WHO global strategy on diet, physical activity and health:
South-East Asia regional consultation meeting report

New Delhi, India, 10-12 March 2003

World Health Organization
2003
Towards a WHO global strategy on diet, physical activity and health

Background

1979 The Global Strategy for Health for All by the year 2000 underlined the growing importance of chronic noncommunicable diseases (NCDs) for developed and developing countries alike.

1985 The Thirty-eighth World Health Assembly called for increased efforts to assess the importance of NCDs and to coordinate long-term NCD prevention and control programmes (resolution WHA38.30).

1989 The Forty-second World Health Assembly urged the promotion of intersectoral and integrated approaches for the prevention and control of NCDs, especially at the community level in developing countries (resolution WHA42.45).

1990 In its report *Diet, nutrition and prevention of noncommunicable diseases*, a WHO Study Group made recommendations to help prevent chronic diseases and reduce their impact (WHO Technical Report Series, No. 797).

1997 *The world health report 1997. Conquering suffering, enriching humanity* described the high rates of mortality, morbidity and disability from the major NCDs and proposed the development of a global strategy for NCD prevention and control.

1998 Recognizing the burden on public health services resulting from the growth in NCDs, the Fifty-first World Health Assembly requested the Director-General to formulate a global strategy for NCD prevention and control (resolution WHA51.18).

2000 The Fifty-third World Health Assembly endorsed the WHO global strategy for NCD prevention and control and urged Member States and WHO to increase efforts to combat NCDs (resolution WHA53.17).


2001 *Macroeconomics and health: investing in health for economic development*, the final report of the Commission on Macroeconomics and Health, noted that many NCDs can be effectively addressed by relatively low-cost interventions, especially prevention activities related to diet and lifestyle.

2002 Having considered a report on diet, physical activity and health, the Fifty-fifth World Health Assembly requested WHO to develop a global strategy on diet, physical activity and health (resolution WHA55.23).

2002 "Move for health" was the theme for World Health Day, 7 April 2002. "Move for health" has become a continuing initiative across the world.

2002 *The world health report 2002. Reducing risks, promoting healthy life* described how a few major risk factors account for a significant proportion of all deaths and diseases in most countries. For chronic NCDs, some of the most important include tobacco consumption, overweight and obesity, physical inactivity, low fruit and vegetable intake and alcohol consumption, as well as the risks posed by intermediate outcomes such as hypertension and raised serum cholesterol and glucose levels.

2002 A joint FAO/WHO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases examined the latest scientific evidence available and updated recommendations for action (see below, Phase I, for details of its report published in 2003)

2003 The Framework Convention on Tobacco Control was adopted by the Fifty-sixth World Health Assembly in May 2003 (resolution WHA56.1).

Development of the global strategy

2003 **Phase I**

**Phase II**

Six regional consultations to gather information that will form the basis of the strategy (March–June 2003). Consultations with relevant United Nations and other international organizations, with civil society organizations and with the private sector (May–June 2003).

**Phase III**
Reference Group, a group of internationally recognized experts, to advise WHO on the preparation of a draft global strategy.

Completion of the draft strategy (September 2003).

2004 Submission of the draft strategy to the Executive Board at its 113th session (January 2004).

Discussion of the revised draft strategy at the Fifty-seventh World Health Assembly (May 2004).
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Preface

This report of the consultation in the South-East Asia Region, on the global strategy on diet, physical activity and health, is the first in a series of six. Organized by the Regional Office for South-East Asia, the consultation gave the Member States’ perspective on the issues encountered and made specific recommendations on direction, both for the countries of the Region, and for the development of the global strategy. As a whole, the series of reports provides a summarized global account of the status of knowledge about the links between diet, physical activity and health, and the work in countries to address the pandemic of chronic diseases. Added to this will be contributions from consultations with other United Nations organizations, civil society and the private sector. Together these will provide the foundation for the development and formulation of the Global Strategy on Diet, Physical Activity and Health and subsequently for action to make measurable changes in diet and physical activity at population level, with positive consequences for the prevention of noncommunicable diseases (NCDs).

As a result of the consultation in the South-East Asia Region, the following key issues were identified and recommendations to address them formulated: a need for region-wide development and implementation of national policies on diet, physical activity and health, a serious lack of standardized comparable data on diet and physical activity in the Region; the clear identification of the Ministry of Health as leader of the implementation of the global strategy but drawing in other ministries and seeking centres of excellence to support implementation; dialogue with the private sector, civil society and other partners to promote the aims of the strategy and mobilize support; financing mechanisms which promote and sustain health as a core aspect of development work; capacity-building at national level to support acquisition of scientific knowledge of NCD prevention and advocacy skills in behavioural change communication; research (on areas such as the most effective community-based and national interventions, the local impact of globalization, or the identification and acceptability of locally available, culturally appropriate health-promoting foods and facilities for physical activity); and monitoring and evaluation systems for population beliefs and practices related to diet and physical activity and levels of related risk factors, with appropriate indicators. This report summarizes the discussions at the consultation and outlines the recommendations made.
1. Introduction

Noncommunicable diseases, especially cardiovascular diseases (CVDs), cancers, obesity and type 2 diabetes mellitus, now kill more people every year than any other cause of death. The World Health Organization (WHO) has responded to the global rise in NCDs by giving increasing attention to their prevention and control in recent years (see Box).

Four factors in the epidemiology of these diseases – poor diet, physical inactivity, tobacco and alcohol use – are of overwhelming importance to public health. Diet and physical activity have recently been the subject of intensified high-level attention by a Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases. The report of the Expert Consultation makes recommendations, inter alia, for optimum nutrition and for worldwide action to stimulate physical activity within a health context. WHO is currently developing a global strategy on diet, physical activity and health to give effect to these and other recommendations.

The first of the three-day consultative meetings was held in the Regional Office for South-East Asia in New Delhi, India, March 10-12, 2003, attended by participants from Bhutan, India, Indonesia, Maldives, Myanmar, Sri Lanka and Thailand, as well as by regional and headquarters staff from WHO. Dr KK Talwar (India) was elected as Chairman with Co-Chairman Dr GL Hapugoda (Sri Lanka), and Rapporteurs Dr Somchai Leetongin (Thailand) and Dr Aye Aye Thaw (Myanmar).

The Regional Director, Dr Uton Muchtar Rafei, opening the meeting, said that the regional consultations were among the most important steps in the preparation of the global strategy on diet, physical activity and health. Noncommunicable disease mortality in the Region represented 26% of global NCD deaths. Whilst there was awareness of the general issue of NCD prevention, the evidence in the Region of behavioural risks was inadequate. Nutrition transition in the Region was evident and approximately half of the adult population was undertaking insufficient physical activity. He urged participants to relay the messages for action of the meeting to their governments and invest more in NCD prevention.

Dr Pekka Puska, Director, Noncommunicable Disease Prevention and Health Promotion at WHO headquarters, describing the process of formulating the strategy, stressed the value of country and regional input and thanked the participants for convening to share their experience. Dr Yoosuf Abdul Sattar, Director Sustainable Development and Healthy Environments, also welcomed participants.

The meeting was structured so as to give the majority of time to discussion and formulation of recommendations for input to the strategy. These were based on review of the global and regional situation in terms of NCDs, and present or future actions in the area of diet and physical activity to combat them (summarized in sections 2 and 3). The consultation paper prepared by WHO was used as a basis for the discussion of principles for action, exploring the main issues faced by countries (section 4). The working method was a mixture of briefings in plenary, where the knowledge base was reviewed, and group work, where the issues of diet and physical activity relevant to the Region were analysed separately. Conclusions and recommendations common to both areas of diet and physical activity were agreed in plenary (section 5).

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2. The global perspective

2.1 Health in transition

The world’s health is undergoing an unprecedented transition on several fronts: epidemiological, nutritional and demographic. The result, felt keenly at country level and substantiated unequivocally by scientific evidence, is a broad shift in disease burden. The majority of deaths (59%) are from NCDs (Figure 1).

![Figure 1](https://example.com/figure1.png)

Death, by broad cause group 2000

Total deaths: 55,694,000

In the European, American and Western Pacific Regions, NCDs are in an overwhelming majority. The South-East Asia and Eastern Mediterranean Regions are in transition, with NCDs now a more significant public health problem than infectious diseases (Figure 2). The African Region is also in transition and, while communicable diseases still predominate in many countries in the Region, the incidence of NCDs is rising rapidly.

![Figure 2](https://example.com/figure2.png)

Deaths, by broad cause group and WHO Region, 2000

In the South-East Asia Region, diabetes, leading to cardiovascular disease (and many other complications, such as renal failure, blindness, amputation, and death), dominates the public health agenda, with millions of diabetic cases predicted.

A wealth of medical research shows the risk factors responsible for this growing pandemic and clearly points out the strategies needed to reduce their impact. The data gathered for *The world health report 2002* show high blood pressure to be the major contributing factor to all deaths in the world (Figure...
Of the ten leading risk factors, six relate to nutrition, diet and physical activity. Progress in these two areas, combined with reductions in tobacco and alcohol use, will have enormous importance for the prevention of NCDs and will lead to major health gains that are cost-effective.

The figures also make clear the important role played by undernutrition. This must not be forgotten in the concern to address overnutrition. In many countries, both forms of malnutrition co-exist. Balanced diet can play an essential role in improving population health. Childhood obesity too is a growing problem across the world, with physical inactivity a major factor.

Close to 80% of the NCD burden is now found in the developing world, moving to lower and lower socioeconomic groups and contributing strongly to inequities in health. The determinants of these changes are urbanization, changes in occupation and many global influences. The transition concerns adults and children alike.

NCDs are to a great extent preventable diseases. While genetic susceptibility to NCDs may be a factor, appropriate preventive action can alter environments, protect against risk factors and change life expectations. On a population scale, relatively modest behavioural changes affecting several of the risk factors simultaneously, can make swift, affordable and dramatic changes in population health.

Diet is a powerful instrument in this regard. In Finland, the North Karelia project, through community-based activity encouraging a healthier diet, reduced annual CHD mortality by 73% over 25 years. In Japan, reduction of salt intake resulted in lower blood-pressure levels and greatly reduced stroke mortality; in Mauritius, changing cooking oil from palm to soy bean oil resulted in a 15% decrease in serum cholesterol in the population; and in Poland, a change in dietary fats resulted in a 20% decline in heart disease mortality.

There are many obstacles to implementing prevention activities, but they can be overcome. They include: outdated concepts such as seeing NCDs as “diseases of affluence”; a lack of understanding about the speed with which prevention activities can make an impact on morbidity; low public visibility for success stories in comparison with the needs of sick patients; powerful commercial interests that block policies and generate conflicting messages; traditional training of health personnel that emphasizes curative care; and inertia among institutions, financing bodies, and services.

Food consumption and physical activity patterns are a key to tackling NCDs. However, these behaviours are embedded in the environment, the community, and in areas such as agriculture and food policies. It will be essential to work with all these sectors as partners, and to look carefully at what factors influence consumption patterns, in dialogue with those partners. The problems are complex, and cannot be solved by any one entity on its own. The consultation process for the global strategy will draw all those partners into debate, with the specific intention of working positively towards change. WHO is confident that, with this background and through broad consultation, the global strategy will be successfully developed and implemented, leading to major health gains in Member States and globally.

