



World Health  
Organization

REGIONAL OFFICE FOR

Europe

# European Food and Nutrition Action Plan 2015-2020



# Abstract

The intention of the Action Plan is to significantly reduce the burden of preventable diet-related noncommunicable diseases, obesity and all other forms of malnutrition still prevalent in the WHO European Region. It calls for action through a whole-of-government, health-in-all-policies approach. Its priority actions will contribute to improving food system governance and the overall quality of the European population's diet and nutritional status.

## Keywords

DIET  
FOOD  
HEALTH POLICY  
NUTRITION POLICY  
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European Food  
and Nutrition  
Action Plan  
2015–2020



Conceptual  
overview  
and main  
elements

# Vision

Health 2020 has inspired a vision of a European Region in which the negative impacts of preventable diet-related noncommunicable diseases and malnutrition in all its forms – including overweight and obesity – have been dramatically reduced, and all citizens have healthier diets throughout their lives.

# Mission

To achieve universal access to affordable, balanced, healthy food, with equity and gender equality in nutrition for all citizens of the WHO European Region through intersectoral policies in the context of Health 2020.

# Guiding principles

- Reduce inequalities in access to healthy food, as stated in Health 2020.
- Ensure human rights and the right to food.
- Empower people and communities through health-enhancing environments.
- Promote a life-course approach.
- Use evidence-based strategies.

# Strategic goal

To avoid premature deaths and significantly reduce the burden of preventable diet-related noncommunicable diseases, obesity and all other forms of malnutrition still prevalent in the WHO European Region, which are strongly influenced by social determinants of health and have a profound negative impact on well-being and quality of life.

# Objectives

The goal of this Action Plan will be achieved by taking integrated, comprehensive action in a range of policy areas through a whole-of-government, health-in-all-policies approach. The objectives listed below will contribute to improving food system governance and the overall quality of the population's diet and nutritional status and will ultimately promote health and well-being.

- Create healthy food and drink environments.
- Promote the gains of a healthy diet throughout life, especially for the most vulnerable groups.
- Reinforce health systems to promote healthy diets.
- Support surveillance, monitoring, evaluation and research.
- Strengthen governance, alliances and networks to ensure a health-in-all-policies approach.

# Foreword

By adopting the WHO European Food and Nutrition Action Plan 2015–2020 at the 64th session of the WHO Regional Committee for Europe, Member States took a further decisive step towards promoting healthy diets and addressing the alarming rates of obesity and diet-related noncommunicable diseases seen across the WHO European Region. The Action Plan calls for a wide range of policies to help people from all backgrounds adopt more balanced diets and maintain a healthy bodyweight.

There are strong indications of the links between energy-dense diets, excess consumption of saturated fat, trans fats, free sugars and salt, low consumption of fruit and vegetables, and the increased burden of obesity, cardiovascular diseases, diabetes and some cancers. According to the WHO Childhood Obesity Surveillance Initiative (COSI), on average one in three children aged 6–9 are overweight or obese in the countries studied. WHO data also show that more than 50% of adults are overweight or obese in 46 countries across Europe. More worryingly, the problem disproportionately affects the most vulnerable groups in society and is advancing more rapidly in the eastern part of the Region.

Governments can contribute to improving the diets of their population through changes to the wider environments and contexts in which we make our daily food choices; such policies will influence the ways in which foods are promoted, their availability in different settings, and – in some circumstances – their affordability.

The Action Plan highlights important actions at key stages throughout the life-course to maximize impact, ranging from protecting and promoting exclusive breastfeeding for infants to expanding school fruit schemes that have been shown to both increase daily intake of fruit and vegetables and encourage young children to develop healthy taste preferences. Collaboration within and beyond the health sector is also central.

In approving the Action Plan, Member States continue to demonstrate leadership and innovation in this important area. The WHO Regional Office for Europe will continue to provide support and technical leadership to Member States, through tailored policy advice, the development of practical tools and strengthening of surveillance and evaluation mechanisms. I sincerely hope that this Action Plan will encourage all stakeholders to build a healthier Europe by improving diets and reducing the burden of obesity and other diet-related NCDs.



Zsuzsanna Jakab  
WHO Regional Director for Europe

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# Introduction

Analysis of the Global Burden of Disease Study 2010 shows that dietary factors are the most important factors that undermine health and well-being in every Member State in the WHO European Region. It is recognized that malnutrition, including undernutrition, micronutrient deficiencies, overweight and obesity, as well as noncommunicable diseases (NCDs) resulting from unhealthy diets have high social and economic costs for individuals, families, communities and governments.

Of the six WHO regions, the European Region is the most severely affected by NCDs, which are the leading cause of disability and death; cardiovascular disease, diabetes, cancer and respiratory diseases (the four major NCDs) together account for 77% of the burden of disease and almost 86% of premature mortality. Excess body weight (body mass index > 25 kg/m<sup>2</sup>)<sup>1</sup> excessive consumption of energy, saturated fats, *trans* fats, sugar and salt, as well as low consumption of vegetables, fruits and whole grains are leading risk factors and priority concerns. Furthermore, the Region faces a double burden of malnutrition, with some countries simultaneously observing challenging levels of both overweight and obesity and nutrient deficiencies.

Rising rates of overweight and obesity have been reported in many countries in the Region during the past few decades. The statistics are disturbing: in 46 countries (accounting for 87% of the Region), more than 50% of adults are overweight or obese, and in several of those countries the rate is close to 70% of the adult population. Figures from the WHO Global Health Observatory data repository show that, on average (crude estimate), 57.4% of adults aged ≥ 20 years (both sexes) are overweight or obese. Overweight and obesity are estimated to result in the deaths of about 320 000 men and women in 20 countries of western Europe every year. The situation in countries of the eastern part of the Region is particularly worrying given the speed at which the prevalence rates among children and adolescents are catching up with those in the western part of the Region and the fact that rates of overweight and obesity in some parts of eastern Europe have risen more than threefold since 1980.

Overweight and obesity are also highly prevalent among children and adolescents, particularly in southern European countries. The children of less educated parents are most affected and the problem continues to have the greatest impact among the most deprived groups of society. Round 2 of the WHO European Childhood Obesity Surveillance Initiative (2009–2010) showed that, on average,

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<sup>1</sup> Obesity (body mass index >30 kg/m<sup>2</sup>) is not only a risk factor for a range of diseases and conditions, but is included in the WHO International Classification of Diseases, 10th revision (ICD-10).

one in every three children aged six to nine years in countries participating in the survey was overweight or obese.<sup>2</sup> The prevalence of overweight (including obesity) ranged from 24% to 57% among boys and from 21% to 50% among girls and that of obesity from 9% to 31% in boys and 6% to 21% in girls. The Health Behaviour in School-aged Children study in the WHO European Region in 2009–2010 showed that the prevalence of overweight and obesity was 11–33% for children aged 11 years, 12–27% for children aged 13 years and 10–23% for those aged 15 years. The study also showed a higher prevalence of overweight associated with lower socioeconomic status in some countries. Indicators of suboptimal body composition among children, including low muscle mass, are also a concern. Evidence indicates that higher rates of obesity among groups of low socioeconomic status may in part result from their greater exposure to environments in which there are barriers to access to healthy foods and fewer opportunities to engage in physical activity.

Some countries in the Region face a nutritional and demographic transition, with rapid acceleration in the rates of overweight, obesity and diet-related NCDs accompanied by persistence of undernutrition, particularly in poor households. This can often result in the coexistence of overweight and obesity with food and nutrition insecurity<sup>3</sup> in communities and households. Studies among children aged 0–5 years in 2007–2011 showed that stunting is prevalent in the Region, at a rate ranging from 7% to 39%. Exclusive breastfeeding rates in the Region are stalling, and inappropriate complementary feeding practices are still common. Micronutrient deficiencies, notably of iron and iodine, are still frequent, particularly among vulnerable populations. Research also indicates that some population groups in the Region may be lacking other micronutrients, notably vitamin D.

The promotion and accessibility of a healthy and varied diet (that is both available and affordable) is thus a key lever to improve the health, well-being and quality of life of the population, promote healthy ageing and reduce health inequalities. This will require allocation of additional effort and resources and will be further supported by efforts to enhance food literacy, skills and knowledge. Supporting the most vulnerable groups so that all people living in the WHO European Region have the benefits of an affordable, healthy diet and an active life at a time of limited resources is an ethical imperative.

This European Food and Nutrition Action Plan 2015–2020 was prepared in light of existing global policy frameworks for the prevention and control of NCDs and for nutrition, notably the WHO global action plan for the prevention and control of NCDs 2013–2020 and the comprehensive implementation plan on maternal, infant and young child nutrition. It is based on ongoing and related work at regional level, notably in the areas of environmental health, physical activity, healthy ageing, child

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<sup>2</sup> For a list of the countries that participated in the survey, see <http://www.euro.who.int/en/health-topics/disease-prevention/nutrition/activities/monitoring-and-surveillance/who-european-childhood-obesity-surveillance-initiative-cosi>.

<sup>3</sup> Food security exists when all people at all times have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active, healthy life. As nutrition is central, "food and nutrition security" better reflects the importance of finding a balance between quantity (energy) and quality (dietary diversity).

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and adolescent health and continuing efforts to ensure food safety in the European Region. Similarly, this Action Plan supports and is consistent with the EU Action Plan on Childhood Obesity 2014–2020. Furthermore, in 2013, ministers of countries of the European Region adopted the Vienna Declaration on Nutrition and Noncommunicable Diseases in the Context of Health 2020, which calls for decisive, concerted action. It acknowledges that strategies to improve dietary health require government-led action in a broad range of areas and should be informed by increasing evidence of the efficacy of a comprehensive response incorporating a core set of policies. It also recognizes that successful adoption and implementation of these policies requires continuing emphasis on health-in-all-policies and whole-of-government approaches for the creation of healthy and sustainable food systems, in line with the European Health 2020 strategy. Therefore, much of what is required lies outside the health sector.

This Action Plan provides guidance to Member States to support and encourage wider implementation of a “menu” of effective policies at the national level, including coherent, coordinated, multisectoral approaches. As social and economic factors strongly contribute to unhealthy diets and poor nutrition, population-wide strategies, policies and targeted interventions are required by governments, with a strong role for health ministries. This will help ensure that the environments in which we live support and encourage healthy patterns of consumption and healthy diets.

During implementation of this Action Plan, WHO will continue to support, stimulate and provide strategic advice to Member States on nutrition and health in the context of Health 2020, thereby contributing towards the overall goal of achieving a sustainable, healthy life for all. Policy options that governments might consider include influencing the production, marketing, availability and affordability of foods (which together can influence access), with a simultaneous focus on public awareness, food and nutrition skills, capacity and knowledge and the role of health professionals in providing nutrition counselling, particularly in the primary health care context. The policies and tools to support implementation described in this Action Plan are relevant to all countries in the Region, but retain flexibility in design and are adaptable to national contexts, existing legislation and the important cultural dimensions of nutrition. This Action Plan contains recommendations for innovative evidence-based policies and tools that are priorities for tackling malnutrition in all its forms, including the development of common approaches to respond to common regional challenges.

Member States will work together through these effective approaches to promote healthy diets and dietary patterns by addressing priorities such as excessive intake of energy, saturated fats and *trans* fats, sugar and salt, and inadequate consumption of vegetables, fruits and whole grains. Simultaneously, Member States will work to reduce energy, protein and micronutrient deficiencies and unacceptable levels of food and nutrition insecurity for certain vulnerable populations, such as older people, pregnant women and populations of low socioeconomic status. Energy-dense, micronutrient-poor foods and non-alcoholic beverages – consumption of which should be limited as part of a healthy diet – are defined for the purpose of this document as “food products high in energy, saturated fats, *trans* fats, sugar or salt”.

Experience with national nutrition policies in the WHO European Region has shown the intrinsic value of having shared or common tools and a focus on knowledge translation and transfer. In addition, comprehensive monitoring mechanisms are important to identify trends and to measure the impact of policies over time, so that accountability for health and equity is ensured. Within this Action Plan, Member States will also work together with the support of the WHO Regional Office to develop common tools, share experiences, improve the availability of data and enhance capacity for monitoring and surveillance, including assessment of implementation and the impact of policies.

In order to accelerate progress to resolve malnutrition in all its forms, food and nutrition strategies must also address governance. Following the guidance on governance provided by Health 2020, government leaders and policy-makers should establish governance mechanisms that safeguard the integrity of effective policy-making, but also mobilize political commitment to reduce malnutrition through intersectoral cooperation among government departments, national and local institutions, experts, civil society and, where appropriate, the private sector. Multifaceted cross-government approaches can secure political involvement, define the roles and responsibilities of different parts of government and facilitate agreement on shared goals, objectives and agendas. Engagement with the private sector is needed, given its role in food production, distribution and retail; however, such engagement should be related to the core activities of the stakeholders and be set within the context of standards and incentives established by the government in order to meet nutrition and health goals; care must be taken to avoid conflicts of interest in policy-making.

In the context of this Action Plan, it is recognized that a healthy diet can contribute to achieving the voluntary global targets on NCDs adopted by the Sixty-sixth World Health Assembly, including achieving a 25% relative reduction in premature mortality from NCDs by 2025. Healthy diets will also contribute to existing voluntary global targets on maternal, infant and child nutrition.

Other voluntary global targets to be achieved by 2025 that emerged from these global processes are included below as appropriate in this European Action Plan.

- Halt the increases in obesity and diabetes.
- Halt the increase in the prevalence of overweight among children under five years old.
- Reduce the mean population intake of salt and sodium by 30%.
- Increase the rate of exclusive breastfeeding in the first six months of life to at least 50%.
- Reduce the proportion of stunted children under five years by 40%.
- Reduce the prevalence of anaemia among non-pregnant women of reproductive age by 50%.

A woman with brown hair, wearing a white short-sleeved shirt and grey leggings, is running on a paved path. She is smiling and looking upwards. The background shows a grassy field and a cloudy sky. A large, semi-transparent orange circle is overlaid on the left side of the image, containing the text.

# Vision, Mission, Strategic Goals and Scope

# Vision

Health 2020 has inspired a vision of a European Region in which the negative impacts of preventable diet-related NCDs and malnutrition in all its forms – including overweight and obesity – have been dramatically reduced, and all citizens have healthier diets throughout their lives.

# Mission

To achieve universal access to an affordable, balanced, healthy diet, with equity and gender equality in nutrition for all citizens of the WHO European Region through intersectoral policies in the context of Health 2020.

# Strategic goals

To avoid premature deaths and significantly reduce the burden of preventable diet-related NCDs, overweight, obesity and all other forms of malnutrition still prevalent in the WHO European Region, which are strongly influenced by social determinants of health and have a profound negative impact on well-being and quality of life.

This goal will be achieved by taking integrated, comprehensive action in a range of policy areas through a whole-of-government, health-in-all-policies approach. The Action Plan is intended to support the coordinated, comprehensive implementation of national strategies, action plans and policies for improving food system governance, minimizing nutritional risk factors and reducing the prevalence of diet-related diseases, with an emphasis on integration throughout life. Furthermore, it will provide overall direction for the development, expansion and consolidation of sound, feasible action.

# Scope

The Action Plan focuses on food and nutrition as the leading factors in health and well-being in the European Region, with particular attention to the associated burden of NCDs. It covers all forms of malnutrition, including overweight and obesity, throughout the life-course. Specifically, it aims to address:

- inequitable access to proper nutrition throughout the life-course and the inequitable distribution of overweight, obesity, diet-related NCDs and malnutrition;
- continuing lack of easy-to-understand nutritional information about food products, which can make the healthy choice the easy choice and inadequate knowledge, skills and competence about nutrition and healthy diets, which limit the population's ability to act upon this information;
- unhealthy food environments in key settings such as schools, public institutions, catering establishments and retail environments;
- pervasive marketing to children of foods and drinks high in energy, saturated fats, *trans* fats, sugar or salt and inappropriate marketing of follow-on foods and complementary feeding for infants and young children;
- a continuous requirement to ensure that health and social care systems have the tools and resources to prioritize health promotion and disease prevention, with a view to addressing nutrition challenges and diet-related diseases; and
- continuing lack of alignment between health goals and global, regional and local trade and food supply chain policies, which influence the nutritional quality of foods that are available and affordable and, therefore, food and nutrition security for the population.



# Guiding principles and time frame



## Reduce inequalities in access to healthy food, as stated in Health 2020

A reduction in social inequalities will contribute significantly to health and well-being, including nutritional status and diet-related outcomes. The causes of inequality are complex and deeply rooted, reinforcing disadvantages and vulnerability throughout the life-course and across generations. Health 2020 and the Vienna Declaration both reflect an increasing will to tackle poor nutrition and unhealthy diets in countries and throughout the Region, particularly among the most vulnerable groups.

Tackling avoidable inequalities in diet and achieving universal access across social gradients (age, gender, ethnicity, disability or socioeconomic position) will be necessary to achieve the best results and will support human capital and the economy in all Member States at a time of limited resources. Policies that have the effect of improving the availability, affordability and acceptability of healthy diets for the most vulnerable groups (thereby influencing the accessibility of healthy diets) can contribute to reducing their risks for disease and, in tandem with policies in other areas, may help to close the gap. When devising policies and taking action to implement them, consideration should be given to the impact on inequalities.

## Ensure human rights and the right to food

Proper nutrition and health are internationally recognized as fundamental human rights. Respect for and the promotion and protection of human rights are integral to effective prevention and control of malnutrition and diet-related NCDs and strategies must be formulated and implemented accordingly. Achieving the right to food, which is now guaranteed by the constitutions of many countries, requires sustainable, equitable, accessible, resilient food systems that ensure comprehensive food and nutrition security and the supply and consumption of foods that provide nutrition for health and the prevention of NCDs. The focus should be on addressing the determinants of food and nutrition security (sustainable and adequate supplies; hygienic, consistent quality; widespread availability, affordability and accessibility) and also determinants of consumer choice and consumption patterns.

## Empower people and communities through a health-enhancing environment

People and communities should be empowered and involved in the prevention and treatment of malnutrition and diet-related NCDs, including through policies to create healthy food environments and ensure the protection of consumer rights. Particular consideration should be given to participatory approaches, to engage the public and leverage their support for action on these issues.

## Promote a life-course approach

This approach is key to the prevention and control of diet-related NCDs and malnutrition in all its forms. The approach starts by addressing maternal nutritional status and health before and during pregnancy and continues with proper infant feeding practices, including promotion of breastfeeding. Action to encourage healthy diets for children, adolescents and young people is reinforced and sustained by promotion of a healthy diet during the working life, nutrition for healthy ageing and nutritional care for elderly people with diet-related NCDs and micronutrient deficiencies. It also includes nutritional care for patients with disease-related nutritional problems.

## Use evidence-based strategies

Strategies for the prevention and control of diet-related NCDs, overweight, obesity and all other forms of malnutrition, including micronutrient deficiencies, must be based on the best available scientific evidence and public health principles and should be free from conflicts of interest. The main emphasis should be on implementing evidence-based actions, taking further steps from the development and sharing of good practices to institutionalized, scaled-up implementation of effective measures. Special attention should be given to knowledge translation and exchange.

## Time frame

The Action Plan will be implemented during the period 2015–2020, with support from the Regional Office through biennial, Region-wide workplans and country cooperation strategies.

Furthermore, the Regional Office will support Member States by preparing specific tools and technical guidance on policy development, with input from Member States, including meetings of the WHO knowledge and action networks and online consultations. The Regional Office will submit an interim progress report in 2018.

A monitoring framework comprising relevant indicators from WHO global monitoring frameworks and specific European Food and Nutrition Action Plan 2015–2020 indicators will be developed by September 2015. This framework will be used by the Regional Office for Europe, in cooperation with Member States, to assess progress in implementing the recommendations contained in this Action Plan. It will contribute to continuing expansion of the WHO European Database on Nutrition, Obesity and Physical Activity.



# Objectives, priorities and tools

Member States should develop or expand, according to the national context, strategies and action plans that address the Action Plan objectives, which are closely aligned with the Vienna Declaration on Nutrition and Noncommunicable Diseases in the Context of Health 2020. Due consideration should be given to incorporating or adapting as necessary the priority policy actions and tools proposed.

## OBJECTIVE 1

### Create healthy food and drink environments

Adopt strong measures that reduce the overall impact<sup>4</sup> on children of all forms of marketing of foods high in energy, saturated fats, *trans* fats, sugar or salt. Ensure adequate provision for independent monitoring and evaluation to assess whether they achieve this objective.

Use common tools in the context of policies to reduce marketing to children of foods high in energy, saturated fats, *trans* fats, sugar or salt, such as nutrient profiling.

Consider economic tools, including supply chain incentives, targeted subsidies and taxes, to promote healthy eating, with due consideration to the overall impact on vulnerable groups.

Promote, through government leadership, product reformulation, improvements to the nutritional quality of the food supply, use of easy-to-understand or interpretative, consumer- friendly labelling on the front of packages and healthy retail environments.

Engage in cross-government collaboration to facilitate healthier food choices in settings such as schools, kindergartens, nurseries, hospitals, public institutions and workplaces, including by setting standards. Examples might include school nutrition policies, such as school fruit schemes, and nutrient- and food-based standards for foods available in public institutions, which can contribute to reducing inequalities.

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<sup>4</sup> Given the effectiveness of marketing for exposure (reach, frequency) and power (content, design, execution of marketing message), the overall policy objective should be to reduce both the exposure of children to, and power of, marketing of foods high in saturated fats, *trans* fats, free sugars or salt.

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## OBJECTIVE 2

### Promote the gains of a healthy diet throughout the life-course, especially for the most vulnerable groups

Invest in nutrition at the earliest possible stage, before and during pregnancy, including protecting, promoting, supporting and addressing barriers to adequate breastfeeding, while providing for appropriate complementary feeding.

Improve the ability of citizens to make healthy choices, taking into account the needs of different age groups, genders and socioeconomic groups, through multicomponent initiatives to improve food and health literacy and enhance food and nutrition skills. Pre-school and school settings represent excellent entry points, but attention should also be given to opportunities to reach the active and working-age population.

