representing 5630 tons of		

				<p>sugar. The tax triggered a reformulation of the SSB. While, in 2017, 30.5% of SSB sold had over 80g of sugar/L, in 2023, it had dropped to 19.5%. Also, from 2019 to 2023, there was a 54% increase in the SSB sales in the lowest tier (under 25g/L). between 2018 and 2022, there was a decrease of 20.5% in average sugar content of SSB, far beyond the initial target of 10%</p>		
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8. Provision 1

All countries have in place some form of regulation when it comes to food service activities implemented in schools and early childhood education services, guided by monitoring and evaluation to ensure proper implementation of these guidelines. In Estonia, Slovenia and Portugal, these standards/guidelines/regulations are mandatory, whilst in the other countries, they are voluntary. All countries have food group based standards (Estonia is transitioning to these type of standards), but in Italy, Spain and Slovenia (and currently Estonia) there are also nutrient-based standards.

In Estonia, Portugal and Slovenia, there are also monitoring provisions in place, and in Slovenia even enforcement provisions when schools or persons responsible fail to adhere to these standards.

In Finland, school meals are free for everyone. In Estonia, the government pays 1 euro per child to purchase the raw ingredients, the rest (partially or whole) is paid by local government. Slovenia subsidizes school meals for the most deprived children.

Additionally, there are also mandatory standards/regulations/guidelines in place with regards to vending machines in Slovenia and Portugal, and in Estonia, these will be made mandatory in the new regulation. These regulations prohibit the presence of vending machines on school grounds or what they can contain or where they can be placed (f.e. there is the possibility in Slovenia to place a vending machine for hot beverages in the teacher's lounge).

Table 8: Data collected on provision 1 by the different countries

	Estonia	Finland	Italy	Portugal	Slovenia	Spain
Evidence	Yes	Yes	Yes	Yes	Yes	Yes
Specifics	<p>In Estonia, currently in force are nutrition based standards Regulation: "Health protection requirements for catering in preschools and schools" 2008</p> <p>Work is ongoing to replace it with a new regulation, if this is adopted, Estonia will have food based standards</p>	<p>Early Childhood Education Plan by Finnish National Agency for Education 2018: A child attending day-care or family day-care must be provided with balanced nutrition. Mealtime should be appropriately organized and guided.</p> <p>Early Childhood Education Act</p>	<p>There are Italian guidelines for meals provided by the schools for children up to 13 years of age. However, these guidelines are not legally binding for food procurement.</p> <p>Health related policies</p>	<p>Food group based standards</p> <p>Policies around restriction/ elimination of choice</p> <p>Policies around provision of fruit and vegetables (EU Fruit and Vegetable Scheme)</p>	<p>1) National dietary guidelines for healthy nutrition in kindergarten and schools</p> <p>2) EU school Scheme</p> <p>3) Project: the Traditional Slovenian Breakfast</p> <p>4) Healthy eating guidelines for students with menus/subsidized student meals</p>	<p>Overarching principles/ guidelines established at the national level that could influence the implementation of nutrition policies.</p> <p>1) Interinstitutional Cooperation Program for the Promotion of Healthy Eating Habits and Physical Activity (PAAS-HAP):</p>

	<p>Health related policies</p>	<p>540/2018, §11 Nutrition and Meals: "child in early childhood education must be provided with healthy and necessary nutrition that meets the child's nutritional needs."</p> <p>Basic Education Curriculum Framework by Finnish National Agency for Education: "The purpose of school meals is to support students' healthy growth and development, learning ability, and food competence. Each school day, all students participating in education are to be provided with a balanced and free meal." Basic Education Act (13.6.2003/477)</p> <p>Early Childhood Education Curriculum</p>	<p>The objective is to guarantee balanced meals ensuring variety and adherence to the Mediterranean diet pattern. Then the guidelines aim to promote the consumption of sustainable food to avoid food waste.</p>	<p>Policies around food on events, if the food is provided by school bars or school vending machines</p> <p>Dispatch no. 8127/2021 defines what food products cannot be available in school bars and vending machines, as well as the products that may or must be made available in those settings;</p> <p>- Circular 3097/DGE/2018 establishes the guidelines to follow when designing school menus, including the types, frequency and portions of foods to serve, and which foods should not be made available.</p>	<p>5) Recommendations for filling food vending machines</p> <p>All health related policies</p>	<p>This program extends its efforts beyond schools to promote healthy eating habits and physical activity in other public sector settings such as public parks, community centers, and recreational facilities.</p> <p>2) Dietary guidelines for the Spanish population</p>
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		<p>Framework 2014. "Objectives and key principles of organizing meals and food education in early childhood education."</p> <p>Decision A227/200/2017 of the Finnish Tax Administration, §12: Nutrition Benefit Received by Education Personnel. The value of the nutrition benefit received by day-care and school staff during the supervision of children's/pupils' meals is €4,80 per meal in the year 2023.</p> <p>Vocational Education Act 531/2017, § 100: Right to Free Meals.</p> <p>Upper Secondary School Act 10.8.2018/714, § 35: Student Social Benefits: 'In upper</p>				
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		<p>secondary education intended for young people, students have the right to a free meal.</p> <p>4 national nutrition and meal recommendations by the National Nutrition Council: - Health and Joy from Food. Early Childhood Education Meal Recommendations. 2018. - Eat and Learn Together. School Meal Recommendation. 2017. - Well-being and Community from Meals - Meal Recommendation for Vocational Institutions and Upper Secondary Schools. 2019. - Well-being and Study Performance through Meals - Meal Recommendations for University Students 2021.</p>				
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		<p>School Sponsorship and Other Marketing in Schools. Consumer Ombudsman's Statement 1997. School sponsorship is one form of marketing, and the same rules apply to it as to other forms of marketing. The guidelines are intended for companies planning commercial cooperation with schools. "Marketing materials such as advertisements, product samples, or promotional gifts may not be distributed to minors through schools and educational institutions"</p>				
Responsible	<p>Ministry of Social Affairs NIHD Ministry of Regional Affairs and Agriculture Other relevant agencies</p>	<p>The Finnish National Agency for Education (The Ministry of Education and Culture)</p>	<p>Ministry of Health</p>	<p>Ministry of Education; Directorate-General of Education and with the technical support of the</p>	<p>Ministry of Health Ministry of Education Ministry of Agriculture, Forestry and Food National institute of Public Health</p>	<p>1) Ministry of education and Vocational training 2) Ministry of Agriculture, Fisheries and Food</p>

		<p>The Ministry of Agriculture and Forestry The Finnish Competition and Consumer Authority (the Ministry of Economic Affairs and Employment)</p> <p>The National Nutrition Council</p>		<p>Directorate-General of Health, Ministry of Health</p>	<p>National Education Institute Slovenia</p>	
Types	<p>Standards/regulations /guidelines for School meals Food in vending machines</p>	<p>Standards/regulations /guidelines for school meals Standards/regulations /guidelines for food for promotions</p>	<p>Standards/ regulations /guidelines for school meals</p>	<p>Mandatory nutrition standards through regulation</p> <p>Standards/ regulations /guidelines for School meals Food at events Food in vending machines</p>	<p>Standards/regulations /guidelines for</p> <ol style="list-style-type: none"> 1) school meals, food in vending machines, food in other occasions 2) distribution of free food, food for promotions 3) food at events 4) school meals 5) food in vending machines 	<p>Guidelines, regulations</p>
Types of school included	<p>Kindergarten Primary school Secondary school</p>	<p>Kindergarten Primary school Secondary school Universities/college</p>	<p>Kindergarten Primary school</p>	<p>All public schools and schools with state funding</p>	<ol style="list-style-type: none"> 1) Kindergarten, primary and secondary schools 2) primary school 3) kindergarten, primary school, secondary school 4) universities, college 	<p>Primary schools, Secondary schools Universities</p> <p>Hospitals and Primary Health care centers, Other public sector settings such as</p>

					5) Universities/college (as vending machines are banned in schools)	public parks, community centers and recreational facilities
Standards used	Nutrient based standards (current) Food group based standards (new)	Nutrient based standards Food group based standards	Food group based standards	Food group based standards	Nutrient based standards Food group based standards	Nutrient based standards Food group based standards
Nutrient based standards	Trans fats Saturated fats Sugar Salt/sodium	Saturated fats Sugar Salt/sodium Other (total energy intake, total fats, carbohydrates, proteins, fiber and iodine) (18–20)			Trans fats Saturated fats Sugar Salt/sodium Other (fiber) The specific standards are present in several places in the guidelines or is limited in different ways. Table 2 (pp. 32-34) lists the restrictions on ordering particular food groups (the restrictions vary between groups). Table 7 (p. 54) lists the restrictions by age group for the full day intake depending on which meals are	Trans fats Saturated fats Sugar Salt/sodium Other (fiber) (21)

					offered by the establishment. Table 12 (p. 78) gives recommended daily intakes by age and sex, which are not fully mandatory (except for those nutrients already mentioned in the above tables), but only encourage monitoring as part of the research work.	
Specify	Total energy content (kj/kcal); proteins, carbohydrates and fatty acids contents in grammes and as % of energy. Vitamins and minerals contents are given as indicatives (i.e. not mandatory). In the Annexes to the Regulation specific ranges are defined for total energy, proteins, carbohydrates and	There is no regular monitoring associated with other regulations and recommendations and their implementation, but the nutritional content of meals for university students is monitored. The Social Insurance Institution of Finland (Kela) monitors the use of the grant granted to student restaurants under the State Aid Act			For trans fats: regulation on the maximum allowable trans fatty acids content in foodstuffs. This regulation prohibits trans fats in foods	Regulations on salt, and trans fats

	<p>fatty acids content for each age group. Specifically:</p> <ul style="list-style-type: none"> *) saturated and trans fats - less than 10% of total energy content; *) added sugars - less than 10% of total energy content; *) salt/sodium - maximum permitted levels in grams depending on the age group. <p>All Estonian preschools and general education schools – children are divided into groups based on the nutritional needs of their age</p>	<p>(688/2001) and how the restaurant adheres to the Government Decree on the Basis for Supporting the Meals of University Students (375/2020). Attention is also paid to the implementation of the criteria of the meal recommendation for university students in the monitoring.</p>				
Stage	Implementation	Implementation			Implementation 4) currently under revision	Implementation
Type of regulation	Mandatory nutrition standards through regulation	Voluntary nutrition standards (Otherwise voluntary except the nutritional content of meals for university students)			<ol style="list-style-type: none"> 1) Mandatory nutrition standards through regulation 2) Voluntary nutrition standards 	Voluntary nutrition standards

		where standards are mandatory for students restaurants to obtain the financial support by the Social Insurance Institution of Finland (Kela))			3) Voluntary nutrition standards 4) Mandatory nutrition standards 5) Nutrition standards through co-regulation	
Food group based standards	All food groups included		Specific food groups included		All major food groups, with an emphasis on the recommended food groups	All major food groups, with an emphasis on the recommended food groups
Specify	The new regulation sets clear restrictions on food choices. E.g. the following foods should not be in the menu: foods containing high-intensity sweeteners, azo dyes and flavour enhancers; deep-fried (prepared with copious amounts of fat); instant mashed potatoes or sulphited potatoes; fruit/berry preserves with added sugar; confectionary, cookies and other sweets; drinks with added sugar, energy and sports drinks;	Recommendations and standards concern all components of a meal including side dishes, like drinks, bread, salad and salad dressings (18–20)	The guidelines set the frequency of consumption of vegetables and fruits, bread and cereals, legumes, potatoes, fish, eggs, cheese, meat and delicatessen meat. These guidelines do not set the portion sizes (22,23) The local health authority prepares the	Includes all food available on school premises beyond school hours, all food available on school premises in general, all food in canteen/tuck shops and in vending machines	/	Spanish agency for food safety and nutrition Ministry of Consumption: RECOMMENDATIONS HEALTHY DIETETICS AND SUSTAINABLE supplemented with recommendations (2022) of physical activity for the Spanish population (24)

	<p>products high in caffeine; ketchup, mayonnaise and other industrially prepared sauces. There are also restrictions, e.g. smoked and salted fish can be offered only once per fortnight, meat products once per month etc. Butterfish cannot be served in preschools and schools. Fruits (except juice and dried fruits and berries) and vegetables (except potatoes, sweet potatoes, olives, avocado and juice) should be in the menu every day. The minimum amount of grams are given in the new Regulation. The menu may differ from the usual on a few days per year, however, the required amount of total</p>		<p>school meals following the guidelines and it controls that canteens follow the food safety requirements which are mandatory</p>			
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	energy needs to be provided.					
Stage	In development	Implementation	Implementation	Implementation	Implementation	Recommendation (Implementation)
Type of regulation	Mandatory nutrition standards through regulation	Voluntary nutrition standards	Voluntary nutrition standards	Mandatory nutrition standards	The School Nutrition Act defines the mandatory use of dietary guidelines	Voluntary
Monitoring	<p>Yes</p> <p>For the first 10 years (from 2008 to 2018) the Health Board recurrently monitored how school canteens followed the provisions in the Regulation.</p> <p>Now they monitor the situation in a school if a complaint has been made.</p> <p>Regarding the new regulation, monitoring, evaluation and funding provisions are unknown at the moment.</p>	<p>No</p> <p>The implementation of nutrition recommendations in early childhood education and educational institutions is not actively monitored.</p> <p>However, in Finland, a comprehensive national school health survey is conducted every other year, which includes questions about the consumption of school lunches and their components.</p> <p>Currently, a national children's nutrition survey is being developed</p>	<p>No</p>	<p>Yes</p> <p>For dispatch no. 8127/2021 (school bars and vending machines): An online survey was sent to schools to assess compliance;</p> <p>For circular 3097/DGE/2018 (school meals): there is an online tool (SPARE+ - School Meal Planning and Evaluation System) designed to allow school staff as well as parents/caregivers to evaluate the quality and adequacy of school meals.</p>	<p>Yes:</p> <p>School Nutrition Act</p> <ul style="list-style-type: none"> - Self-evaluation follow-up questionnaire for all schools and follow-up with counseling (implemented by NIPH) - Questionnaires for pupils and for the person in charge - School by school evaluation 	<p>No</p>

				For dispatch no. 8127/2021 (school bars and vending machines): There was an evaluation in 2022; the next one is scheduled for 2024.		
Funding	Yes: implementation In order to provide children with food, the state pays 1 euro per child for purchasing the raw ingredients. The rest will be covered either whole or partially by the local government.	No	No	No	Yes: monitoring, evaluation and implementation	No
Enforcement	Yes The Health Board may make injunctions in cases where the provisions are not followed. And injunction is an administrative act that imposes obligations to do or not to do certain activities	No	No	No	Yes: The inspectorate of the Republic of Slovenia for Education and Sport supervises schools in relation to the organization and operations of school catering activities; Fines €1000 - €2000 for schools €100 - €1000 for person in charge of the school	No

Impact and policy effectiveness		<p>A comprehensive national school health survey is conducted every other year, which includes questions about the consumption of school lunches and their components. Currently, a national children's nutrition survey is being developed.</p> <p>Research conducted in Finland has found that school meals are nutritionally the best meal of the day for many children</p>		<p>Approximately 30% of schools had one or more forbidden foods available in food bars, while a similar percentage did not make available one or more mandatory food products; regarding vending machines, close to 50% had at least one forbidden food product, while 97.5% did not provide one or more mandatory food products.</p>	<p>Public procurement of food provides the opportunity to drive local and regional food economies towards more sustainable paths</p> <p>Reduced use of sugary drinks, more fruit and vegetables, more frequent breakfasts, more balanced meals in ECEC</p>	/
Vending machines	<p>Voluntary guidelines</p> <p>Will become mandatory in the new regulation</p> <p>The guidelines are based on national dietary guidelines. The main aim is to make healthy food choices more available and restrict</p>	<p>No</p> <p>Vending machines can be present</p>	<p>No</p> <p>Vending machines can be present. There are no limitations for foods sold by the vending machines</p>	<p>Mandatory regulations</p> <p>Vending machines must not contain:</p> <ul style="list-style-type: none"> - cakes and pastries; - salty pastries (pies, samosas, croquettes, etc.); - breads with sweet fillings; 	<p>Specific policy for vending machines: School Nutrition Act</p> <p>Vending machines for the distribution of food and drinks may not be installed on the premises of schools and educational establishments and on the area adjacent to their school premises</p>	<p>Present: the Law 1/2010 of March 1, on Retail Trade Regulation in Spain was enacted in accordance with the provisions of Directive 2006/123/EC of the European Parliament and of the Council concerning services in the internal market.</p>

