A FRAMEWORK TO MONITOR AND EVALUATE IMPLEMENTATION

WHO GLOBAL STRATEGY ON DIET, PHYSICAL ACTIVITY AND HEALTH

World Health Organization

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Overview

Purpose

This document sets out an approach to measure the implementation of the WHO Global Strategy on Diet, Physical Activity and Health (DPAS) at country level and proposes a framework and indicators for this purpose.

The indicators provided are intended as examples of simple and reliable tools to be used by Member States as appropriate, taking into account their country reality.

The indicators are also intended to take into account existing, as well as planned, activities in the surveillance and monitoring of diet and physical activity.

This document, produced with the support of the Spanish Ministry of Health, is an updated edition of the document, Global Strategy on Diet, Physical Activity and Health: a framework to monitor and evaluate implementation, published by WHO in 2006.

Audience

The proposed framework and indicators aim to assist ministries of health, other government offices and agencies, and stakeholders in monitoring the progress of their activities in the area of promoting healthy diet and physical activity.

Structure

This document describes a framework for DPAS implementation and includes a series of tables specifying indicators set to DPAS recommendations. Annexes include examples of the methods different countries have used in implementing monitoring and evaluation activities; a list of ongoing monitoring and surveillance activities at global level and key reference materials.

Background

Burden of chronic diseases

Noncommunicable diseases (NCDs), including cardiovascular diseases (CVDs), diabetes, obesity, certain types of cancers and chronic respiratory diseases, account for 60% of the 58 million deaths annually. This equates to 35 million deaths globally in 2005 from these diseases (1).

Of deaths caused by NCDs, 80% will occur in low- and middle-income countries. Regional data estimations for 2005 indicate that NCDs accounted for nearly 23% of all deaths in the WHO African region; 78% in the Region of the Americas; 52% in the Eastern Mediterranean Region; 86% in the European Region; 54% in the South-East Asia Region; and 78% in the Western Pacific Region (2–7). This reinforces the fact that the burden of NCDs is highly prevalent in all WHO Regions regardless of their overall economic status.

Inexpensive and cost-effective interventions can prevent 80% of heart disease, stroke, type 2 diabetes and 40% of cancers (1). There is strong scientific evidence supporting the fact that a healthy diet and sufficient physical activity are key elements in the prevention of NCDs and their risk factors (8).

World Health Assembly Resolution on Diet, Physical Activity and Health (2004)

The WHO Global Strategy on Diet, Physical Activity and Health (DPAS), was adopted by the Fifty-Seventh World Health Assembly on 22 May 2004 (9).

The World Health Assembly Resolution endorsing DPAS (WHA57.17), urges Member States "to strengthen existing, or establish new, structures for implementing the strategy through the health and other concerned sectors, for monitoring and evaluating its effectiveness and for guiding resource investment and management to reduce the prevalence of noncommunicable diseases and the risks related to unhealthy diet and physical inactivity"; [...] and "to define for this purpose, consistent with national circumstances: [...] (d) measurable process and output indicators that will permit accurate monitoring and evaluation of action taken and a rapid response to identified needs" [...]. "

Furthermore, it is recommended in DPAS that WHO "set up a monitoring system and design indicators for dietary habits and patterns of physical activity."

Background

World Health Assembly Resolution on NCD Prevention and Control (2008)

In May 2008, the sixty-first World Health Assembly adopted the resolution WHA 61.8 endorsing the action plan on the prevention and control of noncommunicable diseases (10). The action plan, urges members states to:

- develop and implement a comprehensive policy and plan for the prevention and control of major NCDs, and for the reduction of modifiable risk factors;
- promote interventions to reduce the principal shared modifiable risk factors for NCDs: tobacco use, unhealthy diets, physical inactivity and harmful use of alcohol;
- monitor NCDs and their determinants and evaluate progress at national, regional and global levels;
- strengthen surveillance systems and standardized data collection on risk factors, disease incidence and mortality by cause, using existing WHO tools; contribute, on a routine basis, data and information on trends with respect to NCDs and their risk factors disaggregated by age, gender, and socioeconomic groups; and provide information on progress made in the implementation of national strategies and plans;
- implement the actions recommended in the WHO Global Strategy on Diet, Physical Activity and Health.

Moreover, the resolution and its action plan highlights that "Monitoring noncommunicable diseases and their determinants provides the foundation for advocacy, policy development and global action. Monitoring is not limited to tracking data on the magnitude of and trends in noncommunicable diseases, it also includes evaluating the effectiveness and impact of interventions and assessing progress made."(10)

The role of WHO in DPAS implementation

The role and responsibilities of WHO in DPAS implementation have been established in the DPAS document and agreed upon by Member States.

According to these responsibilities, the implementation of DPAS will follow three principal paths:

- direct implementation through WHO regional and country offices at national level.
- the provision of guidance, technical support and tools for Member States.
- the establishment of partnerships with various stakeholders when, and if, appropriate.

Background

Aims of this document

The aims of this document are:

- to provide guidance to Member States on monitoring and evaluation of national policies and plans related to diet and physical activity, in coordination with ongoing monitoring and surveillance initiatives.
- to assist Member States in identifying specific and relevant indicators to measure the implementation of policies and plans related to diet and phy sical activity at country level.

Update of 2006 WHO publication

As a follow-up to the 2006 document ***Global Strategy on Diet, Physical Activity and Health: a framework to monitor and evaluate implementation***, an international capacity-building workshop was held in Madrid, Spain on 3–4 October 2007. (Information on this workshop can be found in Annex 3 at the end of this document.)

This current document has been developed maintaining the structure and aims of the 2006 publication while including details on the content and discussions of the Madrid workshop. Tabled information on monitoring and evaluation activities and surveillance systems are also included in Annexes 1 and 2.

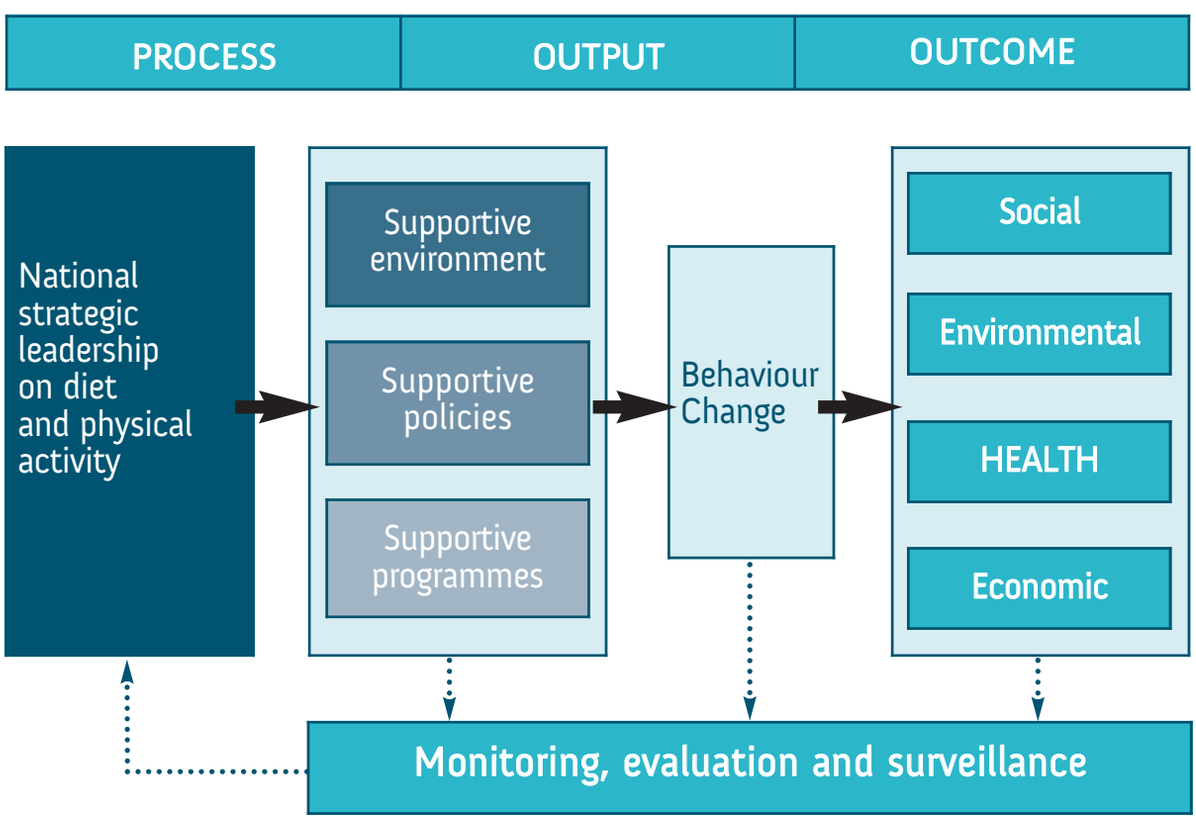
Framework for implementation at country level

Introduction

DPAS is not a national programme, but a comprehensive tool to guide Member States in their efforts to prevent chronic diseases, and addresses, specifically, a number of detailed action points for the promotion of healthy diets and physical activity.

The following model is intended for country use. It aims to explain how policies and programmes, and their implementation, influence behaviour changes in a population and have longer-term social, health and economic benefits. The model also suggests how adequate monitoring and evaluation indicators can be integrated into the process of behaviour change.

Schematic model



Framework for implementation at country level

Interpretation of the proposed framework

According to this model, Ministries of Health can provide national strategic leadership on diet and physical activity through the development and implementation of supportive environments, policies and programmes. During this process, all interested stakeholders (e.g. other ministries and interested governmental agencies, nongovernmental organizations [NGOs] and private sector organizations, etc.) need to be involved.

The implementation of supportive policies can foster the processes of change leading to desired behaviours. The outcomes of this change can be monitored and evaluated through the health status of the population, and also through several social, environmental and economic aspects.

Research, monitoring, evaluation and surveillance need to continue throughout the process so that feedback on the modifications can be provided to the institutions involved.

Action areas within the framework

The following table divides the DPAS recommendations for Member States into various action areas according to the level and type of activity.

Action area	Description
National strategic leadership	Activities which Member States can 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 option.
Supportive policies	Policies developed by Member States or institutions at national or local levels that, through their effective implementation, will foster and promote healthy diets and physical activity.
Supportive programmes	Activities to efficiently 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 actions taken and to guide future activities.

Framework for implementation at country level

Planning for implementation

According to the priorities of Member States, the policy recommendations in DPAS can be implemented at country level through various mechanisms and by all stakeholders. DPAS can also be implemented through chronic disease prevention and other related, previously established policies, such as food, nutrition and health promotion, and through the use of multisectoral teams already in existence for that purpose.

Before implementation, it is important to assess any existing ongoing initiatives and programmes, structures and institutions (including available NGOs and the private sector), as well as any existing barriers, which may include legislation and budgetary priorities. Whenever appropriate, consistency and adequate synergies between existing and new policies should be pursued.

Tools available from WHO

WHO has a variety of published tools to support DPAS implementation:

- The global report on chronic diseases prevention and management (1).
- Technical report on diet, nutrition and the prevention of chronic diseases (8).
- Technical report on obesity prevention (11).
- Technical report on preparation and use of food-based dietary guidelines (12).
- The STEPS and GSHS surveillance and monitoring tools (13,14).
- The WHO Global InfoBase (15).
- The WHO/FAO framework for promoting fruit and vegetables at national level (16).
- Guide for population-based approaches to increasing levels of physical activity (17).
- Reports of WHO technical meetings on reducing salt intake in populations and on marketing of foods and non-alcoholic beverages to children (18,19).
- Report of joint WHO/World Economic Forum event on prevention of noncommunicable diseases in the workplace (20).
- A school policy framework focusing on diet and physical activity (21).

Intersectoral collaboration

The resolution and action plan on the prevention and control of noncommunicable diseases highlights the fact that providing effective public health responses to the global threat posed by NCDs requires strong national and international partnerships (10). Additionally, it is recognized that since the major determinants of NCDs lie outside the health sector, collaborative efforts and partnerships need to be intersectoral and must operate “upstream” in order to ensure that a positive impact is made on health outcomes with respect to NCDs.

Ideally, many of the recommendations in DPAS need to be implemented through intersectoral collaboration. Certain countries, such as Germany, have opted to form a multisectoral platform for DPAS implementation. Others, such as Brazil, Norway, Poland, Spain and Switzerland, have drafted a national diet and physical activity strategy which guides implementation in their respective countries.

Monitoring and evaluation

Introduction

Monitoring and evaluation are systematic processes which assess the progress of ongoing activities and identify any constraints for early corrective action. They measure the effectiveness and efficiency of the desired outcome of the programme (22).

Monitoring provides a descriptive snapshot of what is happening at a given point in time. It is a regular, ongoing management activity which, through reliable record-keeping, provides information to managers on a regular basis. Evaluation provides greater in-depth analysis on whether a policy, plan or programme has achieved its desired goals (23).

Planning for implementation needs to take into account monitoring and evaluation from the beginning as well as budgeting. Policy-makers need to consider allocating approximately 10% of the total budget of a policy, plan or programme to evaluation activities (24).

National experts

National monitoring and evaluation experts need to be part of any multisectoral team working on DPAS implementation, and should take the lead in designing and carrying out evaluation activities.

Steps to follow

The following steps are recommended when setting up the monitoring and evaluation of activities promoting a healthy diet and physical activity, in particular as part of DPAS implementation.
Specific goals for implementation and milestones in achieving these goals are to be set before indicators can be identified.

Step	Action
1	Ensure that monitoring and evaluation are included in any plan or strategy developed at national level for DPAS implementation and that a budget-line is included. Ideally, a multisectoral team should lead DPAS implementation at national and sub-national levels.
2	Identify existing monitoring and evaluation activities and the agencies responsible, and ensure that existing data, if relevant, can inform, or be useful to, policy and programme implementation.
3	Identify suitable indicators to monitor process, output and outcome, with the help of the following indicator tables.
4	Carry out monitoring and evaluation activities in a consistent and repeated manner to enable any revision or adjustment of the implementation activities. Good practiceis to collect baseline data before any activity is carried out, with follow-up collection at a later date.
5	If feasible, repeat the evaluation activities periodically so that a monitoring system can be established.

Indicators

Introduction

Indicators are identified as variables which help measure changes and facilitate the understanding of where the process is, where it is going and how far it is from the underlying goal. They are measurements used to answer questions in the process of monitoring and evaluating a health promoting intervention activity. The selection of indicators used need to be guided according to the purpose for which they were established.

Types of indicators

According to the proposed framework, three types of indicators are defined:

Type of indicator	Purpose
Process indicators	Used to measure progress in the processes of change. They are used to investigate how something has been done, rather than what has happened as a result. Examples of these might be the setting up of expert advisory committees on nutrition and physical activity within a Member State.
Output indicators	Used to measure the outputs or products that come about as the result of processes. For example the publication of a strategy document or the launching of a national programme. In addition to action plans and programmes, output indicators might also include improving the social and physical environments of various settings to support the adoption of healthier behaviours, such as improved access to fruit and vegetables or safe cycling routes.
Outcome indicators	Used to measure the ultimate outcomes of an action. These might be short-term outcomes, such as increased knowledge; intermediate outcomes, such as a change in behaviour; or long-term outcomes, such as a reduction in the incidence of cardiovascular disease.

The three types of indicators considered in this document are organized into two sets: core indicators and expanded indicators.

The set of core indicators includes the most critical items to be analysed in the implementation of a national programme for healthy diet and physical activity. The set of expanded indicators includes additional indicators that Member States may consider using in order to enhance and deepen their existing monitoring, evaluation and surveillance systems.

A monitoring system should include, to the greatest extent possible, demographic and socioeconomic factors. Those used to examine differences and inequalities between population groups include age, gender, ethnicity, education, occupation, income and geographical location (25).

Measuring progress

In order to measure progress, it is important to establish from the beginning, the clear goals and targets to be achieved.

The proposed core indicators should be regarded as a minimum set to be achieved if national resources and capacity permit. Additionally, they would allow WHO to monitor the progress of Member States in their implementation of national strategies on healthy diet and physical activity promotion.

The set of expanded indicators should be considered by Member States when national resources and capacities allow the development of a more comprehensive and informative system for monitoring and evaluation of their progress in the development and implementation of national activities on diet and physical activity.

Issues to consider when developing national indicators

Introduction

Listed below are issues to be considered by Member States when reviewing the structure and content of their DPAS implementation, while taking into account their national reality.