Encourage the use of social media and new techniques to promote healthy food choices and healthier lifestyles.

Adopt tools and strategies to address the special nutrition needs of vulnerable groups, including older people, for both those living in the community and those in care.

## OBJECTIVE 3

### Reinforce health systems to promote healthy diets

Ensure that all health care settings remain committed to health promotion and that nutrition and healthy eating are priorities in people-centred health and social care systems, including brief interventions and nutrition counselling in primary health care settings.

Ensure universal health coverage for preventable and treatable diet-related problems, with a continuum of high quality nutrition services and appropriately qualified and resourced health professionals, ranging from health promotion and prevention to hospital services and care.

Establish nutritional assessment and intervention procedures in the most relevant settings for different age groups, especially children and the elderly, including primary health care and home care services.

## OBJECTIVE 4

### Support surveillance, monitoring, evaluation and research

Consolidate, adjust and extend existing national and international monitoring and surveillance systems, such as the Childhood Obesity Surveillance Initiative and the Health Behaviour in School-aged Children study.

Establish and maintain nutrition and anthropometric surveillance systems for nutritional risk factors, which allow disaggregation by socioeconomic status and gender, and establish and expand food composition databases as a priority.

Make effective, proper, good use of available data, including through knowledge translation and transfer, to inform policy-making. Monitor and evaluate diet-related activities, interventions and policies in different contexts in order to determine their effectiveness and to disseminate good practice.

## OBJECTIVE 5

### Strengthen governance, intersectoral alliances and networks for a health-in-all-policies approach

Strengthen coordinated action at different administrative levels and across government departments to ensure coherence among all policies that influence food systems and the food supply, with a view to promoting, protecting or reinstating healthy and sustainable diets (high in vegetables, fruit and whole grains, with limited intake of saturated fat, *trans* fats, sugar and salt). Some diets in parts of Europe are consistent with the characteristics of a healthy diet, notably the Mediterranean diet<sup>5</sup> and the new Nordic diet.

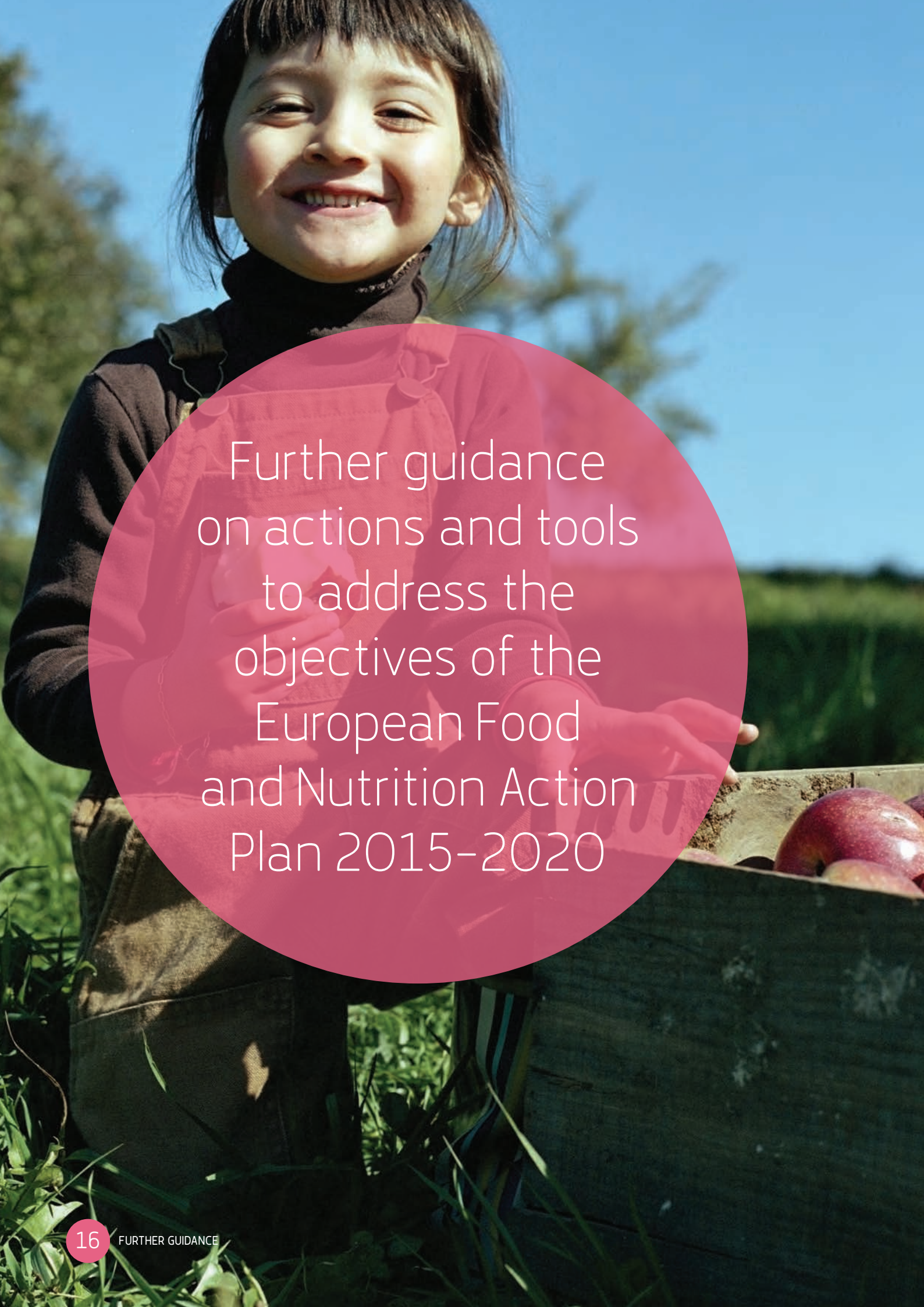
Support mechanisms that enhance multistakeholder action and empower communities at local and regional levels, such as Healthy Cities, the Schools for Health in Europe network and other initiatives, taking care to avoid conflicts of interest. Opportunities to leverage the power of local action should be used, including planning and short supply chain approaches such as farm-to-school programmes.

Participate in and support networks of countries, such as the European Salt Action Network and the European Network on reducing marketing pressure on children.

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<sup>5</sup> UNESCO has reported that the Mediterranean diet is based on high consumption of fresh vegetables, fruits and nuts, legumes, cereals and olive oil, with moderate consumption of dairy foods, moderate-to-high consumption of fish and low consumption of meat.

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A young girl with dark hair and bangs, wearing a dark turtleneck and a brown apron, is smiling and holding a wooden basket filled with red apples. She is standing in a field of green grass under a clear blue sky. A large, semi-transparent pink circle is overlaid on the center of the image, containing white text.

