



Report of the first meeting of the WHO Sugar and Calorie Reduction Network





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London, United Kingdom 19-20 October 2022

Abstract

The WHO European Office for Prevention and Control of Noncommunicable Diseases is engaging in several initiatives addressing healthy and sustainable diets, guided by experts from across the WHO European Region. This report sets out presentations and discussions that took place at the first meeting of the new Member State-led WHO Sugar and Calorie Reduction Network, held as a hybrid event on 19 and 20 October 2022 and in partnership with the United Kingdom's Department of Health and Social Care. It was a chance to share learning across five key areas: fiscal levers; industry benchmarks and transparency; the out-of-home food sector; marketing and advertising; and front-of-pack labelling. The meeting identified knowledge gaps and highlighted opportunities for Member State research and action to foster positive change by the food industry. These opportunities will be supported by the WHO Regional Office for Europe through working groups and through the Network.

Keywords

SUGARS
ENERGY INTAKE
OBESITY
NUTRITION POLICY



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Abbreviations

ATNI	Access to Nutrition Initiative
DHSC	Department of Health and Social Care
EU	European Union
HFSS	high in fat, salt and sugar
NCD Office	WHO European Office for Prevention and Control of Noncommunicable Diseases
NPM	nutrient profiling model
OHID	Office for Health Improvement and Disparities
ООН	out-of-home
SSB	sugar-sweetened beverage
UPF	ultra-processed food
VAT	value-added tax

Executive summary

This report summarizes the first meeting of the new Member State-led WHO Sugar and Calorie Reduction Network (the Network), co-hosted by the WHO European Office for Prevention and Control of Noncommunicable Diseases (NCD Office) and the Office for Health Improvement and Disparities (OHID), an office of the United Kingdom Department of Health and Social Care (DHSC), which will lead the Network for the first three years. The meeting was attended by Member States and expert stakeholders and was a hybrid event; held both online and in London from 19–20 October 2022 under the Chatham House Rule.¹

The meeting covered five key topics, each of which were introduced by subject-matter experts and contributions from the WHO Regional Office for Europe. Six Member States additionally made detailed presentations about their experience of policy design and implementation. There was opportunity both for plenary and break-out group discussion across each topic. The five key topics are as follows.

Fiscal levers (case study: Hungary). This session described why mandatory taxes on unhealthy products (including food and beverages that are high in sugar) are an important tool to reduce consumption and drive product reformulation (altering recipes to better serve guidelines). Examples of success were presented, and there was discussion on how tax structures can best be designed and improved – including the importance of setting taxes using an evidence-informed nutrient profiling model (NPM), regularly reviewing tax thresholds and using incentives to encourage the development of healthier options.

Industry benchmarks and transparency (case study: United Kingdom). This session looked at ways in which to benchmark and assess efforts by the food industry to reduce levels of sugar and calories in their products. It highlighted that, to date, progress has been limited. Accurate measurement is essential in understanding the impact of government efforts to reduce sugar and calorie consumption, and there is scope for collaboration on the collation of data to overcome the considerable financial and human resource barriers to accessing and evaluating data.

The out-of-home (OOH) food sector. Offerings in the OOH food sector tend to be higher in sugar and calories than food prepared at home, so it is an important arena for efforts to reduce consumption. This session discussed the rapid rise of meal-delivery applications (including pervasive marketing), the lack of labelling information provided to consumers and ways to incentivize the provision of healthier products offered to consumers out of the home, with a particular focus on the United Kingdom, where the subject-matter expert had conducted research and where the OOH sector is a particular concern in terms of calories consumed and market growth.

¹ The Chatham House Rule: "When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed". The Chatham House Rule [website]. London: Chatham House, The Royal Institute of International Affairs, 2023 [https://www.chathamhouse.org/about-us/chatham-house-rule].

Marketing and advertising (case studies: Portugal and Slovenia). The marketing of unhealthy products to children is an increasing concern for WHO and Member States, particularly as advertising through digital channels such as social media and videogaming becomes more widespread. This session discussed the need for innovation in data gathering in order to understand advertising exposure, for cross-sector and cross-governmental dialogue and working, and how to provide stronger legislative protection for children based on robust nutrient profiling systems.

Front-of-pack labelling (case studies: France and Israel). Clear labelling of unhealthy nutrients on product packaging is essential for consumers. The strengths and limitations of several of the systems currently in use across the WHO European Region were discussed, including whether labelling should be mandatory and harmonized. The challenge and opportunities of combining nutrient labelling with environmental impact labelling was highlighted, along with difficulties in the defining/labelling of ultra-processed foods (UPFs).

Next steps include the **development of working groups** to take forward ideas for research and cross-country action addressing two key areas of concern: the use of fiscal levers; and nutrient profiling in reducing sugar and calorie consumption. Other issues that should be included as priorities in future network discussions include the OOH food sector (particularly meal delivery applications and marketing), UPFs, and the links between nutrition and environmental sustainability – potentially bringing in experts from these areas to identify synergies. Joint work efforts with the WHO European Action Network on Reducing Marketing Pressure on Children were also reinforced.

In addition, several Member States called for WHO to develop an action plan on food systems, which would support each Member State in making the case for action at national level. It was also proposed that the Regional Office work with Member States to develop national nutrition databases of branded products within each country, which could then be collated to enable comparison of products across the Region.

Given the scale of the health challenge that poor nutrition poses to the Region, there is scope both for greater action by individual companies and for appropriate engagement by government with the industry, albeit within clear parameters and with care to avoid conflicts of interest. All participants agreed on the importance of the Network as a springboard for future research and to support national action.





1. Context and aims

1.1 Context

High sugar intake is linked to increased risk of excess calorie consumption, increased body weight and risk of tooth decay. There is evidence that **sugar intake exceeds WHO recommendations in many countries across the WHO European Region**, which is also the region with the highest rates of NCD-related morbidity and mortality, for which overweight and obesity are a major risk factor. There is additional emerging evidence that excess weight increases the risk of complications of COVID-19.

Out-of-home (OOH) sectors vary across the Region, but there is consensus that **the contribution of the OOH sector towards observed calorie intake is often greater than the contribution from retail or in-home equivalents**. Estimates from the United Kingdom, for example, suggest that OOH food servings represent around twice the calories of the equivalent dish when prepared at home. The OOH sector is, therefore, almost certainly a significant driver of excess calorie intake, and in course weight gain and elevated obesity risk.

Taking **collective action and providing a coordinated response** will support action by national governments and promote greater and more rapid change in the industry, helping to drive the sugar and calorie reduction agenda.

Following discussions in early 2020, the WHO European Office for Prevention and Control of Noncommunicable Diseases (NCD Office) and Public Health England together agreed that taking global action on sugar reduction would be beneficial. Having reflected on the success of the European Action Network on Salt Reduction, the NCD Office and the United Kingdom agreed to collaborate in establishing a network to target sugar reduction, and it was subsequently agreed that this network should be extended to include calorie reduction. The **Network** will galvanize international, collective action on sugar and calorie reduction and enable the sharing of technical expertise and learning to inform national action. It will meet annually and will provide a forum for countries to:

- exchange information on the implementation of sugar and calorie reduction strategies;
- exchange technical information that can facilitate product improvement;
- share open, transparent ways of working with the food industry;
- support the development of the evidence base on sugar- and calorie-reduction strategies;
- provide technical expertise to Member States on how to develop a sugar- and calorie-reduction programme; and
- set benchmarks and develop an index to enable better monitoring of levels of sugar and calories in products and to encourage food companies to take action.

Membership of the Network comprises Member States from the WHO European Region, with participation from governmental institutions (or those nominated by government) and representatives of WHO. There is no financial requirement for joining, but countries will fund their own travel and any requests for financial assistance will be assessed on a case-by-case basis. Smaller, topic-based working groups may be established by the Network to take forward specific discussions during the course of the year, ensuring that interested Member States can continue the dialogue in more detail.

Context and aims

The United Kingdom will lead the Network for the first three-year term from 2022 to 2024, after which leadership will be transferred to another Member State. This work in the United Kingdom is housed within the Office for Health Improvement and Disparities (OHID) in the Department of Health and Social Care (DHSC).

1.2 The first meeting of the WHO Sugar and Calorie Reduction Network

The first meeting of the WHO Sugar and Calorie Reduction Network (the Network) was held from 19–20 October 2022, co-hosted by the WHO NCD Office and OHID. It was a hybrid event: 25 of the 73 participants attended in person in London with the remainder taking part online. From the WHO European Region, **24 Member States** were represented: Albania, Armenia, Austria, Belgium, Croatia, Estonia, France, Germany, Hungary, Ireland, Italy, Israel, Latvia, Malta, Netherlands (Kingdom of the), Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom. Interest was also expressed by Bosnia and Herzegovina, Georgia and Kazakhstan. Presentations were given by six Member States on the status of national policy and implementation of sugar- and calorie-reduction efforts. The meeting was held under the Chatham House Rule, so in this report no comments are attributed other than those made by the speakers.

The meeting provided a forum for Member States to:

- discuss and approve the terms of reference of the Network;
- highlight successful national-level efforts to reduce sugar and calorie consumption;
- share the challenges that Member States face in implementing action;
- hear from experts on the latest research across key areas;
- identify areas where more in-depth discussion is needed, ahead of the next meeting in 2023; and
- set out where technical support from the WHO Regional Office for Europe would be of most benefit.

This report summarizes the proceedings and insights gained during this meeting. It provided direction for the work of the Network in the future and was enthusiastically received by Member States as providing a **strong basis for future action** across the WHO European Region and, potentially, globally.

2. Five key topics

The meeting opened with presentations from the co-hosts. **Dr Jeanelle De Gruchy (Deputy Chief Medical Officer at OHID),** highlighted the challenge to health that is posed by rising obesity prevalence. She set out the need for robust evidence on possible policy interventions and evidence of their effectiveness, using the United Kingdom's Soft Drinks Industry Levy as an example. This was followed by a discussion led by **Dr Kremlin Wickramasinghe (WHO NCD Office) and Dr Tazeem Bhatia (OHID)** on both the need for the Network and to confirm the current terms of reference for the Network, which were approved by participants.

The remainder of the two-day meeting was organized around five key topics:

- fiscal levers
- industry benchmarks and transparency
- the OOH food sector
- marketing and advertising
- front-of-pack labelling.

Evidence on each topic was presented by experts, followed by Member States highlighting their experiences to date, and then by a plenary discussion involving participants in the room and online. On the second day, each topic was further discussed in breakout groups.

During the course of the meeting, it became clear that Member States would welcome some themes being taken forward within **smaller, more focused working groups**, convened by the WHO Regional Office for Europe, to continue discussion and take forward specified actions prior to the next meeting of the Network.

Further cross-cutting issues were clearly identifiable within the topic discussions and are indicated in this report using icons. These include: a lack of available, affordable, reliable data; the need for robust, evidence-informed nutrient profiling models (NPMs); concerns over the nutrition impacts of ultra-processed foods (UPFs); and the use of artificial sweeteners to replace sugar. Member States requested that these issues be included on the agenda of future meetings of the Network.

2.1 Fiscal levers: the use of taxes to improve nutrition

Fiscal levers – primarily taxes rather than subsidies – to encourage better nutrition are a source of particular interest to Member States. **Professor Franco Sassi (Imperial College, London)** opened the session with an overview of why taxes on unhealthy discretionary products are useful, why the current structures are insufficient to have the desired impact on diets and health and how they can be improved. Taxes on unhealthy discretionary foods are all dependent on what is defined as "unhealthy", which requires the consistent use of a robust and evidence-informed NPM (Box 1).

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Box 1: Nutrient profiling







Policies on sugar and calorie reduction cannot be standalone. Synergies can and should be created between fiscal policies, labelling, marketing and food procurement, which need to be consistent, complementary and work best when **based on a common metric such as a nutrient profiling system**.

Nutrient profiling is the science of classifying or ranking foods according to their nutritional composition, to help in preventing disease and promoting health. NPMs can be used to differentiate foods for a number of purposes: regulating advertising to children, setting standards for front-of-pack labelling and encouraging reformulation through taxation systems. **In each case, the objective of the policy will determine the nutrition thresholds set.**

There was discussion as to whether there should be allowances for some differences between the NPMs adopted by countries in the Region; for example, to reflect cultural dietary differences and allow for a more targeted focus on what is most important in the diet of each country's population, such as snacks or sugar-sweetened beverages (SSBs). Alternatively, a harmonized NPM could create a baseline for consistency between Member States, although the point was raised that this risks the NPM being slightly more permissive – for example, with the exclusion of artificial sweeteners in the model because some countries are not able to include these in their NPMs. Ideally, a harmonized NPM would err on the stricter side which would enable countries to include more provisions. On the contrary, if the model is more permissive, it becomes harder for countries to implement a stricter model.

Health taxes are undoubtedly a powerful tool, with the ability both to change customer behaviour (through price increases and heightened awareness of the health impacts of consuming unhealthy products) and industry behaviour (through encouraging reformulation to avoid the tax, as in Spain and the United Kingdom). When the Soft Drinks Industry Levy was introduced in the United Kingdom, reformulation began even before it came into force, leading to an overall 41% reduction in sugar in soft drinks sold in the United Kingdom. This level of reduction is not seen where voluntary targets are used instead of mandatory taxation.

SSBs are the most commonly taxed food product worldwide. **SSB taxes have been shown to reduce consumption and can also encourage reformulation** where a differential rate of tax is applied to products containing more sugar. The success of a tax depends partly on the level of tax that is applied and partly on the design of the tax (for example, levying the tax on a granular, sliding scale according to sugar content).

Hungarian participants contributed several suggestions for successful roll-out of a tax, based on impact assessments of the country's Public Health Product Tax (Box 2). First, regularly review the range of products and the tax rates and level at which they are applied and consider introducing incentives for producing healthier foods. Next, use evidence-informed messaging in national media campaigns to ensure that the public fully understand the tax. Finally, develop a supportive environment that promotes healthy products (including developing the skills of local communities in food growing) to help the population both understand and access healthy, affordable nutrition.

The demand for food is generally not very sensitive to changes in price. However, within individual food categories (including SSBs) there is significant price responsiveness, partly because close substitutes are more readily available – so any tax needs to be applied to all products in a category if overall consumption is to be reduced. Appropriate targeting of products and potential substitutes

is particularly important for children, as research has shown they are likely to switch to other highsugar options when taxes only target narrowly selected products. People on lower incomes, however, do have a greater propensity to move away from purchasing high-sugar options.

Existing taxes on SSBs and foods high in fat, salt and sugar (HFSS) are typically small. In the United Kingdom, the SSB tax paid by an average household is £14.80 per year, while the value-added tax (VAT) paid by the same household on food and non-alcoholic beverages averages £468 per year. Belgium is now considering how to use VAT to encourage healthier consumption, which is an appropriate step to take, provided it is not merely a temporary measure. The current cost-of-living crisis and inflation may also impact on purchasing patterns of healthy/unhealthy products and affect the impact of taxation.



