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Comparative analysis of food and nutrition policies in WHO European Member States

Summary Report

Nutrition and Food Security Programme
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ABSTRACT

In line with the First Action Plan for Food and Nutrition Policy for the WHO European Region, 2000-2005, endorsed by the Regional Committee for Europe in 2000, Member States are encouraged to develop sound and sustainable food and nutrition policies. Several surveys on food and nutrition policy were carried out between 1994 and 1999. This report presents the data collected during these surveys. The aim is to compare the situation of food and nutrition policies in the Region and to show trends. The analyses present a broad picture of policy development and nutritional health in the WHO European Region. Countries where national food and nutrition coordination bodies exist appear to be the most effective in developing and implementing policies. Both a summary report (presenting data by sub-region) and a full report (presenting information by country) are available.

Keywords

COMPARATIVE STUDY
NUTRITION POLICY
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EUROPE
EUROPE, EASTERN
EUROPE, SOUTHERN
COMMONWEALTH OF INDEPENDENT STATES
BALTIC STATES

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Summary

In September 2000, the WHO Regional Committee for Europe, in which all 51 Member States of the WHO European Region are represented, endorsed the First Action Plan for Food and Nutrition Policy, WHO European Region, 2000-2005. The resolution recommends that Member States implement the Action Plan for the European Region of WHO for 2000-2005 and report on progress at a ministerial conference to be held in 2006.

The Nutrition and Food Security programme works in the WHO European Region to raise awareness of nutrition policy on the political agenda. The programme encourages and supports WHO Member States to develop sound and sustainable food and nutrition policies.

Several surveys on food and nutrition policy were carried out between 1994 and 1999. This report presents the data collected during these surveys. The aim is to compare the situation of food and nutrition policies in the Region and to show trends. The analyses present a broad picture of policy development and nutritional health in the WHO European Region.

This report provides a summary of: a region-by-region comparison of food and nutrition policies in the WHO European Member States in 1994/95 and 1998/99; a comparison of data on Body Mass Index (BMI) and dietary intake between some WHO European Member States; a situation analysis of the European Member States on the basis of their country reports¹; and conclusions and recommendations for future actions in the WHO European Region on food and nutrition policy

- 16 Member States reported having administrative structures for implementing food and nutrition strategies;
- 28 reported having a nutrition council or equivalent technical advisory body;
- 36 reported having national Recommended Nutrient Intake or equivalent tables;
- 27 reported having national dietary guidelines; and
- 17 reported collecting national dietary intake data, using a variety of methods.

Countries where national food and nutrition co-ordination bodies exist appear to be the most effective in developing and implementing policies. A co-ordinating body advises the government on developing, implementing, monitoring and evaluating inter-sectoral policies and their associated guidelines and action plans.

In addition, a national co-ordinating body can be responsible for ensuring the consistency of information given by different sectors to the public, facilitate and respond to public interest about food issues and advise government on how to meet its international commitments.

¹ Submitted at the WHO Consultation on "Development of the First Food and Nutrition Action Plan for the WHO European Region", Malta 8-10 November 1999

This report includes:

- A comparative analysis of food and nutrition policies and plans of action in WHO European Member States was made on the basis of questionnaires returned to the Nutrition and Food Security Policy programme in 1994/95 and 1998/1999.
- A comparison of national BMI and dietary intake data from WHO European Member States returned to the Nutrition and Food Security Policy programme in 1998/99.
- A situation analysis of WHO European Member States based on reports submitted to the Nutrition and Food security Policy programme in 1999.

Introduction

In September 2000, the WHO Regional Committee for Europe, in which all 51 Member States of the WHO European Region are represented, endorsed the First Action Plan for Food and Nutrition Policy, WHO European Region, 2000-2005. The resolution recommends that Member States implement the Action Plan for the European Region of WHO for 2000-2005 and report on progress at a ministerial conference to be held in 2006.

The Nutrition and Food Security programme works in the WHO European Region to raise awareness of nutrition policy on the political agenda. The programme encourages and supports WHO Member States to develop sound and sustainable food and nutrition policies. Several surveys on food and nutrition policy were carried out between 1994 and 1999. This report presents the data collected during these surveys. The aim is to compare the situation of food and nutrition policies in the Region and to show trends. The analyses presents a broad picture of policy development and nutritional health in the WHO European Region.

WHO European Member States were grouped into eight geographic sub-regions to facilitate comparative analysis and interpretation: Southeast Europe (SEE), Baltic Region, Central Asian republics (CAR), countries of Central and Eastern Europe (CEE), the Commonwealth of Independent States (CIS), Nordic countries, Southern European countries (SE) and Western European countries (WE).

Table 1: Member States in the WHO European Region by geographic grouping included in this analysis.

SEE	BALTIC	CAR	CEE	CIS	NORDIC	SE	WE
Albania	Estonia	Kazakhstan	Bulgaria	Armenia	Denmark	Andorra	Austria
Bosnia & Herzegovina	Latvia	Kyrgyz Republic	Czech Republic	Azerbaijan	Finland	Greece	Belgium
Croatia	Lithuania	Tajikistan	Hungary	Belarus	Iceland	Israel	France
Former Yugoslav Republic of Macedonia		Turkmenistan	Poland	Georgia	Norway	Italy	Germany
Slovenia		Uzbekistan	Romania	Rep. of Moldova	Sweden	Malta	Ireland
			Slovakia	Russian Fed.		Monaco	Luxembourg
				Ukraine		Portugal	Netherlands
						San Marino	Switzerland
						Spain	United Kingdom
						Turkey	

This report provides a summary of: a comparison of food and nutrition policies in the WHO European Member States in 1994/95 and 1998/99; national data on Body Mass Index (BMI) and dietary intake in some WHO European Member States; a situation analysis of the European Member States on the basis of their country reports²; conclusions and recommendations for future actions in the WHO European Region on food and nutrition policy.

Intersectoral Food and Nutrition Policy Development

To assist Member States in developing and implementing national food and nutrition action plans, WHO developed a 3-day training module “Intersectoral food and nutrition policy development – a training manual for decision makers”. This training module was implemented in the following sub-regions: southeast Europe, Baltic and Nordic countries and southern Europe. A total of 28 countries participated in 7 training workshops (Full reports are available from the Nutrition and Food Security programme):

Southeast Europe: The first workshop on development of national Food and Nutrition Action Plans in southeast Europe was held in Slovenia, June 2000 and participants came from Albania, Bulgaria, Bosnia & Hercegovina, Croatia, Hungary, Poland, Slovenia and the former Yugoslav Republic of Macedonia. Participants were national representatives from many different sectors including health and agriculture. A second workshop, with as far as possible the same national representatives plus Czech Republic, Romania, Slovakia and Yugoslavia, took place in Bulgaria, October 2001. A third workshop took place in Croatia, September 2002 when 12 countries presented their progress on development of national action plans. The First Technical Workshop of the South East Europe Nutrition Project took place in November 2002, under the auspices of the Stability Pact for SEE Social Cohesion Initiative. This meeting finalized the project proposal entitled “Developing and strengthening food and nutrition strategies to prevent cardiovascular diseases in South-East Europe”. Nine countries of the SEE region participated.

Baltic countries: participants from Estonia, Latvia and Lithuania took part in the first workshop on the development of national food and nutrition action plans for the Baltic countries in Latvia, August 2000. Participants were national representatives from different sectors including health and agriculture. A second workshop was carried out with as far as possible the same national representatives in June 2001 to evaluate progress and advise on the way forward. A third workshop took place in Estonia in June 2002 when Estonia, Latvia and Lithuania presented their final drafts of national food and nutrition action plans.

Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) participated in the Baltic workshops with the aim of supporting the Baltic countries and sharing their experiences in the field of nutrition policy development. A proposal was developed to set up a Nordic/Baltic Public Health Nutrition Network. This proposal was successfully submitted to the Nordic Council of Ministers and funding is therefore secured for the first 3 years (2002-2005).

² Submitted at the WHO Consultation on “Development of the First Food and Nutrition Action Plan for the WHO European Region”, Malta 8-10 November 1999

Southern Europe: A workshop was held for countries in southern Europe in Rome, March 2002 and Andorra, Greece, Israel, Italy, Malta, Portugal, Spain, Turkey were invited to participate. Participants were national representatives from different sectors including health and agriculture.

Russian Federation: the Nutrition programme worked with the national authorities to develop a Russian Food and Nutrition Action Plan for different Regions of Russia. The "Arkhangelsk" declaration was endorsed by delegates from around 20 Regions in October 2000. Two Regions, Murmansk and Arkhangelsk, are implementing their Regional Food and Nutrition policy, assisted by funding from the Norwegian government (Barents Initiative).

Development of national food based dietary guidelines.

This document "Comparative analysis of nutrition policies" is supported by an additional survey on food-based dietary guidelines in WHO European Member States that was carried out in 2002. The full report on status of Food Based Dietary Guidelines in Member States is available from the Nutrition and Food Security programme.

An unhealthy diet combined with physical inactivity increase the risk for non-communicable diseases (NCD) enormously. NCD such as cardiovascular diseases, cancer, hypertension, obesity and type 2 diabetes are increasing within the European Region. There is a clear need for political commitment in developing adequate nutrition policies. These should help prevent NCD through the provision of enough healthy, affordable food, especially fresh fruit and vegetables in addition to the reduction of nutritional deficiencies.

Part of this political action should include the translation of nutrient population goals into food-based dietary guidelines (FBDG) at the national level. It is fundamental that the Ministry of Health endorse FBDG that are consistent and easily understood. Many primary care experts and other health specialists have the opportunity to disseminate information on healthy eating.

The aim of the survey in 2002 was to assess the existence of national, government-endorsed food-based dietary guidelines in Member States of the WHO European Region. Of the 48 participating countries, 25 reported having national, government-endorsed food-based dietary guidelines; 8 reported having national food-based dietary guidelines that were either in preparation and/or not yet endorsed by the government; 6 reported not having food-based dietary guidelines and 9 did not reply to the questionnaire.

The findings of this survey illustrate important discrepancies from country to country in national food-based dietary guidelines. Further effort will be required in the development of dietary guidelines as well as in the implementation of national nutrition policies before the ministerial conference in 2006.

Meeting of all Member States, Greece, February 2003

A Meeting of Nutrition Counterparts supported by the Greek Ministry of Health in February 2003, during the Greek Presidency of the EU, provided the opportunity to carry out a mid-term evaluation of progress in implementing the Action Plan.

All 50 national Nutrition Counterparts, officially nominated by their ministries of health, in the WHO European Region were invited to Greece in February 2003. Progress was discussed regarding development of food and nutrition action plans in the European Region (see report of the meeting of nutrition counterparts in the WHO European region, Athens, 28 February – 2 March 2003). This meeting provided an opportunity to plan for the period up to the Ministerial Conference in 2006.

Data sources

The information presented here is from surveys on nutrition policy, body mass index (BMI) and dietary intake; and country reports.

Nutrition policy

The Nutrition and Food Security programme of the WHO Regional Office for Europe carried out surveys on national nutrition policy in European Member States twice: 1994-1995 and 1998-1999. Table 2 shows which countries responded to the 1994/5 and 1998/1999 surveys. Three countries replied in 94/95 compared with 40 out of a possible 50 in 1998/9.

Table 3 shows the numbers of countries in each region (Southeast Europe SEE, Baltic, central Asian republic CAR, Central and Eastern Europe CCEE, Commonwealth of Independent States CIS, Nordic, Southern Europe SE, Western Europe WE) having nutrition policies in 1999.

1. 29 Member States reported having documents concerning food and nutrition policy;
2. 16 Member States reported having an administrative structure responsible for implementation of food and nutrition policy;
3. 28 Member States reported having an advisory scientific body to assist on technical issues;
4. 26 Member States reported having regular government-initiated collaboration between parties responsible for: food production and distribution, food control and regulation, health promotion and nutrition education;
5. 28 Member States reported having regular consultation between the Ministry of Health and the Ministry of Agriculture on food and nutrition policy.

Table 2: Completed questionnaires submitted by WHO Member States

Member State	Quest. 1994/95	Quest. 1998/99
Southeast Europe		
Albania		X
Bosnia & Herzegovina		X
Croatia	X	X
Republic of Macedonia	X	X
Slovenia		X
Baltic Region		
Estonia	X	X
Latvia	X	X
Lithuania	X	X
CAR		
Kazakhstan		X
Kyrgyz Republic	X	X
Tajikistan	X	
Turkmenistan		
Uzbekistan		X
CEE		
Bulgaria	X	X
Czech Republic	X	X
Hungary	X	X
Poland		X
Romania	X	
Slovakia	X	X
CIS		
Armenia		
Azerbaijan	X	X
Belarus		X
Georgia		
Republic of Moldova		X

Member State	Quest. 1994/95	Quest. 1998/99
Russian Federation	X	
Ukraine		X
Nordic Countries		
Denmark	X	X
Finland	X	X
Iceland	X	X
Norway	X	X
Sweden	X	X
Southern European Region		
Andorra		
Greece	X	X
Italy	X	X
Israel		X
Malta	X	X
Monaco		
Portugal	X	X
San Marino		
Spain	X	
Turkey	X	X
Western European Region		
Austria		X
Belgium	X	X
France	X	X
Germany	X	X
Ireland	X	X
Luxembourg	X	X
Netherlands	X	X
Switzerland	X	X
United Kingdom	X	X
TOTAL	33	40

Table 3: Number of countries, by sub-region, with government-initiated action to implement and monitor nutrition policy, as per 1999

Sub-region (total no. of countries)	Food and nutrition policy document	Government-initiated administrative structure to implement the policy	Advisory body to assist the government on technical issues	Regular government-initiated intersectoral collaboration	Regular collaboration between MoH and MoAg
SEE (5)	4	2	2	4	5
Baltic (3)	2	1	2	1	1
CAR (5)	3	2	2	3	3
CEE(6)	4	3	2	4	4
CIS (7)	3	1	2	2	3
Nordic (5)	4	1	5	3	2
SE (10)	4	4	6	4	4
WE (9)	5	2	7	5	6
Totals	29	16	28	26	28

Source: based on responses from WHO survey to all Member States (total responses 40 out of 50 possible countries)

Over half of the countries of the Region have advisory bodies, able to provide scientific advice to politicians and policy-makers, with the Nordic Region most fully developed in this respect. Less than one third of Member States reported having administrative structures to ensure policy is implemented. Therefore, this is an area where capacity needs to be strengthened

Trends between 1994 and 1999

An overview of trends in food and nutrition policies is presented in Table 4. Slightly more Member States reported having advisory bodies responsible for providing scientific advice to national policy-makers in 1998/99 compared with 1994/95. The CAR and CEE Member States showed the greatest increase of advisory bodies established by 1998/99. In the Southern European Member States a large decline in advisory bodies with a written mandate was observed in 1998/99 compared with 1994/95. In 1998/99, only 16 Member States reported that the advisory body had a budget to cover its activity.

Similar numbers of countries reported having collaboration between different sectors in 1994/95 compared with 1998/99. More than half of Member States reported having regular consultations between the Ministries of Agriculture and Health (68% of responding countries). Member States in the Western European countries appear to have more collaboration across different sectors than the S.E. European, CEE and CAR Member States.

Most Member States have recommended nutrient reference values and dietary guidelines. In 1999, 36 Member States (90%) of the responding countries reported having recommended nutrient reference values. However, in many countries these are in need of

updating. In 1999, 83% of responding Member States reported having dietary guidelines, which is an increase of 13% since 1995. In 1995 only two S.E. European countries had nutrient reference values and dietary guidelines, whereas in 1999 all reported having recommended nutrient reference values and all, but one, had dietary guidelines.

Generally, the Nordic countries and Western Europe did not report large differences in the answers reported in the questionnaire in 1999 compared with 1995, whereas more changes are observed in the Member States of the S.E. European, CEE and CAR sub-regions.

Table 4: Overview of food and nutrition policy trends in the WHO European Member States 1994-1999³

Questions	Yes		No		No information	
	1994/5	1998/9	1994/5	1998/9	1994/5	1998/9
FOOD AND NUTRITION POLICY, PLAN OF ACTION OR STRATEGY						
Does country/Region have a policy document adopted by a political body concerned with nutrition ⁴ ?	24	28	9	10	17	12
ADVISORY OR ADMINISTRATIVE STRUCTURE						
Has a special <i>administrative</i> structure responsible for the implementation of the food and nutrition policy been set up?	21	18	11	8	18	24
Does country have a nutrition council/advisory structure/body responsible for providing scientific advice to national policy-makers?	25	27	8	10	17	13
Does advisory body have a written mandate or terms of reference?	17	17	7	7	26	26
Does advisory body have a budget to cover its activities?	n/a	16	n/a	10	n/a	24
INTERDISCIPLINARY COLLABORATION						
Is there any form of regular government-initiated collaboration between parties responsible for: food production, manufacture & sales, control & legislation and nutrition education?	25	26	6	10	19	14
Is there any form of regular consultation between the Ministry of Health & the Ministry of Agriculture on matters related to nutrition?	n/a	27	n/a	9	n/a	14
EXAMPLES OF NORMATIVE ACTION						
Does country have a set of recommended nutrient reference values (physiological norms)?	29	36	4	1	17	13
Has a population representative dietary assessment been made in the last 10 years?	24	24	9	12	17	14
Does country have dietary guidelines with/without food selection guides?	23	33	10	3	17	14

³ Data from questionnaires submitted to WHO European Regional Office, Copenhagen by WHO European Member States in 1994/95 (33 Member States responded of 49 that questionnaire was sent to) and 1998/99 (40 Member States responded of 50 that questionnaire was sent to).

⁴ It may be a document only concerned with nutrition or it may be part of a document concerned with other policy areas

Country reports

A country report was compiled by each delegation attending the WHO Consultation on the “Development of the First Food and Nutrition Action Plan for the WHO European Region”, Malta 8-10 November 1999. A total of 37 country reports were submitted (response rate 74%) to the Nutrition and Food Security programme, WHO Regional Office for Europe. Table 5 shows that 37 countries submitted country reports.

Delegates were requested to submit information according to the following criteria: Nutrition policy; NCD and related risk factors; Inequity and poverty leading to lack of food and nutrient deficiency; Infant, young children and maternal nutrition; Sustainable food production and distribution; and food safety.

The country reports provided a very diverse content and quantity of data. This may indicate the level of availability of data and priority areas of different countries. The considerable variety of information provided by the Member States is not surprising as the Region consists of such a diverse set of countries at different economic and social development levels.

The major cause of death in the Region is cardiovascular disease and cancer, which is likely to be linked to dietary patterns low in fruit and vegetables and high in saturated fat. A few Member States provided comprehensive data on mortality and morbidity of non-communicable diseases. Previously Member States have been more concerned with nutritional deficiencies than the prevalence of non-communicable diseases. Two micronutrient deficiencies remain a problem and have detrimental effects on public health in the Region, namely deficiencies of iodine and iron.

Poverty is widespread in many countries resulting in food insecurity and consumption of unhealthy monotonous diets. In the Baltic and CIS a large dependency by low income groups on home-grown produce is reported. In contrast, the Nordic countries reports that not poverty, but a lack of education are highly correlated with adverse dietary habits.

Many Member States lack data on infant and maternal health. However, it is evident that low breastfeeding rates and poor weaning practices are common throughout the Region. The Nordic countries have the highest breastfeeding rates, but even here there is scope for improvement. In many sub-regions, including the Baltic, CEE, CAR CIS and Southern Europe, there are concerns about aggressive promotion of commercial breast milk substitutes by the industry.

In many of the former Soviet block countries that have undergone socio-economic transitions, this has affected food availability and public health adversely. Additionally, it is commonly reported that declining agricultural productions are a result of lack of financial support and expertise and need for improved agricultural methods.

Table 5: Country reports submitted by WHO Member States, 1999.

Member State	Country Report 1999
Southeast Europe	
Albania	X
Bosnia & Herzegovina	X
Croatia	X
Republic of Macedonia	X
Slovenia	
Baltic Region	
Estonia	X
Latvia	X
Lithuania	X
CAR	
Kazakhstan	
Kyrgyz Republic	X
Tajikistan	X
Turkmenistan	X
Uzbekistan	X
CEE	
Bulgaria	X
Czech Republic	X
Hungary	X
Poland	X
Romania	X
Slovakia	X
CIS	
Armenia	X
Azerbaijan	
Belarus	X
Georgia	X
Republic of Moldova	X

Member State	Country Report 1999
Russian Federation	X
Ukraine	X
Nordic Countries	
Denmark	X
Finland	X
Iceland	X
Norway	X
Sweden	X
Southern European Region	
Andorra	
Greece	
Italy	
Israel	
Malta	X
Monaco	
Portugal	X
San Marino	
Spain	
Turkey	X
Western European Region	
Austria	X
Belgium	
France	X
Germany	X
Ireland	X
Luxembourg	
Netherlands	
Switzerland	X
United Kingdom	X
TOTAL	37

Body Mass Index (BMI)⁵

The BMI data received from the WHO European Member States indicates that overweight and obesity is a general problem in the European Region. The greatest prevalence was observed in the Southern Europe, while underweight was most frequent in Central Asian republics.

The BMI data received from Member States had several limitations, making comparison difficult. For instance, sample size was occasionally very small or not indicated at all; not all Member States use the WHO recommended BMI classifications; the year of data collection was not always reported and the collection period, which was reported was very broad (1984-1999); and the anthropometric data were not always measured by investigators, but self-reported which may have created an underestimation of the prevalence of obesity. Despite these shortcomings, the data clearly suggests that overweight and obesity are a serious public health problem throughout the Region. If this trend continues, it will have profound economic and health consequences for the population in the WHO European Region due to the association between non-communicable diseases and overweight and obesity (*reference: Obesity: preventing and managing the global epidemic. WHO Technical Report Series 894, 2000*).

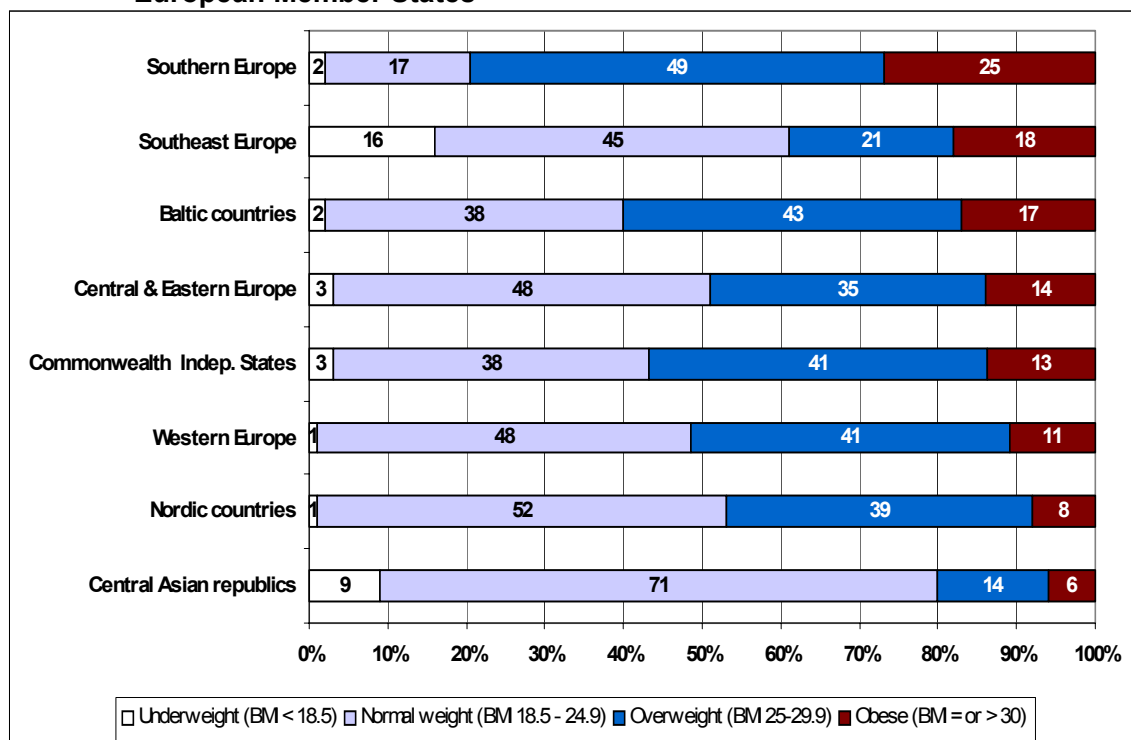
The high prevalence of overweight and obesity in the Region is likely to be linked to sedentary lifestyles (*reference: Obesity: preventing and managing the global epidemic. WHO Technical Report Series 894, 2000*) in conjunction with high fat intake and low consumption of fruit and vegetables as suggested by the dietary intake data presented here. No Member States reported having dietary fat intake below the recommended 30% of dietary energy or consumption of fruit and vegetables above the recommendation of 600g daily.

The dietary intake data were collected by different methods and there is a lack of information regarding sampling method, making judgement of data and comparison difficult. The 24-hour recall method was used by the majority of the Member States probably because the method is relatively inexpensive and easily carried out. A single 24-hour recall is appropriate to assess average intakes of food and nutrients for large population groups, except for people with poor memories and children below 10 years of age. (*reference: EFCOSUM; European Journal of Clinical Nutrition, Vol. 56, Supplement 2, May 2002*).

Assessment of dietary intake and BMI are essential for identifying populations at risk and formulating food and nutrition policies to reduce those at risk. Hence, knowledge of dietary patterns and BMI are important for developing intervention programmes and for monitoring the success of programmes and policies in the Region.

⁵ BMI data were not received from the following countries: Albania, Bosnia & Herzegovina, Croatia, Slovenia, Estonia, Kazakhstan, Kyrgyzstan, Tajikistan, Czech Republic, Poland, Romania, Armenia, Azerbaijan, Georgia, Republic of Moldova, Ukraine, Finland, Iceland, Norway, Andorra, Israel, Italy, Monaco, San Marino, Spain, Turkey, Austria, Belgium, Ireland, and Luxembourg.

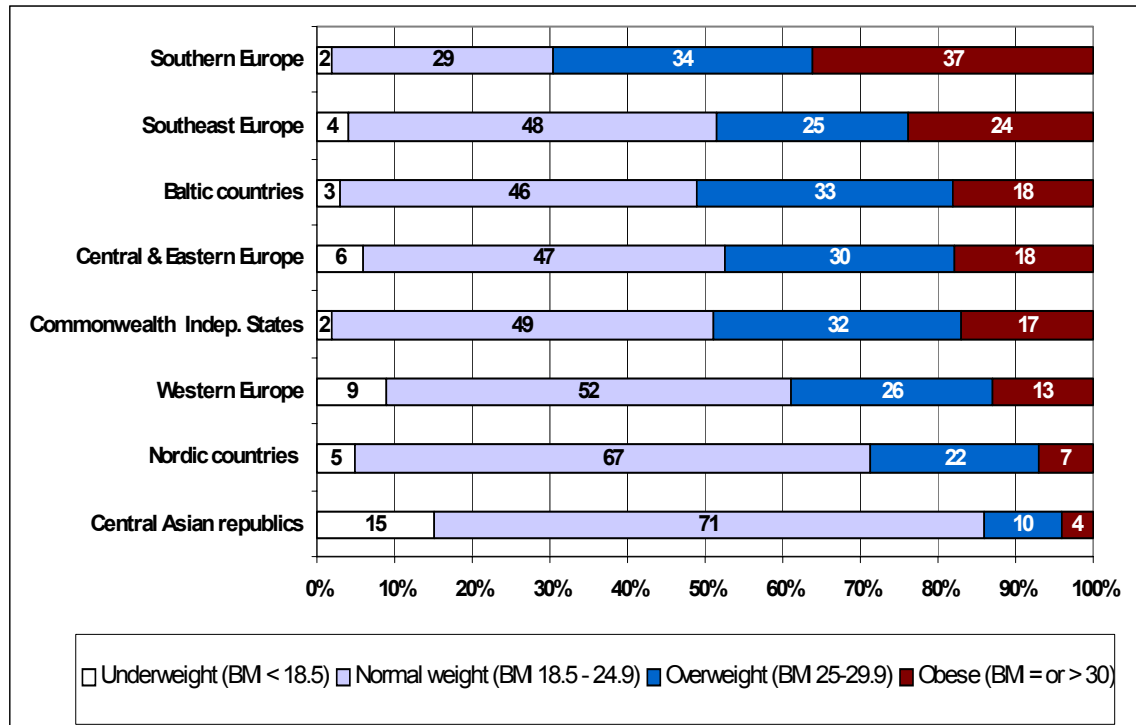
Figure 1 Distribution of Body Mass Index in males aged 19-64 years[‡] in WHO European Member States*



[‡] Except: Bulgaria 18-74, Hungary 18+, UK 16-64, and Malta 25-64.

*Data source: National surveys from S.E. Europe (Macedonia), Baltic (Latvia and Lithuania), CAR (Tajikistan and Uzbekistan), CEE (Bulgaria, Hungary and Slovakia), CIS (Belarus and Russian Federation), Nordic (Denmark and Sweden), S. Europe (Greece and Malta), W. Europe (France- self-measured data, Germany, Switzerland and UK).

Figure 2 Distribution of Body Mass Index in females aged 19-64 years^Ψ in WHO European Member States*



Except: Bulgaria 18-74, Hungary 18+, UK 16-64, and Malta 25-64.

*Data source: S.E. Europe (Macedonia), Baltic (Latvia and Lithuania), CAR (Tajikistan and Uzbekistan), CEE (Bulgaria, Hungary and Slovakia), CIS (Belarus and Russian Federation), Nordic (Denmark and Sweden), S. Europe (Greece and Malta), W. Europe (France- self-measured data, Germany, Switzerland and UK).

The highest prevalence of overweight and obesity is observed in the Southern Europe, followed by CEE and Baltic sub-regions. In Southern Europe up to 74% of males and 71% of females are overweight (BMI >25) and 25% of males and 37% of females are obese (BMI >30). The lowest prevalence of overweight and obesity is observed in the CAR sub-region, where underweight is also most widespread.

The data show that overweight is more prevalent among males than females, especially in the younger age categories, while obesity is more common among females. Data suggest that overweight and obesity increase with age.

Dietary intake

Dietary data was not received or was not readily comparable from Albania, Bosnia and Herzegovina, Kyrgyzstan, Tajikistan, Turkmenistan, Poland, Romania, Belarus, Georgia, Russian Federation, Andorra, Greece, Israel, Malta, San Marino, Spain, Germany, Ireland, Luxembourg, Switzerland, and United Kingdom. The method used for estimating dietary intake varied between the Member States (Table 6). The majority of Member States used the 24-hour recall method, except in the Nordic region where food records were used. Several Member States did not provide information on sample size and year of data collection. Consequently, this comparison can only present a broad picture of dietary trends in the WHO European Member States.

Table 6: Dietary assessment methods employed, by sub-region.

Sub-region (no. of countries)	Data received	Collection Method					
		FBS ⁷	HBS ⁸	24 R ⁹	FFQ ¹⁰	7-day FR ¹¹	No info on method /other method
<i>Southeast Europe (5)</i>	3		1	1	1		
<i>Baltic Region (3)</i>	3			3			
<i>Central Asian republics (5)</i>	3			1			2
<i>Central and Eastern Europe (6)</i>	4	1		1			2
<i>Commonwealth of Independent States (7)</i>	2			1			1
<i>Nordic Countries (5)</i>	5			1	1	2	1
<i>Southern European Region (9)</i>	3			1			2
<i>Western European Region (10)</i>	6			2			4

7 Food Balance Sheet

8 Household Budget Survey

9 24 hour Recall

10 Food Frequency questionnaire

11 7 Day Food Record

Regional information

Southeast Europe¹²

Questionnaire analysis 1994/95 and 1998/99, Southeast Europe

All Member States in the sub-region submitted questionnaires in 1998/99, while only Croatia and the Republic of Macedonia returned questionnaires in 1994/95.

Food and nutrition policy, plan of action or strategy

Bosnia & Herzegovina is the only country in the Region, which had yet to adopt a food and nutrition policy. The countries that adopted national food and nutrition policies have most of the actions from the World Declaration and Plan of Action.

Advisory or administrative structure

Only Albania, Croatia and the Republic of Macedonia had administrative structures to ensure implementation of the food and nutrition policies and these countries also had advisory bodies set up to provide scientific advice to relevant policy makers. Slovenia stated plans to establish an administrative structure and to institute Ad Hoc expert committees, when scientific expertise is required. Only the Croatian advisory body had a written mandate and a budget to cover its activities.

Interdisciplinary collaboration

The government of Bosnia & Herzegovina had not initiated collaboration between different sectors. All countries appeared to have regular consultations between the Ministry of Health and Ministry of Agriculture on matters related to nutrition. Slovenia had meetings on food legislation only and Croatia on matters concerning Chamber of Commerce and inspection. Bosnia & Herzegovina was the only country that did not report having a responsible body or department for the collection of information on population dietary patterns or for public nutrition education.

Examples of normative actions

All countries in the sub-region stated having implemented recommended nutrient reference values. However, the recommended nutrient reference values used in Bosnia & Herzegovina and Albania probably need updating as they are reported to be from 1979 and 1980 respectively. Croatia and Slovenia appear to have carried out representative population surveys of dietary intake and nutritional status within the last 10 years. All the countries in the sub-region use dietary guidelines except Bosnia & Herzegovina. However, the guidelines used in the Republic of Macedonia are only directed at pre-school and school children.

¹² Albania, Bosnia & Herzegovina, Croatia, Slovenia, Republic of Macedonia.

Country reports, 1999, Southeast Europe

Slovenia submitted no country report.

Non-communicable diseases and related risk factors

In the Southeast Europe the major cause of death is cardiovascular diseases followed by cancer. The diet is often high in fat and low in fruit and vegetables. Only Croatia and the Republic of Macedonia reported to have developed policy guidelines and programmes to reduce the impact of non-communicable diseases in their respective countries.

Inequity and poverty leading to lack of food and nutrient deficiency

In all countries of the Southeast Europe problems of iodine deficient disorder and iron deficiencies are prevalent especially among the disadvantaged. Bosnia & Herzegovina reported strategies to diagnose and treat iron deficiency anaemia and to regulate universal salt iodisation by law. In Southeast Europe the major problems experienced in developing policies and programmes are a lack of financial resources and a lack of collaboration between different sectors.

Infant, young children and maternal nutrition

Albania stated that there was a lack of data regarding infant and maternal health. The others gave little information indicating a scarcity of data concerning infant and maternal health. However, it is generally accepted that low breastfeeding rates and poor weaning practices are common in the Region. No countries mentioned that they have adopted policies to improve infant and maternal health and most reported a need for more trained health personnel and economic support.

Sustainable food production and distribution

Agricultural production employs a large proportion of the population in the Region. Despite abundant areas of fertile soil and good climate for food production, the countries suffer from insufficient food production. Croatia and the Republic of Macedonia mentioned that they have strategies to increase agricultural production and solve public health problems related to food insecurity, while maintaining a sustainable environment.

Food safety

The countries in the Southeast Europe provided no information regarding food-borne disease prevalence, which indicates that data may be limited. Albania mentioned that hygienic standards are not respected, while Bosnia & Herzegovina reported that there is a lack of facilities such as laboratories and sanitary inspection. The Republic of Macedonia stated that lack of professional skills result in poor hygiene at premises in the food industry and markets.

Baltic countries¹³

Questionnaire analysis 1994/95 and 1998/99, Baltic countries

All Member States in the sub-region returned questionnaires in both surveys.

Food and nutrition policy, plan of action or strategy

In 1995, Estonia adopted a food and nutrition policy followed by Lithuania in 1998, but in 1999 Latvia reported not having an official food and nutrition policy. Lithuania was the only Baltic country that reported in 1998/99 having all the components of the World Declaration and Plan of Action incorporated in their food and nutrition policy document.

Advisory or administrative structure

Only Lithuania stated to have a special administrative structure, which was established in 1991, for the implementation of food and nutrition policy. Latvia is the only country in the Region which did not have a nutrition advisory body. The Ministry of Agriculture in Estonia and the Ministry of Health in Lithuania finance the advisory bodies.

Interdisciplinary collaboration

Estonia and Lithuania had regular consultations between their national Ministry of Health and Ministry of Agriculture on matters related to nutrition. All the Baltic countries have designated the responsibility for the collection of dietary information, which is provided to policy makers for public nutrition education. The responsibility shifted from different departments between 1994/95 and 1998/99 in all the Baltic countries.

Examples of normative actions

In 1998/99, Latvia reported not having recommended nutrient reference values, whereas Estonia and Lithuania did. All three countries reported having carried out population representative surveys of dietary intake and nutritional status within recent years (1996) supported by WHO.

All had developed guidelines with support from WHO by 1999. In addition, Lithuania has guidelines directed at women, children and the army. Estonia and Lithuania reported field-testing their guidelines before publication and distribution to the public.

Country reports, 1999, Baltic countries

All Member States in the sub-region submitted country reports.

Non-communicable diseases and related risk factors

Life expectancy has been declining in the Baltic Region, due to an increase in non-communicable diseases, especially cardiovascular diseases. In addition, obesity is a major health problem in the Region.

In the Baltic region, dietary fat intake is above WHO recommendations and vegetable and fruit consumption is low. Latvia has the lowest consumption of vegetable and fruit and many do not consume fresh or raw vegetables daily. Poor dietary behaviours and

¹³ Estonia, Latvia, Lithuania.

other lifestyle factors such as smoking, alcohol, low physical activity and obesity appear to be the main contributors to the increase in non-communicable diseases observed in recent years.

Inequity and poverty leading to lack of food and nutrient deficiency

The transition from a central to a market economic structure following the independence from the former USSR has increased food prices in the Baltic sub-region. Many families with children live below the subsistence minimum. The majority of these families depends on home-grown produce and has a lower intake of vegetable, fruit and meat than the rest of the population.

Micronutrient deficiencies of iodine, iron, calcium, vitamin D and selenium are reported throughout the sub-region. Iron and iodine deficiencies are the most prevalent micronutrient deficiencies. In the Baltic sub-region iodised salt is available, but only approximately 5% of households use this in cooking.

Infant, young children and maternal nutrition

The rate of breastfeeding is highest in Estonia (33%) following a breastfeeding promotion programme in 1995-96, whilst breastfeeding rates are currently lowest in Lithuania (11%). In the Baltics breast milk substitutes are imported and expensive, but are heavily promoted by the industry. Concern was expressed regarding the influence that the promotion of commercial milk substitutes has on the breastfeeding rate.

Sustainable food production and distribution

In the Baltics the agricultural output has been declining the last decade and it appears that policymakers are concerned with ensuring a food production without the use of pesticides and fertilisers. The sub-region experiences a lack of collaboration between sectors involved in the food chain, which makes it difficult to achieve the goal of sustainable agricultural production.

Food safety

Food safety is a high priority in the Baltic countries and various measures of control of foods are carried out. However, the incidence of *Salmonella* is increasing, while the level of other food-borne diseases has reduced in the recent years. It appears that problems regarding food safety are mainly observed in smaller shops and markets, but lack of financial and human resources is a major obstacle for carrying out and strengthening food control.

Central Asian republics¹⁴

Questionnaire analysis 1994/95 and 1998/99, CAR

No questionnaires were returned by Kazakhstan, Turkmenistan and Uzbekistan in 1994/95, and in 1998/99 no questionnaires were returned by Tajikistan and Turkmenistan.

Food and nutrition policy, plan of action or strategy

All the countries in the sub-region that returned questionnaires stated to have adopted a food and nutrition policy document. The majority of the countries reported to have incorporated most of the components of the World Declaration and Plan of Action.

Advisory or administrative structure

Of the countries, which returned questionnaires in either 1994/95 or 1998/99 only Kyrgyz Republic, stated to have no administrative structure to ensure implementation of food and nutrition policy. Furthermore, Kyrgyz Republic and Tajikistan do not have an advisory body responsible for providing scientific advice to policymakers. Only the advisory body in Kazakhstan has a written mandate. None of the advisory bodies of the sub-region have a budget to cover their activities.

Interdisciplinary collaboration

All the countries that returned questionnaires stated to have designated responsibility for the collection of information regarding dietary intake and provide this information to policy makers. Kazakhstan and Uzbekistan stated to have regular consultation between the Ministry of Health and the Ministry of Agriculture. However, in Uzbekistan these consultations are on food safety only.

Examples of normative actions

All the countries in the sub-region appear to have a set of recommended nutrient reference values, which are based on the former Soviet norms and so are very different from international recommendations. Uzbekistan is the only country in the CAR sub-region, which has not carried out a population representative survey of dietary intake and nutritional status within the previous 10 years.

Country reports, 1999, CAR

Kazakhstan did not submit a country report.

Non-communicable diseases and related risk factors

Little information regarding mortality rates of non-communicable diseases was provided in the country reports. However, it appears that the CAR countries are experiencing an increase of non-communicable diseases especially cardiovascular disease, cancer and obesity.

¹⁴ Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan.

Inequity and poverty leading to lack of food and nutrient deficiency

Micronutrient deficiencies, primarily iodine and iron, are prevalent in the CAR sub-region. The soil and water in the sub-region are low in iodine due to the geography. Despite efforts in the sub-region iodine deficiency is still a major health problem affecting large segments of the populations. Iodised salt is expensive and therefore only a minority of the population buys it. In addition, iron deficiency anaemia is widespread in the sub-region due to the traditionally consumed monotonous diets by the majority of the population.

Infant, young children and maternal nutrition

Despite breastfeeding being traditional the rate of mothers breastfeeding is declining and weaning practices are poor. Programmes to encourage exclusive breastfeeding have been initiated or are under preparation in most countries. However, the lack of continuous training of health personnel and financial resources has resulted in limited implementation and impact of programmes.

Sustainable food production and distribution

All the countries in the sub-region of Central Asian Republics are undergoing socio-economic transitions towards a market economy. Such a transition does not occur without an impact on public health. The agricultural production has overall been decreasing in the Region, which has a serious impact on the availability of foods for the majority of the population.

Food safety

The countries of the CAR sub-region still have high numbers of infectious diseases resulting from microbial food contamination including poor water quality in many parts of the sub-region.

Central and Eastern Europe¹⁵

Questionnaire analysis 1994/95 and 1998/99, CEE

No questionnaire was returned by Poland in 1994/95, and in 1998/99 Romania did not return questionnaire.

Food and nutrition policy, plan of action or strategy

In 1998/99 all of the countries in the sub-region had or were preparing a food and nutrition policy document. Most of the components of the World Declaration and Plan of Action were reported to be included in the food and nutrition policies.

Advisory or administrative structure

Bulgaria, Poland and Slovakia stated to have established an administrative structure to ensure the implementation of the food and nutrition policy while the Czech Republic and Poland reported to have established advisory bodies in 1991 and 1963 respectively.

¹⁵ Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia.

However, these do not have a written mandate and only the advisory body in Poland has a budget to cover its activities.

Interdisciplinary collaboration

All CEE countries stated to have designated responsibility for the collection of dietary intake information to provide to policy makers. In addition, all the countries reported carrying out regular consultations between the Ministry of Health and the Ministry of Agriculture on matters related to nutrition.

Examples of normative actions

All the countries in the sub-region have a set of recommended nutrient reference values. Poland and the Czech Republic had not had a population representative survey of dietary intake and nutritional status in the previous 10 years. All the countries within the sub-region had dietary guidelines, with the exception of Romania.

Country reports, 1999, CEE

All Member States in the sub-region submitted country reports.

Non-communicable diseases and related risk factors

The trend in the sub-region is that non-communicable diseases are increasing and the main causes of mortality are cardiovascular diseases followed by cancer. The diet is commonly high in saturated fat and low in fruit and vegetables. Though, Poland has recently observed an increase in the consumption of fruit and vegetables. Smoking and low physical activity is also prevalent in the CEE sub-region.

Inequity and poverty leading to lack of food and nutrient deficiency

The food consumption of disadvantaged groups is markedly less nutrient dense and higher in fat than others. Iodine deficiency disorder and iron deficiencies are most commonly reported nutrient deficiencies in disadvantaged. There is a lack of policies and programmes to deal with these problems in the sub-region. Lack of financial and human resources were mentioned as difficulties in developing policies and guidelines for the disadvantaged.

Infant, young children and maternal nutrition

Breastfeeding rates and weaning practices were poor in the Region despite programmes being carried out. Bulgaria is experiencing a decline in breastfeeding rates, while Poland reported an increase in the level of women who breastfed. Aggressive marketing of commercial milk substitutes is mentioned as the main obstacle for improving the breastfeeding rates.

Sustainable food production and distribution

In the CEE countries food distribution is commonly unsatisfactory and many of the smaller farms produce for own consumption only. Lack of financial support and expertise of agricultural development has resulted in a declining agricultural production in recent years.

Food safety

Food-borne diseases are prevalent and increasing in the sub-region, especially *Salmonella*. Most often problems occur in households or catering systems. Food producers and distributors often do not acknowledge their responsibility for food safety. Slovakia reported that problems of food safety have been limited since control of food contamination has been carried out. In Hungary consumer information regarding food safety is reported to be poor. Bulgaria reported that co-ordination of activities between different sectors is lacking.

Poland had not introduced the Hazard Analysis and Critical Points¹⁶ system, while the Czech Republic was beginning to implement the system in the food industry. In Hungary the implementation of the Hazard Analysis and Critical Points system was hindered due to financial constraints. All the CEE countries reported having introduced legislation regarding food safety.

Commonwealth of Independent States¹⁷

Questionnaire analysis 1994/95 and 1998/99, CIS

Armenia, Belarus, Georgia, Republic of Moldova and Ukraine submitted no questionnaire in 1994/95, while Armenia, Georgia and the Russian Federation did not return questionnaire in 1998/99.

Food and nutrition policy, plan of action or strategy

Only Azerbaijan, Republic of Moldova, Russian Federation and Ukraine report having adopted a food and nutrition policy document.

Advisory or administrative structure

In 1998/99 the Republic of Moldova stated to have an administrative structure established to ensure implementation of the national food and nutrition policy. Azerbaijan and the Republic of Moldova reported to have an advisory body responsible for providing scientific advice to national policymakers in 1998/99. However, the advisory body in the Republic of Moldova refers to breastfeeding only. The advisory body in Azerbaijan was stated to have a written mandate, but did not have a budget for its activities.

Interdisciplinary collaboration

Ukraine reported not to have any regular collaboration initiated by the government between different sectors. In addition, Ukraine did not provide information regarding who is responsible for the collection of population dietary patterns, or who is responsible for public nutrition education. Informal regular consultations were reported to take place between the Ministry of Health and the Ministry of Agriculture in Azerbaijan and Belarus.

¹⁶ A system to control and monitor food production.

¹⁷ Azerbaijan, Armenia, Belarus, Georgia, Republic of Moldova, Russian Federation, Ukraine.

Examples of normative actions

It appears that Azerbaijan, Belarus, Republic of Moldova and Ukraine have had a population representative survey of dietary intake and nutritional status within the previous 10 years. The republic of Moldova experts studied nutrition of children and the Russian Federation published a review of smaller studies.

All the Member States reported having recommended nutrient reference values. These reference values are based on reference values (physiological norms) from the former USSR, 1991 which are very different from international recommendations.

Country reports, 1999, CIS

No country report was submitted by Azerbaijan.

Non-communicable diseases and related risk factors

Information regarding non-communicable diseases in the CIS indicated that mortality of non-communicable diseases was on the increase. The dietary pattern of the Region is a diet high in animal fat and sugar, while the intake of fruit and vegetables is low.

Inequity and poverty leading to lack of food and nutrient deficiency

The disadvantaged parts of the populations commonly consume monotonous diet rich in carbohydrate, but low in fruit, vegetables and meat. Iodine deficiency disorder is prevalent and Armenia, Georgia and the Russian Federation reports that programmes are carried out to reduce the impact of IDD. These countries report having national policies concerned with improving the health of the disadvantaged groups.

Infant, young children and maternal nutrition

In the sub-region low prevalence of breastfeeding and poor weaning practices are common. There was a widespread lack of knowledge among mothers and health professionals concerning maternal and child health and nutritional advice.

In Armenia iron deficiency was reported to affect 16% of women of childbearing age and among pregnant women the prevalence had increased by ten fold. The diets of mothers are reported to be monotonous dominated by carbohydrates. In Belarus it was reported that 69% of children suffered from iodine deficiency disorder and Armenia, the Russian Federation and Ukraine mentioned prevalence between 20-35% of iron deficiency anaemia among children.

Armenia, the republic of Moldova, the Russian Federation and Ukraine mentioned having programmes to improve the situation regarding child and maternal health.

Sustainable food production and distribution

Only the Russian Federation provided information regarding food production and distribution in their country. The Russian Federation reports to have a low agricultural output due to employing old farming methods and called for development of good agricultural practices.

Food safety

Problems of food-borne diseases are common. Most often food produced in small private enterprises without adequate technology, on-site control and hygienic training of personnel are mentioned as main obstacles for food safety. Only Georgia mentioned having implemented policies or programmes to tackle food safety issues.

Nordic countries¹⁸

Questionnaire analysis 1994/95 and 1998/99, Nordic countries

All Member States in the sub-region submitted questionnaires for both surveys.

Food and nutrition policy, plan of action or strategy

All the Nordic countries had implemented food and nutrition policies, but the food and nutrition policy in Finland was not officially adopted.

Advisory or administrative structure

In 1998/99, only Norway and Iceland reported setting up a special structure to ensure implementation of the food and nutrition policy. However, all the countries in the sub-region had established advisory bodies with written mandate to provide advice to the policymakers. Sweden was the only country where the advisory body appeared not to have had a budget to cover its activities.

Interdisciplinary collaboration

Neither Denmark nor Iceland reported having government-initiated collaboration between different sectors. It appeared that Iceland, Norway and Sweden did not have regular consultations between the Ministry of Health and the Ministry of Agriculture on matters related to nutrition. All the Nordic countries have delegated responsibilities to collect information about population dietary patterns, providing this information to policy makers for public nutrition education. In Denmark, responsibility for these activities changed from the Ministry of Health to the Ministry of Agriculture over the period between 1994 to 1999.

Examples of normative actions

All the countries have recommended nutrient reference values and had carried out representative surveys of dietary intake and nutritional status within the last 10 years. In 1998/99 all countries reported having dietary guidelines.

Country reports, 1999, Nordic countries

All Nordic countries submitted country reports.

Non-communicable diseases and related risk factors

Non-communicable diseases are the main cause of mortality in the Nordic countries, due to a diet high in fat, low in fruit and vegetables and a sedentary lifestyle. An improvement

¹⁸ Denmark, Finland, Iceland, Norway, Sweden.

in dietary habits was reported in recent years (decreased consumption of fat and increased intake of fruit and vegetables). Finland reported that the mortality from cardiovascular disease and cancers decreased since the 1970s, while obesity was increasing. Sweden mentioned a need for more research into public catering and factors that determine public eating patterns. Norway reported that there is an emphasis on co-ordinating food and nutrition policies with different sectors.

All the Nordic countries had programmes and strategies, which targeted the problems of non-communicable diseases. However, Sweden highlighted a lack of government involvement in setting priorities for public health and uncertainty concerning delegation of responsibility among ministries. Finland mentioned that lack of permanent staff, lack of decision power by the National Nutrition Council and the sporadic ad-hoc nature of the implementation of food and nutrition policies.

Inequity and poverty leading to lack of food and nutrient deficiency

Differences in income were not related to lack of food, but to level of education. In Denmark the problems of increased morbidity and mortality in the disadvantaged groups were treated as a social problem, while Norway aimed for a holistic policy concerning diet and nutrition involving co-operation across sectors and administrative levels. None of the countries reported having policies directly aimed at the disadvantaged.

Infant, young children and maternal nutrition

Breastfeeding rates were reported to be highest in people of higher education. Denmark and Finland had the lowest breastfeeding rates (between 50-60% at 6 months), while the highest breastfeeding rate (80%) was reported in Norway. In Iceland 38% of infants at 6 months received cows milk resulting in 24% of one-year-old infants suffering from iron deficiency. In Sweden all day care centres for infants, children and primary school children (6-16 years) received warm meals free of charge.

Sustainable food production and distribution

In general food supplies were abundant and varied in the Nordic countries, due to national agricultural production and imports. However, the prices of fruit and vegetables were high in Iceland due to a price policy of high taxes on imports to protect domestic production, which appeared to result in low fruit and vegetable intake. The main objectives of the Icelandic agricultural policies were to ensure sufficient income for farmers in traditional agricultural production such as dairy and sheep to keep rural areas inhabited. These objectives were in contrast to main priority of the nutrition action plan, which called for reduced vegetables prices and improving the availability of vegetables in schools and canteens. Similarly, the Norwegian National Council of Nutrition and Physical Activity tried to increase the availability of fruit and vegetables through input to the agricultural and price policy. In addition, the objective of the Norwegian agricultural policy was to integrate health aspects into the agricultural policy.

Finland reported to be the second largest organic food producer and used the smallest quantities of pesticides in EU. In contrast, Sweden stated to use large amounts of

pesticides in their agricultural production. However, to improve the situation environmental aspects were incorporated into the Swedish agricultural policy.

Food safety

The trend was that *Salmonella* was decreasing, while *Campylobacter* was increasing. All Nordic countries have had control systems and policies for many years. However, Iceland reported a need for more resources for the food authorities to participate in development of legislation and principles for food control. Generally, increased co-operation between sectors would improve efficiency of both food inspection and food legislation. In addition, import of untraditional food and novel foods will require establishment of new food safety procedures and health risk assessments.

Southern Europe¹⁹

Questionnaire analysis 1994/95 and 1998/99, Southern Europe

Andorra, Israel, Monaco, San Marino did not return questionnaires in 1994/95, while the same Member States plus Spain did not provide information in 1998/99.

Food and nutrition policy, plan of action or strategy

All reporting Member States, except Greece and Portugal, had adopted a food and nutrition policy document.

Advisory or administrative structure

In 1998/99 Israel, Italy and Malta had administrative structures responsible for implementation of the policy document.

In 1998/99 Greece, Israel, Italy, Malta and Portugal all had an advisory body to provide scientific advice to the policymakers. Portugal was the only Member State to report in 1998/99 that their national advisory body had a written mandate, whereas only Malta stated that their national advisory body had a budget to cover its activities.

Interdisciplinary collaboration

In 1998/99 government-initiated collaborations occurred between parties responsible for nutrition related matters in Greece, Israel, Malta and Turkey. Furthermore, in Italy, Portugal and Turkey regular consultations between the Ministry of Health and Ministry of Agriculture took place regarding nutritional matters.

In 1998/99 Greece, Israel, Portugal and Turkey reported having responsibility for the collection of population dietary patterns, providing this information to policy makers.

Examples of normative actions

All countries in the sub-region stated to have recommended nutrient reference values. The majority of Member States had carried out population representative surveys of

¹⁹ Andorra, Greece, Israel, Italy, Malta, Monaco, Portugal, San Marino, Spain, Turkey.

dietary intake and nutritional status. However, the survey in Malta was from 1980-84. Portugal and Turkey had not yet carried out a nation-wide survey and Israel had planned a dietary survey in December 1998. All countries except Turkey, reported having dietary guidelines. Only the dietary guidelines from Israel were field-tested prior to use.

Country reports, 1999, Southern Europe

Andorra, Greece, Italy, Israel, Monaco, San Marino and Spain did not submit country reports.

Non-communicable diseases and related risk factors

Little information regarding non-communicable diseases was provided by most of the Member States in the sub-region. Malta reported little intersectoral support from other ministries, as health was not perceived as worth investing in. This resulted in low budget and commitment to health promotion. Similarly, Turkey reported of a lack of collaboration between organisations involved in health issues. In the Turkish population there was little awareness of healthy eating habits and increasing urbanisation, smoking and stress exacerbate the situation.

Inequity and poverty leading to lack of food and nutrient deficiency

In the sub-region iodine, iron and other vitamin deficiencies were reported. In addition, Turkey mentioned protein-energy malnutrition to be a problem. Portugal had a guaranteed minimum income and poor children received school milk and free lunches. In Turkey it was reported that the national Health Policy aimed to decrease nutrition problems by 50% by year 2000. However, financial difficulties and lack of intersectoral co-operation made planning and implementation of programmes and policies difficult.

Infant, young children and maternal nutrition

Breastfeeding rates and weaning practices were poor in the sub-region. The maternal health in Malta was commonly poor due to overweight and lack of folic acid and iron in the maternal diet. In Turkey problems of infant and maternal health were mainly due to large family sizes and poor hygiene. Portugal and Turkey mentioned promotion of "Baby Friendly Hospital Initiative", while Malta had "Well-baby clinics" run in community based health centres.

Sustainable food production and distribution

Malta imported most of its food supply and there appeared to be no formal agricultural policy, but laws were being updated. In contrast, Turkey reported to be self-sufficient in food; though energy intake was reported to be inadequate in 27% of the rural population. Turkey indicated that a lack of co-ordination between organisations and ministries in conjunction with inadequate budgets limited the effect on food production.

Food safety

In Malta food-borne diseases increased in recent years and problems were encountered at all levels in the food industry. Hazard Analysis and Critical Points system had recently been introduced, but enforcement of laws needed to be strengthened. Portugal stated that their national food legislation was according to EU directives. In Turkey, a lack of

awareness of food safety is reported among traditional food manufactures. Even though Turkey had food laws, a lack of collaboration between ministries and producers made the implementation of food safety polices problematic.

Western Europe²⁰

Questionnaire analysis 1994/95 and 1998/99, Western Europe

Austria did not return questionnaire in 1994/95, while all Member States in the sub-region submitted questionnaires in 1998/99.

Food and nutrition policy, plan of action or strategy

Austria, France, Ireland and the UK reported not having adopted a food and nutrition policy document in 1998/99, whereas Ireland and the UK in 1994/95 stated to have had such a document. Germany, Luxembourg and the Netherlands had incorporated all the components of the World Declaration and Plan of Action.

Advisory or administrative structure

In 1998/99 only Belgium and Netherlands reported to have established an administrative structure responsible for the implementation of the food and nutrition policy document. Ireland stated that the Health Promotion Unit was implementing many of the policy recommendations.

All the countries in the Region, except Austria and Luxembourg, had an advisory body responsible for providing scientific advice to policy-makers. In 1998/99 all the countries, which had an advisory body, had a budget to cover its activities and a written mandate.

Interdisciplinary collaboration

Most countries, except Germany and UK, had regular government-initiated collaboration between different sectors involved in nutrition. However, Austria, Belgium and Luxembourg did not have regular consultations between the Ministry of Health and the Ministry of Agriculture in matters related to nutrition.

The majority of countries had delegated responsibility for the collection of information of population dietary patterns except Germany and Luxembourg. In Germany there was not one single organisation responsible for providing this information to policy-makers. In addition, no information was provided from Austria, France and Luxembourg. Most Member States had delegated the responsibility for public nutrition education except Austria, who appeared not to provide any information regarding this.

Examples of normative actions

All countries had recommended nutrient reference values. Belgium and Luxembourg had not had a population representative survey of dietary intake and nutritional status in the previous 10 years and Austria did not give information about this. However, the majority

²⁰ Austria, Belgium, France, Germany, Ireland, Luxembourg, Netherlands, Switzerland, United Kingdom.

of surveys were carried out in the 1980s and 1990s and needed to be updated, except for UK where surveys were carried out regularly.

All the countries had published dietary guidelines. The guidelines were targeting the whole population and France, Ireland and Luxembourg also reported to have guidelines directed at special groups.

Country reports, 1999, Western Europe

No country reports were provided by Belgium, