

Nutrition and Physical Activity

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Editors

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Health Information Sources in EU Member States,
and Activities in the Commission, WHO,
and European Networks

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Preface

*Je crois du moins que les hommes n' ont jamais cessé
d'avancer dans la conscience qu'ils prenaient de leur destin.*

Les Amandiers

Albert Camus

Many Health Information Activities related to nutrition and physical activity have been initiated during the past years by several institutions at national and international level as well as by several European networks. A multitude of projects with different scopes and methodologies has arisen. This variety makes it necessary to bring the results of these activities into a coordinated framework.

The report aims to give a structured overview on the availability of routinely repeated or repeatable data on the health determinants nutrition and physical activity in European countries. An Inventory of Health Information Activities on nutrition and physical activity was built up, which summarizes activities carried out by the European Commission, WHO, various European networks, as well as national examples.

The Health Information Activities collected as national examples assess data for all countries belonging to the European Union up to 2006, the European Economic Area (EEA), and all candidate countries. The Inventory considers activities that started in 1990 or later, which were still running or were approved but have not yet started. Food safety and food labeling are not constituent subjects of the report.

The report analyses institutional initiatives of the European Commission, WHO, selected European networks as well as examples of health information activities at national level. A network of European public health professionals identified available national health information activities and survey data, which were summarised in a structured online database.

The results section presents the analysis of the database, which summarises health information activities in European countries. The database is freely accessible at the Web site of the Working Party on Information on Lifestyle and Specific Subpopulations. Additionally, the printed report provides a summary of all project database entries in the form of *Project Identity Cards*. For each country, Health Information Activities have been summarised in *Country Profile Sheets*.

The report provides a general overview on Health Information Activities related to nutrition and physical activity as well as a state-of-the-art investigation about available data in European countries. The concluding section of the report aims to recommend future Health Information actions that outline open issues.

The Scientific Platform of the Working Party on Information on Lifestyle and Specific Subpopulations has compiled this project report on Health Information Activities on nutrition and physical activity on request of DG SANCO of the European Commission.

Dresden
July 2008

Grit Neumann, M.A.
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1

Background and Purpose

Analysing people's health and reporting on health have become increasingly important for a large number of EU Member States. Health reporting is defined as "a system of different products and measures aiming at creating knowledge and awareness of important Public Health problems and their determinants (in different population groups) among policy makers and others involved in organisations that can influence the health of a population." [6] Health reporting systems are intended to monitor the status of health, health behaviour, and risk factors as well as the health care system at national level. Politicians, scientists, and stakeholders are thus offered an information background. Accordingly, effective health monitoring is an important instrument for health policy decisions and support for national health policy. Furthermore, it can lead to the identification of health data needs and health research priorities.

In the past, the European Commission has supported several activities to measure health in Europe and to implement a unique and comparable health monitoring system at the level of the European Union that allows for the measurement of health status, trends, and determinants throughout the community. First steps have been taken, but to ensure that health monitoring fulfils these functions at a national as well as at international level, future efforts are necessary.

On 23 September 2002, the European Parliament and the Council adopted a new Community Action Programme for Public Health. The programme started on 1 January 2003 and was originally intended to run for a 6-year period until 31 December 2008. This programme was designed to complement national policies; its overall aim was to protect human health and improve public health. There were three general objectives:

- To improve information and knowledge for the development of public health (health information)
- To enhance the capability of responding rapidly and in a coordinated fashion to threats to health (health threats)
- To promote health and prevent disease through addressing health determinants across all policies and activities (health determinants) [7, 8]

Under the thematic priority *health information* within the Community Public Health Programme 2003–2008, the European Commission is launching public

health monitoring projects. This thematic strand sets the objective of establishing and operating a sustainable health monitoring system. The system aims at producing comparable information on health and health-related behavior of the European population, on diseases and health systems.