Further guidance  
on actions and tools  
to address the  
objectives of the  
European Food  
and Nutrition Action  
Plan 2015–2020



## OBJECTIVE 1

### Create healthy food and drink environments

Establish strong measures to reduce the overall impact on children of all forms of marketing of foods high in energy, saturated fat, *trans* fats, sugar or salt. These measures will have the effect of reducing the power of the communication techniques used and children's overall exposure to marketing of these foods. Marketing of these products influences children's food preferences and habits and is associated with unhealthy diets and increased risks for overweight and obesity; emerging evidence indicates that the effects of marketing persist into adulthood. Children's greater vulnerability to the persuasive power of marketing messages, notably from television, the Internet and social media advertising, places them at higher risk. The leading categories of food being advertised are high in energy, saturated fats, *trans* fats, sugar or salt, such as breakfast cereals, sugar-sweetened beverages and confectionary. At present, television remains the dominant medium for promotional marketing of foods and beverages, but it is only one of many media, including the Internet and social networks, through which advertisers are now able to promote products, build brand awareness and generate consumer loyalty in a more integrated approach. The WHO framework for implementing the set of recommendations on the marketing of foods and non-alcoholic beverages to children provides guidance to Member States on policy design and implementation. The Regional Office will continue to support Member States in this area. Experience suggests that self-regulatory, voluntary approaches have loopholes and government leadership is required to establish the criteria for policy and for independent monitoring to achieve optimal implementation and ensure progress in strengthening and expanding controls over time. Independent complaints procedures and sanction mechanisms are also required to protect the rights of children and consumers in this regard.

Schools and other settings in which children gather should be free from all marketing of foods high in energy, saturated fats, *trans* fats, sugar or salt<sup>6</sup>.

Member States, with support from WHO, may consider developing monitoring frameworks to assess the extent of marketing in their country. These frameworks should also capture the impact of policies or regulations in terms of reducing the overall impact on children (power and exposure) of all forms of marketing of foods high in energy, saturated fats, *trans* fats, sugar or salt. Such a framework might also clarify the potential impact of cross-border marketing.

Develop and adopt approaches to nutrient profiling for the purposes of restricting the marketing to children of foods high in energy, saturated fats, *trans* fats, sugar or salt. Nutrient profiling has emerged as a valuable tool for policy development and implementation to promote healthier food supplies. A nutrient

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<sup>6</sup> Such settings include nurseries, schools, school grounds and pre-school centres, playgrounds, family and child clinics, paediatric services and all sporting and cultural activities held on these premises.

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profiling tool for the Region, which may be adopted or adapted according to the national context on a voluntary basis, would make clear which food products may and may not be marketed to children. Lessons from the use of nutrient profiling in the context of marketing to children may facilitate adaptation or development of similar tools for other policy areas, such as school food procurement.

Consider the range of economic tools, including supply chain incentives, targeted subsidies and taxes, that could decrease or increase price, notably at point of purchase, and that could improve the affordability of a healthy diet and discourage the consumption of food products high in energy, saturated fats, *trans* fats, sugar or salt. Due attention should be paid to the overall impact on vulnerable groups.

Possible actions include creating or adjusting incentives along the food supply chain, such as through investments in production, supply chain logistics and procurement policies, in order to realign broader food system policies with public health goals and improve the availability and affordability of healthy diets.

Simultaneously, Member States might choose to introduce targeted subsidies to influence the affordability of, and thus improve access to, vegetables, fruits and whole grains, particularly for vulnerable groups. One option might be to include subsidized fruit and vegetables in food and nutrition assistance programmes. Research into the affordability of “healthy food baskets” in the European Region may provide additional guidance.

Member States should develop monitoring frameworks to identify trends in food prices and assess the impact of these economic measures on price, availability, purchase and consumption of targeted products and potential substitutes, including the overall impact on the quality of diets. When possible, this data should be disaggregated by gender and socioeconomic status.

Promote, through government leadership, product reformulation and improvements to the nutritional quality of the food supply. In many countries, a large majority of the population do not meet the targets for saturated fat, *trans* fats, sugar or salt intake, particularly groups of low socioeconomic status. These measures should be directed at actors in the food supply chain, notably producers, processors and retailers (including caterers), in order to bring about significant reductions in the levels of the target nutrients in the full range of products and in all market segments, which will contribute to a reduction in population-level consumption.

- Develop, extend and evaluate, as a priority, salt reduction strategies to continue progress across food product categories and market segments. Integrated salt reduction programmes have had a strong impact in several Member States in the WHO European Region. Their success depends on monitoring, stakeholder engagement and establishment of benchmarks and targets, with sophisticated population awareness initiatives. The primary objective is to take a stepwise approach to reducing sodium

content, with a view to adaptation of consumer taste preferences over time. Sodium replacements, where necessary, must be shown to be safe. As salt reduction and salt iodization programmes are compatible, the latter should continue to be used as the most effective public health measure to counteract generalized iodine-related problems, which are still common in the WHO European Region. WHO is preparing a salt reduction toolkit to assist Member States that are either planning to implement or are implementing salt reduction strategies in order to reach the global target.

- Consider expanding national reformulation strategies and targets to address other relevant nutrients, such as saturated fats and sugar, in addition to overall calorie reduction for a wide range of food products and establishing appropriate portion sizes.
- Develop and implement national policies to ban or virtually eliminate trans fats from the food supply, with a view to making the European Region *trans* fat-free. Although progress has been made in reducing this component, popular foods with high amounts of *trans* fats are still readily available, particularly in some parts of the Region and in some market segments. A generalized ban would eliminate concern about potentially high intake by the most vulnerable groups but should be implemented in the context of improvements to the overall nutritional quality of food products, notably with no increase in saturated fats. WHO will support Member States to identify policy approaches appropriate to national contexts.

Increase consumer-friendly labelling by establishing easy-to-understand or interpretative front-of-package labels that help consumers to identify healthier options. Front-of-package labelling can facilitate consumer understanding of the nutritional content of many foods, especially complex processed foods, and might also have an effect on diets by encouraging food producers and retailers to reformulate their products. Easy-to-understand or interpretative front-of-package labelling can limit consumption of foods high in energy, saturated fats, trans fats, sugar or salt in the context of overall improvements to the nutritional quality of diets. WHO will provide guidance on possible approaches, including best practices from the Region for defining nutrition criteria.

Member States may also formulate policy measures directed at food retailers and caterers to explicitly address the availability, affordability and promotion of fruit and vegetables in these settings and simultaneously set rules for in-shop promotion of foods high in energy, saturated fats, trans fats, sugar or salt. Decisions made by retailers about location, product selection, prices and other in-shop promotions have significant implications for diets, affecting the accessibility of food, particularly in low-income areas.

Generalize schemes to promote healthy diets, particularly in schools and public institutions. Member States are encouraged to develop or expand school nutrition policies that set nutrition- and food-based criteria for foods that are available or provided, including restrictions that limit the availability of foods high in energy, saturated fat, trans fats, sugar or salt. Consideration should be given to developing such criteria for foods available in other public institutions.

School nutrition policies should also improve the accessibility of fruit and vegetables, such as in a subsidized fruit and vegetable scheme. Within this Action Plan, WHO and Member States consider the European Union School Fruit Scheme and other similar national schemes as examples of a broad partnership between the education, health and agriculture sectors for improving the availability and affordability of vegetables and fruits. We recommend its extension to more schools and encourage an increase in the amount or frequency of vegetables and fruits provided. The WHO Regional Office will continue to support Member States through, inter alia, the Schools for Health in Europe network.

## OBJECTIVE 2

### Promote the gains of a healthy diet throughout the life-course, especially for the most vulnerable groups

Increase measures to protect and promote breastfeeding, including through policies and standards, supported by education about the benefits of breastfeeding. The promotion of a healthy diet and nutrition before conception, during pregnancy and for infants and young children is critical to ensuring growth and development and also to prevent NCDs. In this context, Member States commit to implement comprehensive monitoring of the International Code of Marketing of Breast-milk Substitutes and the Baby-Friendly Hospital Initiative (or standards that are of equal or greater strictness) and to strengthen the capacity of health providers and services to support optimal child feeding through appropriate training, good maternity care practices and early childhood services to promote breastfeeding. Member States and WHO will also prepare guidance for nutrition during pregnancy, particularly in relation to nutritional status and weight gain.