Tax structures must be carefully designed to avoid inadvertently encouraging consumers to trade down to unhealthy or even less healthy products. Where SSB taxes are introduced, consumption shifts away towards lower-sugar drinks containing artificial sweeteners. **The WHO Regional Office for Europe is currently considering whether to include artificial sweeteners in forthcoming guidance on the design of fiscal policies,** and many countries that impose SSB taxes also tax drinks containing artificial sweeteners.



There are increasing calls for taxes on UPFs, which are known to damage health. However, there is not yet a full understanding of the mechanisms through which UPFs are detrimental to health. Harm from UPFs is partly due to nutrient composition (which is measured by NPMs), but could also be due to additives, disruption of the food matrix, the rate at which they are eaten or biological processes linked with UPF consumption. **The Regional Office could help to take a role in building a better understanding of these mechanisms**, building the evidence on which a UPF tax could then be predicated.

Box 2. Member State experience: Hungary



Dr Eszter Sarkadi-Nagy (National Institute of Pharmacy and Nutrition, Hungary) provided a detailed case study on the effect of the Public Health Product Tax, which was introduced in 2011. It is not simply a sugar tax: it is an excise tax (paid on purchase of the product) applied to pre-packed, non-staple foods and is based on sugar, salt, caffeine, and (since 2022), saturated fat and fibre content. It was established to reduce consumption, promote healthier nutrition and encourage product reformulation, and the revenue is earmarked to be spent on public health; food companies can now decide to which public health projects 10% of the tax they pay should go.



In 2022 the tax became two-tier, with a per-unit threshold (e.g. per kilogram) above which products are taxed at a higher level. It was also increased by up to 30% for products where the added sugar or aggregate sugar and sweetener content exceeds a prescribed threshold, and products containing artificial sweeteners are also now included.



The effects on product formulation are evident, although there is currently no monitoring system in Hungary – the most recent of the three impact assessments to date was based on sales data calculated per capita. The impact on consumption, however, is less clear: after an initial price increase in SSBs as costs were passed through to consumers, consumption decreased, but has since risen again. In a strong economic environment, such a tax may not deter purchasing (as it represents only around 4% of the purchase price), but still affects product formulation.

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2.2 Industry benchmarks and transparency: the use of targets and improving reporting

Guidelines and targets for product reformulation that encourage or require the food industry to reduce sugar, calories and other nutrients can be designed in several ways. They can be based on average nutrient content or on a maximum level for a particular category, they can be applied to all or only to some sectors (perhaps with different targets for each) and there may be differences between individual categories (for example, natural sugars in yoghurt, in contrast to added sugar in ice cream).

Assessing the progress that has been made against targets relies on accurate data: data on the nutrient profile of every product, on product sales and on consumption. The WHO Regional Office for Europe is considering setting sugar targets, as have already been set for salt, although the timeline for publication is not yet clear; any data collected from across the WHO European Region as part of this work will be made available to the Network.



Dr Lauren Bandy and Professor Mike Rayner (University of Oxford) provided an overview of recent research to measure and monitor food industry progress. The sales-weighted mean sugar and salt content of foods during the period 2015–2018 was tracked and disaggregated by company and food category. Data from third-party databases such as Edge by Ascential and foodDB, which provide composition data, were combined with sales data from Euromonitor International, to give the volumes of sugar/salt sold. This then enabled an **assessment of whether the nutritional quality of the offers of the top 10 food manufacturers in the United Kingdom have (or have not) changed** over this period. The researchers applied an NPM to each company's whole product portfolio, weighted by sales and designated any company whose portfolio scored over 67 as healthy. However, none of the companies reached that threshold and there has been very only slight improvement over time. The research is now also looking at retailers and at the fast-food sector.



Other organizations, such as Informas and the Access to Nutrition Initiative (ATNI), also rank food manufacturers by their efforts to promote healthier eating, but may arrive at different conclusions because of the different parameters selected. For example, ATNI ranks companies not only according to food composition data but also on pricing, marketing and reformulation; as well as on activities towards health goals when disclosed by companies. The Oxford research, in contrast, focuses solely on products that are actively sold in each country, and does not require engagement with the companies.



Professor Rayner noted that **there is a growing interest among governments and other stakeholders to hold companies to account**, and that WHO could take a leading role in developing robust, consistent ways in which to monitor the food industry's contributions to diets, both regionally and around the world. Stakeholders that undertake such work on assessing progress have the option of publishing the data either entirely factually (the choice made by OHID) or with an accompanying commentary (as nongovernmental organizations often choose to do).



Participants in the meeting also heard valuable advice from the United Kingdom (Box 3) on how best to monitor progress – for example, it can be helpful to involve stakeholders in the initial setting of guidelines and working out how best to gather data. Improvements to data gathering can and should be made over time to reflect market changes, despite this potentially leading to inconsistencies. Member States have found that there are considerable financial and staff resourcing requirements: the purchase of data can be very expensive (often with restrictions on how much can be put into the public domain, both from the data companies and from the food companies themselves) and the analysis is time-consuming.

Box 3. Member State experience: England (United Kingdom)

Victoria Targett (OHID) presented on the voluntary sugar and calorie reduction programmes that have been in place since 2016 (for sugar) and 2018 (for calories) in England. Food retailers, manufacturers and the 00H sector were asked to deliver a 20% reduction in sugar by 2020 across a range of categories including biscuits, cakes, breakfast cereals, confectionery and sweetened milk drinks. Ways to achieve this for food industry actors included using reformulation, reducing product size or shifting consumers to lower-sugar products. The ambition for the calorie reduction programme calls on retailers and manufacturers to reduce calories by up to 10% and for the 00H sector (with a much higher base calorie level to work from) to reduce calories by up to 20%. There is no overlap between food categories in the two programmes.

Data provision is challenging and the data that are available are limited, particularly for the 00H sector. This is because there is no requirement for nutrition labelling or to provide nutrition information to consumers by other methods in the 00H sector other than calorie labelling on menus in larger businesses. Some 00H businesses display this information on their websites, where it will not be viewed or used by many consumers. In addition, the consumer panel used by the data provider for the 00H sector is smaller compared with that of purchases brought in to the home (approximately 7500 versus 30 000 respectively). For this reason, OHID asks 00H businesses to provide data to supplement information obtained through commercial data providers. Generally, 00H businesses in the United Kingdom have not been very responsive to 0HID's requests for information. Changes in the nutrient levels in products are not fully captured in third-party databases and much data focuses primarily on purchases rather than actual consumption.

• The data that has been cleaned, coded and analysed by OHID – itself a resource-intensive process – is presented in progress reports in several ways: by the average per-category sales-weighted total sugar per 100g, by a simple per-sector average, by business and by brand. Changes over time can be tracked, with comparison possible both between the in-home and OOH sectors and between companies, indicating which are and are not taking action. The final report of the sugar reduction programme is due to be published later in 2022, and the first report on the calorie reduction programme is due to be published in 2023.

2.3 The OOH food sector: a fast-growing challenge

The specific nutrition challenges posed by the OOH food sector were regularly raised throughout the two days of the meeting of the Network and were summarized at the start of this session by **Dr** Holly Rippin (WHO NCD Office) and Professor Jean Adams (MRC Epidemiology Unit, University of Cambridge).

A number of systematic reviews show that those who eat out of home more frequently tend to have poorer quality diets and higher body mass index. Food from the OOH sector is often HFSS and has portion sizes significantly greater than those of packaged products from retailers and manufacturers. An added complication in the OOH sector is that people eating out do not simply eat individual products, but select a dish that involves several products from a fixed menu, which makes assessment and understanding of OOH consumption much more challenging.

In 2021 in response to a request by Member States, the WHO Regional Office for Europe co-hosted

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(with Public Health England) an **initial Expert Meeting on the OOH food sector**. This meeting enabled countries to share their national experiences, challenges and policies (Box 4) and took a deep dive into the challenges of large portion size and the rise of meal delivery applications such as Just Eat, Deliveroo and Uber Eats. The Regional Office and Kingston University, United Kingdom are conducting ongoing work towards the development of a secure, online databank on the OOH food environment, using machine learning and natural language processing.

Concerns about **meal delivery applications** were evident throughout the session, not least as there are clear gaps in knowledge about them: the nutrition profile of the products offered through the applications; how they are marketed; what information is provided to consumers; and how healthier offerings can best be made available. The process of delivery tends to lead to a loss of quality, so deliveries are likely to be at the less-healthy end of the foods offered by the OOH sector – fast food, rather than high-end products.

One route to reducing demand for unhealthy 00H food could be **stronger restrictions on marketing, including online**. Advertising is often strategic and joined up – for example, a TV advertisement for food delivery at half-time of a major football game may be timed with push notifications sent to mobile phones. Food companies are also increasingly partnering with video games, promoting products through games or through influencers who use the gaming platforms. These forms of marketing are personal and transient, making it particularly difficult to gather data: **finding ways to quantify exposure from multiple sources is needed to build a strong case for regulation**.



Labelling requirements tend to be less exacting for the OOH sector than for manufacturers and retailers, even for large OOH companies (Box 4). Extending labelling requirements to small- and medium-sized enterprises (which are responsible for half the OOH sector in the United Kingdom) would be challenging: nutritional analysis of products is usually undertaken by third parties, which is onerous and expensive for SMEs and is further complicated by many products not being produced to a standard recipe (i.e. ingredients and portion size may vary from day to day, according to who is cooking or serving). However, tools are being developed that help SMEs to undertake their own analysis (for example, the Food Standards Agency in Northern Ireland's MenuCal tool) and WHO may be able to be involved in developing and disseminating such tools in the future.

Cities can use town planning systems to work to reduce consumption of unhealthy 00H options by denying permission for the establishment of new fast-food outlets. In the United Kingdom, for example, local authorities can establish exclusion zones around schools, but evidence on the effectiveness of these zones is mixed and, in an economic downturn, the financial repercussions of outlets sitting empty may override planning restrictions. It is also common to have deliveries into these zones, but power relationships between the food companies and delivery applications could be leveraged here: one large fast-food company has convinced delivery applications not to deliver its products to schools in the United Kingdom. A new joint venture between one of the delivery applications and a finance company was mentioned, under which takeaway can be ordered on a buy now, pay later basis (with no encouragement to purchase healthier options), which has the obvious effect of further pushing families into debt – a particular concern during a cost-of-living crisis.

Not all 00H and takeaway meals are unhealthy, and ways to **incentivize healthier, affordable options** were discussed. Local award schemes can be used to reward and promote companies (particularly small independent outlets) that provide healthier options; Belgium is promoting cafes that serve healthy menus for €5. The Republic of Türkiye also has a scheme involving restaurants and pastry shops aimed at decreasing salt in their products.

Box 4: Member State experiences: the United Kingdom and some snapshots

Professor Adams provided insights into the 00H sector in the **United Kingdom**, which is fast-growing and challenging to assess. The 00H sector is included within the voluntary sugar and calorie reduction programmes: **calorie labelling is mandatory on menus and online (including in delivery applications) for all larger 00H food chains** (250+ employees). Recent research in the United Kingdom has been using web scraping on a quarterly basis to gather product nutrition data provided online by around 80 of the largest 00H businesses. This has enabled the development of a menu-healthiness score for 180 000 outlets, showing a wide range of offerings, with offerings from takeaway outlets generally less healthy than those from restaurant-type outlets. Further research will examine the correlation of these menu-healthiness scores to neighbourhoods, where initial findings suggest that in more deprived neighbourhoods, the number of outlets is greater, and the average healthiness of offerings is lower. The proportion of outlets that are active on delivery applications is also higher in these more deprived areas, and this inequality has become more pronounced since the start of the COVID-19 epidemic.

Some further brief insights into the OOH sector in other Member States in the Region were provided by Dr Rippin. For example, in **Spain** there is a voluntary reformulation programme covering the OOH sector, a coregulatory code on reducing marketing to children, and regional nutritional recommendations in schools. In **France**, work is being done to understand and improve institutional and commercial catering and the Nutri-Score labelling system is being introduced to the OOH sector (see section 1.5).

2.4 Marketing and advertising: a focus on digital

The marketing and advertising of unhealthy products to children has been firmly on WHO's agenda since the 2010 presentation to the World Health Assembly of a Set of recommendations on the marketing of foods and non-alcoholic beverages to children. The action taken to date by the WHO NCD Office is based on these recommendations, providing **tools and evidence to support Member States in developing national regulation**.

- The CLICK tool to support Member States in monitoring the digital marketing of unhealthy products to children is being piloted in several countries in the Region, including Denmark, Portugal, Sweden and the United Kingdom. In Norway, a pilot found that 80% of advertisements would not be permitted to be marketed under WHO recommendations, despite a voluntary system that is designed to restrict marketing to children under 13 years of age. Supporting software is being developed by the WHO Regional Office for Europe and partners to assist with monitoring exposure to unhealthy marketing, including KidAd and an artificial intelligence tool.
- NPMs are essential for firstly and accurately designating products as unhealthy, and subsequently
 analysing the result of policies to restrict advertising of such products. The NPM itself has recently
 been updated and was tested by 13 mainly countries from the European Union (EU)'s Joint Action
 on Healthy Food for a Healthier Future (Best-ReMaP) in the first half of 2022, is now being adjusted
 and finalized, and will soon be sent to all Member States for consultation and review.
- Other initiatives include the WHO Regional Office for Europe's upcoming C.H.I.L.D. initiative (which addresses how to combat harm to children within the digital sphere, including the marketing of HFSS foods and mental health impacts) and the recent publication of a misinformation toolkit. Forthcoming documentation from the Regional Office includes guidance on developing a legislative response and a publication on the digital media ecosystem.

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There is evident concern that designating TV programmes, social media platforms and gaming channels as being primarily for adults is a legislative loophole, because, in practice, many children engage with or watch them. Self-regulation is not successfully reducing children's exposure to HFSS marketing, with age verification on digital platforms proving to be extremely challenging. The Regional Office will shortly publish an age verification toolkit to assist Member States; however, it was suggested that the difficulty of accurate verification could be used as an entry point supporting the argument that a complete ban on the marketing of unhealthy products is the only way to ensure that their advertising will not reach children. Whether this is a feasible option could be assessed by the Best-ReMaP project..

A further concern was around the movement away from advertising specific HFSS products, particularly those that are covered by a marketing ban and towards **advertising the overall brand**. This evasion is increasingly prevalent as marketing restrictions on products are introduced; for example, on London transport system advertising platforms that still follow restrictions on HFSS advertising. There is a clear need to develop a tool that can assess the healthiness of a brand in a consistent way, including weighting for sales of products.



Knowledge was shared on how best to ensure effective **cross-sector dialogue** when developing marketing and advertising restrictions, particularly on whether, when and how to include the food and advertising industries. In both Portugal and Slovenia (Box 5), such marketing regulation was established prior to detailed discussion with wider stakeholders; this legislative lead made it easier then to develop an NPM to underpin the regulations without inappropriate influence from industry. Several countries endorsed involving the private sector later in the process, thus providing industry with an opportunity to comment but carefully limiting influence.