Issues related to national circumstances

- Cultures, norms and prevailing patterns, trends of diet and physical activity, and national characteristics of how diet and physical activity are understood, described and promoted.
- Existing gender issues, ethnic minorities, jurisdictional and legal structure.
- Existing state of health service infrastructure.
- Significance, or not, of using different indicators at local, regional and national levels.
- Significance, or not, of using different indicators in rural and urbanized environments.
- Information available on food insecurity and food trends.
- Existing infrastructure for food safety, food distribution and supply.
- Existing disease burden.
- Ensuring no adverse effects of the policies implemented on the most disadvantaged communities.
- Economic factors, demographic features and social developments.
- The connection between food and health.
- Type of economy and employment base.
- National characteristics and patterns of marketing of foods and beverages.
- Mobility patterns within each country and existing transport infrastructure.
- Patterns of participation in sport and recreation.
- Existing sports and recreation facilities.
- Use of media and communication channels.
- Trust and understanding of the government and the information given.

Issues related to policy

- Existence of overall public health plan or strategy for diet and physical activity.
- General political situation and priority given to diet, physical activity and other health issues.
- National legislative procedures, including legislation regarding marketing to children, nutrition labelling, food and non-alcoholic beverage advertisements and health claims.
- Investments in the health sector.
- Resources available and level of provision for primary prevention activities.
- Structures available for convening and coordinating multidisciplinary mechanisms, committees or expert advisory boards.
- Existing channels for consumer action and participation.
- Gender and cultural issues regarding development and implementation of policies.
- Actors in policy process in general, and collaboration mechanisms at local, regional, national, and international levels.
- Existence of public–private partnerships.
- Existence of a national policy on social equity.
- Existence of an agricultural policy that addresses specific health-related issues.

Issues to consider when developing national indicators

Issues related to settings

- Geographical settings, seasons and climate.
- Existing educational infrastructure and levels of literacy.
- Educational curricula and programmes.
- Structure of provision of food and drinks in schools, workplaces and local communities.
- Security and space availability for the practice of physical activity.
- Gender issues related to school and worksite attendance.
- Levels of funding for schools, universities, local communities, primary health care, and workplaces.
- Training opportunities on diet and physical activity for teachers, community nurses, health workers, etc.
- Available sources of educational and information materials.

Points related to scientific evidence and data availability

- Systems, including financial and human resources, available for surveillance, measurement of targets and monitoring.
- National expert recommendations.
- Sources of information, e.g. data sets, and evidence available in the country.
- Data on nutritional status and dietary intake.
- Physical activity levels and measures of overweight and obesity.
- Mortality and morbidity data related to diet, nutrition and physical inactivity.
- Public and private funds for research.
- Relationship between research and policy, and the means by which information is transferred to policy-makers and vice-versa.
- Training and learning opportunities available in the country regarding diet and physical activity.

Data sources for indicators

Data for indicators can be newly collected (e.g. through surveys) or obtained from a variety of existing sources.

A significant part of the information required to assess process and output indicators will come from sectors outside the health sector (e.g. public transportation or agriculture and food production), therefore interaction with the various relevant stakeholders will be essential for the data collection process.

Examples of information available from different sectors at national or international levels include: food balance sheets of the United Nations Food and Agriculture Organization (FAO); imports versus exports of food products (e.g. from the Ministries of Agriculture or Trade and Commerce); use of public transportation (e.g. from the Ministry of Transportation); nutritional content of foods and non-alcoholic beverages (e.g. from food manufacturers).

Capacity to analyse the information collected is essential, and a balance between the quality of the data, their purpose and available resources need to be achieved.

Key indicators: process and output

Introduction

This section includes a series of tables with process and output indicators to be considered as examples by Member States when planning for the monitoring and evaluation process.

The tables include core and expanded indicators that were developed based on the recommendations for Member States included in DPAS.

Table 1. National policies, strategies and action plans

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraphs 35 and 39)	
National strategic leadership	Foster the formulation and promotion of national policies, strategies and action plans to improve diet and encourage physical activity. Support should be provided by effective legislation, appropriate infrastructure, implementation programmes, adequate funding, monitoring and evaluation, and continuing research.	
	Core indicators that relate to the recommended actions for Member States included in DPAS	
	Diet and physical activity	
	• National strategy on diet and physical activity published, or diet and physical activity identified as priorities in the existing national plans. • National action plan on diet and physical activity published.	
	Expanded indicators that relate to the recommended actions for Member States included in DPAS	
	Diet and physical activity	
	• Specific and measurable targets for action published. • Document published with specified funding sources and timeline for each action. • Existence of guidance for different stakeholders on how to implement activities consistent with the national policies for the promotion of healthy diets and physical activity.	
	Diet	Physical activity
	• Existence of legislation to support availability and access to healthy food.	• Existence of legislation to support access to physical activity.

Key indicators: process and output

Table 2. National coordination mechanism

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraphs 37 and 38)
National strategic leadership	Governments are encouraged to set up a national coordinating mechanism that addresses diet and physical activity within the context of a comprehensive plan for NCD prevention and health promotion. Health ministries have an essential responsibility in coordinating and facilitating the contributions of other ministries and government agencies. Member States should establish mechanisms to promote participation of nongovernmental organizations, academia, civil society, communities, the private sector and the media in activities related to diet, physical activity and health. Multisectoral and multidisciplinary expert advisory boards should also be established.
	Core indicators that relate to the recommended actions for Member States included in DPAS
	Diet and physical activity
	• Existence of an expert advisory mechanism with active responsibility to advise on the development and implementation of the strategy. • Existence of national coordinating mechanism (an organization, committee or other body) to oversee, develop and implement the policy or strategy.
	Expanded indicators that relate to the recommended actions for Member States included in DPAS
	Diet and physical activity
	• Expert advisory mechanism with representation from all key sectors and disciplines. • Expert advisory mechanism with clear mandate, lines of accountability and ability to influence policy. • Existence of academic centres of excellence with focus on diet and physical activity. • Coordinating mechanism headed or chaired by Ministry of Health. • Coordinating mechanism containing representation from all key sectors including competent scientific bodies, NGOs, academia, civil society, communities, the private sector, and the media. • Number of full-time staff dedicated to working on diet and physical activity within the Ministry of Health, and/or other ministries. • Number of meetings of the coordinating mechanism per year. • Existence of a system that ensures accountability and transparency of the work of the coordinating mechanism.

Key indicators: process and output

Table 3. National dietary and physical activity guidelines

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraph 39)	
National strategic leadership	Governments are encouraged to draw up national dietary guidelines, taking into account evidence from national and international sources. National guidelines for health-enhancing physical activity should be prepared in accordance with the goals and objectives of the Global Strategy and expert recommendations.	
	Core indicators that relate to the recommended actions for Member States included in DPAS	
	Diet	**Physical activity**
	• Existence of published national dietary guidelines.	• Existence of published national physical activity guidelines.
	Expanded indicators that relate to the recommended actions for Member States included in DPAS	
	Diet	**Physical activity**
	• Existence of clear mechanisms to disseminate dietary guidelines. • Percentage of the target population that received the national dietary guidelines.	• Existence of clear mechanisms to disseminate physical activity guidelines. • Percentage of the target population that received the national physical activity guidelines.

Table 4. National budget

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraph 48)	
National strategic leadership	Various sources of funding, in addition to the national budget, should be identified to assist in implementation of the Strategy. Programmes aimed at promoting healthy diets and physical activity should therefore be viewed as a developmental need and should draw policy and financial support from national development plans.	
	Core indicators that relate to the recommended actions for Member States included in DPAS	
	Diet	**Physical activity**
	• Existence of clear and sustainable national and/or sub-national budget for action on diet and nutrition.	• Existence of clear and sustainable national and/or sub-national budget for action on physical activity.
	Expanded indicators that relate to the recommended actions for Member States included in DPAS	
	Diet	**Physical activity**
	• Existence of a resource mobilization plan for action on diet. • Budgets for action on healthy diet identified from nongovernmental sources, including NGOs and private sector institutions. • Percentage of the national budget expenditure in public health action attributed to diet-related policies, plans and activities.	• Existence of a resource mobilization plan for action on physical activity. • Budgets for action on physical activity identified from nongovernmental sources, including NGOs and private sector institutions. • Percentage of the national budget expenditure in public health action attributed to physical activity-related policies, plans and activities.

Key indicators: process and output

Table 5. Physical activity and transportation

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraph 42)
Supportive environments	National and local governments should frame policies and provide incentives to ensure that walking, cycling and other forms of physical activity are accessible and safe; transport policies to include non-motorized modes of transportation; labour and workplace policies to encourage physical activity; and sport and recreation facilities to embody the concept of "sports for all". Strategies should be geared towards changing social norms and improving community understanding and acceptance of the need to integrate physical activity into everyday life. Environments that facilitate physical activity should be promoted, and a supportive infrastructure to increase access to, and use of, suitable facilities established. Ministries of health should take the lead in forming partnerships with key agencies, and public and private stakeholders, in order to draw up a common agenda and workplan aimed at promoting physical activity.
	Core indicators that relate to the recommended actions for Member States included in DPAS
	Physical activity
	• Existence of multistakeholder national and/or regional transport policies that promote active and safe methods of transportation such as walking or cycling. • Existence of national or regional guidance for the development of urban plans that promote physical activity. • Existence of a multi-domain physical activity policy (i.e. one that covers active transportation for example to workplaces or schools, as well as activities during leisure and working hours). • Provision of sports facilities and equipment to schools stated in national school policies. • Percentage of adult population using public transportation regularly. • Number of partnerships between ministries of health and key agencies which aim to draw up a common agenda or joint workplan to promote physical activity.
	Expanded indicators that relate to the recommended actions for Member States included in DPAS
	Physical activity
	• Percentage of population with access to safe places to walk. • Kilometres of bicycle paths per square kilometre (or per 100 square kilometres) by urban versus rural. • Percentage of communities with formal transportation plan listing walking and bicycling as priorities. • Percentage of schools and workplaces equipped with appropriate sports facilities and equipment. • Percentage of schools with "walk-to-school" safe routes.

Key indicators: process and output

Table 6. Civil society and NGOs

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraphs 60)	
Supportive environments	Civil society and nongovernmental organizations have an important role to play in influencing both individual behaviour, and the organizations and institutions involved in healthy diet and physical activity. They can help ensure that consumers ask governments to provide support for healthy lifestyles, and the food industry to provide healthy products. Nongovernmental organizations can support a government 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.	
	Core indicators that relate to the recommended actions for Civil Society and NGOs included in DPAS	
	Diet and physical activity	
	• Number of NGOs working on diet and/or physical activity. • Active NGO participation in the implementation of the national policy on diet and physical activity. • Number of awareness-raising activities for consumers performed by NGOs. • NGOs represented in the national coordination mechanism or expert advisory board set up to develop and implement diet and physical activity policies and plans. • Number of meetings of the national coordination mechanism or expert advisory board attended by relevant NGOs.	
	Expanded indicators that relate to the recommended actions for Member States included in DPAS	
	Diet	**Physical activity**
	• Existence of networks and action groups to promote the availability of healthy foods formed by NGOs. • Events organized by NGOs to promote diet and/or physical activity (e.g. organization of a "Move for Health" day).	• Existence of networks and action groups formed by NGOs to promote physical activity.

Key indicators: process and output

Table 7. Private industries

Action Area	Summary of recommended actions for the private sector included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraph 61)	
Supportive environments	The food industry, retailers, catering companies, sporting-goods manufacturers, advertising and recreation businesses, insurance and banking groups, pharmaceutical companies and the media all have important roles to play as responsible employers and as advocates for healthy lifestyles. All can become partners 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. Food industry initiatives can accelerate health gains nationally and globally by: reducing the fat, sugar and salt content of processed foods; reducing portion sizes; increasing introduction of innovative, healthy, and nutritious choices; providing consumers with adequate and understandable product and nutrition information; and by reviewing current marketing practices.	
	Core indicators that relate to the recommended actions for the private sector included in DPAS	
	Diet and physical activity	
	• Number of companies implementing the national policy on healthy diet and physical activity. • Number of companies engaging in activities related to diet and/or physical activity with the relevant government sectors. • Percentage of companies engaged in diet and physical activity education campaigns in accordance with national guidelines. • Number of national projects promoting healthy diet and physical activity funded by industry. • Number of public–private partnerships promoting healthy diets and physical activity. • Percentage of nationally-represented companies having a corporate social responsibility policy that includes a diet and physical activity dimension in line with national policies and priorities.	
	Diet	**Physical activity**
	• Percentage of nationally-represented food manufacturers providing full nutrition labelling. • Existence of a self-regulatory code or other regulatory mechanism on marketing of foods and non-alcoholic beverages to children. • Percentage of food and non-alcoholic beverage companies with national and/or international nutrition policies. • Percentage of food and non-alcoholic companies with a published policy on provision of healthy and nutritious choices to consumers.	• Percentage of private companies supporting physical activity promotion campaigns nationally.
	Expanded indicators that relate to the recommended actions for the private sector included in DPAS	
	Diet	**Physical activity**
	• Number of foods and/or non-alcoholic beverages available to consumers at national level, with limited levels of saturated fats and/or trans-fatty acids and/or free sugars and/or salt. • Number of food and non-alcoholic companies with a published policy on reduction of portion sizes offered to consumers. • Number of food and/or non-alcoholic beverages that use health claims in accordance with national and/or international legislation.	• Percentage of food and non-alcoholic beverage companies sponsoring sports events.

Key indicators: process and output

Table 8. Workplaces

Action Area	Summary of recommended actions for the private sector included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraph 62)	
Supportive environments	Workplaces are important settings for health promotion and disease prevention. People need to be given the opportunity to make healthy choices in the workplace in order to reduce their exposure to risk. Workplaces should make healthy food a possible choice, and support and encourage physical activity.	
	Core indicators that relate to the recommended actions for the private sector included in DPAS	
	Diet and physical activity	
	• Number of workplaces with policies or programmes to promote healthy diets and/or physical activity in the workplace. • Number of workplaces that monitor and/or evaluate their policies and/or programmes on diet and physical activity in the workplace. • Percentage of workplaces conducting health risk assessment of employees and collecting information related to diet, physical activity patterns, body mass index and blood pressure.	
	Expanded indicators that relate to the recommended actions for Member States included in DPAS	
	Diet	**Physical activity**
	• Percentage of workplaces serving meals consistent with national dietary guidelines. • Percentage of workplaces offering healthy snack options. • Percentage of workplaces with facilities available to employees for food conservation and simple food preparation. • Percentage of workplaces selling fruit and vegetables. • Percentage of workplaces offering fruit and vegetables to the employees.	• Percentage of workplaces with showers and changing-room facilities. • Percentage of workplaces with facilities to practice physical activity. • Percentage of workplaces offering physical activity programmes for employees.

Key indicators: process and output

Table 9. Schools

Type of action	Summary of recommended actions for the private sector included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraph 43)	
Supportive environments	School policies and programmes should support the adoption of healthy diets and physical activity. They should protect the health of children by providing health information, improving health literacy, and promoting healthy diets, physical activity, and other healthy behaviours. Schools are encouraged to provide students with daily physical education. Governments are encouraged to adopt policies that support healthy diets at school and limit the availability of products high in salt, sugar and fats.	
	Core indicators that relate to the recommended actions for Member States included in DPAS	
	Diet and physical activity	
	• Existence of curriculum standards for health education with focus on diet and physical activity. • Existence of engagement between Ministry of Health or education and Ministry of Transportation to improve walking and cycling routes to schools. • Total number of health education sessions focusing on healthy diet and physical activity per year within the national curriculum. • Total school hours allocated to physical activity at primary and secondary level. • Percentage of schools monitoring height and weight of children.	
	Diet	**Physical activity**
	• Existence of national school food policy. • Existence of nutritional standards for school meals consistent with the national dietary guidelines.	• Existence of national school policy on physical activity and/or physical education.
	Expanded indicators that relate to the recommended actions for the private sector included in DPAS	
	Diet	**Physical activity**
	• Percentage of schools with a school food policy • Percentage of schools offering school meals consistent to dietary guidelines. • Existence of nutrition education and awareness programmes at schools. • Percentage of schools offering healthy food options. • Percentage of schools restricting the availability of high fat, salt, sugar products and vending machines. • Percentage of schools offering fruit and vegetable programmes. • Percentage of teachers attending training courses on healthy diet.	• Percentage of schools with published physical activity school policy. • Percentage of schools offering a minimum of one hour of physical activity daily. • Percentage of schools offering extracurricular physical activity opportunities. • Percentage of schools with safe "walk-to-school" routes. • Percentage of schools using community recreation facilities. • Existence of physical activity awareness programmes at schools. • Percentage of teachers attending training courses on physical activity.

Key indicators: process and output

Table 10. Marketing of food and non-alcoholic beverages to children

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraph 40)
Supportive policies	Governments should work with consumer groups and the private sector (including advertising) to develop appropriate multisectoral approaches to deal with the marketing of food to children, and such issues as sponsorship, promotion and advertising.
	Core indicators that relate to the recommended actions for Member States included in DPAS
	Diet
	• Existence of a regulatory framework and/or self-regulatory mechanism to limit the marketing of food and non-alcoholic beverages to children. • Existence of an independent monitoring system or self-regulatory mechanism for the marketing of food and non-alcoholic beverages to children.
	Expanded indicators that relate to the recommended actions for Member States included in DPAS
	Diet
	• Percentage of television advertisements for foods and non-alcoholic beverages targeting children during peak child-viewing hours. • Percentage of printed media advertisements for foods and non-alcoholic beverages targeting children. • Percentage of internet advertisements for foods and non-alcoholic beverages targeting children.

Table 11. Nutrition labelling

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraph 40)
Supportive policies	Governments may require information to be provided on key nutritional aspects, as proposed in the Codex Guidelines on nutrition labelling (26). Any health claims must not mislead the public about nutritional benefits or risks.
	Core indicators that relate to the recommended actions for Member States included in DPAS
	Diet
	• Advisory mechanism or consultation established, regarding nutrition labelling and health claims on foods and beverages.
	Expanded indicators that relate to the recommended actions for Member States included in DPAS
	Diet
	• Legislation and/or regulation regarding nutrition labelling and health claims developed.

Key indicators: process and output

Table 12. Food and agricultural policies

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraph 41)
Supportive policies	National food and agricultural policies should be consistent with the protection and promotion of public health. Where needed, governments should consider policies that facilitate the adoption of healthy diets. Food and nutrition policy should also cover food safety and sustainable food security. Governments should be encouraged to examine food and agricultural policies for potential health effects on the food supply.
	Core indicators that relate to the recommended actions for Member States included in DPAS
	Diet
	• National food and agricultural policies supporting a healthy diet and developed through a "cooperative process" decision.
	Expanded indicators that relate to the recommended actions for Member States included in DPAS
	Diet
	• Existence of legislation for food control for the protection of consumers' health. • Mechanism established to review and update food and nutrition policy. • Existence of surveillance mechanisms for food safety. • Agricultural policy in line with nutrition recommendations. • Existence of specific subsidies for fruit and vegetables production and/or consumption. • Existence of local or municipal food subsidies and food pricing strategies that are consistent with national dietary guidelines.

Table 13. Education, communication and public awareness

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraph 40)
Supportive programmes	Clear, consistent and coherent messages need to be prepared and conveyed by government experts, nongovernmental and grass-roots organizations, and appropriate industries. These should be communicated through several channels and in forms appropriate to local culture, age and gender. Health literacy should be incorporated into adult education programmes.
	Core indicators that relate to the recommended actions for Member States included in DPAS
	Diet and physical activity
	• Existence of a clear national programme or campaign for diet education and public awareness. • Existence of a clear national programme or campaign for physical education and public awareness. • Existence of sustained institutional support to promote and implement national dietary and physical activity guidelines.
	Expanded indicators that relate to the recommended actions for Member States included in DPAS
	Diet and physical activity
	• Number of channels used to communicate the messages on healthy diet and physical activity. • Percentage of the population or specific target population reached with the healthy diet and physical activity communication campaigns or messages.

Key indicators: process and output

Table 14. Health service-based programmes

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraphs 45)	
Supportive programmes	Routine contacts with health-service staff should 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.	
	Core indicators that relate to the recommended actions for Member States included in DPAS	
	Diet and physical activity	
	• Provision of counselling on diet and physical activity, by a qualified professional, included in the national primary health care plan. • Percentage of government health facilities offering diet and physical activity counselling. • Relevant diet and physical activity content integrated into university curricula for health professionals.	
	Expanded indicators that relate to the recommended actions for Member States included in DPAS	
	Diet	Physical activity
	• Percentage of the population offered advice on a healthy diet by primary care team.	• Percentage of the population offered advice on physical activity by primary care team.

Table 15. Surveillance, research and evaluation

Action Area	Summary of recommended actions for Member States included in the Global Strategy on Diet, Physical Activity and Health (DPAS, paragraphs 46)
Monitoring and surveillance	Governments should invest in surveillance, research and evaluation. Long-term and continuous monitoring of major risk factors is essential. Governments may be able to build on existing systems, at either national or regional levels. There is need to put in place efficient mechanisms for evaluating the efficacy and cost-effectiveness of national disease-prevention and health-promotion programmes, and the health impact of policies in other sectors. The evaluation process should, where needed, include information about the programmes that promote healthy diets and physical activity integrated into broader development and poverty-alleviation programmes.
	Core indicators that relate to the recommended actions for Member States included in DPAS
	Diet and physical activity
	• Specific budget-line allocated for monitoring and evaluation of dietary habits and physical activity patterns and DPAS implementation. • Monitoring and surveillance system in place to measure process, output and outcome indicators. • National surveillance system in place to measure energy, food and nutrient intake, dietary habits, physical activity patterns and anthropometrical data. • Utilization of valid, reliable, standard instruments such as GPAQ (Global Physical Activity Questionnaire); STEPS (WHO STEPwise approach to chronic disease risk factor surveillance) or IPAQ (International Physical Activity Questionnaire). • Participation of NGOs in monitoring progress of DPAS implementation and the number of partnerships formed for the implementation of national programmes on diet and physical activity.
	Expanded indicators that relate to the recommended actions for Member States included in DPAS
	Diet and physical activity
	• Percentage of diet and physical activity interventions that include baseline surveys and post-evaluation. • Percentage of ongoing applied research projects in community-based pilot projects and evaluation of different policies and interventions. • Existence of cost–benefit calculations for specific interventions.

Key indicators: outcome

Introduction

The following table gives examples of outcome indicators. They are presented in two separate sets of core and expanded indicators and organized as short, intermediate and long-term indicators. This structure allows Member States to use the table to monitor and evaluate the impact of policy implementation at different times throughout the course of action.

Table 16. Core outcome indicators (short and intermediate term)

OUTCOME INDICATORS

Core indicators – short term

Diet and physical activity

- Percentage of the population aware of the health benefits of an adequate consumption of fruit and vegetables.
- Percentage of the population aware of the health risks of high-intake levels of total fat, saturated fats, salt and sugars.
- Percentage of the population aware of the health benefits of physical activity (including maintaining a healthy weight).
- Percentage of the population recalling the messages from communication campaigns or strategies on healthy diets and physical activity.

Core indicators – intermediate term

Diet and physical activity

- Reduction in the percentage of overweight and obese adults (i.e. body mass index (BMI) ≥ 25 and BMI ≥ 30) in a targeted population participating in a healthy diet and physical activity intervention programme.
- Percentage of adults with raised blood pressure (BP) (i.e., systolic (SBP) ≥ 140 and/or diastolic (DBP) ≥ 90 mmHg).
- Percentage of adults with raised total cholesterol (i.e. ≥ 5.2 mmol/l).

Diet	Physical activity
• Percentage of population eating fewer than 5 servings of fruit and vegetables per day, or proportion of adults eating less than 400 g of fruit and vegetables per day.	• Percentage of adults with low levels of physical activity (i.e. < 600 MET* minimum per week). • Percentage of children participating in at least 60 minutes of physical activity per day. (*MET = Metabolic Equivalent: one MET is defined as 1 kcal/kg/h and is equivalent to the energy cost of sitting quietly. A MET is also defined as oxygen uptake in ml/kg/min with one MET equal to the oxygen cost of sitting quietly, around 3.5 ml/kg/min).

Key indicators: outcome

OUTCOME INDICATORS	
Expanded indicators – intermediate term	
Diet	Physical activity
• Percentage of population with dietary fat intake < 30 % of total energy daily consumed. • Percentage of population with dietary saturated fat intake < 10 % of total energy daily consumed. • Percentage of population with dietary sugar intake < 10 % of total energy daily consumed. • Percentage of population with dietary sodium chloride (sodium/salt) intake < 5 g per day. • Percentage of children exclusively breastfed for 6 months.	• Percentage of population walking and bicycling to work, of the duration of 10 minutes or more. • Percentage of children walking or bicycling to school.

Table 17. Expanded outcome indicators (intermediate term)

OUTCOME INDICATORS
Core indicators – long term
Diet and physical activity
• Population-based percentage of overweight or obese adults, children and adolescents. • Cause-specific mortality. • Cause-specific morbidity.

Table 18. Core outcome indicators (long term)

Tailoring indicators to a national setting

Introduction

The previous tables give some example indicators. However Member States may wish to develop their own or additional indicators to measure DPAS implementation. When deciding at national level on alternative or additional indicators, certain questions need to be answered to ensure the indicators chosen best fit the specific circumstances. The following questions can serve as guidance (27,28):

Questions for defining indicators

- Which indicators are relevant to DPAS implementation?
- Which data are available and can be collected so that the indicators have reliable sources?
- How much burden can be put onto statistical institutes, Ministries of Health and other involved parties?
- Which indicators will meet methodological criteria at the level of their precise definition, such as:
  validity – does the indicator measure what it is intended to measure?
  reliability – is the measurement reproducible?
  sensitivity – is the measurement sufficiently discriminative in space or time?

Questions for checking suitability of indicators

- Are reliable data for the proposed indicators realistically available in a timely fashion, or do the indicators portray health data that already exist?
- Is the set of indicators easy to read and understand?
- Are the indicators mutually consistent?
- Are the indicators ideally comparable to other countries or regions?
- Is it possible to find operational definitions for the proposed indicators?
- Do the indicators, if possible, take into account work by international organizations?

General considerations

Indicators used for monitoring the implementation of DPAS at national level, should, most of all, reflect the cultural settings in the respective country. Dietary habits and levels of physical activity are strongly associated with particular lifestyles, and these, in turn, are shaped to a large extent by cultural settings. An indicator for monitoring the implementation of DPAS may be useful in one country (e.g. total distance of cycle paths in urban-dominated settings), but prove less useful in another (e.g. in countries overwhelmingly characterized by rural settings).

Conclusions

Monitoring and evaluation of the development and implementation of diet and physical activity-related policies and programmes at national and subnational levels will:

- ensure the policy, plan or programme is being implemented as planned;
- contribute to ongoing learning and continuous improvement of the actions implemented;
- assist policy-makers in decision-making about existing policies, plans and programmes, including the development of new ones; and
- facilitate transparency and accountability in reporting to senior managers, politicians, donors, citizens and all other interested parties.

WHO developed this document to assist Member States in their monitoring and evaluation activities in the area of promoting healthy diets and physical activity. This tool includes a framework explaining how policies and programmes, and their implementation, can influence populations leading to behavioural, social, health economic and environmental changes, and suggests how adequate monitoring and evaluation indicators can be integrated into the process of change. Additionally, it includes a series of tables of indicators that were developed according to DPAS recommendations.

The indicators suggested in this document should be seen as examples to be used, if appropriate, after adjusting to country needs and reality. When adjusting to country reality, several issues need to be taken into consideration including those related to: culture, religion, gender policies, existing health policies, settings, scientific evidence, and data availability in the country.

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ANNEX 1: Country

example of monitoring and evaluation activities at national level

The following table summarizes examples of national activities currently being carried out to monitor and evaluate the development and implementation of policies and programmes related to diet and physical activity. The table also contains examples of indicators selected by the countries involved as being relevant to their national situation when asked to analyse the 2006 DPAS document, and to link the indicators proposed to the policies and programmes being implemented in their countries.

Brazil

Policy related to diet and physical activity	In 1999 the *National Diet and Nutrition Policy* was published. In 2006 a *National Policy of Health Promotion and Health* was published prioritizing among other areas the promotion of healthy and safe diets and physical activity. Both policies are being implemented by secretariats and relevant organs of the Ministry of Health and by 27 State Capital Secretariats and Municipalities.
Institution(s) responsible for the monitoring and evaluation of activities	Ministry of Health; National Health System; Health Surveillance Secretariat; Brazilian Institute of Geography and Statistics; BEMFAM (Society for the Welfare of the Family); National Cancer Institute.
Summary of monitoring and evaluation of activities, tools and sources of data	The National Health System carries out monitoring activities through the following: mortality data registry; compulsory notification of diseases; service production and ambulatory care; hospital admittance registry; primary care registries; nutritional status of the population; and SISVAN (National Surveillance System of Food and Nutrition). The Brazilian Institute of Geography and Statistics carries out yearly surveys on household demographics and budgets. This includes the collection of information on household spending on diet. A Household Survey was carried out in 2002–2003, and included the collection of information on dietary and physical activity patterns and anthropometric data. Another study was carried out in 2008. In 2006, the Ministry of Health (MoH) launched a surveillance system for NCD risk factors by telephone interview – VIGITEL. The objective of VIGITEL is the continuous monitoring of the frequency and distribution of risk and protection factors for NCDs, including diet and physical activity, in all major Brazilian cities. The MoH has carried out four surveys since 1986 on diet and nutrition for women and children under five years old. The MoH has established indicators for the monitoring of reduction in sedentary behaviours with Health Secretariats in 2007. In addition to the above mentioned activities, process and outcome evaluation is carried out through communication with local systems, budget spending control, and internet questionnaire assessment related to the implementation of physical activity policies.
Examples of relevant process and output indicators	- Diet and physical activity have been identified as priorities in the existing plans for states and municipalities. - Existence of academic centres of excellence with focus on diet and physical activity. - Nutritional standards for school meals consistent with the national dietary guidelines. - Regulatory mechanisms to limit the marketing of food and non-alcoholic beverages to children of specific ages in the areas of television, radio, the media and internet, and addressing the hours of broadcasting.
Examples of relevant outcome indicators	- Reduced percentage of sedentary adults*. - Percentage of adults eating at least five servings of fruit and vegetables per day (recommended daily consumption of fruit and vegetables*). * Indicators used by the VIGITEL (survey on NCD by telephone interviews).

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examples of monitoring and evaluation activities at national level

Fiji

Policy related to diet and physical activity	The MoH developed the National NCD Strategic Plan 2004–2008 in which diet and physical activity, were a priority. The MoH, with the assistance of the Japan International Cooperation Agency, developed a National Food and Nutrition Policy in June 2007. The NCD Taskforce also formulated a National Physical Activity Guide. The national policies are synchronized into the Fiji National Health Promotion Policy. The PSC has also developed a healthy workplace policy that includes physical activity and nutrition. This was endorsed by Cabinet in January 2008 and is now in place in all government workplaces.
Institution(s) responsible for the monitoring and evaluation of activities	Ministry of Health and Sub-District Management Teams; Fiji School of Medicine; and Menzies Centre for Population Health Research of the University of Tasmania. Monitoring and Evaluation and other activities are coordinated at national level through the SC of the national NCD Committee although subdivisions are free to do their own monitoring.
Summary of monitoring and evaluation of activities, tools and sources of data	Each province is responsible for the monitoring and evaluation of its own activities. Routine monitoring of programmes related to diet and physical activity is done through the submission of reports on activities to the Divisional Chief Medical Officer for Community Health on a monthly, quarterly and annual basis. These are compiled and reported for evaluation at the monthly Community Health Executive Committee. Tools used include: • NCDs and their Risk Factor screening/Health Promotion Report Form submitted by each regional nurse responsible for the programme; • Snap questionnaires and green prescriptions being piloted in the Western Division; and • National NCD STEPS Survey (WHO STEPS Programme) and other reports submitted by programme managers, task force and directors. The next NCD STEPS survey will be carried out in 2009.
Examples of relevant process and output indicators	- National document on diet and physical activity with specified funding sources and published timelines. - Existence of resource mobilization plan for diet and physical activity. - Events organized by NGOs to promote diet and physical activity. - Number of workplaces with programmes promoting healthy diet and physical activity in the workplace.
Examples of relevant outcome indicators	- Percentage of population aware of the benefits of physical activity. - Percentage of population aware of health risks of high intake levels of total fat, saturated fats, salt and sugars. - Reduction in the percentage of overweight and obese adults in a targeted population participating in a healthy diet and physical activity intervention programme.

ANNEX 1: Country

examples of monitoring and evaluation activities at national level

Philippines

Policy related to diet and physical activity	Diet and physical activity-related policies are integrated in: the National Objectives for Health (2005–2010); the National Integrated NCD Strategic Plan (2006–2010); Presidential Proclamation No.958 (declaring 2005–2015 as the Decade of Healthy Lifestyle); the Integrated Non-Communicable Disease Prevention and Control Programme and the Medium Term Philippine Plan of Action for Nutrition (2005–2010).
Institution(s) responsible for the monitoring and evaluation of activities	Department of Health (Regional and National Levels, National Epidemiology Center); National Nutrition Council; Food Nutrition and Research Institute, Department of Science and Technology
Summary of monitoring and evaluation of activities, tools and sources of data	Local programme activities are reported to regional "Centers for Health Development". The reports are consolidated at the national level by the programme coordinator at the Department of Health. A similar process is used for programmes implemented by the National Nutrition Council. Every five years, the Food Nutrition and Research Institute of the Department of Science and Technology, in collaboration with various stakeholders, conducts the National Nutrition Survey and the National Nutrition and Health Survey. These surveys determine and reasses the prevalence of lifestyle and nutrition-related risk factors and diseases among Filipinos aged four years and above, using standardized anthropometric, biochemical, clinical and dietary assessment techniques. The Global School-based Health Survey (GSHS) is conducted every 3–5 years by the National Epidemiology Center of the Department of Health. The survey monitors prevalence of NCD-related behavioural factors in adolescents, such as physical activity, dietary behaviours and overweight etc. Mortality and morbidity statistics (which includes data from the cancer registry) are also analysed to determine trends in NCDs.
Examples of relevant process and output indicators	- Development and dissemination of national physical activity guidelines. - National strategic plan for NCD prevention and control (containing diet and physical activity plan) published and disseminated to partners and stakeholders. - National coordinating mechanism established to oversee implementation of the integrated NCD prevention and control (containing diet and physical activity plan). - National guidelines on physical activity developed and disseminated.
Examples of relevant outcome indicators	- Increase in percentage of adult population eating at least five servings of fruit and vegetables per day. - Increase in percentage of population engaged in regular physical activity. - Reduction in percentage of adult population who are overweight or obese.

ANNEX 1: Country

examples of monitoring and evaluation activities at national level

Sweden

Policy related to diet and physical activity	A national public health policy covering both diet and physical activity was published in 2003. In 2004, the Nordic Recommendations for Physical Activity were published. The Nordic Plan of Action on better health and quality of life through diet and physical activity was approved in July 2006.
Institution(s) responsible for the monitoring and evaluation of activities	Swedish National Institute of Public Health; Statistics Sweden; Board of Welfare and Health; National Food Administration; and Swedish Board of Agriculture.
Summary of monitoring and evaluation of activities, tools and sources of data	The Swedish National Institute of Public Health (SNIPH) monitors the objectives of the national public health policy and disseminates its results in a national report every four years. "Health on Equal Terms" is an annual survey on health and living conditions in Sweden which includes questions on diet and physical activity. The SNIPH provides basic public health statistics for municipalities on various determinants for health. Other government agencies (see above) also provide official statistics concerning population health. The Community-based Study of Physical activity, Lifestyle and Self-esteem in Swedish School Children (COMPASS), is a survey analysing the relationship of young people with levels of physical activity, their self-esteem, eating habits, body size, ethnicity, and socioeconomic circumstances. Data on the daily movements and longer journeys made by Sweden's population aged 6–84 years is collected through the National Travel Survey.
Examples of relevant process and output indicators	- Existence of legislation to support physical activity including sports laws and transport policy and infrastructure. - Existence of a clear and sustainable national budget for action on physical activity. - Percentage of schools restricting the availability of high fat, salt and sugar products and vending machines. - Percentage of TV advertisements for foods and non-alcoholic beverages targeting children during peak child-viewing hours.
Examples of relevant outcome indicators	- Percentage of adults physically active on a level of moderate intensity of at least 30 minutes per day. - Percentage of children and adolescents with low levels of physical activity. - Percentage of adults eating fewer than five servings of fruit and vegetables per day, or proportion of adults eating less than 400 g of fruit and vegetables per day. - Percentage of people with dietary sugar intake < 10 % of total energy daily consumed.

ANNEX 1: Country

examples of monitoring and evaluation activities at national level

Thailand

Policy related to diet and physical activity	National dietary guidelines, national policy on diet and nutrition and a national policy on physical activity have been published. "Thai people No Big Belly" is a national programme to control the waist circumference and BMI of people over 15 years of age, with interventions in health promotion clubs, secondary schools and government offices in the principal districts of all the provinces throughout the country.
Institution(s) responsible for the monitoring and evaluation of activities	Ministry of Public Health; Ministry of Tourism and Sports; Health Inspection Office; Bureau of Policy and Planning; Provincial Health Office; Ministry of Education; Regional Health Centres and Nutrition Divisions; Department of Health; Health System Research Institute and the National Statistics Office.
Summary of monitoring and evaluation of activities, tools and sources of data	A national nutritional survey collecting information on dietary habits and BMI is regularly carried out. The Department of Health and Ministry of Public Health also conducts a national survey to evaluate daily physical activity and physical inactivity levels and occupation of leisure-time of Thai people aged over six years. The Ministry of Public Health also collects data on weight, height and waist circumference through the Health Inspection Office to monitor the programme "Thai people No Big Belly".
Examples of relevant process and output indicators	- Number of workplaces with activities promoting healthy diet and physical activity in the workplace. - Number of schools with activities promoting healthy diet and physical activity in schools. - Percentage of the population aware of the health risks of high intake levels of total fat, saturated fats, salt and sugars.
Examples of relevant outcome indicators	- Percentage of adults with high waist circumference (i.e. more than 80 cm for women and 90 cm for men). - Percentage of overweight or obese children and adolescents (weight for height). - Percentage of children exclusively breastfed for six months. - Percentage of adults eating more than 400 g of fruit and vegetables per day.

ANNEX 2:

Ongoing work in surveillance and monitoring

Ongoing work

The following table summarizes examples of global or regional initiatives being carried out in the area of risk factor surveillance and monitoring.

Surveillance system	Responsible institution	Description
STEPS The WHO STEPwise approach to chronic disease risk factor surveillance	WHO Headquarters and Regional Offices	Sequential process of gathering comparable and sustainable chronic disease risk factor information at country level through which all countries can develop surveillance systems containing quality information on risk factors in their unique settings. The STEPs approach is made up of: Step 1 – which gathers information on risk factors that can be obtained from the general population by questionnaire; Step 2 – which includes objective data by simple physical measurements needed to examine risk factors that are physiological attributes of the human body; and, Step 3 – which carries the objective measurements of physiological attributes one step further with the inclusion of blood samples for measuring lipid and glucose levels (www.who.int/chp/steps/en/).
GSHS The Global School-based Student Health Survey	WHO Headquarters and Regional Offices	Collaborative surveillance project designed to help countries measure and assess behavioural risk factors and protective factors in 10 key areas among young people aged 13–15 years. This low-cost, school-based survey uses a self-administered questionnaire to obtain data on students' lifestyles, e.g. dietary behaviours and physical activity. A number of countries in Africa, Asia and the Americas have either implemented GSHS or are in the process of doing so (www.who.int/school_youth_health/assessment/gshs).
HBSC Health Behaviour in School-aged Children	WHO Regional Office for Europe in collaboration with national research institutions	Cross-national research study conducted in several countries. This study seeks new insights into the health of adolescents, including their health behaviour and lifestyles in a social context. The study examines young people aged 11, 13 and 15 years (www.euro.who.int/youthhealth/hbsc/20030130_2).
WHO Global InfoBase	WHO Headquarters	The WHO Global InfoBase is a data warehouse that collects, stores and displays information on chronic diseases and their risk factors of all WHO Member States. The InfoBase was developed in 2002 to improve access to country-level chronic disease risk factor data with traceable sources and full survey methodology for public health professionals. Currently, this data warehouse holds over 500.000 data points from 9.500 surveys, representing 186 countries. In 2005 the InfoBase online tool received approximately 16 000 hits per day from ministries of health around the world, as well as from researchers and journalists seeking information on risk factor data ttp://www.who.int/infobase/report.aspx).
ECHI European Community Health Indicators	European Commission	This project aims to create a prototype for a future health monitoring system. The two phases completed so far have addressed an inventory of sources and methods of the whole EU; analysis of data-needs in respective areas; definition of indicators and quality assurance; technical support for national efforts; data collection at EU level; reporting and analysis and promotion of the results (ECHI, 2005) (http://ec.europa.eu/health/ph_projects/2001/monitoring/fp_monitoring_2001_frep_08_en.pdf

ANNEX 3:
Madrid workshop

Objectives

As a follow-up to the publication *WHO Global Strategy on Diet, Physical Activity and Health: a framework to monitor and evaluate implementation,* an International Capacity-building Workshop was held in Madrid, Spain, 3-4 October 2007. The objectives of the workshop were:

1. to present and disseminate the DPAS framework to Member States;
2. to encourage Member States to use the document adapting it to their national characteristics and policies; and
3. to review and share country experiences on monitoring and evaluation of national policies on diet and physical activity.

Purpose

This document is a summary report of the International Workshop in Madrid.

Workshop programme

Dr Félix Lobo, President of the Spanish Food Safety and Nutrition Agency (SFSNA), opened the workshop and welcomed all participants to Madrid. Dr Lobo outlined the burden of NCDs in Spain, summarized the development and milestones in the implementation of the NAOS Strategy (Spanish Strategy for Nutrition, Physical Activity and prevention of Obesity), and highlighted the need to incorporate monitoring and evaluation in all policies and programmes related to diet and physical activity. Dr Lobo concluded by mentioning that this international workshop was not only a good opportunity to strengthen the ongoing collaboration between SFSNA and WHO but also a valuable occasion for all participating Member States to discuss their monitoring and evaluation activities.

Following Dr Lobo's opening speech, Dr Jerzy Leowski, Regional Adviser for NCDs in the WHO Regional Office for South East Asia, India, gave the opening remarks. Professor Fernando Artalejo was elected as Chairperson.

The first day consisted of presentations followed by plenary discussions.
On the second day, three working groups were formed to discuss national monitoring and evaluation activities using the framework document.

Table 1. Participants of each working group

	Group 1	Group 2	Group 3
Facilitator	Mr Nick Cavill (WHO Temporary adviser)	Ms Vanessa Candeias (WHO, Headquarters)	Ms Trudy Wijnhoven (WHO, Europe)
Rapporteur	Dr Jerzy Leowski (WHO, South-East Asia)	Ms Melanie Cowan (WHO, Headquarters)	Prof Fernando Rodriguez-Artalejo (Spain)
Participants	Dr Praveena Ali (Fiji) Dr F. Prescilla L Cuevas (Philippines) Dr Sopon Mekthon (Thailand) Dr Rakesh Srivastava (India)	Dr Anne Gabriel (Seychelles) Dr Enrique Jacoby (WHO, Americas) Dr Deborah Carvalho Malta (Brazil) Dr Tito Pizarro (Chile) Dr Joyce Nato (WHO, Kenya)	Dr Jonathan Back (European Commission) Dr Zuzana Brazdova (Czech Republic) Dr Juan Manuel Ballesteros (Spain) Dr João Breda (Portugal) Dr Marián Dal-Re (Spain) Dr Napoleón Perez Farinós (Spain) Dr Gunnar Johansson (Sweden) Dr Murielle Mendez (Belgium) Dr Enrique Regidor (Spain) Dr Carmen Perez Rodrigo (Spain) Dr Benoit Salanave (France) Dr Gregorio Varela (Spain) Dr Carmen Villar (Spain)

ANNEX 3:
Madrid workshop

Working session: SUPPORTIVE ENVIRONMENTS, POLICIES AND PROGRAMMES

Following the structure proposed in the DPAS framework each working group discussed how the proposed indicators, related to the three following categories, could be used at the national level:

1) supportive environnment
2) supportive policies
3) supportive programmes

Working session: SETTINGS

Considering a setting approach to each country's national policy on diet and physical activity, each working group discussed how the proposed indicators in the DPAS framework could be used to monitor and evaluate activities in:

1) schools
2) the workplace

Working session: STAKEHOLDER INTERACTION

Taking into consideration a multistakeholder approach to each country's national policy on diet and physical activity, each working group discussed what would be the most appropriate way to evaluate interaction between different stakeholders and the outcomes of a multistakeholder approach to promoting healthy diets and physical activity.

It was also discussed how the proposed indicators in the DPAS framework could be used to monitor and evaluate activities by:

1) civil society and NGOs
2) the private sector
3) others

Working session: COUNTRY SPECIFIC ACTION PLANS

In the final working session, each group discussed the development and subsequent implementation of country-specific action plans to monitor and evaluate policies on diet and physical activity. Furthermore, discussions took place on how to incorporate the indicators proposed in the framework document into future actions on monitoring and evaluation.
In order to conclude the working session, each group prepared their reporting back which was presented in the plenary session.

ANNEX 3:
Madrid workshop

Conclusions

The majority of countries participating in the workshop found the DPAS document to:

- be a useful tool to raise awareness on the need for monitoring and evaluation to be included in policies and programmes related to diet and physical activity;
- be a practical guidance to support Members States' activities;
- provide a comprehensive set of indicators that could be used directly and/or easily adapted to the national policies and programmes; and
- offer indicators that were also practical for monitoring and evaluation activities at regional and country levels.

Areas of the document needing further attention related to monitoring and evaluation in:

- fiscal policy
- urban planning
- capacity building and human resources
- community-based interventions
- marginalized groups
- differences between interventions in urban versus rural settings

The participants highlighted that data for different indicators can come not only from traditional surveys and questionnaires, but also from various other existing, possibly unconventional sources (e.g. registry of public transportation users, through interaction with NGOs or private sector, registries from agriculture production or trade activities, etc).

All countries participating in the workshop indicated that they would incorporate appropriate indicators into current and future monitoring and evaluation activities.

List of participants

Dr Praveena Ali	Principal Medical Officer Lautoka Health Centre Western Health Service Fiji
Prof Fernando Rodríguez Artalejo (Chairperson)	Department of Preventive Medicine and Public Health Faculty of Medicine University of Madrid Spain
Dr Jonathan Back	Health and Consumer Protection Directorate-General European Commission Belgium
Dr Juan Manuel Ballesteros	Technical Adviser Spanish Food Safety and Nutrition Agency Spain
Dr João Breda	Coordinator of the Platform Against Obesity Directorate General for Health Portugal

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Ms Vanessa Candeias (rapporteur)	Technical Officer Surveillance and Population-based Prevention Unit World Health Organization Geneva Switzerland
Dr Deborah Carvalho Malta	General Coordinator of NCD Secretary of Health Surveillance Ministry of Health Brazil
Mr Nick Cavill	Consultant Cavill Associates United Kingdom
Ms Melanie Cowan (rapporteur)	Technical Officer Surveillance and Population-based Prevention Unit World Health Organization Geneva Switzerland
Ms Frances Prescilla L. Cuevas	Chief Health Program Officer National Center for Disease Prevention and Control Department of Health Philippines
Dr Marián Dal-Re	Technical Adviser Spanish Food Safety and Nutrition Agency Spain
Dr Napoleón Pérez Farinós	Coordinator of Monitoring and Evaluation Spanish Food Safety and Nutrition Agency Spain
Dr Anne Gabriel	Director and Focal Person Noncommunicable Diseases Ministry of Health Seychelles Seychelles
Dr Jerzy Leowski	Regional Adviser Noncommunicable Diseases World Health Organization Regional Office for South-East Asia New Delhi India
Dr Enrique Jacoby	Regional Advisor on Healthy Eating and Healthy Living World Health Organization Regional Office for the Americas Washington USA
Prof Gunnar Johansson	Professor of Food and Nutrition Swedish National Institute of Public Health Sweden
Dr Sopon Mekthon	Deputy Director-General Department of Health Ministry of Public Health Thailand
Ms Murielle Mendez	Ministerium der Deutschsprachigen Gemeinschaft Abteilung Beschäftigung Gesundheit und Soziales Belgium

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Dr Enrique Regidor	Ministry of Health and Consumer Affairs Spain
Dr Carmen Perez Rodrigo	Community Nutrition Unit Bilbao Department of Public Health Spain
Dr Tito Pizarro	Head of the Nutrition Department Ministry of Health Chile
Dr Benoit Salanave	Nutritional Surveillance & Epidemiology Paris University - InVS France
Dr Rakesh Srivastava	Director-General Health Services Ministry of Health and Family Welfare Government of India India
Dr Joyce Nato	Office of the WHO Representative for Kenya Kenya
Dr Gregorio Varela	Department of Nutrition San Pablo-CEU University of Madrid Campus Montepríncipe Spain
Dr Carmen Villar	Spanish Food Safety and Nutrition Agency Spain
Ms Trudy Wijnhoven	Technical Officer World Health Organization Regional Office for Europe Copenhagen Denmark

A FRAMEWORK TO MONITOR AND EVALUATE IMPLEMENTATION

WHO GLOBAL STRATEGY ON DIET, PHYSICAL ACTIVITY AND HEALTH

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