Member States reaffirm the need to promote appropriate complementary feeding practices, notably by adopting national guidelines, in addition to monitoring and establishing standards for the marketing of complementary foods. Particular attention should be paid to the importance of appropriate complementary feeding in helping to establish healthy taste preferences.

Adopt comprehensive interventions and community-based initiatives to improve nutrition and prevent overweight and obesity among pre-school and school-aged children, in addition to including nutrition and cooking skills in school curricula. Scientific evidence has shown that the effectiveness of community- and school-based interventions in changing eating behaviour and preventing overweight and obesity depends on design; multicomponent behaviour change interventions are the most effective, especially when supported by changes to the school food environment. Consideration should be given to interventions and initiatives that focus on food and nutrition skills (for example, cooking and school gardens) as these not only improve knowledge, competence and attitudes, but may amplify the impact of other policies, such as nutrition labelling, and help to reduce inequalities. Member States should

explore mechanisms to ensure longer-term sustainability and generalizability of interventions and initiatives. Opportunities to expand the reach of behaviour change communication through social media should also be considered.

Guarantee healthy ageing and maximize healthy life years by preventing all forms of malnutrition and frailty among older people, taking into account the importance of healthy nutrition throughout life, including among the active adult population. In order to achieve the ultimate goal of healthy, active ageing and to prevent disease, this Action Plan recognizes the need to take an intersectoral approach and build on existing WHO policy frameworks relevant to healthy and active ageing. Specific priorities within this Action Plan may include a commitment to expand surveillance of nutritional status among older groups and to consider the food and nutritional needs of older populations living in institutions and those living in the community.

Promote gender equality by taking into account the social, cultural and biological factors that influence nutritional health outcomes and, in so doing, improve programme efficiency, coverage and equity. The challenge of gender imbalance will be tackled by nutrition policies that include raising awareness and collecting and analysing gender-disaggregated data for nutrition policies. Member States are encouraged to consider ways to ensure that policies and interventions are of overall benefit to all population groups, including specific targeted interventions when necessary.

## OBJECTIVE 3

### Reinforce health systems to promote healthy diets

Improve capacity and training for primary health care professionals, including guidance on appropriate nutrition counselling and weight monitoring and management. Member States will prioritize and coordinate their nutrition policies with primary health care or people-centred health care policies to meet the Health 2020 principles and priorities. Information, brief interventions and counselling about healthy diets and their influence on overall health and nutritional status will be included in care paths, with a particular focus on primary care and home care services.

Improve capacity and training for professionals in nutrition in order to secure a skilled public health workforce in addition to delivering high-quality nutrition services in health care settings. Member States, under WHO guidance, will provide public health and health care professionals with evidence-based information on nutrition in professional education systems and through best practice examples, guidance and guidelines.

## OBJECTIVE 4

### Support surveillance, monitoring, evaluation and research

Further develop and integrate existing surveillance tools with valid, representative, comparable and (preferably) measured data for inferring trends. Identify through surveillance current inequalities in risk factors and health outcomes, with a view to better targeting interventions.<sup>7</sup> There should be a continued emphasis on data that can be disaggregated by gender and socioeconomic status. WHO will play a leading role in supporting Member States to ensure that data from surveillance are accompanied by accurate analyses, interpretation and evidence-based policy recommendations. In so doing, Member States and WHO should consider ways to engage with national experts, academic institutions and civil society.

Consolidate and enlarge the Childhood Obesity Surveillance Initiative, which is already the largest database of its kind containing comparable data, involving 25 countries in the Region and supported by the European Union. Simultaneously, with support from WHO, Member States should consider expanding the Health Behaviour in School-aged Children study to cover a broader range of age groups.

Develop and implement innovative nutrition surveillance to improve the quality of local monitoring of child growth and to monitor the availability and affordability of "healthy food baskets" and other environmental influences on dietary behaviour. Member States, with support from WHO, should also continue to strengthen and expand nationally representative diet and nutrition surveys and should, as a priority, establish national food composition databases.

Continue commitment to monitoring and evaluating nutrition interventions, programmes and policies to assess impact and effectiveness, including across different age groups and socioeconomic groups.

Where possible, common repositories, such as the WHO European Database on Nutrition, Obesity and Physical Activity created in collaboration with Member States and the European Union, should be promoted to provide comparable information. This database contains surveillance data and details of more than 300 national and subnational policies in the European Region.

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<sup>7</sup> For example, emerging evidence suggests that overweight and obesity are more prevalent on some island regions than on the mainland, yet little research has been carried out to determine why this is the case.

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## OBJECTIVE 5

### Strengthen governance, alliances and networks for a health-in-all-policies approach

Governments will consistently and coherently implement the recommendations set out in Health 2020 to improve governance for health, including nutrition. At the same time, incentives should be aligned throughout the food system to ensure the availability and affordability of a healthy diet.

Support the development of formal mechanisms to promote cross-government cooperation, particularly for local action and, where appropriate, engage stakeholders such as civil society. Some of the most promising initiatives for preventing overweight and obesity are based on comprehensive integrated programmes implemented at local level. For example, Member States could encourage and support local actions, such as planning, establishment of food councils and community coalitions, and work with regional and local policy-makers in the agro-food sector to leverage the benefits of healthy diets, establish markets for smallholders and local farmers and develop urban food systems that meet the needs of the local population. Specific actions might include establishment of farm-to-school programmes, community gardens and kitchens. Member States could also support networks such as WHO Healthy Cities and Schools for Health in Europe network.

These measures must be sustainable and equitable and therefore require leadership, with training and improved competence for local policy-makers. They also require adequate surveillance and monitoring and sustained investment.

Multisectoral collaboration, communication and community participation should be promoted to raise awareness and create an enabling environment for wider policy action. Special consideration should be given to mechanisms to strengthen links between the agro-food, education, local government and health sectors.

Engage with the action networks of WHO Member States. WHO facilitates various action networks, such as the European Salt Action Network and the European Network on reducing marketing pressure on children, which consist of groups of countries committed to implementing specific activities. The networks are led by volunteer countries, and the Regional Office closely follows and supports their work. Action networks are important for sharing country experiences and exchanging policies among Member States.

# Bibliography

A framework for implementing the set of recommendations on the marketing of foods and non-alcoholic beverages to children. Geneva: World Health Organization; 2012.

Agostoni C, Braegger C, Decsi T, Kolacek S, Koletzko B, Michaelsen KF, et al. Breast-feeding: a commentary by the ESPGHAN Committee on Nutrition. *J Pediatr Gastroenterol Nutr.* 2009;49(1):112-125.

Alwan A, MacLean DR, Riley LM, d'Espaignet ET, Mathers CD, Stevens GA, et al. Monitoring and surveillance of chronic non-communicable diseases: progress and capacity in high-burden countries. *Lancet.* 2010;376(9755):1861-1868.

Andreyeva T, Long MW, Brownell KD. The impact of food prices on consumption: a systematic review of research on the price elasticity of demand for food. *Am J Public Health.* 2010;100(2):216-222.

Andreyeva T, Luedicke J, Henderson KE, Tripp AS. Grocery store beverage choices by participants in federal food assistance and nutrition programs. *Am J Prev Med.* 2012;43(4):411-418.

Andreyeva T, Luedicke J. Federal food package revisions: effects on purchases of whole-grain products. *Am J Prev Med.* 2013;45(4):422-429.

Arvanitakis M, Beck A, Coppens P, De Man F, Elia M, Hébuterne X, et al. Nutrition in care homes and home care: how to implement adequate strategies (report of the Brussels Forum (22-23 November 2007)). *Clin Nutr.* 2008;27(4):481-488.

Bartali B, Frongillo EA, Bandinelli S, Lauretani F, Semba RD, Fried LP, et al. Low nutrient intake is an essential component of frailty in older persons. *J Gerontol A Biol Sci Med Sci.* 2006;61(6):589-593.

Boyland EJ, Halford JC. Television advertising and branding: effects on eating behaviour and food preferences in children. *Appetite.* 2013;62:236-241.

Boyland EJ, Harrold JA, Dovey TM, Allison M, Dobson S, Jacobs MC, et al. Food choice and overconsumption: effect of a premium sports celebrity endorser. *J Pediatr.* 2013;163(2):339-343.



Boyland EJ, Harrold JA, Kirkham TC, Corker C, Cuddy J, Evans D, et al. Food commercials increase preference for energy-dense foods, particularly in children who watch more television. *Pediatrics*. 2011;128(1):e93-e100.

Boyland EJ, Harrold JA, Kirkham TC, Halford JC. The extent of food advertising to children on UK television in 2008. *Int J Pediatr Obes*. 2011;6(5-6):455-461.

Branca F, Nikogosian H, Lobstein T, editors. The challenge of obesity in the WHO European Region and the strategies for response: summary. Copenhagen: WHO Regional Office for Europe; 2007.

Cairns G, Angus K, Hastings G, Caraher M. Systematic reviews of the evidence on the nature, extent and effects of food marketing to children: a retrospective summary. *Appetite*. 2013;62:209-215.

Cattaneo A, Monasta L, Stamatakis E, Lioret S, Castetbon K, Frenken F, et al. Overweight and obesity in infants and preschool children in the European Union: a review of existing data. *Obes Rev*. 2010;11(5):389-398.

Cecchini M, Sassi F, Lauer JA, Lee YY, Guajardo-Barron V, Chisholm D. Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost-effectiveness. *Lancet*. 2010;376(9754):1775-1784.

Comparative analysis of nutrition policies in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2006 (document EUR/06/5062700/BD/2).

Comprehensive implementation plan on maternal, infant and young child nutrition. Geneva: World Health Organization; 2014.

Connell P, Brucks M, Nielsen J. How childhood advertising exposure can create biased product evaluations that persist into adulthood. *J Consum Res*. 2014;41(1):119-134.

Core health indicators in the WHO European Region 2012. Copenhagen: WHO Regional Office for Europe; 2012.

Council Regulation (EC) No. 1234/2007 of 22 October 2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products (single CMO regulation). *Off J Eur Union*. 2007;L299:1-149.

Cowburn G, Stockley L. Consumer understanding and use of nutrition labelling: a systematic review. *Public Health Nutr*. 2005;8(1):21-28.

Cruz-Jentoft AJ, Franco A, Sommer P, Baeyens JP, Jankowska E, Maggi A, et al. Silver paper: the future of health promotion and preventive actions, basic research, and clinical aspects of age-related disease - a report of the European Summit on Age-Related Disease. *Aging Clin Exp Res*. 2009;21(6):376-385.

Currie C, Zanotti C, Morgan A, Currie D, de Looze M, Roberts C, et al, editors. Social determinants of health and well-being among young people. Health behaviour in school-aged children (HBSC) study: international report from the 2009/2010 survey. Copenhagen: WHO Regional Office for Europe; 2012 (Health Policy for Children and Adolescents, No. 6).

Danish data on trans fatty acids in foods. Copenhagen: Ministry of Food, Agriculture and Fisheries of Denmark; 2014.

Day PL, Pearce J. Obesity-promoting food environments and the spatial clustering of food outlets around schools. *Am J Prev Med*. 2011;40(2):113-121.

de Schutter O. Report submitted by the Special Rapporteur on the right to food to the nineteenth session of the Human Rights Council. New York: United Nations; 2011.

Effertz T, Wilcke AC. Do television food commercials target children in Germany? *Public Health Nutr*. 2012;15(8):1466-1473.

Elmadfa I, editor. European nutrition and health report 2009. Basel: Karger AG; 2009 (Forum of Nutrition (vol.2)).

European charter on counteracting obesity. Copenhagen: WHO Regional Office for Europe; 2006 (document EUR/O6/5062700/8). Adopted at the WHO European Ministerial Conference on Counteracting Obesity: diet and physical activity for health (Istanbul, Turkey, 15-17 November 2006).

EU Action Plan on Childhood Obesity 2014-2020 (Online). European Union (EU); 2014.

Evaluation of the European school fruit scheme: final report. Brussels: European Commission, Directorate-General for Agriculture and Rural Development; 2012.

Eyles H, Mhurchu CN, Nghiem N, Blakely T. Food pricing strategies, population diets, and non-communicable disease: a systematic review of simulation studies. *PLOS Medicine*. 2012;9(12):e1001353.

Fats and fatty acids in human nutrition: report of an expert consultation. Rome: Food and Agriculture Organization of the United Nations; 2010 (FAO Food and Nutrition Paper 91).

Fewtrell M, Wilson DC, Booth I, Lucas A. Six months of exclusive breast feeding: how good is the evidence? *BMJ*. 2011;342:c5955.

Follow-up to the WHO European Ministerial Conference on Counteracting Obesity and second European action plan for food and nutrition policy. Copenhagen: WHO Regional Office for Europe; 2007 (resolution EUR/RC57/R4).

Galbraith-Emami S, Lobstein T. The impact of initiatives to limit the advertising of food and beverage products to children: a systematic review. *Obes Rev*. 2013;14(12):960-974.

Galcheva SV, Iotova VM, Stratev VK. Television food advertising directed towards Bulgarian children. *Arch Dis Child*. 2008;93(10):857-861.

Giskes K, van Lenthe F, Avendano-Pabon M, Brug J. A systematic review of environmental factors and obesogenic dietary intakes among adults: are we getting closer to understanding obesogenic environments? *Obes Rev*. 2011;12(5):e95-e106.

Global action plan for the prevention and control of NCDs 2013-2020. Geneva: World Health Organization; 2013.

Global health risks: mortality and burden of disease attributable to selected major risks. Geneva: World Health Organization; 2009.

Global status report on noncommunicable diseases 2010. Geneva: World Health Organization; 2011. Global strategy on diet, physical activity and health. Geneva: World Health Organization; 2004 (resolution WHA57.17).

Glossary on right to food. Rome: Food and Agriculture Organization of the United Nations; 2009.

Guideline: sodium intake for adults and children. Geneva: World Health Organization; 2012.

Gurina NA, Frolova EV, Degryse JM. A roadmap of aging in Russia: the prevalence of frailty in community-dwelling older adults in the St Petersburg district – the “Crystal” study. *J Am Geriatr Soc*. 2011;59(6):980–988.

Hawkes C. Food taxes: what type of evidence is available to inform policy development? *Nutr Bull*. 2012;37(1):51–56.

Health Behaviour in School-aged Children: World Health Organization collaborative cross-national study [website]. St Andrews: Child & Adolescent Health Research Unit, University of St Andrews (<http://www.hbsc.org/>).

Health 2020: a European policy framework supporting action across government and society for health and well-being. Copenhagen: WHO Regional Office for Europe; 2012 (document EUR/RC62/9).

Interim second report on social determinants of health and the health divide in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2011.

Inzitari M, Doets E, Bartali B, Benetou V, Di Bari M, Visser M, et al. Nutrition in the age-related disablement process. *J Nutr Health Aging* 2011;15(8):599–604.

Johansson L, Sidenvall B, Malmberg B, Christensson L. Who will become malnourished? A prospective study of factors associated with malnutrition in older persons living at home. *J Nutr Health Aging*. 2009;13(10):855–861.

Joint WHO/FAO expert consultation on diet, nutrition and the prevention of chronic diseases. Geneva: World Health Organization; 2002.

Kaiser MJ, Bauer JM, Rämisch C, Uter W, Guigoz Y, Cederholm T, et al. Frequency of malnutrition in older adults: a multinational perspective using the mini nutritional assessment. *J Am Geriatr Soc*. 2010;58(9):1734–1738.

Kelly B, Halford JC, Boyland EJ, Chapman K, Bautista-Castaño I, Berg C, et al. Television food advertising to children: a global perspective. *Am J Public Health*. 2010;100(9):1730-1736.

Lee A, Mhurchu CN, Sacks G, Swinburn B, Snowdon W, Vandevijvere S, et al. Monitoring the price and affordability of foods and diets globally. *Obes Rev*. 2013;14(S1): 82-95.

Lobstein T. Research needs on food marketing to children: report of the StanMark project. *Appetite*. 2013;62:185-186.

Marmot M, Friel S, Bell R, Houweling TA, Taylor S. Closing the gap in a generation: health equity through action on the social determinants of health. *Lancet*. 2008;372(9650):1661-1669.

Moscow Declaration of the first global ministerial conference on healthy lifestyles and noncommunicable disease control. Geneva: World Health Organization, 2011.

Ni Mhurchu C, Vandevijvere S, Waterlander W, Thornton LE, Kelly B, Cameron AJ et al. Monitoring the availability of healthy and unhealthy foods and non alcoholic beverages in community and consumer retail food environments globally. *Obes Rev*. 2013;14(S1): 108-119

Parma declaration on environment and health. Copenhagen: WHO Regional Office for Europe; 2010 (EUR/55934/5.1)

Paul IM, Bartok CJ, Downs DS, Stifter CA, Ventura AK, Birch LL. Opportunities for the primary prevention of obesity during infancy. *Adv Pediatr*. 2009;56(1):107.

Political declaration of the high-level meeting of the General Assembly on the prevention and control of non-communicable diseases. New York: United Nations; 2011 (document A/66/L.1).

Pomerleau J, Knai C, Branca F, Robertson A, Rutter H, McKee M, et al. Review of the literature of obesity (and inequalities in obesity) in Europe and of its main determinants: nutrition and physical activity. In: *Tackling the social and economic determinants of nutrition and physical activity for the prevention of obesity across Europe*. London: EURO-PREVOB Consortium; 2008.

Prevention and control of noncommunicable diseases in the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2006 (resolution EUR/RC56/R2).

Rees K, Hartley L, Flowers N, Clarke A, Hooper L, Thorogood M, et al. 'Mediterranean' dietary pattern for the primary prevention of cardiovascular disease. *Cochrane Database Syst Rev.* 2013;8:CD009825.

Rodriguez-Fernandez R, Siopa M, Simpson SJ, Amiya RM, Breda J, Cappuccio FP. Current salt reduction policies across gradients of inequality-adjusted human development in the WHO European region: minding the gaps. *Public Health Nutr.* 2013:1-11.

Roman Viñas B, Ribas Barba L, Ngo J, Gurinovic M, Novakovic R, Cavelaars A, et al. Projected prevalence of inadequate nutrient intakes in Europe. *Ann Nutr Metab.* 2011;59(2- 4):84-95.

Semba RD, Bartali B, Zhou J, Blaum C, Ko CW, Fried LP. Low serum micronutrient concentrations predict frailty among older women living in the community. *J Gerontol A Biol Sci Med Sci.* 2006;61(6):594-599.

Set of recommendations on the marketing of foods and non-alcoholic beverages to children. Geneva: World Health Organization; 2010.

Stender S, Astrup A, Dyerberg J. A trans European Union difference in the decline in trans fatty acids in popular foods: a market basket investigation. *BMJ Open.* 2012;2(5):e000859.

STEPwise approach to surveillance (STEPS). In: WHO Chronic diseases and health promotion [website]. Geneva: World Health Organization (<http://www.who.int/chp/steps/en/>).

Strategy and action plan for healthy ageing in Europe, 2012-2020. Copenhagen: WHO Regional Office for Europe; 2012 (EUR/RC62/10 Rev.1).

Strobl R, Müller M, Emeny R, Peters A, Grill E. Distribution and determinants of functioning and disability in aged adults - results from the German KORA-Age study. *BMC Public Health.* 2013;13(1):137.

Summerbell CD, Moore HJ, Vögele C, Kreichauf S, Wildgruber A, Manios Y, et al. Evidence-based recommendations for the development of obesity prevention programs targeted at preschool children. *Obes Rev.* 2012;13(s1):129-132.

Te Morenga L, Mallard S, Mann J. Dietary sugars and body weight: systematic review and meta-analyses of randomised controlled trials and cohort studies. *BMJ.* 2013;346:e7492.

Thow AM, Jan S, Leeder S, Swinburn B. The effect of fiscal policy on diet, obesity and chronic disease: a systematic review. *Bull World Health Organ.* 2010;88(8):609-614.

Trichopoulou A, Bamia C, Trichopoulos D. Anatomy of health effects of Mediterranean diet: Greek EPIC prospective cohort study. *BMJ.* 2009;338:b2337.

Troesch B, Hoefl B, McBurney M, Eggersdorfer M, Weber P. Dietary surveys indicate vitamin intakes below recommendations are common in representative Western countries. *Br J Nutr.* 2012;108(4):692-698.

Vienna declaration on nutrition and noncommunicable diseases in the context of Health 2020. Copenhagen: WHO Regional Office for Europe; 2013.

WHO European action plan for food and nutrition policy 2007-2012. Copenhagen: WHO Regional Office for Europe; 2008.

Wijnhoven TM, van Raaij JM, Spinelli A, Rito AI, Hovengen R, Kunesova M, et al. WHO European Childhood Obesity Surveillance Initiative 2008: weight, height and body mass index in 6-9-year-old children. *Pediatr Obes.* 2013;8(2):79-97.

World health statistics 2011. Geneva: World Health Organization; 2011.

# 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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## Member States:

Albania	Finland	Luxembourg	Slovenia
Andorra	France	Malta	Spain
Armenia	Georgia	Monaco	Sweden
Austria	Germany	Montenegro	Switzerland
Azerbaijan	Greece	Netherlands	Tajikistan
Belarus	Hungary	Norway	The former Yugoslav Republic of Macedonia
Belgium	Iceland	Poland	Turkey
Bosnia and Herzegovina	Ireland	Portugal	Turkmenistan
Bulgaria	Israel	Republic of Moldova	Ukraine
Croatia	Italy	Romania	United Kingdom
Cyprus	Kazakhstan	Russian Federation	Uzbekistan
Czech Republic	Kyrgyzstan	San Marino	
Denmark	Latvia	Serbia	
Estonia	Lithuania	Slovakia	

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