	<p>the choice of unhealthy ones in order to provide children with nutrients and prevent obesity. For example, the following foods are not considered suitable for selling in cafes and vending machines: foods containing azo dyes, high-intensity sweeteners and flavour enhancers; deep-fried products; energy drinks and sugary soft drinks; confectionary; snacks with high salt content etc. In addition, information about healthy eating (e.g. posters with the food pyramid or plate rule) should be in close proximity to the point of sale.</p>		<ul style="list-style-type: none"> - delicatessen, including sandwiches or other products containing chorizo, sausages, mortadella, prosciutto or bacon; - sandwiches or other products containing ketchup, mayonnaise or mustard; - cookies and biscuits; - soft drinks and energy drinks; - candy, caramels, chewing gum with added sugar, lollipops and gummies; - sweet or salty snacks, chips, popcorn, etc.; - sweet desserts (chocolate mousse, rice pudding, custard, etc.); 	<p>Exception: vending machines for the distribution of hot drinks may be installed in chambers or premises intended exclusively for the use of employees of the school or educational establishment</p>	<p>The main objective of this legislation is to establish rules that regulate the exercise of retail trade activity in Spain</p> <p>No limits to what it can contain – everybody has access</p>
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				<ul style="list-style-type: none"> - cereal bars and single doses of breakfast cereal; - ready-to-eat meals such as hamburgers, hotdogs, pizza, lasagna, etc.; - chocolates; - alcoholic drinks; - sauces, namely, ketchup, mayonnaise and mustard; - chocolate spreads and spreads with added sugar; - ice-cream. <p>Hot drinks automatic machines must not serve hot chocolate or add more than 5g of sugar per drink.</p>		
Included	Primary school, secondary school			All public schools and schools with the state funding	Kindergarten, primary school, secondary school	Kindergarten, primary school, secondary school, universities/college
Branding	No restrictions			Restriction of branding of the	No restrictions	No restrictions

				vending machines (PROMO4)		
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*For Slovenia, numbers agree with types included in the different policies (so 1), the National dietary guidelines for healthy nutrition in kindergarten and schools, contains standards/regulations/guidelines for school meals, food in vending machines and food in other occasions)

9. Provision 2

Most governments, with the exception of Italy, also have guidelines or regulations in place for a definite set of government settings (like hospitals, prisons, ...). Estonia, Portugal and Spain have specific, mandatory regulations in place for the settings included, Slovenia and Finland rely on a voluntary implementation of the guidelines. Portugal conducted a study on public support (2018), and found that 82.1% of the Portuguese population agrees with the implementation of these measures to promote a healthy diet.

Table 9: data collected on provision 2 by the different countries

	Estonia	Finland	Italy	Portugal	Slovenia	Spain
Evidence	Yes	Yes	No	Yes	Yes	Yes
Specifics	Three settings where food service activities have clear and consistent requirements laid down in legal acts 1) Regulation regarding food service in health care and social welfare institutions 2) Regulation regarding rations of food in detention facilities 3) Regulation regarding rations of food for crew members of board ships	The National Nutrition Recommendations consider all public sector catering services Health from Food. Finnish Nutritional Recommendations 2014. New recommendations will be published in 2024. - Nutritional Recommendations for University Students - Health from Food 2016. - Well-being and Community through Eating - Nutritional Recommendations for Vocational Schools and High Schools. 2019. - Vitality for Senior Years: Nutritional Recommendations for the Elderly. 2020. - Nutritional Therapy.		Yes (Dispatch No. 7516-A/2016, which determines the food supply in Automatic Vending Machines at Ministry of Health institutions and Dispatch no 11391/2017, which determines the food supply in bars, buffets and cafeterias of the Ministry of Health institutions, both forbidding the inclusion of HFSS foods and promoting healthier alternatives) Settings included: all ministry of health's institutions (hospitals, primary care health centers and all	PUBLIC PROCUREMENT STANDARDS Public Procurement Act as public food procurement is managed at the national level. PFP is based on national legislation on public procurement and recommendations such as food-based dietary guidelines. Slovenia transposed EU legislation on public procurement by utilizing an exemption in public procurement Directive to achieve short food chains.	While there are overarching guidelines and principles established at the national level, the enforcement and detailed implementation may vary across different autonomous communities. 1) Comprehensive Plan for the Promotion of Physical Activity and Balanced Nutrition (PAAS): this plan sets out guidelines and actions to promote physical activity and balanced nutrition across various public sector settings (hospitals, government

	<p>Additionally: internal regulation regarding rations of food in the defense forces (not publicly available)</p> <p>All health related policies</p>	<p>Recommendations for Hospitals, Health Centers, Service and Care Homes, and Rehabilitation Centers (2023). - Developing Mass Catering in Finland. Recommendations of the Monitoring and Development Working Group for Mass Catering. Ministry of Social Affairs and Health 2010. - The diet of conscripts and prisoners follows national nutritional recommendations.</p> <p>Responsible Food Service Procurement Guide (2021) which are especially targeted for catering services.</p> <p>Nutrition commitment is a Finnish operating model, which helps and encourages food business operators and stakeholders to improve the nutritional quality of the Finnish diet and to encourage nutritionally responsible practices. A target-oriented and measurable</p>		<p>institutions of the Ministry of Health)</p> <p>Objective was health related, inadequate eating habits, high blood pressure and high BMI are among the leading factors contributing to DALY in Portugal; All National Health System (SNS) facilities must be health-promoting environments and, therefore, should encourage the adoption of healthy behaviors, in agreement with other policies.</p>	<p>The PFP procedure also includes quality schemes (20% by quantity) and other criteria (selection criteria, award criteria, GPP). 12% of purchased food must be organic and public institutions can procure local products on purchase form from a local farmer, without a public tender, due to the legislative exemption</p> <p>FOOD REGULATION IN PRISON</p> <ul style="list-style-type: none"> - Law on the Enforcement of Criminal Sanctions (ZIKS-1), Article 44: The food provided to the prisoner shall be sufficient to maintain his health and physical fitness. - Rules on the enforcement of prison sentences, 	<p>offices and military facilities</p> <p>2) NAOS Strategy (Nutrition, Physical Activity and Obesity Prevention): aims to promote healthy eating and physical activity across different public sector environments to prevent obesity. This includes initiatives targeting workplaces, prisons and other public institutions</p> <p>3) Dietary Guidelines for the Spanish Population: these guidelines provide evidence-based nutritional recommendations that can be applied not only in school cafeterias but also in other public sector food service establishments such as hospitals, prisons and government canteens</p> <p>4) Health Public Procurement Policies: National policies promoting healthy public procurement practices</p>
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		commitment provides an excellent tool for such bodies as companies and corporations to improve their own nutritional responsibility.			<p>Article 22/Food provision: The diet is balanced, varied and adapted to the daily energy needs of the inmates.</p> <p>GUIDELINES 1) Healthy menu practice nutrition of patients in hospitals and the older people in homes for the elderly (2008) 2) guidelines for the implementation of nutritional care in care homes for the elderly (2020)</p> <p>Health related policies</p>	can influence food service activities in various public sector settings by encouraging the purchase and provision of nutritious food options in government-run facilities and institutions
Responsible	Ministry of Social Affairs	<p>The Finnish National Agency for Education (The Ministry of Education and Culture) The Ministry of Agriculture and Forestry The Finnish Food Authority</p> <p>National Nutrition Council</p>		Ministry of Health, DGS	<p>1) Ministry of Health 2) Ministry of Health, Ministry of Labour, Family, Social Affairs and Equal Opportunities + National Institute of Public Health, Chamber of Commerce and Industry of Slovenia, Community of social</p>	<p>1) Ministry of Health, Consumer Affairs and Social Welfare 2) Ministry of Health 3) Ministry of Agriculture, Fisheries and Food</p>

					institutions, Institute of Oncology, Ljubljana	
Coherence		These recommendations are in coherence with other nutrition recommendations		This measure is part of the National Program for Healthy Eating Promotion (PNPAS) and is aligned with axis 1 of the multisectoral Integrated Strategy for the Promotion of Healthy Eating (EIPAS) to "modify the environment where people choose and buy food by modifying the availability of food in certain physical spaces and promoting the reformulation of certain categories of food". PNPAS is national health priority program and EIPAS is a interministerial strategy of 7 different ministries (Finance, Internal Affairs, Education, Health, Economy, Agriculture, and Sea Ministries).	Part of the National Programme for Nutrition and Physical Activity 2015-2025	See above
Stage	Implementation	Implementation		Implementation	Implementation	Implementation

Types of policies	Policies around canteens	Policies around canteens Policies around public procurement standards			Policies around canteens Policies around public procurement standards	Policies around vending machines and canteens in public institutions
Type	Mandatory nutrition standards through regulation	Voluntary nutrition standards		Mandatory nutrition standards through regulation	Voluntary nutrition standards	Mandatory
Inclusion of special populations	Yes Following the abovementioned groups	No			Yes 1) - oncology patients - renal disease patients - gastroenterology patients - patients with liver disease - patients with diabetes 2) - older people in institutional care	See above
Support	- Training available for caterers - Government support (training course organization)	Mass communication for dissemination of guidelines Training available for caterers Government support (There is no established regular funding from the government to promote these recommendations, but government has provided for example financial support to		According to a study conducted in 2018, 82,1% of the Portuguese population agree with the implementation of this measure to promote a healthy diet.	- Use of mass communication for dissemination of guidelines - Training available for caterers - Government support (recommended guidelines)	Government support (recommended guidelines)

		implement and disseminate the new Nutritional Therapy guidelines				
Monitoring	No	No		Yes An evaluation was carried out by the Inspectorate-General for Health Activities (IGAS) of approximately 200 (out of the 1751) vending machines available in National Health System (SNS) facilities in 2018.	Yes: (for 2)) Guidelines recommend that each home for older people organize a nutrition team consisting of at least the head of a member of the health team, a resident representative and a family representative	No
Funding	Yes, for implementation	No		No	No	No
Enforcement	No	No		No	No	No
Impact and policy effectiveness				The IGAS inspection suggests a general compliance with the dispatch by not making available forbidden products in vending machines in SNS facilities, despite an observed lack in variety; furthermore, most vending machines did not provide some of the recommended food products, with none of the equipment included		



				in this inspection having fresh fruit (one of the recommended foods).		
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10. Monitoring

Within CODIET, there is a special focus on monitoring and evaluation practices of policies within a country, to assess the degree of implementation, to monitor degree of adherence to the policy and to assess the impact of the policies. The results, as provided in Table 10, however, indicate that there are only a limited set of monitoring and evaluation practices present in the participating countries.

Monitoring 1, as discussed also in detail per indicator, handles the systems, implemented by the governments, that are in place to regularly monitor food environments. As indicated before, there are some monitoring systems in place specifically for the marketing restrictions within different countries (Portugal, Estonia, Slovenia, Spain). There are also some monitoring systems in place for food offered within the school environment (Portugal, Spain, Finland and Slovenia), although in Slovenia, this is not on a regular basis.

Monitoring 2 provisions, which includes the regular monitoring of the adult and childhood nutrition status and population intakes against specified intake targets or recommended daily intake levels, are present in Estonia, Finland, Portugal, Slovenia and Spain (although for the latter, these are independent research projects rather than government provisions). Here, there are different means to monitor the nutrition status. Portugal and Estonia both use for the children COSI, and Estonia, Slovenia and Portugal all use the HBSC. In addition, there are surveys such as the Health Behaviour among Estonian Adult Population Study, the National Food, Nutrition and Physical Activity Survey (Portugal), the SI.Menu (although this was a single analysis) in Slovenia, and the Children European Health Interview Survey in Slovenia. Slovenia also has the CINDI Slovenija programme, whose main emphasis was on preventing and overcoming chronic non-communicable diseases. These are all provisions which include both children and adolescents, using different techniques such as food frequency questionnaires, food diaries and 24h urine collection. With the exception of SI.Menu, these are all monitoring provision that have a repeating time frame. Finland uses its own set of surveys for the adult population every five years, and a pilot survey to monitor the diet of children between 12-16 years old has been piloted and the full scale survey will be conducted in autumn 2025. In addition, they also use school health surveys every second year, which assess the food habits of children and 5th grade, 8/9th grade and youth at secondary school (16-17 years old).

Monitoring 3, which looks into the adult and childhood overweight and obesity prevalence, is again installed in Estonia, Finland, Portugal and Slovenia, with Spain having provisions, but on the level of independent research projects and not on governmental level. Estonia solely relies on the data gathered with COSI, Portugal on the data gathered with COSI, the National Health Survey with Physical Examination, HBSC (self-reported) and the National Food, Nutrition and Physical Activity Survey. Finland relies on the health monitoring surveys carried out regularly. Health and weight are measured in surveys. For children, data are based on height and weight measurements taken at health care visits in child health clinics or school health care. Slovenia relies on both self-reported data (by EHIS? CINDI and HBSC) and measured data (SLOFit, SL.Menu and EHES). All of these are recurrent analyses, so trends can be followed over time.

For Monitoring 4, all countries have surveillance systems in place for NCD prevalence. Again, Spain relies on independent research projects, but the other countries have governmental systems in place. These are all repeated monitoring provisions, to follow the trends over time in development of NCDs within a population.

Monitoring 5, which includes the evaluation of major programs and policies, is less frequently present. Estonia has a health System Performance Assessment framework, which acts as a tool for stakeholders and policy makers to guide healthy reforms in an evidence-based and targeted manner. Spain has regular evaluations to assess the effectiveness of interventions, policies and public health programs in achieving their intended goals and Portugal

indicates that, for some, there is a monitoring plan associated, which will vary depending on the type, scope, funding and responsible entity for said program/policy.

Lastly, for monitoring 6, with entails the monitoring of the progress towards reducing health inequalities of health impacts in vulnerable populations and social and economic determinants of health. Only Slovenia and Spain explicitly mention understanding health disparities and reducing health inequalities, ensuring all actions and activities contribute to reducing the gap in health inequalities. Portugal also mentions the notion of equity, but only with regards to FOP labelling. And lastly in Finland, the results of the surveys that are used (monitoring 1-4) are also reported by population groups. In addition, separate surveys are carried out for some minorities, such as immigrants and ethnic minorities.

Table 10: data collected on monitoring provisions by the different countries

	Estonia	Finland	Italy	Portugal	Slovenia	Spain
MONITORING1						
Monitoring systems, implemented by the government, are in place to regularly monitor food environments (especially for food composition for nutrients of concern, food promotion to children and nutritional quality of food in schools and other public sector settings) against codes/guidelines/standards/targets						
Evidence + Specifics	<p>The Regulation “Health protection requirements for catering in preschools and schools” (PROV1)</p> <p>Media Services Act (PROMO1)</p> <p>Advertising Act and Consumer Protection Act (PROMO4)</p> <p>Surveillance of Estonian Agriculture and Food Board by taking samples of trans fats in food products</p>	<p>Yes</p> <p>In Finland, some related activities exist, which are also monitored</p> <p>1. National Food Composition Database (FINELI). A database maintained by the Nutrition Unit of the National Institute for Health and Welfare, containing information about the average nutrient composition of foods consumed in Finland and foods used in</p>	No	<p>Yes</p> <p>Food composition: food reformulation agreements regarding sugar, salt and trans fats (COMP1)</p> <p>Law regulating food marketing targeting children (PROMO 1-4)</p> <p>Mandatory nutrition standards for bars and vending machines in schools and SNS institutions as well as for school meals (PROV1 and PROV 2)</p>	<p>Regular monitoring of food composition for nutrients was proposed in recommendations in JA BestReMaP</p> <p>Monitoring of food promotion to children in not regular</p> <p>Monitoring of nutritional quality of food in schools is not regular</p>	<p>Regulatory Frameworks: Spain has established comprehensive regulatory frameworks, including laws and regulations, to govern food safety, nutrition, and related aspects. The legal frameworks cover areas such as food labeling, product standards, hygiene practices, and</p>

		<p>Finland. The food database includes information on over 4,000 foods and 55 nutritional factors.</p> <p>2. Government Decree (54/2012) on the criteria for supporting the meals of higher education students. This decree is applied when granting the state subsidy referred to in section 49 of the Student Financial Aid Act (65/1994) to student restaurants to reduce the price of student meals (meal-specific subsidy). One of the conditions is that the student meal meets general health and nutritional quality requirements. KELA supervises the fulfilment of the criteria.</p> <p>3. The Heart Symbol system of the Finnish Heart Association. The</p>		<p>Yes;</p> <ul style="list-style-type: none"> - COSI evaluates the nutritional status and intake in school-age children (between 6 and 8 years old), every 2-3 years (last round in 2021/22), including anthropometric measurements taken by trained examiners, and evaluated the presence of marketing targeting children in the school setting; - HSBC collects information regarding the wellbeing, health status and health behaviours in children aged 11, 13 and 15 years old, through an online questionnaire done every 4 years (since 1997/98); - The National Health Survey (INS), collects information from individuals aged 15 years and up, since 		<p>nutrition guidelines.</p> <p>Monitoring and Surveillance Systems: Various monitoring and surveillance systems are in place to assess food environments, food composition, and compliance with nutritional standards. These systems help identify trends, evaluate the effectiveness of interventions, and ensure adherence to regulations.</p>
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		<p>Heart Symbol indicates that a particular product or meal is a healthier choice within its product category. The Heart Symbol system includes evaluation visits.</p> <p>4. The school fruit subsidy is intended for children in day-care and basic education. The Finnish Food Authority inspects school milk and school fruit subsidies through on-site inspections. These inspections are based on Article 10 of Commission Implementing Regulation (EU) 2017/39. The purpose of the inspections is to ensure that the conditions for granting subsidies are met. In addition to on-site inspections, the Finnish Food Authority reviews all</p>		<p>1987, through interviews, according to three different health domains: health status, health care and health determinants (last round, in 2015, also included physical examination (INSEF) in adults aged 25 to 74)</p>		
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		<p>subsidy applications. As part of these reviews, the subsidy applicant may sometimes be asked to provide invoices or delivery notes from a specific site at this stage.</p> <p>5. TEAviisari is a survey for municipalities and schools. The information depicts the health promotion activities, that is, the municipality's actions to promote the health and well-being of its residents. The survey involves primary schools. The schools are asked about following the nutrition recommendations.</p>				
Responsible	Different ministries and their agencies (see indicators)	1. Finnish Institute for Health and Welfare/Finnish Food Authority /Ministry of Agriculture and		Different ministries and their agencies (see specific indicators)	Ministry of Education Ministry of Agriculture, Forestry and food Ministry of Health Ministry of Finances	Spanish Agency for Food Safety and Nutrition. National Commission of Food Safety

		Ministry of Health and Social Welfare 2. Ministry of Education and Culture 3. Finnish Heart Association 4. Ministry of Agriculture 5. Finnish Institute for Health and Welfare/Ministry of Health and Social Welfare			Ministry of Public administration National institute of public health	Inter-Ministerial Committee on Food and Nutrition Regional Health Departments and Agencies Advisory Committees on Nutrition Public Health Committees
Included	Food composition Food promotion to children Nutritional quality of food in schools and other public sector settings	Food composition Nutritional quality of food in schools and other public sector settings		Food composition Food promotion Food provision	Food composition	Food composition Food promotion to children Nutritional quality of food in schools and other public sector settings
MONITORING2						
There is regular monitoring of the adult and childhood nutrition status and population intakes against specified intake targets or recommended daily intake levels						
Evidence + Specifics	Yes: NIHD regularly conducts three studies that monitor either children or adults - COSI: at the beginning only children in the 4 th grade were added and the latest study	Yes Finnish Institute for Health and Welfare is responsible for monitoring of health of the population. A FinRavinto (FinNutrition) survey	No	Yes In the National Food, Nutrition and Physical Activity Survey (IAN-AF), the intake of children under 10 years of age was evaluated through a 2-day food diary.	Yes Adult survey: SI.Menu 2017/18 (part of the EU Menu programme) – supported cross-sectional surveys on dietary habits, dietary intakes and	No There are independent research project conducted in different universities to monitor it

	<p>conducted in the academic year 2021-2022 also included children in the 7th grade</p> <ul style="list-style-type: none"> - HBSC: children in the 5th, 7th and 9th grade are monitored - Health Behaviour among Estonian Adult Population Study: survey includes people from 16 to 64 years of age 	<p>for adults is carried out every five years. A pilot survey to monitor the diet of children between 12-16 years has been piloted and a full scale survey will be conducted in autumn 2024.</p> <p>In addition, School health survey that is carried out every second year assesses the food habits of children at 5th grade, 8th/9th grade and youth at secondary school (16-17 years olds).</p>		<p>The National Food, Nutrition and Physical Activity Survey (IAN-AF) used food frequency questionnaires to supplement the information gathered through food diaries/24h-recalls;</p> <p>Also, both COSI and HBSC ask their participants questions regarding intake frequency of food groups (fruits, vegetables, etc.) and/or meals (breakfast)</p> <p>The National Food, Nutrition and Physical Activity Survey (IAN-AF) measured salt intake through a 24h urine collection in a subset of participants.</p>	<p>food intakes of specific population groups, in accordance with the European Food Safety Authority's uniform methodology</p> <p>CINDI Slovenija programme, whose main emphasis was on preventing and overcoming chronic non-communicable diseases</p> <p>Children European Health Interview Survey (age group 15+)</p> <p>HBSC</p> <p>Data from the EU school scheme</p>	
Responsible	National Institute for Health Development	Finnish Institute for Health and Welfare		DGS, INSA	Ministry of Education	Spanish Agency for Food Safety and Nutrition

		Ministry of Health and Social Welfare			Ministry of Agriculture, Forestry and food Ministry of Health National institute of public health	Ministry of Consumption
Included	Adults and children	Adults and children		Adults and children, depending on the monitoring systems	Adults and children	Adults and children
Systems	Food frequency questionnaires	Recommended daily intake levels		Food diary Food frequency questionnaire Repeated 24h dietary recall 24h urine collection	Recommended daily intake levels as preferred reporting	Food frequency questionnaires
Timeframe	COSI: every 3 years since 2015/2016 HBSC: every 4 years since 1993/1994 Health behaviour among Estonian Adult Population study: every even year (2022 = 17 th wave)	Nutrition surveys for adults are carried out every five years. Nutrition surveys for children are a new initiative. The time frame yet not known. School health surveys are carried out every second year.		Repeated, varied according to monitoring system	Sl.Menu was a single analysis Other are recurrent	Specific surveys
MONITORING3						
There is regular monitoring of adult and childhood overweight and obesity prevalence using anthropometric measurements						
Evidence + Specifics	Yes COSI	Yes Health monitoring surveys carried out regularly for	No	Yes COSI the National Health Survey with Physical	Yes Self-reported by EHIS, CINDI and HBSC	No There are independent research project

		adult population (every five years) by Finnish Institute for Health and Welfare. Height and weight measured in surveys. FinChildren Register Monitoring. The data are extracted from the Register of Primary Health Care Visits (Avohilmo). The data are based on height and Weight measurements taken at health care visits in child health clinics or school health care.		Examination (INSEF) (in adults) HBSC (self-reported; adolescents) the National Food, Nutrition and Physical Activity Survey (IAN-AF)	Measured SLOFit, Sl.Menu, EHES	conducted in different universities to monitor it
Responsible	National Institute for Health Development	Finnish Institute for Health and Welfare Ministry of Health and Social Welfare		DGS INSA	Ministry of Education Ministry of Agriculture, Forestry and food Ministry of Health National institute of public health	Research groups
Included	Children and adolescents	Children, adolescents and adults		Children and adolescents	Children, adolescents and adults	Children, adolescents, adults and elders
Type reporting	Measured Height, weight, hip and waist	Measured And in addition, in school health surveys,		Measured and self-reporting	Both measured and self-reporting	Both measured and self-reporting

	circumference are measured by data collectors	self-reported height and weight data exist				
Time frame	Every 3 years since 2015/2016	Recurrent		Repeated, depending on monitoring activity	Recurrent	Recurrent
MONITORING4						
There is regular monitoring of the prevalence of NCD metabolic risk factors and occurrence rates (e.g. prevalence, incidence, mortality) for the main diet-related NCDs						
Evidence + Specifics	<p>Yes</p> <p>Surveillance and monitoring systems: prevalence, incidence and mortality for many diet-related NCDs, cancers and all causes of mortality</p> <p>NIHD collects and publishes population-based statistics on prevalence, incidence and mortality for many diet-related NCDs.</p>	<p>Yes</p> <p>Health monitoring surveys carried out regularly for adult population (every five years) by Finnish Institute for Health and Welfare. Surveys include also measurement of serum lipids, indicators of glucose metabolism and blood pressure. Also diseases are asked. Survey data is also linked to registers from which diagnoses set at health care can be extracted. In addition, several registers exist in Finland:</p>	<p>Yes</p> <p>CUORE Project promoted by the Italian National Institute of Health. It is a surveillance system of the major cardiovascular events in the Italian population</p> <p>Epidemiological study on a cohort of 30.000 adults</p>	<p>Yes</p> <p>INE compiles, analyses and publishes several population-based indicators, including statistics regarding mortality and health indicators collected through different studies conducted by INE and/or other agencies. Every 4 to 5 years a National Health Survey is conducted following the Eurostat recommendations and this survey is composed by 4 modules on health status, health care use, health determinants, and</p>	<p>Yes</p> <p>EHIS CINDI SI.Menu</p> <p>Health statistics yearbook</p>	<p>No</p> <p>There are independent research project conducted in different universities to monitor it</p>

		cancer register, diabetes register etc. Statistics Finland reports regularly causes of death. From Finnish Care register for Health care data on diagnoses and visits to the health service system can be obtained.		socio-economic background variables.		
Responsible	National Institute for Health Development	Finnish Institute for Health and Welfare Ministry of Health and Social Welfare	Italian National Institute of Health Italian Regions and autonomous provinces	Statistics Portugal	Ministry of Health Health Insurance Institute of Slovenia, National Institute of Public Health Statistical Office of the Republic of Slovenia	Research groups
Timeframe	Annual	Recurrent analyses	Annual	Varies per indicator (repeated)	Single analysis + recurrent analysis	Recurrent
MONITORING5						
Major programs and policies are regularly evaluated to assess their effectiveness and contributions to achieving the goals of the nutrition and health plans						
Evidence + Specifics	Health System Performance Assessment framework for Estonia. The HSPA framework for Estonia acts as a tool for stakeholders and policy makers to	No	No	Yes Although there isn't a one-size-fits-all tool for monitoring programs and policies, some do have a monitoring plan associated,	No Evaluation of programmes is ongoing The frequency of evaluation is	Yes Regular evaluations are conducted to assess the effectiveness of interventions,

	<p>guide health reforms in an evidence-based and targeted manner. The HSPA framework is an evaluation tool, it has many components and indicators (most of these have already been used previously, some will be fine-tuned and some new indicators will be added in the future). The aim of the framework is to get a systematized, comprehensive and consistent overview of all important components of the Estonian health system. The assessment results are used to improve situational awareness and transparency of the system, to set goals that are more coherent and to plan targeted changes in order to achieve better</p>			<p>which will vary depending on the type, scope, funding, and responsible entity for said program/policy.</p>	<p>adapted to the changes in habits</p>	<p>policies and public health programs in achieving their intended goals. These evaluations help inform decision-making, improve strategies and ensure that resources are used efficiently. Spain has established comprehensive regulatory frameworks at both the national and regional levels. These frameworks encompass laws, regulations, and guidelines addressing food safety, nutrition, and public health. They set the standards and requirements for the production, distribution, and marketing of food products.</p>
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	<p>public health and a stronger health system.</p>					<p>AESAN, under the Ministry of Health, is a central agency responsible for coordinating and overseeing food safety and nutrition policies. AESAN plays a key role in risk assessment, regulatory development, and communication with the public regarding food safety.</p> <p>Robust monitoring and surveillance systems are in place to assess various aspects of food safety and nutrition. These systems include regular inspections, sampling of food products, and health monitoring to identify and</p>
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						<p>address potential risks to public health.</p> <p>Research and Data Collection: Ongoing research initiatives contribute to the understanding of nutrition-related issues and health trends. Data collection efforts, including nutritional surveys and health assessments, help inform evidence-based decision-making.</p>
Methodology used for evaluation	The methodology used varies depending on an health system indicator: surveys, data from registries, databases, questionnaires, monitoring and reporting, regular analyses (not done in all cases) and in some cases the					The methodology used for the evaluation of food safety, nutrition, and public health programs in Spain typically involves a systematic and evidence-based approach. While specific methodologies

	<p>methodology needs further specification.</p>					<p>may vary based on the nature of the program or policy being evaluated, some common elements and methods include:</p> <ul style="list-style-type: none"> - Formulation of evaluation questions: - Development of evaluation frameworks: - Identification of Key Performance Indicators (KPIs) - Data collection - Quantitative Analysis - Qualitative Analysis - Cost-Effectiveness analysis - Comparison with benchmarks and standards - Reporting and communication - Continuous improvement
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Responsible	Ministry of Social Affairs					<p>Ministry of health Spanish Agency for Food Safety and Nutrition Ministry of Agriculture, Fisheries and Food Ministry of Social Rights and 2030 Agenda Autonomous Communities National Commission on Food Safety Inter-Ministerial Committee on Food and Nutrition Spanish Nutrition Foundation Spanish Society of Community Nutrition</p>
Types of policies evaluated	<p>The Estonian health system is monitored in a comprehensive way. The prevalence of overweight and obesity and the morbidity of certain diseases reflect diet-related activities.</p>					<ul style="list-style-type: none"> - Nutrition and Dietary Guidelines - Health promotion campaigns - School Nutrition programs - Food Marketing and Advertising Regulations