This will be based on European-wide common agreed indicators with regard to their definition, data collection, and use [9]. The system is to be established on the basis of the previous work in former Community Health Programmes and will now be continued intensively under the new Public Health Programme, which starts in 2007 and runs till 2013. The new Public Health Programme will substitute the old programme (2003–2008).

One of the key priorities in the EU Public Health Action Programme is the life-style-related health determinants of nutrition and physical activity, not least because of the linkage to the growing problem of overweight and obesity. During the past years, many Health Information Activities related to nutrition and physical activity have been initiated by several institutions on the national and international level as well as by European networks.

The majority of research activities in this field have been initiated because nutrition and inappropriate physical activity are significant risk factors for many common noncommunicable diseases. The top noncommunicable health problems (cardiovascular disease, obesity, diabetes, osteoporosis, and cancer) are life-style-related diseases and share common risk factors. These are unhealthy nutrition, lack of physical activity, smoking, and heavy drinking. For the majority of adults in Europe who neither smoke nor drink excessively, what they eat, and how physically active they are, are the most significant controllable risk factors affecting their long-term health. During the past decades, physical inactivity and high dietary fat intakes have becoming increasingly prevalent in people's daily living in industrialised countries [20, 23].

The awareness of the importance of nutrition and physical activity on health status has given rise to a multitude of projects with different scopes and methodologies. Until now the European Commission's aim to produce comparable information on health and health-related behavior of the population has not been fulfilled. The measurement of comparable health status, trends, and determinants throughout the Community is not yet possible.

One important reason that hampers the production of comparable data in the field of the lifestyle indicators nutrition and physical activity is the absence of agreed measures and related data definitions within Europe. As mentioned earlier, a considerable number of projects have been initiated. They used different definitions, indicators, and methods, which made the production of comparable data difficult.

First steps in the field to harmonise and compare health information activities have already been taken. A first set of European Community Health Indicators was produced by the European Community Health Indicators (ECHI) project in its first and second phases (ECHI 1 and ECHI 2), which included indicators on nutrition and physical activity. The objective of this project was to continue the work on specific indicators to complete the European Community Health Indicators list that

will serve as a basis for the European health information system including their operational definitions.

The project “Monitoring Public Health Nutrition in Europe” also contributed to comparable health indicator definitions across member states. This project aimed to clearly define the indicators for nutrition and physical activity that should be monitored for nutrition-related health outcomes [24].

To tie up to these efforts of harmonisation and standardisation, it is necessary to bring together into a coordinating framework the results of past activities related to nutrition and physical activity, with their different scopes and methodologies. In this context, a report on the availability of national data sources since 1990 concerning the health determinants, nutrition and physical activity has been initiated; at the same time, it should be noted that food safety and food labeling are not covered in this report.

The report also presents an Inventory of Health Information Activities on Nutrition and Physical Activity, which summarizes National Examples and activities carried out by the European Commission, the WHO, and selected European Networks. Therefore, the report provides a general overview on Health Information Activities, which are related to nutrition and physical activity, and thus provides a state-of-the-art investigation. The report aims to analyse which existing resources can be linked into one coordinated database. The concluding section of the report aims to recommend future Health Information Actions, which would address issues that have not yet been covered.

2 Objective

Many Health Information Activities, which provide data on people's nutrition and physical activity, have been initiated during the past years by several institutions at national and international level as well as by various European networks. This results in a multitude of projects with different scopes and methodologies. This circumstance of variety makes it necessary to bring activities into a coordinated framework.

The main objective of this report is to provide an overview about the availability of routinely repeated or repeatable Health Information Activities in the form of *National Examples*.

The Health Information Activities collected within this report assess data for:

- All countries belonging to the European Union up to 2006
- The European Economic Area (EEA) countries
- All candidate countries

This report is intended to give a general overview about available Health Information Activities, which are topically related to *nutrition* and to *physical activity*. This overview includes projects and activities that have been carried out by:

- The European Commission
- The World Health Organisation
- Various European Networks

The national examples include research projects and surveys that started in 1990 or later, which were still running or were approved but have not yet started.

The report's aim is to identify available health-related activities and survey data in Europe containing data on nutrition and physical activity. For that purpose, a network of public health professionals for data collection was established.

Identified Health Information Activities were entered into a structured database by scientists. While including projects into the database, all scientific coworkers who contributed to the report concentrated on Health Information Activities in general. Health Information Activities in this report cover a broad scope and are defined in "Defining Concepts."

The inventory contains information about the projects' contents, methods used, and towards which indicators the activities provide data. It is especially interesting

how far this multitude of projects that have been initiated in the timeframe since 1990 produced comparable data in the field of nutrition and physical activity. The results of data collection within this report are the basis for further discussion and steps that have to be considered. Thus, the report aims to recommend future Health Information Actions that outline open issues.

The report is limited to data availability in the countries covered. Health reporting activities at national level are summarised in *Country Profile Sheets* (pp. 52–86). Individual activities are additionally listed in *Project Identity Cards* in the appendix (pp. 141–477). All activities are available in the online database, which is freely accessible at the web page of the Working Party (<http://www.public-health.tu-dresden.de/Query001/>). Thus, the inventory provides a structured framework for Health Information Activities on nutrition and physical activity. Assessments of data quality and data usability are not within the scope of this report. Also, this is a *snap shot* study given the one-off resourcing – though the database will continue to be available for consultation, it will not be updated.

3

Background Information

3.1. Defining Concepts

Nutrition

Within Europe there are no established definitions of nutrition or of physical activity. The project, therefore, devised the following definitions, which were used throughout the project

Nutrition can be defined as the interactions that occur between living organisms and food. It studies the psychological, social, cultural, economic, and technological factors that influence which food we choose to eat. The science of nutrition also studies the biological process by which we consume food and utilize the nutrients it contains [25].

Public Health Nutrition focuses on the promotion of good health through healthy food habits and a physically active lifestyle and the prevention of illness in the population [23].

Physical Activity

Physical activity can be defined as “any bodily movement produced by skeletal muscle that results in energy expenditure” [2]. Physical activity is closely related to, but distinct from, exercise and physical fitness. It can be categorized as occupational, leisure, sports, household, or other forms of activity.

Exercise is a subset of physical activity that is “planned, structured and repetitive bodily movement, done to improve or maintain one or more components of physical fitness” [2].

Fitness is “a set of attributes that people have or achieve that relates to the ability to perform physical activity” [2].

Health-related fitness broadens the traditional concept of fitness to include the functional capacity needed for everyday life and health. It includes the characteristics of functional capacity that are affected positively by physical activity or negatively by the lack of physical activity and are, at the same time, associated with health status. Good

health-related fitness is composed of endurance, bodily control, muscular strength, joint mobility, and suitable weight. A person who is sufficiently healthy can cope with everyday activities without overtiring [20].

Health Information Activities

Health Information Activities within this report cover a broad scope. They are defined as published activities, such as projects or surveys, related to nutrition and physical activity on a population level. There was no limitation as regards age of project target groups. Activities focusing on all age groups were included.

Information on European and national projects and activities as well as projects with a regional scope were collected. Although regional projects were included, data from national and international projects were the prime focus. There were no limitations to projects with a specific study design. Though the prime intention was to identify ongoing data sources, in the report studies that were only conducted once were also included, because in many countries, there were data sources with no repetition so far, but they do currently provide useful data for the national health monitoring system.

Activities that do not produce data, or merely promote and implement projects, were not considered eligible Health Information Activities. The same is true for prevention programmes, intervention studies, Health Information Activities on food safety and projects published as textbooks. The purpose of this study was focussed solely on building up a picture of data availability from routinely repeated or repeatable sources, which could inform national policy makers; and secondly to highlight areas where further national or European action on data gathering and information presentation is needed.

At a meeting, subcontracted partners were trained and informed about the definition of Health Information Activities. They were furthermore invited to contact the main partner in case of questions. Those partners who could not attend the meeting were given detailed instructions and were encouraged to closely cooperate with the main partner.

Indicator

It was intended to find a generally binding definition for “indicator,” but the references proved to be very inconsistent. For this reason, we provide in this report definitions from various partners.

An indicator is an informative presentation of the status of an empirically-based and scientifically-framed measure of a detailed subject of interest [22].

In general, indicators are identified as variables that help to measure changes. Furthermore, indicators facilitate the current status and the future actions illustrated from the underlying goal. Finally, they are a simplified representation of measurements used for example to answer scientific questions in the process of monitoring as well as evaluating health promoting activities.

In the main, WHO defined indicators as: "... variables which help to measure changes. Indicators are an indication of a given situation, or a reflection of that situation. Often they are used particularly when these changes cannot be measured directly ... They are indirect or partial measures of a complex situation, but if measured sequentially over time they can indicate direction and speed of change and serve to compare different areas or groups of people at the same moment in time" [37].

Indicators represent the relationship between rather abstract or theoretical terms, such as health, and measurements, which are linked directly to the concept of "health". For this reason, indicators should at best conform to the quality measures of scientific testing instruments: "... the ideal indicators should be valid – that is, they should actually measure what they are supposed to measure; they should be objective – the answer should be the same if measured by different people in similar circumstances; they should be sensitive – that is, they should, be sensitive to the changes in the situation; and they should be specific – that is, they should reflect changes only in the situation concerned. In real life there are very few indicators that comply with all these criteria" [37].

Regarding the selection of recommended indicators for a comparable measurement of health, this project included relevant work from the project "Monitoring Public Health Nutrition in Europe" [24]. This project was part of the EU Programme on Health Monitoring, which aimed to establish a Community Health Monitoring System for the measurement of health status, trends and determinants throughout the community. The project "Monitoring Public Health Nutrition in Europe" defined indicators for nutrition and physical activity that should be monitored across all member states to achieve maximum comparison. The project recommended ideally those indicators that are already being collected in the majority of member states or those that can be added easily to current data collection systems in the member states [24]. According to the proposed context, three different groups of indicators were defined:

- (A) Nutrition related indicators
- (B) Indicators related to physical activity
- (C) Miscellaneous indicators

To establish the inventory on available health information on nutrition and physical activity in Europe, this report uses the recommended indicators of the project "Monitoring Public Health Nutrition in Europe" and analyzes how far the available health data sources provide information on the recommended indicators and ensure comparability.

Methods of Data Collection

Information on the method of data collection applied in the health information projects was gathered. For this purpose, methods used to collect data on nutrition and/ or physical activity were grouped into the following categories and included in the project database:

- (A) Methods measuring food consumption/availability
- (B) Methods measuring physical activity
- (C) Other methods

Activities collected within this report assess also data for countries of the European Economic Area, namely Iceland, Liechtenstein, and Norway.

Furthermore, Table 3.1 provides information on the project partners' responsibilities regarding geographical coverage. Experts in the field of Health Information Activity were contacted to do research on available health data sources in either one or several countries.

Table 3.1 Partners' responsibility regarding geographical coverage

Geographical Coverage	Responsible Institution	Represented by	Country
Austria	Technische Universität Dresden; Faculty of Medicine Carl Gustav Carus; Research Association Public Health Saxony and Saxony-Anhalt	Prof. Wilhelm Kirch	Germany
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(continued)

Table 3.1 (continued)

Geographical Coverage	Responsible Institution	Represented by	Country
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Poland	Department of Social and Preventive Medicine, Medical University	Prof. Wojciech Drygas	Poland
Portugal	Community Nutrition Unit Bilbao, Dept. of Public Health	Dr. Javier Aranceta	Spain
Romania	National School of Public Health and Health Services Management- NSPHHSM,Dept. of Health System Research	Dr. Florian Valentin Sologiu	Romania
Slovakia	Dept. of Health Promotion, National Public Health Authority of the Slovak Republic	Dr. Tomáš Kúdela	Slovakia

(continued)

Table 3.1 (continued)

Geographical Coverage	Responsible Institution	Represented by	Country
Slovenia	Dept. of Public Health, Medical Faculty of University of Ljubljana, Slovenia	Dr. Lijana Kragelj-Zaletel	Slovenia
Spain	Community Nutrition Unit Bilbao, Dept. of Public Health	Dr. Javier Aranceta	Spain
Sweden	Unit for Preventive Nutrition, Institute of Biosciences and Nutrition, Karolinska Institute Sweden	Prof. Michael Sjöström	Sweden
The Netherlands	Netherlands Institute for Health Services Research NIVEL, Dept. Allied Health Care	Dr. Cindy Veenhof	The Netherlands
Turkey	Celal Bayar University, Faculty of Medicine, Dept. of Public Health	Prof. Cemil Ozcan	Turkey

4

Methods

Investigation for Health Information Activities in the four categorised levels was implemented as follows:

4.1. National Data

For the collection of national data sources containing data on nutrition and physical activity, a competent institution was identified for each country. Table 4.1 in Sect. 4.2 provided an overview about the subcontracted partners that contributed to data collection. One national expert or organisation per country was commissioned to gather information on the project specification. This did not apply for those countries where a project partner was asked to undertake the data collection role.

Working together with local scientists and experts in the field of nutrition and physical activity implied a more effective handling of language barriers and ensured obtaining local data. Additionally, the contributions from national experts helped to understand the way national Health Information Activities are organized, as well as helped to understand cultural and political developments in national settings.

After first explanations through telephone between the subcontracted partners and the main partners, a comprehensive information meeting took place with the intention of introducing the project and its objectives. Furthermore, methods (regarding the database) and their use were presented. Subcontracted partners were introduced to their research tasks and were trained. Questions were answered. The principal aim for all partners was to identify national Health Information Activities with population scope. All partners were invited to contact the main partner to clarify open issues that might occur during the research process.

For national data collection, a database was created with Microsoft Access. In a fixed time period, starting from June 2006 and ending in November 2006, all partners were invited to enter their research findings into the database via a Web interface. By using the database, available national data sources related to nutrition and physical activity could be collected in a standardized manner to ensure comparability.

The database entries concentrated on the following aspects:

- General project Information (e.g., executive institution, project leader, funding agency)
- Employed methods and published literature referring to the Health Information Activity
- Description of employed methodology
- Geographical coverage of the data generated by the Health Information Activity
- Collected indicators on nutrition and physical activity
- Age groups covered

The database for collecting national Health Information Activities in European countries is shown in Appendix A.

Regarding the collection of national data sources and their entries into the database, the aim was to find as many Health Information Activities as possible. However, it could not guarantee the compilation of a fully comprehensive picture of implemented Health Information Activities in each European country. As the purpose of the report indicates, the report sets out to give an overview about national *examples*.

First, to arrange collected data more clearly and in a structured way, the database entries were additionally summarised in *Project Identity Cards*. Project Identity Cards comprise main background information for each project that was entered into the database (e.g., project leader and executing institution, short project description, keywords, and age groups). The summary is presented in Appendix C for European Projects and in Appendix D for national projects.

Second, subcontracted partners were asked to give an overview about the way national health reporting is organized in general and with special focus on the health determinants nutrition and physical activity. Furthermore, fundamental changes in the health monitoring system that took place during the reporting period (1990–2006) were asked about as well as a listing of national institutions that are involved in health reporting activities. The overview of health reporting in each country is summarized in *Country Profile Sheets*.

