



Framework for the implementation of the Global Strategy on Diet, Physical Activity and Health in the Eastern Mediterranean Region

Working document



World Health
Organization

Regional Office for the Eastern Mediterranean

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Preface

Many of the major risk factors for chronic noncommunicable disease are closely related to physical inactivity and unhealthy diet. To address the growing burden of noncommunicable disease, in 2002 the World Health Organization (WHO) began developing the Global Strategy on Diet, Physical Activity and Health, which was adopted by the World Health Assembly in 2004.

In the WHO Eastern Mediterranean Region, development of the Global Strategy has been complemented by a number of regional commitments and initiatives towards prevention and control of noncommunicable disease. Although several countries of the Region have undertaken efforts to implement the Global Strategy at country level, progress has been limited to date.

Recognizing the need for a structured approach to implementation of the strategy in countries of the Region, in 2008 the WHO Regional Office for the Eastern Mediterranean initiated the development of a regional framework for implementation of the Global Strategy. Development of the framework took place through a consultative process that included a regional consultation held in Dubai as well as reviews by a core group of regional and global experts. The framework is inspired by two WHO publications: *A guide for population-based approaches to increasing levels of physical activity: implementation of the WHO Global Strategy on Diet, Physical Activity and Health* (2007) and *Marketing of food and non-alcoholic beverages to children* (2006).

This document provides a tool for countries of the Region to adapt and implement the Global Strategy at national level. It takes into account the public health priorities, the target populations and the burden of noncommunicable diseases in the Region, with particular emphasis on actions which countries can adapt and implement. It aims to assist policy-makers in ministries of health and other relevant ministries and stakeholders in the development and implementation of a national plan addressing diet and physical activity. It also provides guidance on policy options for effective promotion of physical activity and a healthy, balanced diet at national and subnational levels.

Introduction

1.1 Background: the challenge of noncommunicable disease

Chronic noncommunicable diseases such as cardiovascular disease, diabetes and cancer were estimated to account for 60% of all deaths globally in 2005, 80% of which occurred in low-income and middle-income countries [1]. According to the global burden of disease database, in 2004 alone, noncommunicable diseases constituted around 55% of the mortality in the Eastern Mediterranean Region of the World Health Organization (WHO). The incidence of these diseases is rising significantly in the Region. It is estimated that the regional burden of disease attributable to noncommunicable diseases will rise to 60% by 2020 [2].

Overweight and obesity are potent risk factors for cardiovascular diseases and type 2 diabetes and are major contributors to premature deaths. Data compiled for adults aged 15 years and over from 16 countries of the Region show the highest levels of overweight in Kuwait, Egypt, United Arab Emirates, Saudi Arabia, Jordan and Bahrain, with the prevalence of overweight/obesity ranging from 74% to 86% among women and 69% to 77% among men (WHO Global InfoBase). The escalating level of overweight and obesity among children and adolescents is of particular concern, given the recent evidence linking childhood and adolescent obesity to increased risk of obesity and morbidity in adulthood.

The direct medical costs associated with noncommunicable diseases are staggering, while hidden costs such as informal care and lost productivity may be even higher. In Pakistan, the national income projected to be lost due to heart disease, stroke and diabetes in 2015 is estimated at US\$1.2 billion [1]. At the level of individuals, the total cost of these diseases can be catastrophic, especially for middle-income and low-income families. Noncommunicable diseases are an under-appreciated cause of poverty that can hinder development in many countries.

The epidemiology of noncommunicable diseases and the risk factors for these diseases are closely related to food consumption, dietary patterns, nutrition and lifestyles. The most important risk factors for chronic disease are high blood pressure, high concentrations of cholesterol, inadequate intake of fruit and vegetables, overweight and obesity, physical inactivity and tobacco use. Five of these risk factors are closely related to physical activity and diet. Taken together, the major risk factors account for around 80% of deaths from heart disease and stroke [3].

1.2 WHO's response: the Global Strategy on Diet, Physical Activity and Health

Responding to the growing burden of noncommunicable diseases and the need to address the most important risk factors, in 2002 the Fifty-fifth World Health Assembly requested WHO to develop a Global Strategy on Diet, Physical Activity and Health (DPAS). The guiding principles in formulating the strategy were as follows.

- *Stronger evidence for policy* – to draw together existing scientific information on the relationship between diet, physical activity and noncommunicable diseases and knowledge about interventions
- *Advocacy for policy change* – to inform decision-makers and stakeholders of the problem, determinants, interventions and policy needs
- *Stakeholder involvement* – to agree on the roles of stakeholders in implementing a global strategy
- *A strategic framework for action* – to propose appropriately tailored policies and interventions for countries.

The final strategy was endorsed by the Health Assembly in 2004 (resolution WHA57.17). Since then, many countries have begun implementing the strategy to reduce the incidence and prevalence of noncommunicable diseases through promoting physical activity and healthy diet. In May 2008, the Health Assembly adopted resolution WHA61.14 Prevention and control of noncommunicable diseases: implementation of the global strategy, which reaffirms the importance of implementing DPAS as one of the core strategies to address the rising burden of noncommunicable disease.

In the WHO Eastern Mediterranean Region, a number of resolutions were adopted by the Regional Committee for the Eastern Mediterranean which reinforce the global initiatives while taking into account the regional situation in approaches towards noncommunicable disease prevention and control. These include EM/RC52/R.7 Noncommunicable diseases: challenges and strategic directions, EM/RC/52/R.8 Regional strategy for health promotion, EM/RC50/R.6 Promoting healthy lifestyles, and EM/RC45/R.7 Prevention and control of cardiovascular diseases. Based on these resolutions, countries of the Region have developed different policy options to address the issue of noncommunicable diseases.

A few countries of the Region are promoting healthy diet and physical activity, with varying degrees of success. However, most countries lack a clear national policy on diet and physical activity, or strategic approaches for systematic and collaborative implementation. Different sectors, the health sector in particular, are undertaking isolated activities with little intersectoral coordination, engagement of the private sector or involvement of the communities. There is clear need for developing and implementation of comprehensive national plans of action for implementation of DPAS.

1.3 Regional context

Countries of the Region share many similar traditions with regard to patterns of food consumption and physical activity. The growing trend of unhealthy diets and sedentary lifestyles is generally found throughout the Region, among high-income and low-income countries alike. In high-income countries, some lifestyle-related risk factors have increased as a result of economic prosperity and development. At the same time, in low-income and middle-income countries of the Region, many unhealthy food consumption patterns emanate from poverty and undernutrition in childhood. Some food consumption patterns, such as eating certain traditional foods rich in fat, sugar and salt, are found across all socioeconomic strata. Levels of physical activity are quite low in most countries of the Region. A culture of regularly visiting parks or open spaces and gymnasiums for physical activity is not prevalent, nor are such spaces and facilities widely available. In addition, in many countries there are cultural barriers to women's engagement in physical activity.

It is important to take into consideration the determinants that influence food choices and physical activity in the Region, and that may in turn increase susceptibility to chronic diseases. Multiple factors are important in determining the way that food habits are developed and physical activity opportunities are made available to the people. These determinants must be taken into account (and the way that may affect the implementation process) when designing any plans for the implementation of DPAs. The biological characteristics and genetic makeup of individuals play an important part in determining their state of health and disease. The effects of those characteristics are often modulated by aspects of the socioeconomic and physical environment and by the individual's interactions with such environments. This framework, however, is mostly focused on the social determinants of health, including environmental characteristics and individual choices and behaviours. A list of such determinants is attached as Annex 1.

2. The Framework

2.1 Objectives, approach and guiding principles

The purpose of the framework is to assist countries in implementing the Global Strategy on Diet, Physical Activity and Health, with the goal of reducing morbidity and mortality due to noncommunicable diseases. Specifically, the framework aims to:

- facilitate the development of national policies and action plans aimed at promoting food diversity and healthy eating habits and increasing physical activity among populations
- stimulate the practice of regular physical activity in the population, with special emphasis on schools, workplaces and community
- facilitate collaboration with private industry to promote the production and distribution of products which contribute to a healthier and more balanced diet including fruits and vegetables and labelling of nutritional content of food, using the regional food-based dietary guidelines
- raise awareness among national health professionals to foster the systematic detection of noncommunicable disease risk factors and build capacity to address them
- enable monitoring of implementation and evaluation of the results obtained as a consequence of the Strategy.

WHO recommends a stepwise approach for the implementation of DPAS. The WHO stepwise framework provides a flexible and practical approach to assist ministries of health in balancing diverse needs and priorities while implementing evidence-based interventions. The stepwise framework includes three main planning steps and three main implementation steps. Planning steps involve assessing the current risk factor profile of the population, formulating and adopting a relevant policy approach and identifying the most effective means of implementing this policy. The chosen combination of actions can be considered as the levers for putting policy into practice with maximum effect. Examples of areas for action using a stepwise approach to implementation of DPAS are attached as Annex 2.

WHO has identified a number of important elements which are essential for successful policies and plans [4]. These include:

- Support from stakeholders: A network of relevant stakeholders (e.g. ministries, private sector organizations, nongovernmental agencies, religious leaders, etc) and effective collaboration is necessary for implementing physical activity and

healthy diet programmes in specified settings and to disseminate health messages on physical activity through relevant media.

- Cultural sensitivity: National policies and plans on physical activity and healthy diet should be socially inclusive and participatory.
- Integration of diet and physical activity within other related sectors: National policies and plans on healthy diet and physical activity should be aligned with, and complementary to, national policies and action plans addressing other related areas.
- A coordination mechanism: A national action plan on healthy diet and physical activity requires leadership and multisectoral coordination. Where possible, this could draw on existing mechanisms or structures; otherwise, a coordinating team may be established with relevant stakeholders. Broad representation on the coordinating team is recommended. The appropriate role of such a team may differ from country to country depending on the local context, but may include: coordinating actions among different stakeholders; creating an environment for stakeholders to pursue their strategies and actions; facilitating the development and implementation of a national action plan and programmes, including resource mobilization; monitoring programme implementation; and taking responsibility for developing coordination between different administrative levels (i.e. national, regional, local).

This framework includes general principles and examples of possible areas of action for the promotion of physical activity and healthy diet. A national action plan should include specific goals, objectives, and actions, similar to those outlined in the DPAS. Of particular importance are the elements needed to implement a plan of action, including: identification of necessary resources and national focal points (i.e. key national institutes); collaboration between the health sector and other key sectors such as education, urban planning, transportation and communication; and monitoring, evaluation and follow-up.

The framework proposes strategic actions that will be integrated within the regional nutrition action plan. Under each strategic action are joint actions for WHO and countries and a set of suggested activities for countries. The activities are based on the broader elements of the DPAS but take into account national and subnational contexts and existing constraints and opportunities.

2.2 Strategic actions and activities

1. *Enforcing regional and national nutrition policies, strategies and action plans*

Joint actions

- Fostering the formulation and promotion of national policies, strategies and action plans to improve healthy diet and encourage physical activity, and ensuring that regional and national nutrition and noncommunicable disease programmes take into account DPAS.

Suggested activities

- Develop and publish national strategies that integrate DPAS with other related strategies. Support adaptation of the global guidelines and tools to regional and local situations.

Possible indicators

- Policies, tools and guidelines available at national level.

2. *Informing national coordination mechanisms*

Joint actions

- Encouraging the establishment of national coordinating mechanisms that address nutrition, balanced diet and physical activity within the context of a comprehensive plan for nutrition and noncommunicable disease prevention.
- Promoting the participation of nongovernmental organizations, academia, civil society, communities, the private sector and the media in activities related to healthy diet and physical activity.

Suggested activities

- Establish or strengthen the existing national coordinating mechanism (an organization, committee or other body) to oversee, develop and implement the comprehensive plan.
- Ensure that the coordination mechanism contains representation from all key governmental sectors including competent scientific bodies, nongovernmental organizations, academia, civil society, communities, the private sector, media.
- Ensure that the coordinating mechanism can effect sector-specific action plan alignments and sustained budgetary allocations for intersectoral activities.

Possible indicators

- A functional national multisectoral council/mechanism.
- Financial resources and legal framework available for the council.

3. *Enforcing or promoting the development of national food-based dietary guidelines and and physical activity guidelines*

Joint actions

- Ensuring use of the regional food-based dietary guidelines and drawing up national guidelines, taking into account evidence from national and international sources.
- Preparing national guidelines for health-enhancing physical activity in accordance with the goals and objectives of the global strategy.

Suggested activities

- Develop and publish national food-based dietary guidelines and national physical activity guidelines.
- Establish clear mechanisms to disseminate the guidelines produced.
- Coordinate with the Regional Office to activate the nutrition-friendly school initiative.

Possible indicators

- National food-based dietary guidelines and guidelines for physical activity are developed and widely disseminated.

4. *Mobilizing resources for DPAS implementation*

Joint actions

- Identifying various sources of funding, in addition to the national budget, to assist in implementing the strategy developed. Programmes aimed at promoting food-based dietary guidelines and physical activity can be framed as a developmental need and can therefore draw policy and financial support from national development plans.

Suggested activities

- Ensure a clear and sustainable national budget for action on healthy diet and physical activity.
- Develop a resource mobilization plan for action on healthy diet and physical activity.

Possible indicators

- A national level budget is available for the implementation of DPAS.

5. *Promoting supportive urban planning and targeting national transportation policies*

Joint actions

- Advicating for urban planning policies and incentives that ensure walking, cycling and other forms of physical activities are accessible and safe.

- Advocating for transport policies to include non-motorized modes of transportation; labour and workplace policies encouraging physical activity.
- Targeting strategies towards changing social norms and improving community understanding and acceptance of the need to integrate physical activity into everyday life. Special emphasis should be put on advocating for creating spaces for women where they can engage in sport activities.
- Supporting ministries of health to take the lead in forming partnerships with key agencies, and public and private stakeholders, to draw up a common agenda and workplan aimed at promoting physical activity.

Suggested activities

- Develop national or regional guidance for the development of urban plans that promote physical activity.
- Establish multistakeholder national transport policies that promote active and safe methods of transportation.
- Ensure that the definition of physical activity used in the physical activity-related policies includes physical activity undertaken in various domains (i.e. work, transport, sports, recreation/leisure).

Possible indicators

- Representation of all relevant sectors in the national multisectoral council.
- Number of guidelines implemented in effective urban planning.

6. *Fostering partnership and synergy with civil society and nongovernmental organizations*

Joint actions

- Civil society and nongovernmental organizations can play an important role in promoting healthy diets and physical activity at the population level, ensuring that consumers ask governments to provide support for healthy lifestyles, and that the food industry provides healthy products.
- Nongovernmental organizations can support a governmental strategy effectively if they are involved in the development and implementation process of the national policies and programmes to promote healthy diets and physical activity collaborating with both national and international partners.

Suggested activities

- Facilitate and promote the participation of nongovernmental organizations in the implementation of the national policy on healthy diet and physical activity.
- Encourage relevant nongovernmental organizations to perform awareness-raising activities for consumers that are in line with national policies on healthy diet and physical activity.
- Invite nongovernmental organizations to be part of the national coordination mechanism and the expert advisory boards.
- Promote and facilitate the establishment of networks, community and consumer associations and action groups to influence policy dialogue and policy formulation.

- Support advocacy events organized jointly by governments, nongovernmental organizations and civil society to promote healthy diet and physical activity (e.g. organization of a “Move for Health” day).

Possible indicators

- Representation of nongovernmental organizations in decision-making processes.
- Number of awareness campaigns conducted by nongovernmental organizations, local communities, schools and civil society.

7. Engaging the private sector

7.1 Promoting the effective engagement of the private sector, particularly food and sports industries

Joint actions

- Encouraging the food industry, retailers, catering companies, sporting goods manufacturers, advertising and recreation businesses and the media all play their roles as responsible employers and as advocates for healthy lifestyles. All could partner with governments and nongovernmental organizations in implementing measures aimed at sending positive and consistent messages to facilitate and enable integrated efforts to encourage healthy eating and physical activity.

Suggested activities

- Develop and enforce legislation which ensures that the private sector meets minimum standards for corporate social responsibility. Standards should cover the issue of marketing to children and young adults. They should be updated at regular intervals in light of the dynamic rate at which new products and marketing tactics develop. Measures to encourage voluntary action by the private sector should be explored.
- Promote reduction in the fat, sugar and salt content of processed foods and non-alcoholic beverages and review current marketing practices.
- Increase introduction of innovative, healthy and nutritious choices.
- Provide consumers with adequate and understandable nutrition information (Codex) for food products.
- Consider the risk of conflict of interest, establish if appropriate public–private partnerships to promote healthy diets and physical activity.
- Develop a mechanism to address marketing of foods and non-alcoholic beverages to children.

Possible indicators

- Availability of national level legislation for the private sector on adhering to minimum standards for processed food.
- Mechanism for public–private partnership in place.

7.2 Identifying mechanisms to influence positively marketing food and non-alcoholic beverages to children

Joint actions

- Establishing appropriate multisectoral approach(es) to address marketing of foods and non-alcoholic beverages to children, and to deal with issues such as sponsorship, promotion and advertising.
- Coordinating with schools to improve the food served in the canteens and around the schools.
- Coordinating with safety net programmes, including school feeding programmes, to improve food diversity.

Suggested activities

- Develop a regulatory framework or self-regulatory mechanisms to limit marketing food and non-alcoholic beverages to children.
- Establish an independent monitoring system for the (self) regulatory mechanism on marketing food and non-alcoholic beverages to children.
- Use the food-based dietary guidelines as a basis to improve the food subsidy programmes, where applicable, and school feeding programme.

Possible indicators

- Legislation regulating food marketing to children in place and enforced.

7.3 Promoting responsible nutrition labelling

Joint actions

- Collaborating with consumer groups and the private sector (including the advertising industry) to develop appropriate multisectoral approaches to deal with food marketing and issues such as sponsorship, promotion and advertising.

Suggested activities

- Establish an advisory mechanism regarding nutrition labelling and health claims on foods and beverages.
- Develop legislation or regulations regarding nutrition labelling and nutritional and health claims (Codex).

Possible indicators

- Regulations and laws regarding food labelling in place and enforced.

8. Employing a settings approach

Joint actions

Interventions in defined settings provide an opportunity to target a uniform community (or target group) which is easily accessible, and interventions at these

levels are almost always cost effective. By targeting two particular settings (schools and workplaces), maximum benefit can be achieved.

Suggested activities

- Develop policies and programmes to promote balanced diets and physical activity in the workplace.
- If appropriate, encourage employers to conduct health risk assessment of employees and collect information related to diet, physical activity patterns, body mass index and blood pressure.
- Encourage employers to serve meals consistent with national dietary guidelines and sell/provide fruits and vegetables.
- Develop, publish and implement a national school policy focusing on healthy diets and physical activity.
- Develop nutritional standards for school meals consistent with the national dietary guidelines.
- Develop curriculum standards for health education with focus on diet and physical activity.
- Facilitate collaboration between the Ministry of Health and Ministry of Education for effective implementation of policies in school settings.
- Promote the nutrition-friendly school initiative in coordination with the Ministry of Health and Ministry of Education.

Possible indicators

- Policies for balanced diet and physical activity exist at the workplace.
- Messages about healthy diet and physical activity incorporated into school curricula.

9. *Influencing food and agricultural policies, taking into account cultural considerations*

Joint actions

- Ensuring national nutrition and food security policies are consistent with the protection and promotion of public health. Where needed, governments should consider policies that facilitate the adoption of healthy diet.
- Ensuring diet and nutrition policies also cover food safety and sustainable food security.
- Encouraging review of food and agricultural policies for potential health effects on the food supply.

Suggested activities

- Develop national food and agricultural policies that are supportive of a healthy and balanced diet through a cooperative decision-making process.
- Create awareness among the community about the hazards of traditional foods that are rich in fats, sugar or salt.
- Develop legislation for food control that favours protection of consumer health.
- Develop surveillance mechanisms for food safety.

- Ensure that agricultural policies are in line with nutrition recommendations.
- Provide specific subsidies for fruit and vegetable production or consumption.
- Ensure that where local food subsidies are provided or food pricing strategies are implemented, they are consistent with national dietary guidelines.

Possible indicators

- Mechanism to monitor the consumption of locally available and culturally accepted food in place.
- Engagement of the government with consumer protection groups.

10. Supporting the development of education, communication and public awareness material/campaigns

Joint actions

- Preparing and disseminating consistent, coherent, simple and clear messages by government experts, nongovernmental and grass-roots organizations and the appropriate industries. They should be communicated through several channels and in forms appropriate to local culture, age and gender.
- Incorporating health literacy into adult education programmes.

Suggested activities

- Develop and implement a national programme or campaign for nutrition, health and public awareness.
- Develop and implement a national programme or campaign for physical education and public awareness.
- Ensure the existence of institutional support to promote and implement national food-based dietary guidelines and physical activity guidelines.
- Use various channels to communicate the messages on diversity and balanced diet and physical activity.
- Work very closely with educational institutions to develop national curriculum addressing food diversity, obesity and physical activities.

Possible indicators

- Availability of information, education and communication material tuned to the national specificities and priorities.
- Number of information, education and communication campaigns conducted by government and nongovernmental organizations in the media.

11. Engaging primary care health services effectively

Joint actions

- Ensuring that routine visits to primary health care centres include practical advice to patients and families on the benefits of healthy diets and increased levels of physical activity, combined with support to help patients initiate and maintain healthy behaviours.

Suggested activities

- Include counselling on diet and physical activity, by a qualified professional in the national primary care plan.
- Integrate relevant diet and physical activity contents into university curricula for health professionals.

Possible indicators

- Prevention and promotion aspects of diet and physical activity incorporated in medical curricula.
- On-the-job training and support provided to physicians, nurses and paramedics on healthy diet and physical activity in primary health care settings.

12. Setting up a clear monitoring and implementation mechanism**Joint actions**

Ministries of health can provide national strategic leadership on diet and physical activity through the development and implementation of supportive policies, programmes and environments. It is crucial that all interested stakeholders are actively involved in the process. The outcomes of this change can be monitored and evaluated through the health status of the population, but also in several social and economic aspects.

This schematic model divides the actions set out in DPAS into several categories according to level and type of activity, as shown in the following table.

Type of action	Description
National strategic leadership	Activities which Member States might undertake to provide leadership and coordinate action, including agreeing national plans and securing funding.
Supportive environments	Activities to influence the creation of environments in which healthy choices are the easier ones.
Supportive policies	Policies developed by Member States or institutions at national or local levels that, through their implementation, will foster and promote food-based dietary guidelines and physical activity.
Supportive programmes	Regional and national nutrition, noncommunicable disease and food-based dietary guidelines activities and activities to implement policies at all levels, carried out by one or more stakeholders.
Monitoring, surveillance and evaluation	Mechanisms established to process and understand the impact of action and guide future activities.

Suggested activities

- Allocate a specific budget line for monitoring and evaluation of dietary habits and physical activity patterns.
- Ensure that the systems used for monitoring and surveillance allow process, output and outcome monitoring and evaluation.
- Coordinate with WHO in strengthening the national surveillance system to measure energy, food and nutrient intake, dietary habits, physical activity patterns and anthropometrical data.

- Use valid, reliable, standard instruments such as GPAQ (Global Physical Activity Questionnaire), STEPS, GSHS or IPAQ (International Physical Activity Questionnaire), nutrition-based indicators.
- Include baseline surveys and post-evaluation for diet and physical activity interventions.
- Perform cost–benefit calculations.

Possible indicators

- Baseline information on noncommunicable disease risk factors available through the use of existing tools such as STEPS, etc.
- A national level surveillance mechanism for noncommunicable disease risk factor is available.
- Results from the surveillance system are used in decision-making.

13. Developing a national plan of action for implementation of DPAS

A regional advisory committee needs to be constituted in order to provide technical advice to countries, organizations and institutions engaged in the development and implementation of DPAS at the national level. A meeting comprising representatives from Member States should be organized to develop national plans of action using the regional framework. Where possible the DPAS will be integrated with the ongoing nutrition and noncommunicable disease programmes to synergize efforts and save resources.

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Annex 1

Determinants influencing choice of food and physical activity

a) Individual behaviours. These include choices and tradeoffs that contribute to shaping individual lifestyles. Individual behaviours occupy a central position among health determinants, because of their direct influences on individual health. The causal nature of many such influences has been established empirically. A substantial component of individual behaviours is determined in response to environmental stimuli, and it is important that possible preventive interventions aiming to influence individual behaviours pay due attention to the origins of such behaviours. In fact, lifestyle choices appear to mediate at least part of the effects of most other health determinants.

b) Education. In all its forms, education has been shown to be a powerful determinant of health. Parental education as well as formal schooling, general as well as health education has consistently been shown to be strongly associated with lifestyle choices, health status and longevity. The pathways through which education produces its influence on health are manifold. Education has strong effects on earnings and socioeconomic position, which in turn are associated with health; it has effects on social mobility, social cohesion and social capital, which also have influences on health.

c) Social and economic determinants. These include a broad range of characteristics of the social and economic context in which people live and work, from social hierarchies to income inequality; from economic growth to social capital; from ethnic composition and cultural integration to unemployment and labour market characteristics. This important group of determinants also includes the social norms that permeate the environment in which human interactions take place, and regulate the development of such interactions. Social norms have a major influence on lifestyle choices and major shifts in the latter may only follow changes in the former. Socioeconomic inequalities affect all countries in the Eastern Mediterranean Region and can be experienced in different ways by many levels of social organization (such as the community, the household and individuals) and by different population subgroups (genders, age groups, ethnic minorities, migrants and refugees, for example).

d) Food marketing. Choices of food are greatly influenced by the way food industry markets food, especially the methods employed to attract consumers, particularly children and young adults, to high energy food. Innovative methods are used (e.g. attracting the interest of children by offering the toy or the character they like most, etc) to influence their food choices. Food marketing has other dynamics. These include characteristics of the markets in which commodities are exchanged that have a direct or indirect influence on health (e.g. food) particularly on the supply side. Aspects such as the production technologies used, or the degrees of regulation and

competition in such markets, have potential repercussions on the health of consumers.

e) *Environmental determinants*. These include aspects of the physical environment in which people live and work and which provide opportunities (or restrict opportunities) engaging in physical activity, such as characteristics of the built environment, means of transportation, environmental pollution, etc. It is important to look at the physical environment with sensitive eyes. So too are the communities and schools in which the children are going to mix as they grow older. They will be influenced enormously during childhood and adolescence by their communities, schools, peers and cultures. Planning controls are needed to ensure safe environments for physical activity and access to safe and nutritious food, in which organizational and commercial practices also play a part. The picture in relation to physical activity is complicated. Lower socioeconomic status may in fact be associated with higher levels of physical activity. However, there are environmental factors that play against those from lower socioeconomic communities.

f) *Food pricing*. Diet cost is positively associated with a global index of dietary quality and with the consumption of fruit and vegetables, and negatively associated with dietary energy density and fats and sugar intake. Energy-dense foods are the least expensive sources of energy and tend to be highly palatable, non-perishable and easy to access, transport, store and prepare. The cheapest calories come from oils, starches and sugars on the other hand healthy foods – lean meats, vegetables, fruits – cost a lot more. It is hardly surprising that many parents opt for the cheap calorie option to keep their children from going hungry. It also suggests an income division, as only those with higher incomes will be able to afford the highly nutritious low-calorie foods.

f) *Health system determinants*. The characteristics of the health system and its ability to respond to the needs of the sick, as well as to the emergence and spread of risk factors, remain critical determinants of health. These include the technical capabilities of health systems in dealing with the challenges posed by disease, in terms of medical prevention as well as cure, but also the organization, funding and incentives built into the structure of the health system, which may lead to a more or less effective response to the above challenges.

g) *Gender inequalities*. Gender inequalities are very apparent across all the factors that influence young people's choice of food and resorting to physical activity. There are consistent and significant gender differences across all countries with regard to levels of physical activity and consumption of foods that culminate in overweight and obesity. Gender differences are stark in factors that lead to increases in overweight, and also in factors that help to restrain it.

Annex 2

Examples of areas for action

The following table shows examples of areas of action for inclusion in a national plan on physical activity. The exact content of a national plan should consider national capacities for physical activity practices, prevailing patterns of physical activity, the health status of the population and existing physical activity promotion, education and transport systems.

Source: *A guide for population-based approaches to increasing levels of physical activity: implementation of the WHO Global Strategy on Diet, Physical Activity and Health*. Geneva, World Health Organization, 2007.

Areas for action	Examples	Level of action
National physical activity guidelines	1. Develop and implement national guidelines for health-enhancing physical activity.	National population
Policy	2. Develop or integrate into national policy the promotion of physical activity, targeting change in several sectors. 3. Review existing policies to ensure that they are consistent with best practice in population-wide approaches to increasing physical activity. 4. Review urban planning/town planning and environmental policies (national and local level) to ensure that walking, cycling and other forms of physical activity are accessible and safe. 5. Ensure transport policies include support for non-motorized modes of transportation. 6. Review labour and workplace policies to ensure they support physical activity in and around the workplace. 7. Encourage sports, recreation and leisure facilities to take up the concept of sports (and physical activity) for all. 8. Ensure school policies support the provision of opportunities and programmes for physical activity (consider staff as well as children). 9. Explore fiscal policy that may support participation in physical activity.	National population National and sub-population National population Sub-population National population
Advocacy	10. Develop a national programme identity and common message branding. 11. Identify channels and audiences for advocacy work (e.g. mass media, role models community/religious leaders, politicians). 12. Consider the role of health events and national days on physical activity and integrate with	National and sub-population National population National and sub-population

	other health (and non-health) agendas where appropriate.	
Supportive environments	<p>13. Implement strategies aimed at changing social norms and improving community understanding and acceptance of the need to undertake physical activity in everyday life.</p> <p>14. Encourage environments that promote and facilitate physical activity, supportive infrastructure should be set up to increase access to, and use of, suitable facilities.</p>	National and sub-population
Partnerships	<p>15. Ministries of health should take the lead in forming partnerships with key agencies, and public and private stakeholders.</p> <p>16. In partnership, draw up jointly a common agenda and work plans aimed at promoting physical activity.</p> <p>17. Form networks and action groups to undertaken advocacy activities and promote access and opportunity for physical activity.</p> <p>18. Create multisectoral collaborations.</p> <p>19. Develop shared work plans for strategy implementation with community groups and sports and religious organizations, as appropriate.</p> <p>20. Develop guidelines for appropriate public-private partnership to promote physical activity</p>	<p>National population</p> <p>National and sub-population</p> <p>National population</p>
Awareness and education	<p>21. Use mass media to raise awareness of the benefits of physical activity.</p> <p>22. Provide clear public messages on physical activity.</p>	National and sub-population
Local and community-based programmes/ initiatives	<p>23. Consider school-based programmes to support the adoption of physical activity.</p> <p>24. Review how schools provide health information, improving health literacy, and promoting healthy diets, and other healthy behaviours.</p> <p>25. Encourage schools to provide students with daily physical education.</p> <p>26. Review if schools are equipped with appropriate facilities and equipment.</p> <p>27. Consider community awareness raising at community events – promoting and supporting local health orientated programmes and initiatives with a physical activity component.</p> <p>28. Undertake health-promoting programmes and health education campaigns</p>	<p>National population</p> <p>National and sub-population</p> <p>Sub-population</p> <p>National and sub-population</p>

Surveillance	29. Commence monitoring and surveillance of levels of physical activity using standardized, valid and reliable tools.	National and sub-population
Evaluation and monitoring	30. Develop and implement an evaluation programme to assess the implementation and impact of the national (and where appropriate regional and local) action plan and programmes on physical activity	National and sub-population
Research	<p>31. Support research, especially in community-based demonstration projects and in evaluating different policies and interventions.</p> <p>32. Communicate research findings to inform policy, budget and actions.</p> <p>33. Develop research expertise by supporting research development at national and local level.</p> <p>34. Conduct research into the reasons for physical inactivity; and on key determinants of effective intervention programmes; on the efficacy and cost-effectiveness of programmes in different settings</p> <p>35. Conduct an assessment of the health impact (and impact on physical activity) of policies in other sectors.</p>	<p>National and subpopulation</p> <p>National population</p> <p>National and sub-population</p>
Capacity building	<p>36. Develop workforce capacity for planning, implementing, monitoring and evaluating for physical activity promotion and interventions</p> <p>37. Include physical activity in existing training and professional development courses.</p>	National and sub-population
Funding	<p>38. Identify resources or action on reallocation of existing resources within health and other relevant areas.</p> <p>39. Develop mechanisms to identify and obtain sustainable sources of funding for physical activity promotion (e.g. national lottery, private sponsorship).</p>	National and sub-population