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2.2 Diet, physical activity and heart disease

By influencing nutrient intake as well as energy balance, diet and physical activity influence cardiovascular disease (CVD) through a multitude of risk factors including blood pressure, lipids, glucose tolerance, coagulation and inflammation. There are many other independent effects of diet and physical activity that are not yet fully understood but which are mediated through BMI and central obesity.

**Dietary fats and CVD**

The key message here is that it is not just the quantity of fats that needs to be adjusted for a healthy diet but the quality of the fat. The consumption of certain types of fat can either be strongly adverse or strongly beneficial. There is a consistent association of the adverse effects of total cholesterol and low-density lipoprotein (LDL) cholesterol on vascular disease. The total cholesterol to high-density lipoprotein (HDL) cholesterol ratio is the strongest predictor of the risk of coronary heart disease. Intake of dietary cholesterol should be kept below 300g/day.

Multiple studies have corroborated that trans-fatty acids are probably one of the most dangerous elements in the diet for atherosclerotic risk, as they have a combined effect of increasing LDL cholesterol and decreasing protective HDL. Deep-fried fast foods and baked goods containing hydrogenated fats are major sources.

Total fat in the diet should not exceed 30%. However, fats rich in polyunsaturated fatty acids (PUFA) have multiple beneficial effects on blood pressure, cardiac function, arterial compliance, endothelial functions as well as potent anti-platelet and anti-inflammatory qualities. Good sources are fish, seafoods and plant oils. Diets high in PUFA have a substantial effect on cholesterol and on decreases in CHD mortality.

**Dietary carbohydrate**

High carbohydrate intakes are associated with low plasma cholesterol and variable plasma triglyceride concentration. Excessive carbohydrate intake can result in overweight and obesity, central obesity, and, through plasma lipids, can affect glycaemic control.

**Dietary antioxidants**

Current evidence does not support antioxidant supplementation, however, intake of primary food sources of Vitamin E and carotenoids should be encouraged. When foods are taken in their natural form beneficial synergistic activity and interactions among the antioxidants have been observed. These are not seen in the supplements.

**Diet and high blood pressure**

People with higher sodium intake have increased risk of coronary mortality, all cause mortality and cardiovascular mortality. Salt reduction trials showed a mean reduction of blood pressure, showing significant benefits to be gained from salt reduction.

As outlined in this presentation a healthy diet has a positive influence on many risk factors for NCDs.
2.3 The potential for fruit and vegetables to prevent noncommunicable disease, and how to promote consumption.

Low fruit and vegetable intake is one of the top 10 risk factors in the analysis presented in *The world health report 2002* (Table 1). Up to 2.7 million deaths could potentially be saved if consumption were increased.

Table 1. Global attributable mortality and disability-adjusted life-years (DALY) in year 2000 due to low fruit and vegetable intake

<table>
<thead>
<tr>
<th>Disease</th>
<th>Mortality ('000)</th>
<th>Burden of disease in DALY ('000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischaemic heart disease</td>
<td>1800</td>
<td>17,093</td>
</tr>
<tr>
<td>Stroke</td>
<td>474</td>
<td>4,935</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>139</td>
<td>1,408</td>
</tr>
<tr>
<td>Stomach cancer</td>
<td>133</td>
<td>1,427</td>
</tr>
<tr>
<td>Oesophagal cancer</td>
<td>77</td>
<td>816</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>12</td>
<td>140</td>
</tr>
</tbody>
</table>

Source: *The world health report 2002.*

The joint WHO/FAO expert report on diet, nutrition and prevention of chronic diseases recommends a population dietary intake goal of more than 400g/day for fruits and vegetables. The benefits are: they are nutrient dense but low in energy; they are low in fat and high in fibre; they are a good source of many vitamins and minerals; and they replace high-energy (sugar and fat) food items in the diet. Consumption can contribute to sustainable development when local, environmentally sound production is favoured over imported foodstuffs, however, the economic implications for increased consumption at population levels are considerable.

Most of the programmes to promote consumption in place to date are in developed countries. Characteristically they are the result of public-private cross-sectoral collaboration (e.g. with fruits and vegetable producers, supermarket chains and cancer or heart-disease prevention associations), and address various target groups (such as schoolchildren, shoppers, or employees).

3. The regional perspective

3.1 Overview of the regional NCD situation

Noncommunicable diseases account for 50% of all deaths and 42% of the disease burden (as measured by DALYs) in the Region, with further increases projected. The principal risk factors that contribute to this picture are high blood pressure (1.5 million deaths); tobacco consumption (1.1 million deaths) and hypercholesterolaemia (1.1 million deaths). Nine risk factors contribute to 85% of all NCD deaths in the Region, and for 42.5% of all deaths (Table 2). The levels among those risk factors are of concern: the mean fruit and vegetable intake in the Region is only 40% of the optimal rate, and nearly 17% of the total population is physically inactive. Mean systolic blood pressure and cholesterol levels are clearly in excess of proposed optimums. The consequences: that cluster of nine risk factors is responsible for one in four deaths in the Region.
Table 2. NCD risk factors in the South-East Asia Region – current estimates