The need for **political will and cross-governmental joint working** to drive legislation was also evident. Portugal's Law No. 30/2019 (Box 5) was initiated by Parliament, rather than from within a government ministry, which was indicative of a broad, cross-party consensus on the need for action. In the United Kingdom, the Government will introduce restrictions on the advertising of less healthy food and drink on television before 9pm, and on paid-for advertising online, from 1 October 2025. This is a joint policy between DHSC and the Department for Culture, Media and Sport, who recently consulted on draft secondary legislation, important for implementation of the policy.



Finally, there was a call for **legislation to ensure greater data availability and transparency**. For example, it is not currently clear in most countries how much each brand spends on marketing and, importantly, what the company's return is on that spend. Knowing this would help to make a case for regulation. Similarly, television companies collect data on their viewer demographic, but do not make this information readily available, which supports calls for the extension of restrictions beyond programmes that are presented as solely for children.



Box 5. Member State experiences: Portugal and Slovenia



As Dr Maria João Gregório (Portuguese National Programme for the Promotion of Healthy Eating, Directorate-General of Health) explained, in 2019 Portugal published comprehensive legislation (Law No. 30/2019) to restrict the marketing of unhealthy food to children aged under 16 across a range of marketing channels, including digital platforms.

At the heart of the legislation was the need for the Directorate-General for Health to develop a clear NPM on which to base the restrictions. The WHO NPM was used as the reference and the Portuguese NPM broadly aligns with it, although artificial sweeteners are not included due to legal constraints. Once the NPM was drafted, a stakeholder group was convened to discuss it, including representation from civil society organizations and the food industry; there were

no bilateral meetings with industry and industry input did not affect the final NPM. A manual explaining the rationale for and the validation process of the NPM was also published. The NPM specifically aims to protect children from food marketing, rather than drive reformulation, and it is proving hard to analyse the impact on reformulation due to the other complementary policies also in place.



Slovenia has enforced codes of conduct on unhealthy marketing on television since 2016, based on the WHO NPM and overseen by a national intersectoral group that meets quarterly to set goals and push forward calls for monitoring. To date, monitoring has been infrequent, although it is essential. In 2017 HFSS advertising was found to be at a higher level on commercial TV than on public TV, but it was also observed that codes of conduct had reduced HFSS advertising on public, but not commercial channels. Further research in 2021 (in Slovenia and other countries) found that the criteria were too weak and that many TV shows popular with children were not caught by the codes. Slovenia also plans to use the new WHO online tool on the marketing of food to infants and toddlers.

Dr Mojca Gabriejelčič (National Institute of Public Health, Slovenia) then described the main challenge to extending restrictions to the digital sphere: the piloting of the WHO Regional Office for Europe's CLICK tool is facing significant opposition from the Ministry of Health ethics committee because of concerns about child privacy. **Action by and with other Member States – such as Portugal – coupled with support from Regional Office could be very helpful in overcoming such concerns.**

2.5 Front-of-pack nutrition labelling: what works and what is next?

A number of different labelling systems are employed within the WHO European Region, including the United Kingdom Food Standards Agency traffic light labelling system, which provides details on individual nutrients, endorsement schemes identifying healthy options (termed by the Nordic Keyhole system as "healthier for you"), warning labels providing details on products with excess levels in key nutrients (Israel), and Nutri-Score, which provides a single overall score. Nutri-Score is being used in seven countries – Belgium, France (where it was developed: see Box 6), Germany, Luxembourg, Netherlands (Kingdom of the), Spain and Switzerland. The scientific committee that advises on Nutri-Score has recently strengthened the thresholds between grades: for example, breakfast cereals now receive an average score of D rather than C. Other labelling systems, such as the Nordic region's Keyhole labelling, are also used. **All labelling systems face challenges of application to the OOH sector**, such as menu items in small restaurants that never follow a standard recipe.

Four labelling systems are currently being debated by the European Commission for possible mandatory adoption across the EU, following a call for a unified labelling system in the EU's Farm to Fork Strategy 2020. A decision or proposal on this is likely in 2023. Harmonization within the EU may also ultimately foster wider adoption across the Region, but Member States will need support and assistance.



This session also discussed an important challenge that would benefit from further investigation by the Network: **UPFs**. UPFs make up a significant proportion of the average diet in the Region and there is an urgent need to establish the evidence around how these foods impact health, not only through their nutrient profile, but through additives, satiety and their influence on the microbiome. Nutri-Score, for example, looks only at nutrients rather than the impact of processing. Without a clear, evidence-informed rationale for action that is based on the impact of UPFs on health, coupled

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with a list of foods that qualify as ultra-processed, any government regulation on UPFs would be open to challenge from the food industry in the courts.

Some level of processing can be beneficial. Processed foods often have a long shelf life (which avoids waste) and the ready availability of inexpensive tinned/canned fruit and vegetables is particularly important during a cost-of-living crisis. The **coupling of environmental sustainability with health** in food labelling is a discussion that is already taking place in many Member States and formed part of an earlier WHO Regional Office for Europe Expert Meeting on healthy and sustainable diets in 2021. In countries such as the United Kingdom, where the government requires cost-benefit analysis of (for example) reformulation or labelling changes on health, the inclusion of environmental issues within labelling could greatly complicate the assessment. Member States expressed interest in the Network working with climate change organizations to leverage co-benefits between nutrition and the environment.

Box 6. Member State experiences: France and Israel



The Nutri-Score labelling system was developed in France in 2014 and introduced in 2017. It is a single, colour-coded score summarising the nutritional profile of a product and can be applied both to healthy and unhealthy foods. Dr Chantal Julia (Université Sorbonne Paris Nord) was involved in the design and validation of the system, which has wide public support: 77% of the population in France say that they use it to guide their purchases. Nutri-Score is based on the NPM developed by the United Kingdom's Food Standards Agency from 2004–5, which incorporates both a negative score for unhealthy ingredients and a positive score for healthy components. Use of Nutri-Score remains voluntary and it was initially met with opposition by the industry, with only a few companies adopting it. However, over the last five years it has become standard practice; by 2020, an evaluation in France estimated that companies that have adopted it accounted for 50% of sales, although manufacturers whose portfolios are primarily unhealthy are still less likely to join. It is also driving reformulation – for example, there has been a significant increase in the proportion of retailer ready-made meals that achieve an A grade – although there has not been a formal evaluation of sales.

The use of Nutri-Score has also been extended to include work cafeterias (where calorie and saturates intake has been shown to have decreased) and secondary school canteens. Most recently, it has been trialled by three large fast-food chains. Work is ongoing with the Ministry of Health to develop guidelines and regulations for its use in the OOH sector.

Professor Ronit Endevelt (Israeli Ministry of Health and the University of Haifa) set out Israel's mandatory front-of-pack labelling, which draws on learning from Nutri-Score and compulsory labelling systems in South America. The labelling focuses on three key nutrients; sodium, saturated fats and sugar, and gives an easy-to-read indication of sugar content using a teaspoon symbol. A review by the Ministry of Economics showed that the market share of HFSS products began to fall when discussion on labelling first began, as behaviour began to shift ahead of its introduction.





In addition to the compulsory labelling of unhealthy products, so-called "green labelling" has been introduced as part of national nutritional guidelines. The food industry has responded by reformulating products to achieve green labelling. Tax on SSBs has also recently been implemented, including drinks containing artificial sweeteners. Israel is building a database of the nutrition content of 22 000 food products, which will enable a much better understanding of the impact of food on health. Professor Endevelt suggested that sharing this database could be very valuable if Member States were to collaborate with the WHO Regional Office for Europe and to extend it to become an international database of products.

3. Next steps and actions

An important objective of the inaugural meeting of the Network was to understand which areas of discussion and technical support Member States would find most useful. Results of the meeting raised many talking points and areas for action.

- Member States would welcome the development of a WHO Regional Office for Europe Action
 Plan on Food Systems, which would support countries in the Region in making the case for
 action at national level. This could include support for governments in establishing regulations
 to require mandatory reporting on nutrition, sales data and advertising spend by companies.
- The Network proposed that Regional Office should work with Member States to develop national nutrition databases of branded products, compiled either by government or by an independent body. These databases could then be brought together to enable comparison of products across the Region. Such work would be done with the ongoing explorations within the field by the Best-ReMaP project and the European Commission Joint Research Centre in mind.
- There were several suggestions of working groups that would allow for further discussion on specific topics prior to the next network meeting. Following these discussions, Member States have been invited to join one or more of four potential working groups concentrating on:
 - **fiscal levers** (including pricing promotions) to take forward knowledge sharing and collaboration. Issues for discussion by this working group could include the impact, design and framing of different tax structures (such as VAT), the evidence for effectiveness, impact on equity and effect of the current cost-of-living crisis and inflation, how best to regulate beyond taxes (such as the use of price promotions) and countering industry opposition;
 - front-of-pack labelling, including the OOH food environment: the OOH sector is a real concern for many Member States, with a need for much greater understanding about the nutrition offered and about how the sector works, particularly in the face of the rapid growth of meal delivery applications and the extensive, pervasive marketing;
 - industry transparency and implementation, including benchmarking and measurement; or
 - nutrient profiling: this should be established only after the publication of the WHO NPM
 on marketing in 2023. An important part of the discussion for this working group would be
 whether it is feasible to have a common NPM that can be used for different policy areas and
 how it can be adapted to different national realities.
- Since the close of the meeting, it has been decided that working group activity will commence
 with the formation of a single working group on fiscal levers (including pricing promotions), to
 be led by the United Kingdom.
- It was felt that there was no need for a new working group on marketing, due to the existence of the WHO European Action Network on Reducing Marketing Pressure on Children. However, new ways to bring the two networks together should be identified, enabling joint working on issues such as how best to regulate brand advertising, how to restrict the marketing of unhealthy products within video gaming, and looking deeper into evidence for restricting online advertising across the board, rather than solely focusing on children. Input would need to be sought from brand advertising experts, social media experts, people with deep commercial expertise and from experts who can help prepare for legal challenges to advertising restrictions.





Next steps and actions 13

 Member States requested that other strands of discussions be included on the agenda for future meetings of the Network. These could also benefit from expert meetings convened by the Regional Office, as they are of relevance beyond the Network itself:



collaborating with the Regional Office to investigate the evidence on UPFs (including plant-based products, which are often highly processed and the use of artificial sweeteners), as, without this knowledge, UPFs cannot be included within regulations on labelling or to restrict marketing; and



 building understanding on how best to extend food profiling to include environmental sustainability impacts, which could then be used for labelling, reformulation or marketing restrictions. Thought should also be given to how best to involve a wider group of stakeholders in this agenda, particularly as health and nutrition is often given less prominence than environmental concerns in discussions on climate change and the food system.

Participants agreed on the importance of the Network as a springboard for future research and to support action at national level. The meeting closed with agreement on establishing working groups and on taking forward discussion of the organization of the next meeting, which will be held in 2023.



Sources

Member States

France

Julia C, Hercberg S and WHO Regional Office for Europe (2017). Development of a new front-of
-pack nutrition label in France: the five-colour Nutri-Score. Public Health Panorama. 3(4):712–25.
 Copenhagen: WHO Regional Office for Europe (https://apps.who.int/iris/handle/10665/325207, accessed 7 May 2023).

Hungary

- Bíró A (2021). The impact of sweet food tax on producers and household spending: evidence from Hungary. Agric Econ. 52:545–59. doi: 10.1111/agec.12634.
- Government of Hungary (2011). Public Health Product Tax. Budapest: Government of Hungary (in Hungarian; https://net.jogtar.hu/jogszabaly?docid=a1100103.tv, accessed 7 May 2023).
- Government of Hungary (2022). 197/2022 (VI.4) Kormányrendelet az extraprofit adókról [Government Decree on extra-profit tax 197/2022 (VI.4)]. Budapest: Government of Hungary (in Hungarian; https://net.jogtar.hu/jogszabaly?docid=a2200197.kor, accessed 7 May 2023)..
- National Institute of Pharmacy and Nutrition (2019). Assessment of the impact of a public health product tax. In: The Hungarian public health product tax [presentation]. Budapest: National Institute of Pharmacy and Nutrition (https://health.ec.europa.eu/system/files/2019-07/ev-201906201_co012_en_0.pdf, accessed 13 June 2023).

Israel

- Endevelt R et al. (2017). Regulatory measures to improve nutrition policy towards a better food environment for prevention of obesity and associated morbidity in Israel. Public Health Panorama. 03(04):566–74. Copenhagen: WHO Regional Office for Europe (https://apps.who.int/iris/handle/10665/325200, accessed 7 May 2023).
- Gillon-Keren M et al. (2020). Development of criteria for a positive front-of-package food labeling: the Israeli case. Nutrients. 12(6):1875. doi: 10.3390/nu12061875.
- Israeli Ministry of Health (2019). Nutritional recommendations. Jerusalem: Israeli Ministry of Health (https://www.health.gov.il/PublicationsFiles/dietary%20guidelines%20EN.pdf, accessed 7 May 2023).

Portugal

 Portuguese Ministry of Health, Directorate-General of Health (2022). Programa Nacional para a Promoção da Alimentação Saudável [National Program for the Promotion of Healthy Eating] 2022–2030. Lisbon: Directorate-General of Health (in Portuguese; https://nutrimento.pt/activeapp/wp-content/uploads/2022/10/PNPAS2022_2030_VF.pdf, accessed 7 May 2023).

Slovenia

• Lavriša Ž et al. (2020). Regulating children's exposure to food marketing on television: are the restrictions during children's programmes enough? Appetite. 154:104752. doi: 10.1016/j. appet.2020.104752.

United Kingdom

- Bandy KL et al. (2022). Changes in the salt content of packaged foods sold in supermarkets between 2015–2020 in the United Kingdom: a repeated cross-sectional study. PLOS Med 19(10):e1004114. doi: 10.1371/journal.pmed.1004114.
- Bandy KL et al. (2021). The sugar content of foods in the UK by category and company: a repeated cross-sectional study, 2015–2018. PLOS Med 18(5):e1003647. doi: 10.1371/journal.pmed.1003647.

Sources 15

- Bandy KL et al. (2021). Assessing the healthiness of UK food companies' product portfolios using food sales and nutrient composition data. PLOS ONE 16(8):e0254833. doi: 10.1371/journal. pone.0254833.
- United Kingdom Department of Health and Social Care [website] (2023). London: Government of the United Kingdom (https://www.gov.uk/government/organisations/department-of-health-and-social-care, accessed 7 May 2023).
- Food Standards Agency (2023). MenuCal [website]. London: Food Standards Agency (https://www.food.gov.uk/business-guidance/menucal-calorie-and-allergen-tool, accessed 7 May 2023).
- Office for Health Improvement and Disparities [website] (2023). London: Government of the United Kingdom (https://www.gov.uk/government/organisations/office-for-health-improvement-and-disparities, accessed 7 May 2023).
- Office for Health Improvement & Disparities (2022). Sugar reduction programme: industry progress 2015 to 2020: including the final report for foods included in the programme and the latest data for drinks included in the soft drinks industry levy and juices and milk-based drinks. London: Office for Health Improvement & Disparities (https://www.gov.uk/government/publications/sugar-reduction-programme-industry-progress-2015-to-2020, accessed 7 May 2023).
- Public Health England (2017). Sugar reduction: achieving the 20% a technical report outlining progress to date, guidelines for industry, 2015 baseline levels in key foods and next steps. London: Public Health England (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/604336/Sugar_reduction_achieving_the_20_.pdf, accessed 7 May 2023).
- Public Health England (2018). Calorie reduction: the scope and ambition for action. London: Public
 Health England (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/800675/Calories_Evidence_Document.pdf, accessed 7 May 2023).
- Public Health England (2020). Calorie reduction technical report: guidelines for industry, 2017 baseline calorie levels and the next steps. London: Public Health England (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/915367/Calorie_reduction_guidelines-Technical_report_070920-FINAL.pdf, accessed 7 May 2023).

WHO Regional Office for Europe

Networks

 WHO European Action Network on Reducing Marketing Pressure on Children – see, for example: Fifteenth Meeting of the WHO European Action Network on Reducing Marketing Pressure on Children, 19 May 2021: meeting report (2021). Copenhagen: WHO Regional Office for Europe (https://iris.who.int/handle/10665/361709, accessed 16 October 2023).

Publications

- WHO Regional Office for Europe (2022). Effective regulatory frameworks for ending inappropriate
 marketing of breast-milk substitutes and foods for infants and young children in the WHO European
 Region. Copenhagen: WHO Regional Office for Europe (https://apps.who.int/iris/handle/10665/352003,
 accessed 7 May 2023).
- WHO Regional Office for Europe (2022). Policy brief: taxing sugar-sweetened beverages.
 Copenhagen: WHO Regional Office for Europe (https://www.who.int/europe/publications/i/item/
 WHO-EURO-2022-5721-45486-65112, accessed 7 May 2023).
- WHO Regional Office for Europe (2022). Sugar-sweetened beverage taxes in the WHO European Region: success through lessons learned and challenges faced. Copenhagen: WHO Regional Office for Europe (https://www.who.int/europe/publications/i/item/WHO-EURO-2022-4781-44544-63081, accessed 7 May 2023).

- WHO Regional Office for Europe (2022). Sugars factsheet. Copenhagen: WHO Regional Office for Europe (https://www.who.int/europe/publications/m/item/sugars-factsheet, accessed 7 May 2023).
- WHO Regional Office for Europe (2022). The out-of-home food environment: report of a WHO Regional
 Office for Europe and Public Health England expert meeting, 10 June 2021. Copenhagen: WHO
 Regional Office for Europe (https://apps.who.int/iris/handle/10665/356899, accessed 7 May 2023).
- WHO Regional Office for Europe (2022). Toolkit for tackling misinformation on noncommunicable disease: forum for tackling misinformation on health and NCDs. Copenhagen: WHO Regional Office for Europe (https://apps.who.int/iris/handle/10665/363688, accessed 7 May 2023).
- WHO Regional Office for Europe (2022). Understanding the digital media ecosystem. how the
 evolution of the digital marketing ecosystem impacts tobacco, alcohol and unhealthy food marketing.
 Copenhagen: WHO Regional Office for Europe (WHO Regional Office for Europe (https://apps.who.int/iris/handle/10665/355277, accessed 7 May 2023).
- World Health Organization. WHO Regional Office for Europe (2022). WHO manual on sugar-sweetened beverage taxation policies to promote healthy diets. Geneva: World Health Organization (https://apps.who.int/iris/handle/10665/365285, accessed 7 May 2023).
- WHO Regional Office for Europe (2022). WHO regional obesity report 2022. Copenhagen: WHO Regional Office for Europe (https://apps.who.int/iris/handle/10665/353747, accessed 7 May 2023).
- WHO Regional Office for Europe (2021). Using third-party food sales and composition databases to measure nutrition policies. Copenhagen: WHO Regional Office for Europe (https://apps.who.int/ iris/handle/10665/339075, accessed 7 May 2023).
- WHO Regional Office for Europe (2019). Monitoring and restricting digital marketing of unhealthy products to children and adolescents: CLICK Monitoring Framework. Copenhagen: WHO Regional Office for Europe (https://www.who.int/europe/activities/monitoring-and-restricting-digital-marketing-of-unhealthy-products-to-children-and-adolescents, accessed 7 May 2023).
- WHO Regional Office for Europe (2018). Evaluating implementation of the WHO set of recommendations on the marketing of foods and non-alcoholic beverages to children: progress, challenges and guidance for next steps in the WHO European Region. Copenhagen: WHO Regional Office for Europe (https://apps.who.int/iris/handle/10665/345153, accessed 7 May 2023).
- WHO Regional Office for Europe (2015). WHO Regional Office for Europe nutrient profile model.
 Copenhagen: WHO Regional Office for Europe (https://apps.who.int/iris/handle/10665/366328, accessed 7 May 2023).

Websites

- Nutrient and Promotion Profile Model (NPPM) [website] (2023). Copenhagen: WHO Regional Office for Europe (www.babyfoodnppm.org, accessed 17 October 2023).
- WHO Action Network on Salt Reduction in the Population in the European Region (ESAN) [website] (2023). Copenhagen: WHO Regional Office for Europe (https://www.who.int/europe/initiatives/european-salt-action-network-(esan), accessed 17 October 2023)..

Other sources cited in the presentations

Fiscal measures

Lauer AJ et al. (2022). Health taxes: policy and practice. Geneva: World Health Organization (https://worldscientific.com/worldscibooks/10.1142/q0365, accessed 7 May 2023).

Healthy food initiatives

- European Commission (2020). Farm to Fork Strategy 2020: For a fair, healthy and environmentally-friendly food system. Brussels: European Commission (https://food.ec.europa.eu/system/files/2020-05/f2f action-plan 2020 strategy-info en.pdf, accessed 7 May 2023).
- European Commission (2023). Joint Action on Healthy Food for a Healthier Future (Best-ReMaP).
 Brussels: European Commission (https://bestremap.eu/, accessed 13 June 2023).

Sources 17

Industry benchmarks and transparency

- Access to Nutrition Initiative (2021). Global access to nutrition index. Utrecht: Access to Nutrition
 Foundation (https://accesstonutrition.org/app/uploads/2021/06/Global-Index-2021-Executive-Summary-1.pdf, accessed 7 May 2023).
- Sacks G et al. (2020). Benchmarking the nutrition-related policies and commitments of major food companies in Australia. Int J Environ Res Public Health. 17(17):6118. doi: 10.3390/ijerph17176118.
- See also Bandy KL et al. (2020 and 2021), in United Kingdom above.

The out-of-home food sector

- Burgoine T et al. (2014). Associations between exposure to takeaway food outlets, takeaway food consumption, and body weight in Cambridgeshire, UK: population based, cross sectional study. BMJ. 348:q1464. doi: 10.1136/bmj.q1464.
- Keeble M et al. (2021). Socioeconomic inequalities in food outlet access through an online food delivery service in England: a cross-sectional descriptive analysis. Appl Geog. 133:102498. doi: 10.1016/j.apgeog.2021.102498.
- Keeble M et al. (2021). Associations between online food outlet access and online food delivery service use amongst adults in the UK: a cross-sectional analysis of linked data. BMC Public Health. 21(1):1968. doi: 10.1186/s12889-021-11953-9.
- Keeble M et al. (2020). Use of online food delivery services to order food prepared away-from-home and associated sociodemographic characteristics: a cross-sectional, multi-country analysis. Int J Environ Res Public Health. 17(14):5190. doi: 10.3390/ijerph17145190.
- Mills S et al. (2018). Sociodemographic characteristics and frequency of consuming home-cooked meals and meals from out-of-home sources: cross-sectional analysis of a population-based cohort study. Public Health Nutr. 21(12):2255–66. doi: 10.1017/S1368980018000812.
- Wellard-Cole L, Davies A and Allman-Farinelli M (2022). Contribution of foods prepared away
 from home to intakes of energy and nutrients of public health concern in adults: a systematic
 review. Crit Rev Food Sci Nutr. 62(20):5511–22. doi: 10.1080/10408398.2021.1887075.
- Y. Huang Y et al (2022). Monitoring the nutrient composition of food prepared out-of-home in the United Kingdom: database development and case study. JMIR Public Health Surveill. 8(9):e39033. doi: 10.2196/39033.

Marketing and advertising

Steinnes KK and Haugrønning V (2021) Mapping the landscape of digital food marketing: investigating exposure of digital food and drink advertisements to Norwegian children and adolescents. Oslo: Oslo Metropolitan University (https://oda.oslomet.no/oda-xmlui/bitstream/handle/20.500.12199/6510/SIFO-report%2017-2020%20WH0%20mapping%20the%20landscape%20of%20digital%20food%20marketing.pdf?sequence=1, accessed 7 May 2023).

Front-of-pack nutrition labelling

- Arambepola C, Scarborough P and Rayner M (2008). Validating a nutrient profile model. Pub Health Nutr. 11(4):371–8. doi: 10.1017/S1368980007000377.
- Egnell M et al. (2019). Modelling the impact of different front-of-package nutrition labels on mortality from non-communicable chronic disease. Int J Behav Nutr Phys Act. 16(1):56. doi: 10.1186/s12966-019-0817-2.
- Egnell M et al. (2018). Objective understanding of front-of-package nutrition labels: an international comparative experimental study across 12 countries. Nutrients. 10(10):1542. doi: 10.3390/ nu10101542.
- Julia C et al. (2015). Discriminating nutritional quality of foods using the 5-Color nutrition label in the French food market: consistency with nutritional recommendations. Nutr J. 14:100. doi: 10.1186/s12937-015-0090-4.

Ultra-processed foods

- Choudhury D et al. (2020). Commercialization of plant-based meat alternatives. Trends Plant Sci. 25(11):1055–8. doi: 10.1016/j.tplants.2020.08.006.
- Fardet A, Rock E (2022). Chronic diseases are first associated with the degradation and artificialization of food matrices rather than with food composition: calorie quality matters more than calorie quantity. Eur J Nutr. 61(5):2239–53. doi: 10.1007/s00394-021-02786-8.
- Hall DK et al. Ultra-processed diets cause excess calorie intake and weight gain: an inpatient randomised controlled trial of ad libitum food intake. Cell Metabolism 30(1):67–77. doi: 10.1016/j. cmet.2019.05.008.
- Monteiro CA, Astrup A (2022). Does the concept of "ultra-processed foods" help inform dietary guidelines, beyond conventional classification systems? YES. Am J Clin Nut. 116(6):1476–81. doi: 10.1093/ajcn/ngac122.
- Monteiro CA, Astrup A (2022). Does the concept of "ultra-processed foods" help inform dietary guidelines, beyond conventional classification systems? NO. Am J Clin Nutr. 116(6):1482–8. doi: 10.1093/ajcn/nqac123.
- · Office for Health Improvement and Disparities (2023). Soft Drinks Industry Levy: detailed information. London: HM Revenue & Customs (https://www.gov.uk/topic/business-tax/soft-drinks-industry-levy?, accessed 13 June 2023).



Annex 1. Participants

Albania

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Armenia

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Austria

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Belgium

Laurence Doughan, Federal Public Service of Public Health of Belgium, Directorate General Animal, Plant and Foods

Croatia

Dora Bukal, Unit for Obesity Monitoring and Prevention, Division for Health Promotion Ivana Šimić, Croatian Institute of Public Health

Estonia

Sille Pihlak, Public Health Department, Ministry of Social Affairs

France

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Yann Le Bodo, EHESP High School of Public Health

Manon Egnell, Food and Nutrition Department, Ministry of Health Directorate General of Health Chantal Julia, Université Sorbonne Paris Nord

Germany

Claudia Dietrich, Federal Ministry of Food and Agriculture Elisa Salas, Federal Ministry of Food and Agriculture

Hungary

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Iraland

Nuala Collins, Reformulation Task Force Sinead O'Mahony, Reformulation Task Force

Italy

Angela Spinelli, National Health Institute

Luisa Mariani, Office for Health Promotion and Prevention of Noncommunicable Diseases, Ministry of Health

Marco Silano, National Health Institute

Israel

Ronit Endevelt, Nutrition Division, Israeli Ministry of Health; University of Haifa School of Public Health

Latvia

Maija Ceruka, Health Promotion and Addiction Prevention Division, Ministry of Health Lasma Pikele, Ministry of Health

Malta

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Netherlands (Kingdom of the)

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North Macedonia

Igor Spiroski, Institute of Public Health of the Republic of Macedonia

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Slovenia

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Spain

Maria José Yusta, Spanish Food Safety and Nutrition Agency

Sweden

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Switzerland

Steffi Schluechter, Federal Food Safety and Veterinary Office, Division Food and Nutrition, Sector Nutrition

Türkiye

Betül Savaşçi Çicek, Ministry of Health

United Kingdom

Presenting from the Department for Health and Social Care:

Tazeem Bhatia, Deputy Director for Diet, Obesity and Healthy Behaviours and Interim Chief Nutritionist, OHID

Jeanelle de Gruchy, Deputy Chief Medical Officer for England, OHID

Gabrielle Owtram, Strategic Lead – Dietary Improvement, Reformulation and Nutrient Profiling, Department of Health and Social Care

Jo Nicholas, Team Lead, Dietary Data, OHID

Victoria Targett, Team Lead, Dietary Improvement, OHID

Also attending from OHID:

Emma Barnes, Tessa Coombe, Melanie Farron-Wilson, Jennifer Garry, Andrew Hamilton, Zoe Hill, Joe James, Sophie Kelly, Lisa Mabbs, Tara Parmer, Sarah Payne-Riches, Emma Peacock, Vicki Pyne, Heather Ramage, Stephanie Shields, Michelle Young

Invited experts

Jean Adams, Professor of Dietary Public Health, MRC Epidemiology Unit, University of Cambridge Lauren Bandy, Research Fellow, Nuffield Department of Population Health, University of Oxford Mike Rayner, Professor of Population Health, Nuffield Department of Population Health, University of Oxford

Franco Sassi, Professor and Director, Centre for Health Economics and Policy Innovation, Imperial College Business School, Imperial College London, United Kingdom

WHO European Office for Prevention and Control of NCDs

Kremlin Wickramasinghe, a.i. Head and Regional Adviser for Nutrition, Physical Activity and Obesity Also attending from the NCD Office:

Aram Babayan, Margarida Bica, Anna Chaturvedi, Kathrin Hetz, Holly Rippin and Olga Zhiteneva

Rapporteur

Katy Cooper

Annex 1. Participants

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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