Keywords

A maximum of six published keywords per health information project was included in the project database and project identity cards. Project partners collected keywords from publications on the individual Health Information Activities. In cases where no keywords were published, this part was left blank in the project database and project identity cards.

The keywords provide a thematic structure for the Health Information Activities included in this report. Thus, they help the reader to research the project database.

Age Groups

To ensure usability of the inventory across definitions, ages of study subjects were entered into the database. Where several groups of different ages were included in a study, age was entered separately for any of the groups. The age of the youngest and the oldest participants was stated for every participant group. With the help of a description field, further information about subgroups or age-gender-classifications could be entered as text. The database thus provides the opportunity to identify exactly the age groups used in different health information activities. These details can then be matched with the definitions on age groups.

4.2. DG's at the European Commission (by M. Sjöström)

For the section of the different DG's at the European Commission, several representatives were contacted. Furthermore all available documents of the DG's were used to get all necessary information relating to this report.

4.3. WHO Section (by M. Rigby)

The section on WHO activities related to information on nutrition and physical activity at the population level was compiled by mixed methods on the basis of primarily an amalgam of personal knowledge not least through previous collaboration with WHO, direct contact, personal visit, and WHO projects as profiled on the WHO Internet pages.

Material was assembled and refined through the following steps:

- Personal knowledge of principal relevant activities
- Search of WHO Web pages (both European and headquarters) for relevant projects
- Email explaining the nature of the project sent to senior WHO contacts in both Copenhagen and Rome offices; included in this approach were contacts in nutrition, physical activity, noncommunicable disease policy, information and databases, and health reporting
- The author offered to visit both the Copenhagen and Rome offices for direct discussion with relevant officers to pick up information beyond that formally published
- A visit was made to Copenhagen in December 2006, coordinated by a senior officer to which several others contributed material; it was felt that aspects from the Rome office were clear from published material
- The draft completed chapter was circulated to all contacts, and improvements were consequently made.

This section seeks to indicate WHO activities within Europe providing, or contributing to national activities supplying, information on nutrition and physical activity in Europe, and also to capture professional views on key issues.

4.4. European Networks (by P. Di Mattia)

Different electronic scientific databases were used entering “European networks” as keywords. This strategy achieved no meaningful results.

Further searching was done with the following strategies:

- Different generic electronic databases were used (Google, arianna, etc.) entering “nutrition” and “physical activity” as keywords. Thousands of results were obtained, both relevant and not. A manual purposeful screening was done for European Networks Web sites
- From the literature review, a search was manually done looking for articles mentioning European Networks
- All official EU and USA Web sites on “Nutrition and Physical Activity” were consulted for “Useful links”

Following the above methodology, a number of European Networks involved in “Nutrition and Physical Activity” were identified.

5

Results

5.1. National Examples

5.1.1. *Introduction*

Data on national Health Information Activities have been collected in two ways. The country profile sheets provide a summary on health reporting for each country within the geographical coverage of this report. Project data on individual Health Information Activities have been entered into a project database and serve as national examples in this report.

In the country profile sheets, partners were asked to provide a general overview on Health Information Activities carried out on a national and regional level. Furthermore, they were requested to include institutions involved in health reporting and to outline any fundamental changes that took place in health reporting during the reporting period 1990–2006. Some examples of Health Information Activities were also included. All partners were encouraged to contact the main partner in case clarification on any open issue was required.

The country profile sheets reflect the multitude of activities and differences among EU member states, the European Economic Area and candidate countries. Factors, such as country size, constitutional and institutional structure influence health reporting activities. In some countries, Health Information Activities are exclusively carried out on a regional basis, whereas in other countries there are national activities. The size of the regions varies to a considerable extent among countries and in some cases even includes municipal level. In Turkey, for example, municipally administered health authorities report data to the Turkish Ministry of Health. However, the data are not reported back to municipal level.

Health reporting activities differ furthermore with respect to the frequency of data collection and how scientific findings are further communicated and published.