<p>Activities in the National Health Plan; including nutrition study (conducted by NHID) as data source. The HSPA scope reflects the National Health Plan (NHP), which is the main policy document/strategy on health in Estonia. The NHP operates on a ten year cycle; during this period, it sets goals with measures and activities for the health care field. The plan is divided into programmes with means and activities to achieve goals and set indicators to measure progress. There are three programme domains: healthy choices, a health-supportive environment, and person-centred health care.</p>					<ul style="list-style-type: none"> - Public Health Interventions - Community health programs - Food labeling policies - Government subsidies and incentives - Public-private partnerships - Research and innovation policies - Community and school gardens initiatives
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	Altogether, 114 indicators are used to measure progress (including "promoting a balanced diet and physical activity" with indicators concerning the prevalence of overweight and obesity).					
MONITORING6						
Progress towards reducing health inequalities of health impacts in vulnerable populations and social and economic determinants of health are regularly monitored						
Evidence + Specifics	No	Yes The results of the surveys mentioned at MONITORING1-4 are also reported by population groups. Separate surveys are carried out for some minorities such as immigrants and ethnic minorities.	No	Yes Although not a regular occurrence, a prospective Health Impact Assessment (HIA) of a food nutrition labelling initiative in Portugal was performed in 2019, with the supervision of the WHO, which highlighted the need for a Government-endorsed policy on interpretative nutrition labelling as a part of health equity promotion.	Yes Chapters related to nutrition and physical activity in three reports: Inequalities in health future challenges for intersectoral cooperation All actions and activities resulting from this document should contribute to reducing health inequalities as a result of the influence of social determinants of safe	Yes The country aims to track and understand disparities in health outcomes among different population groups and regularly assess the impact of policies and interventions on vulnerable populations - Health inequality indicators - Socioeconomic determinants analysis

					and healthy eating and physical activity for health	<ul style="list-style-type: none"> - Equity to access in healthcare - Targeted public health interventions - Community health initiatives - Education and awareness campaigns - Cross-sectoral collaboration - Regular reporting and publications - Policy impact assessment - Evaluation of social programs
Responsible		Finnish Institute for Health and Welfare Ministry of Health and Social Welfare		DGS	Ministry of health National institute of public health	Ministry of health Spanish Agency for Food Safety and Nutrition Specific research in Universities
Time frame					In principle: every four years	Recurrent

11. Equity, negative consequences and awareness

For each of the indicators, equity, negative consequences and awareness were assessed.

Equity

In general, equity is taken into account in policy development and implementation, however mostly not in a direct way. Equity is considered by different dimensions in the different countries (e.g. Slovenia uses education as indicator in assessing equity (25), Estonia uses socio-economic status). In general, policies that have the intention of being universal and proportionate, like policies around composition standards (26), have a positive impact on reducing inequities in the countries (27). This however is limited to the intention of the policy.

In Slovenia, the School Nutrition Act (28) was originally adopted with more than one main equity aim. The most obvious one was providing all children with a healthy meal in school. The second equity aspect was the gender aspect. By organizing school day from 8am till 4pm and providing children with up to four freshly prepared meals in school kitchens, mothers were able to participate more equally in labor market. The fact was that in 1980s, full time employment of the active female population was about 92 %. There were some changes in the perception of the value of school meals in the last 20 years, with still quite high support to that national policy. During the Covid-19 pandemic, the public support increased again. In that times, even if the schools were closed in Slovenia, school kitchens were still providing meals for the most vulnerable, who were 100% subsidized (approximately one third of children). The same idea goes for all school nutrition guidelines, as they target every single child, and make no difference in SES. The Slovene School Nutrition Act is thus based on universal proportionalism. All children in Slovenia are getting subsidized mid-morning snacks (state and local communities are paying for the employees, who are public workers, and economic prices for a meal are a norm) and approximately one third of children are getting all meals for free (the SE status of the family of the child is defined in the structure of the Ministry of Social Affairs). The same idea counts for Finland, where the recommendations for school meals and those in public food services are targeted to everyone, without discrimination. School lunches (and day care) are free for everyone, so all children, regardless of socio-economic position can access a healthy meal at least once a day. In addition, health education and home economics are compulsory subjects in school, making the school based programs more easily transferable to the home.

In designing FOP-labels, countries indicate that equity was not considered during the process. However, it is shown in international research that FOP-labels are an effective measure to decrease inequities in healthy food choices (29). Recent studies showed that especially interpretative labels, such as the Nutri-Score, have the capacity to increase subjective and objective understanding, as well as purchase intention across all socio-economic groups (10,30).

Also for taxation, the more vulnerable groups are more impacted by price changes than the higher SES groups. Taxation has thus a desired effect in improving the healthfulness of diets, especially for lower income households (31).

Lastly, with regards to promotion, the international evidence shows that restricting the promotion of unhealthy foods decreases the health inequalities, as children from lower SES tend to be more exposed to promotions (27).

Negative consequences

For certain policies, several negative consequences are to be expected or are already in place. When considering reformulation, there is a potential effect for negative health consequences if industries replace added sugars with sweeteners. Reformulated products could also induce a price elevation, which will make people more reluctant to change to the reformulated products. In addition, as reformulated products have a new taste, the producers may lose their competitive advantage. Also an additional food waste from products withdrawn from the market because they have failed to sell due to the voluntary reformulation. Also, children might reject some foods (legumes, whole meal products), also increasing food waste. (26) However, these are speculations rather than evidence-based assumptions. Further research in these areas, for example the impact reformulation on food prices, should be investigated.

Providing information to consumers by means of a FOP-label or display information on menu boards generally generates no negative consequences for the general public.

For taxation, there is strong resistance to be expected, mainly from the industry. Slovenia and Estonia for example, observed a strong industry resistance. Slovenia has tried already to introduce this tax in 2011, 2012 and 2014, unfortunately not successful.

Awareness campaigns and public support

In general, policies addressing food environments can count on a high level of public support. Fiscal policies generally have the lowest levels of public support, but in many countries more than the majority of the population supports these measures. Portugal indicated that, according to a study conducted in 2018 (32), 61.2% of the Portuguese population agree with the implementation of a fiscal measure to promote a healthy diet. For the communication of this measure, it was taken into account that public acceptance of such fiscal measures is higher when revenue is used to fund a public cause.

In certain countries, like Slovenia, the awareness campaigns and public support have more impact on the more educated, especially women. For example, they are more actively searching for the reformulated products. Also FOP labels can enjoy great levels of public support.

Cite from website of Slovene Consumer Association:

In view of the still alarmingly high proportion of overweight and obese people in both adults and children in Europe, consumer organisations under the umbrella of BEUC, together with the European Heart Network and the European Public Health Alliance, have sent a joint letter to the European Commission asking it to come forward as soon as possible with its proposal on front-of-pack nutrition labelling.

In general, there were awareness campaigns in the different countries that entailed health messages like 'Too much salt is bad for you', 'read labels more carefully', ...

Discussion

This study reports on the analysis of the design and implementation of different policies regarding food composition, marketing restrictions to children, labeling of food products, fiscal policies, as well as the monitoring and evaluation practices in several European countries, and their linkages with health inequalities. The analysis evaluated the extent to which the design of policies is targeted to addressing the dietary dimensions most closely linked with NCD risk in the countries of interest and the surveillance approaches countries have put in place to monitor policy impacts.

Previously the Healthy Food Environment Policy Index (Food-EPI) was used in the European context to evaluate the level of food environment policy and infrastructure support (including monitoring and evaluation) implementation in Estonia, Finland, Germany, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Slovenia, and Spain in 2019-2021 (33). Evidence of implementation of food environment policies was compiled in each country and validated by government officials. National experts evaluated the implementation of policies and identified priority recommendations. Finland had the highest proportion of policies shaping food environments with a "high" level of implementation. Policies regarding food provision, promotion, retail, funding, monitoring, and health in all policies were identified as the most important gaps across the European countries. Experts recommended immediate action on setting standards for nutrients of concern in processed foods, improvement of school food environments, fruit and vegetable subsidies, unhealthy food and beverage taxation, and restrictions on unhealthy food marketing to children.

Two years later, based on this analysis in the CODIET project, for a sub sample of the countries who conducted FOOD-EPI, we observe that only a few additional policies have been, such as the adoption of Nutri-Score in Spain and strengthening of marketing regulations in Portugal. Most of the policies are still not mandatory and many of them are not monitored frequently, making it hard to evaluate the impact of these regulations.

In order to stimulate further implementation of best practice policies in the European context, on the basis of this analysis, we selected some best practice policies on the basis of which we will develop a range of policy scenarios combining the strengths of these policies. For these policy scenarios, the impact on dietary outcomes, including inequalities in dietary outcomes, will be modelled during the next steps of the project based on available data and insights/inputs from stakeholders. In order to gather input from stakeholders we will first develop some causal loop diagrams for each of the policy scenarios based on scientific evidence.

Next steps

Based on this policy analysis of the different indicators, 4 have been selected by Sciansano and the partner countries to evaluate further and move forward for simulation in task 6.3. These will be composition 1, specifically focusing on the mandatory policies around salt, prices 2, promotion (specifically 1,2 and 4) and provision 1. The indicator label 3 on FOP labeling was not taken into the next phase, as this is a discussion that is currently taken place on higher levels within Europe. Composition 1, and then specifically salt, was chosen since some countries indicate that they have mandatory regulations in place for specific sectors (baking sector) or products (bread and bread products). In comparison, Finland uses in this case the mandatory label high in salt. It should thus be interesting to see if these have an impact in salt intake in a population. Prices 2, specifically taxation of sugar sweetened beverages, was chosen as all 6 countries have some form of taxation in place. Estonia, Finland and Spain specifically have a food group based tax on sugary/sweetened drinks

(Estonia and Finland in the proposition/development phase, Spain in the implementation phase). In Spain this resulted in an increase of the tax from 10% to 21%. The other countries have nutrient based taxes on sugar or sweeteners (only in Portugal implemented). In Portugal, this resulted in an excise tax. Slovenia has a proposition for an ad valorem tax and a sales tax aimed at consumers, and Italy developed an excise tax and sales tax aimed at consumer, which would result in an increase in retail price of 50%. The implementation of this taxation in Italy is now scheduled for 1/07/2025. Comparing the effectiveness of the different measures of taxation can be taken into account during further analysis. Promotion was taken into account, and then mainly tv and radio (PROMO1) and settings where children gather (PROMO4), because these continue to be places where children are highly exposed to unhealthy foods. A closer look is also taken at social media advertisements (PROMO2), however, it should be noted that this is also partly EU responsibility, making it a more complex puzzle for the nations to implement certain restrictions. There are countries (Portugal, Slovenia and Spain) who are actively looking into regulating social media advertisements. And lastly, provision in schools was taken into account as the different countries have different approaches (universal free meals, subsidized meals for lower SES groups, no regulations) and it is worth exploring the most beneficial approach in simulation.

The next phase will exist of interviews with relevant stakeholders for each of these indicators. The interviews will not merely be an exploration of opinion or explanation for certain choices, but an in depth discussion based on a causal loop. These loops (1 for each indicator) will be developed by Sciensano based on the input of the different countries and literature. An example of such causal loop found in literature (not definite yet for CODIET) can be found in Figure 1 and 2.

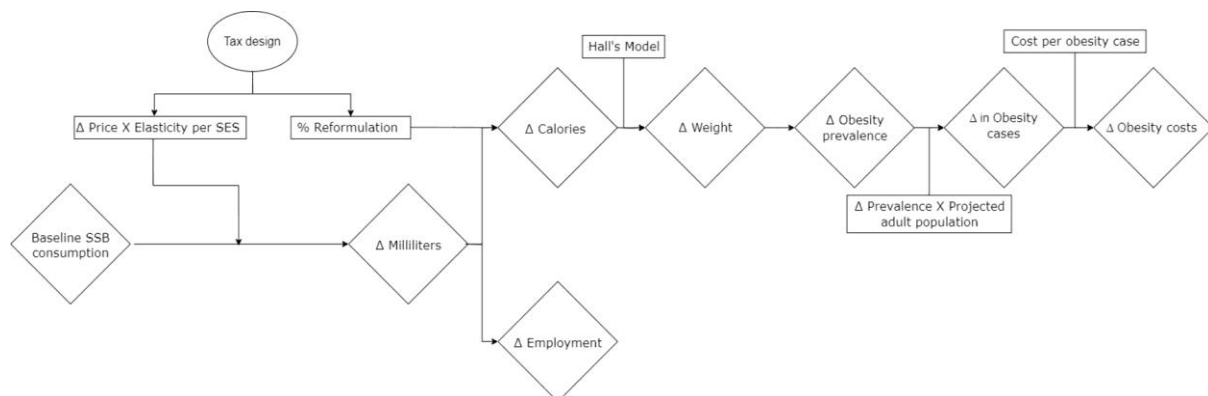


Figure 1: Proposal for causal loop (34)

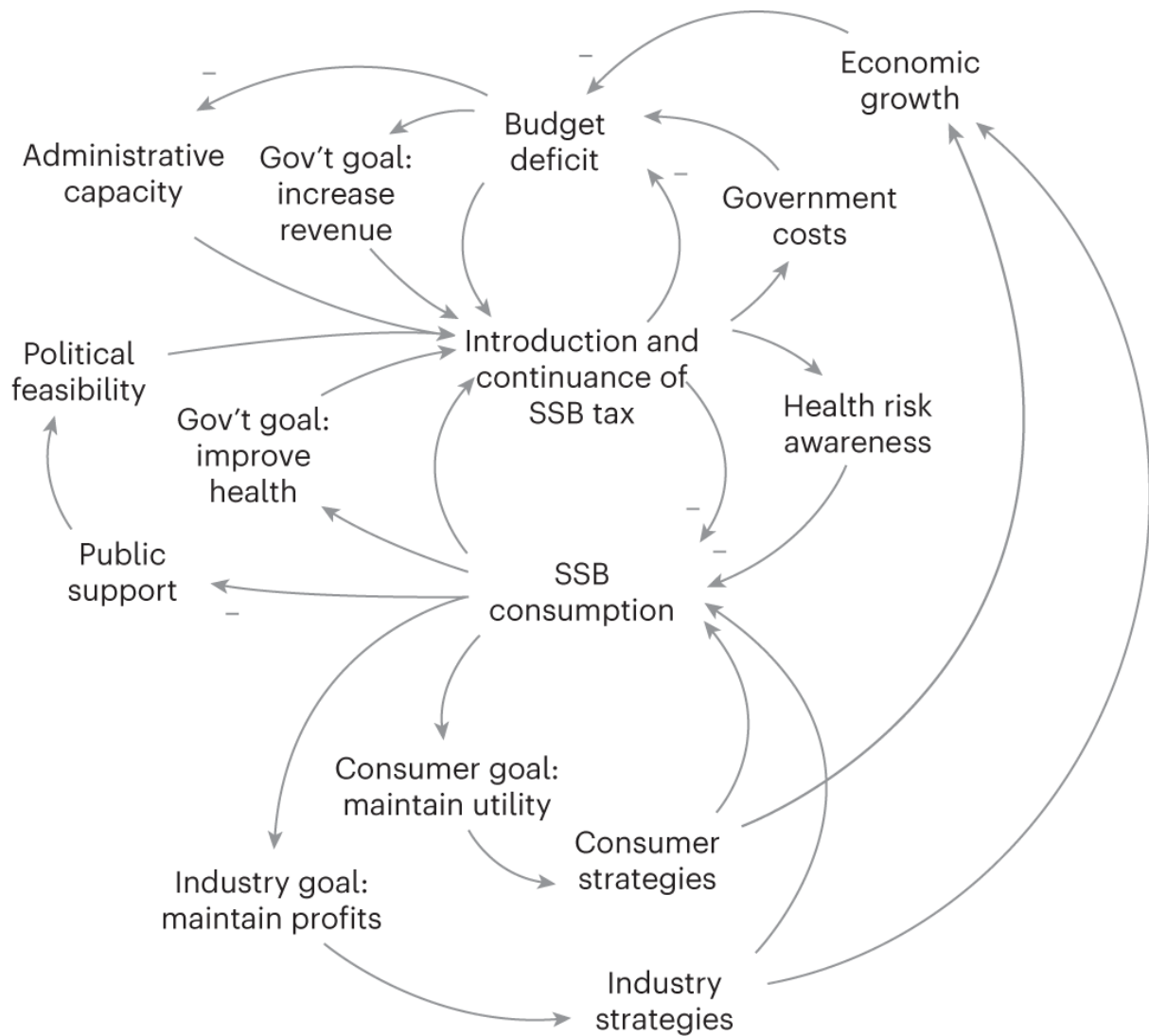


Figure 2: Proposal causal loop for SSB tax (35)

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