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Optimum SEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean fruit and vegetable intake (g/day)</td>
<td>600 236.2</td>
</tr>
<tr>
<td>Mean systolic blood pressure (mmHg)</td>
<td>115 128.6</td>
</tr>
<tr>
<td>Mean cholesterol (mmol/l)</td>
<td>3.8 5.0</td>
</tr>
<tr>
<td>No physical activity (%)</td>
<td>0 16.6</td>
</tr>
<tr>
<td>Overweight - mean BMI (kg/m²)</td>
<td>21 20.5</td>
</tr>
<tr>
<td>Tobacco consumption (%)</td>
<td>No 22.0</td>
</tr>
<tr>
<td>Alcohol consumption (%)</td>
<td>0 13.6</td>
</tr>
<tr>
<td>Urban air pollution (µg/m³)</td>
<td>7.5 25.6</td>
</tr>
<tr>
<td>Indoor smoke (% using bio fuel)</td>
<td>No solid fuel use 79.8</td>
</tr>
</tbody>
</table>


3.2 National data on diet, physical activity and BMI

Limitations of the data
The available data for the Region on diet, physical activity and BMI have severe limitations, such as a lack of data on males, lack of standardization in measurement (due to use of different age groups, definitions and cut-off points, as well as cultural differences in concepts and practice of diet and physical activity), and diversity in indicators used. Standardization of data will be an important area for future work.

Food supply
The regional nutrition problems do not necessarily relate to food supply, although this is well below the levels available in the developed world (3055 calories per head) and in some countries below the world average (2358 calories per head). The daily supply of calories in the Region ranges from 2085 per head in Bangladesh to 2886 calories in Indonesia, with clear implications for reproductive health. Even where national supply is apparently adequate, household feeding patterns can result in undernutrition. Although vegetarianism is common, the regional data showed the mean consumption of fruit and vegetables to be very low (Table 3).

Table 3. Fruit and vegetable intake – mean consumption South-East Asia Region, selected countries (g/day)

<table>
<thead>
<tr>
<th>Country</th>
<th>Green leafy vegetables</th>
<th>Others</th>
<th>Fruits</th>
<th>Total</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>India (1996-1997) R</td>
<td>31.8</td>
<td>70.2</td>
<td>14.7</td>
<td>167.7</td>
<td>INP</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>23.4</td>
<td>75.1</td>
<td>37.6</td>
<td>136.1</td>
</tr>
<tr>
<td>India (1996-1997) M</td>
<td>41.0</td>
<td>81.4</td>
<td>20.1</td>
<td>113.5</td>
<td>INP</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>36.6</td>
<td>72.2</td>
<td>18.8</td>
<td>142.5</td>
</tr>
<tr>
<td>Indonesia (2002)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>105</td>
<td>SNS</td>
</tr>
<tr>
<td>Thailand (1995)</td>
<td>48.1</td>
<td>68.6</td>
<td>70.3</td>
<td>187.0</td>
<td>NNS</td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>42.0</td>
<td>59.4</td>
<td>85.5</td>
<td>186.9</td>
</tr>
<tr>
<td></td>
<td>U</td>
<td>46.6</td>
<td>66.6</td>
<td>73.6</td>
<td>186.8</td>
</tr>
</tbody>
</table>

INP: India Nutrition Profile
SNS: Subnational survey
NNS: National Nutrition Survey

Systolic blood pressure and cholesterol levels
Very little information has been gathered nationally on salt intake or blood cholesterol. Salt intake is thought to be 5-15 g/person/day. A 2% reduction in diastolic blood pressure in every Indian would
avoid 300,000 deaths from CVD in 2020. For all Asia, 2 million deaths could be avoided through dietary intervention.

**Physical activity levels**

Measurement of physical activity has been problematic, both in terms of quantifying the amount of activity taken and in defining what constitutes “activity” for groups as diverse as sedentary urban workers for whom it can be recreational, or agricultural workers for whom it can be part of daily labour. The data gathered, despite their limitations, indicate a need for a major initiative, taking into account the differences between rural and urban and male and female.

**Underweight and overweight**

There is a nutrition transition clearly seen in the Region, with a double burden of overnutrition and undernutrition. Overall, rural areas have the highest rates of underweight, although a decline in the degree of underweight is seen among females (where data are most available, from reproductive health information). The issues here are of equity and distribution of supply.

Overweight is growing rapidly in urban settings. In India, Thailand and Nepal, rates of overweight have risen dramatically. Data from Thailand and India show that higher social class is linked with more overweight and less underweight, and with a more sedentary lifestyle. The study of India’s mega cities showed females of over 30 years of age to be especially at risk from obesity, and the same applied to females in Indonesia, findings that were noted as being especially important for the design of appropriate strategies.

**Body mass index**

There is an unresolved problem with the threshold levels set for BMI in Asia. When a BMI of 30 kg/m\(^2\) is taken as the threshold value for obesity, not many qualify (although overweight - particularly central obesity - is clearly a problem in urban areas, especially among women of more than 40 years of age). If that value were amended to a BMI of 23 kg/m\(^2\), a very large proportion of the Region’s population would be recognized as being at risk. Approaches could then be more accurately targeted.

**Country case study**

Evidence gathered from an urban area of Faridabad, a district in India, provided an indicative profile of the current patterns of diet and physical activity in the country. The picture that emerged was of a principally vegetarian society, with daily consumption of refined grains much higher than whole grain (97% versus 8%), dairy product consumption at 69% and daily consumption of green leafy vegetables at only 26% (as they are considered to be “food for the poor”). A very high proportion of those interviewed never ate meat, fish or eggs (84.5%, 91.5% and 81.7% respectively), only 15% ate fruits daily, and 50.5% ate at least some raw vegetables daily. A very high level of physical inactivity was recorded: males were more active than females but overall 83.3% of respondents were inactive.

Characteristically of the double burden of nutrition problems faced in developing countries, both underweight and overweight were recorded; 11.4% overall being underweight and 33.7% overweight. The data available showed high BMI and central obesity. These were thought to be attributable to a high proportion of fats in the diet.

The findings pointed clearly to the risk factors to be addressed and a community-based intervention for NCD prevention and control has been evolved with the different stakeholders in the community. These include schools, the resident welfare association, youth clubs, political decision-makers such as the mayor, the local administration, medical associations, media, women’s organizations, traders and religious groups. Activities within the “citizens’ initiative” include cooking classes that revive traditional healthier ways of cooking and using local produce, encouraging consumption of raw fruit and vegetables, raising home and kitchen gardens, and making physical activities more easily available through the parks.
3.3 The regional NCD programme

The regional NCD programme has three main components: surveillance; disease prevention and health promotion; and control. Although NCD prevention and control programmes have started in most countries of the Region, they have limitations, being vertical, disease-specific and mostly tertiary-care focused. The human and financial resources allocated to tackle this problem are still largely inadequate, as is the level of political commitment to address the problem.

The aim of the regional NCD programme is for integrated, population-based primary prevention that targets common NCD risk factors. Using this approach, community-based interventions have been successfully piloted in Bangladesh, India and Indonesia and are being extended with a view to implementation up to national level. NCD prevention efforts in the Region have emphasized tobacco-control activities, and the need for increased physical activity. The impetus generated by the hundreds of World Health Day activities undertaken regionally for “Move for health” in 2002 is being sustained by Member States.

National NCD surveillance networks, established in six countries, link into the regional network and provide valuable epidemiological information using the WHO STEPwise approach to data collection, thus ensuring comparability over time and across locations. A regional NCD risk factor database is being established leading to a risk factor profile. The implementation of the regional surveillance strategy and the operationalization of the NCD prevention network will together absorb most of the current programme resources. Mobilization of new funds will be important for the future.

3.4 Current implementation of diet and physical activity policies

In India there are sporadic campaigns by nongovernmental organizations and health professional associations; in the Democratic People’s Republic of Korea the national health policy reflects promotion of healthy lifestyles; in the Maldives policy is clear on balanced diet, addressing both overnutrition and undernutrition but the physical activity programme is limited to schoolchildren; Nepal has no policy on diet and physical activity and Sri Lanka has no national policy but strategies to promote healthy lifestyles are indicated under the NCD prevention programme. In Bhutan, legislation has been passed to ban tobacco use and advertising and alcohol sales to minors below 18 years of age. In an excellent example of physical activity promotion led from the top, the Minister of Health of Bhutan led a 16-day walk from east to west of the country to promote “Move for health”, meeting village communities en route and spreading health messages about eating healthy food and regular physical activity.

Thailand is active in this area with a clear policy and target under the Ninth National Health Development Plan, under which important policies have been initiated.

Among the challenges described was the urgent need for standardized, comparable data to use in advocacy efforts, and linked with that, capacity-building to provide those data. Public awareness of dietary issues is low, and the perception is that underweight is the main nutritional problem.

4. Regional issues raised by the working groups on diet and on physical activity

4.1 Group one: Issues for diet in the Region

The following common constraints were identified by the working group on diet. The issues are drawn from the collective experience of the Member States.
Quality control

Many countries in the Region such as Bangladesh and Bhutan depend on imported foodstuffs. With limited availability of foodstuffs, and few or no quality-control standards in place, consumers are vulnerable to unregulated content of imported foods. There is a strong need for capacity-building in quality control, with increased interministerial coordination. The scope of existing quality control needs to be expanded beyond issues of hygiene, with coordination between agencies on responsibility for enforcement and monitoring. Uniform standardized labelling of foods would be a way of achieving this, with appropriate regional guidelines. World Trade Organization guidelines currently stipulate that no standard can be imposed on imported goods that is stricter than domestic standards. This would be a problem, for example, in Bhutan that currently has no food standards in place.

Pricing and production

Imported goods are often cheaper and more readily available than locally produced goods. In Sri Lanka, imported oranges, although expensive, are cheaper than the locally grown fruit, as declining demand for the local product has decreased supply and raised costs. In many countries, the local fresh produce is exported for income rather than for domestic consumption. Technical support for production, storage and transportation, as well as encouragement and support for local producers is needed. The issue of subsidies needs also to be addressed, at a country level, in terms of their effect on food production and consumption.

Dietary guidelines

Most countries in the Region do not have a national policy on diet. Where guidelines exist, there is confusion between whether they should be food-based or nutrient guidelines; they are not properly used and are insufficiently disseminated. There was a clear wish to strengthen this area and increase intersectoral collaboration among educational and professional associations.

Advertising/marketing/globalization

The Region is subject to aggressive marketing of many consumer products. Children are particular targets, with vending machines and advertisements directly placed in school premises. There are few restrictions on cross-border advertising, and messages are received unscreened from the host country. A similar lack of restriction and control applies to the products within the free trade-flow that exists between countries. There is a need to work positively with food industries to develop healthy foods - for example that use less salt or eliminates trans-fats - and to market them and health messages effectively. A media strategy therefore needs to be evolved, and information and education departments involved. The global strategy could usefully provide guidance on how to work with the industry.

Community counselling

In many countries there is very little awareness of the need for healthy food. Communities have little experience of dietary interventions during vulnerable periods such as during pregnancy, and little understanding of beneficial food preparation processes (to preserve valuable micronutrients) or appropriate complementary feeding. An example from Sri Lanka was given on infants being fed with sausages and sugary carbonated drinks. With raised consciousness of these issues, communities will demand greater support. Programmes to ensure sustainability of healthy diets after interventions need to be put in place and these elements incorporated into the primary health care system.

Addressing the poor

With only limited resources, people depend on the cheapest and most available food, which is often the least healthy. To reach the unreached, and especially groups such as children and pregnant women, governmental programmes such as the mid-day meal for the poorer sections of society could include healthy foods.
Civil society

Mixed messages confuse and dilute the impact of dietary information. Without coordination, diet has not been seen as an important agenda item for countries. With better coordination between agencies on common messages, diet and healthy foods can be made a priority. The Maldives provided a good example of successful coordination between the education and health sector in promotion of messages about healthy diet in schools and elsewhere.

4.2 Group two: Issues for physical activity in the Region

The issues raised were those found in common through participants’ individual presentations on the status of physical activity in their country.

Physical activity

The world health report 2002 describes the opportunities for people to be physically active in terms of four domains of their day-to-day lives: at work; for transport; in domestic duties; or in leisure time. There is considerable diversity between countries in their approaches to promoting increased physical activity: few pursue approaches that integrate diet with physical activity and health although Thailand’s Minister of Health is responsible for physical activity for health, in coordination with other ministries. Participants noted the clear difference in skill level between sport and physical activity, although links between sport and health are several and potentially very beneficial (such as tobacco-free sports).

Leadership

Responsibility for physical activity is not clearly a health issue; in many countries such activities are the responsibility of the Ministry of Sport, Education, or others. Using the pathways and expectations set up by “Move for health” on World Health Day 2002, the ministries of health should become the entry point for physical activity for health through the global strategy, working with the many other stakeholders. Messages that support physical activity with a health rationale will carry weight and credibility, because of the success of activities such as immunization and diarrhoeal disease control in the past. Several ministers have already taken the lead in physical activity, for example in Bhutan where the minister led a historic 560km cross-country walk, and in the Maldives, where the minister leads the office workout daily in office time.

Other stakeholders

These are very important for coordination, mobilization of resources and skills. There are many partners: the ministries of sport, education, labour, information and transport; local government, urban planning departments, media, nongovernmental organizations and professional associations. Partnership building and the sustaining of a multisectoral approach are key challenges for the implementation of the global strategy.

Advocacy

The Ministry of Health of each country will need to be convinced that physical activity should be included in their plans before it can be a convincing and effective leader. Ministries need clear evidence of the emergence of NCDs as the world’s greatest public health problem. For this there is a strong need to acquire reliable data, through surveillance and monitoring.

Capacity-building

Currently there are not enough people with the right skills to carry out all the necessary programmes, although work with partners will alleviate these shortages. There are both personnel and financial resource limitations to deal with.
Supporting the messages
Settings that are conducive to taking physical activity are essential. There are a wide variety of requirements, such as protected cycle lanes, parks set up for safe physical activity, access to public transport and walking lanes that encourage children to walk to school and commuters to leave their cars behind. Indonesia has had a community exercise plan since 1984, reinforced in the National Strategic Plan 2000. Behavioural change communication (BCC) is seen as an essential element in mobilizing community action to act on the health messages. Creative ways of mobilizing support are needed, for example directly accessing consumer groups.

Priorities:
♦ The establishment of the Ministry of Health as the acknowledged focal point for physical activity
♦ Networking and partnership-building
♦ Needs analysis
♦ Advocacy and lobbying
♦ Awareness programmes
♦ Planning and budgeting
♦ Implementation
♦ Monitoring and evaluation.

5. Conclusions and recommendations

5.1 Conclusions
The South-East Asia Regional Consultation on the development of a WHO global strategy for diet, physical activity and health drew the following conclusions.

- Globalization, urbanization and economic development have influenced the lifestyles of people in the developing world, particularly what they eat and how physically active they are. People choose “convenience” processed foods, and other foods that are high in saturated fats, sugar and salt. At the same time, the living environment offers fewer opportunities for routine physical activity. Together with tobacco use, unhealthy diet and physical inactivity are primary risk factors for increased morbidity and mortality from noncommunicable diseases.
- The “nutrition transition” is taking place rapidly in the South-East Asia Region and so there is an urgent need to address these risk factors.
- Throughout the Region there are insufficient reliable data on diet and physical activity practice, and in most countries there is not enough awareness about the connection between these issues and the growth in NCD among decision-makers as well as among the general population. Combined, these two aspects result in a low level of government commitment to address the problems.
- The consultation endorsed the recommendations of the WHO/FAO Joint Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases.
- The WHO global strategy to address diet and physical inactivity for the South-East Asia Region is a timely and appropriate response that could be implemented at national, regional and global levels.
5.2 Recommendations

The recommendations made by the consultation are grouped firstly into those relating to both diet and physical activity and secondly into specific recommendations on each aspect noting the “target audience” for each.

Policy development
Member States are requested to:
1. Develop a national policy for diet, physical activity and health, identifying appropriate centres of excellence, or relevant institutions, to support the development process through technical input and information from several sectors and levels.

WHO is requested to:
2. Provide advocacy support to convince governments of the need to address the emerging problems of unhealthy diet and physical inactivity and obtain their commitment to action on NCD prevention and control, through the medium of a national policy for diet, physical activity and health.

Implementation
Member States are requested to:
3. Establish an intersectoral coordinating mechanism, such as a national steering/technical committee on diet, physical activity and health, to guide and implement the strategy.
4. Give the Ministry of Health a leading role in strategy implementation, also drawing in other related government and nongovernmental agencies.
5. Make a strong commitment to address the emerging health problems in their country, focusing on primary NCD prevention through the promotion of healthy lifestyles.
6. Discuss/plan with mass media achieving sufficient coverage to convey appropriate and effective messages about healthy lifestyles, including diet and physical activity.

WHO is requested to:
7. Provide support as required.

Data collection, monitoring and evaluation
Member States are requested to:
8. Collect and analyse standardized data on NCD risk factors using the WHO STEPwise approach, ensuring sustainability, for example, by including questionnaires in the existing national health/demographic surveys. Appropriate indicators should also be identified and standardized.
9. Establish and strengthen the national surveillance systems on behavioural risk factors especially on diet and physical activity and on levels of related risk factors.

WHO is requested to:
10. Provide technical support for data collection, monitoring and evaluation.

Networking and partnership
Both Member States and WHO are requested to:
11. Initiate and facilitate dialogue with the private sector and civil society to promote the aims of the global strategy and to mobilize support for actions such as the establishment of regional and national networks for NCD prevention.
Financing
Member States are requested to:

12. Consider several financing mechanisms for health-promoting activities, including allocating a proportion of the national budget and sourcing innovative health promotion funds, recognizing health promotion as a part of the national development plan.

WHO is requested to:

13. Continue to advocate for health to be recognized as a core of sustainable and equitable development, with health promotion being a very important tool for healthy living.

Capacity-building
WHO is requested to:

14. Provide the appropriate technical support to build national capacity in planning and implementing the global strategy.

15. Build knowledge and skills in the areas of scientific knowledge about NCD prevention, and in advocacy and behavioural change communication skills.

Research
WHO is requested to:

16. Provide technical support for operational research that reinforces programme implementation. Important topics may include:
   o Impact of globalization on diet and physical activity.
   o Identification and acceptability of locally available, culturally appropriate health promoting foods and facilities for physical activity.
   o Evaluation of which community-based and national interventions have been effective and the lessons learnt.

Specific recommendations on diet

Availability of food within the country, import and quality control
Member States are requested to:

17. Ensure an adequate supply of healthy food at an affordable price, by the most appropriate means, either through local production and/or importation.

18. Strengthen the quality-control system of imported and locally produced food to ensure that it meets required standards. This shall also include the requirement for standard labelling of food ingredients on packaging.

19. Establish an intersectoral coordination mechanism among the ministries of health, agriculture, industry, commerce, finance and the interior to address the above issues effectively.

WHO is requested to:

20. Facilitate the development/strengthening of global policy to ensure an adequate supply of healthy foods.


**Pricing and production**

Member States are requested to:

21. Provide technical support to the relevant sectors, especially farmers, for increasing food production, and improving the storage and transportation of food products.
22. Introduce a crop insurance scheme for vegetable and fruit production and marketing.
23. Establish and implement a pricing and distribution policy, for example, using a community cooperative system to ensure fair pricing between farmers and consumers and equitable distribution.
24. Promote and support initiatives for self-sufficiency in fruits and vegetables at household level, for example, through kitchen gardening.

WHO is requested to:

25. Provide support and work with Member States to increase food production and to support improvements in the technology applied to food storage and transportation.

**Dietary guidelines**

Member States are requested to:

26. Identify specialized institutions in the area of diet to develop or improve the national food-based dietary guidelines.
27. Consult frequently with communities and other relevant stakeholders to make sure that the guidelines are practicable and specific to the geographical/cultural area.
28. Publicize the guidelines through relevant governmental and nongovernmental organizations and evolve effective mechanisms for wider dissemination of the guidelines through advocacy, social marketing, collaboration between professional agencies and other strategies.
29. Monitor and evaluate the use of the guidelines.

WHO is requested to:

30. Provide technical support to the development of national food-based dietary guidelines, including support for national studies that identify the healthy diets available in different locations.

**Community counselling**

Member States are requested to:

31. Create community consciousness through community and targeted education programmes using a healthy settings approach to promote healthy foods in order to generate demand.

WHO is requested to:

32. Provide support for developing and testing models of community empowerment, involving local food production, nutrition education and enhanced consumer consciousness.

**Addressing the poor**

Member States are requested to:

33. Increase accessibility to healthy food at an affordable price, for example, through subsidies, complementary feeding programmes and the mid-day meal scheme for schoolchildren.
34. Introduce healthy food into the existing government programmes like the public distribution system.

WHO is requested to:

35. Facilitate the integration of healthy diet policies into the national development programmes.
Quality control
Member States are requested to:

36. Encourage relevant quality-control agencies reviewing elements of hygiene to consider the content of food items especially the amounts of salt and fat present.
37. Develop or establish standardized labelling of food products.
38. Establish effective monitoring systems for the above.

WHO is requested to:

39. Provide technical support for quality control of food products, strengthening surveillance and monitoring of implementation.

Interaction with food industries
Member States are requested to:

40. Interact with food industries to promote the production and marketing of healthy food, for example, minimizing the use of harmful saturated fats, high sugar and salt.
41. Control the advertising and marketing of “unhealthy” food products (especially those targeted at children) and misleading health claims.
42. Promote and support marketing of healthy foods.

WHO is requested to:

43. Initiate dialogue with multinational food industries and other agencies to promote the production of healthy food and build an understanding of what goes into a healthy diet and to reduce the unhealthy components of existing food products.

Specific recommendations on physical activity

Focal point and cross-sectoral collaboration
Member States are requested to:

44. Identify a focal point for promotion of physical activities, within the context of health promotion, preferably within the Ministry of Health, building on activities and pathways such as were created by “Move for health”.
45. Establish networking/partnerships in government sectors that may involve several ministries, for example, the Ministry of Urban Planning, the Ministry of Transport, the Ministry of Education, the Ministry of Rural Development, the Ministry of Sports, the Ministry of Information, as well as municipalities, civil society and nongovernmental organizations.

WHO is requested to:

46. Facilitate and support the promotion of the Ministry of Health as leader in this process and actively support the development of cross-sectoral collaboration across a wide spectrum of interested parties.

Supportive environments for physical activity
Member States are requested to:

47. Provide a conducive environment with suitable infrastructure to encourage and facilitate physical activity, for example, making safe bicycle and pedestrian lanes, improving public transportation to discourage the use of cars, and encouraging people to walk to public transport stops. At workplaces, staff should be provided with facilities and encouraged to be physically active, for example, walking up stairs, doing aerobic dance or playing sports.
48. Strengthen schemes like school health programmes and health-promoting schools by including teaching and practice of healthy lifestyles, and provide enough facilities for physical activities for schoolchildren and staff.
Policy on the promotion of physical activity

Member States are requested to:

49. Develop a clear national policy to ban sponsorship by “unhealthy” food, drink and tobacco industries for competitive sports events.
50. Promote the concept of sport as being more than just a competitive activity but also an opportunity for all to be physically active.
51. Promote dissemination of consistent messages and examples of good practices on diet, physical activities and health both in their own country and, through sharing plans and experiences, in other countries.

WHO is requested to:

52. Provide support for the development of effective messages and the gathering of information on “best practices” from countries, sharing that information within the Region.

Physical activity guidelines

Member States are requested to:

53. Prepare and make available national guidelines on appropriate physical activity for different age groups in different settings or environments. Organization through groups or local clubs will help to make physical activity an attractive, sustainable lifestyle option.
54. Promote the use of guidelines through different channels, for example, through health facilities, mass media, schools, professional bodies, civil societies and nongovernmental organizations.

WHO is requested to:

55. Develop guidelines on physical activity appropriate to the regional context.
ANNEX  List of participants

Member States

**Bhutan**
Ms Karma Tshering, Nutritionist, Public Health Division, Nutrition Program (*Rapporteur working group on diet and nutrition*)
Mr Rinzin Namgay, Personal Secretary to the Honourable Minister, Ministry of Health and Education, Thimphu (*Rapporteur working group on physical activity*)

**India**
Dr KK Talwar, Professor and Head, Department of Cardiology, All India Institute of Medical Sciences, New Delhi (*Chairman; Chair, working group on diet and nutrition*)

**Indonesia**
Ir (Ms) Siti Zainab, Sub-Directorate of Food Consumption, Directorate of Community Nutrition, D/G of Community Health, Ministry of Health, RI Jakarta
Drg (Mr) Hermanto, Sub-Directorate of Sports Health, Directorate of Community Health, D/G of Community Health, Ministry of Health, RI Jakarta
Drg (Ms) Diah Erti, Center for Health Promotion, Ministry of Health, RI Jakarta

**Maldives**
Ms Hinna Khalid, Project Officer, Department of Public Health, Ministry of Health

**Myanmar**
Dr Aye Aye Thaw, Deputy Assistant Director (Nutrition), Department of Health, Ministry of Health (*Rapporteur*)
Dr Lwin Lwin Yi, Team Leader (Nutrition), Nutrition Team, Bago Division (*Chair, working group on physical activity*)

**Sri Lanka**
Dr (Mrs) GL Hapugoda, Director, Health Education Bureau, Colombo (*Co-Chair*)
Dr M Yogivinayakam, Medical Officer, Health Education Bureau, Colombo

**Thailand**
Dr Somchai Leetongin, Director, Division of Physical Activity and Health, Department of Health, Ministry of Public Health (*Rapporteur*)
Dr Suwat Kusolchariya, Director, Regional Health Promotion Centre 2, Saraburi Province, Department of Health, Ministry of Public Health
Dr Banchong Withayametha, Senior Specialist in Public Health (Nutrition), Regional Health Promotion Center 12, Yala Province, Department of Health, Ministry of Public Health

**RESOURCE PERSONS**
Professor K Srinath Reddy, Cardiothoracic Centre, All India Institute of Medical Sciences, New Delhi (*Technical presentation: Diet, physical activity and heart diseases*)
Professor SK Kapoor, Medical Officer-in-charge, Comprehensive Rural Health Services Project, All India Institute of Medical Sciences, Civil Hospital, Ballabgarh (*Technical presentation: Community-based integrated NCD prevention project*)
WHO SECRETARIAT
Dr K Anand, Short-term Professional, Noncommunicable Diseases, Surveillance, WHO Regional Office for the South-East Asia Region, New Delhi, India (Technical presentation: Regional status on diet, physical activity and health - data)
Dr Rukhsana Haider, Regional Adviser, Nutrition for Health & Development & Food Safety, WHO Regional Office for the South-East Asia Region, New Delhi, India
Ms Ingrid Keller, Technical Officer, Noncommunicable Disease Prevention and Health Promotion, WHO, Geneva, Switzerland (Technical presentation: Promotion of fruit and vegetable consumption)
Dr Pekka Puska, Director, Noncommunicable Disease Prevention and Health Promotion, WHO, Geneva, Switzerland (Technical presentation: Towards a global strategy on diet, physical activity and health)
Dr Jerzy Leowski, Regional Adviser, Noncommunicable Diseases, WHO Regional Office for the South-East Asia Region, New Delhi, India (Technical presentation: Surveillance Regional progress in implementing the NCD prevention programme)
Mr David Porter, Media Officer, WHO, Geneva, Switzerland
Dr Sawat Ramaboot, Coordinator, Health Promotion, WHO Regional Office for the South-East Asia Region, New Delhi, India (Technical presentation: Regional status on diet, physical activity and health - National plan, policy and activities)
Ms Alison Rowe, report writer
Dr Paramita Sudharto, Medical Officer, WHO Representative, Nepal
Dr Cherian Varghese, National Professional Officer – Social Change and Noncommunicable Diseases, WHO Representative Office, India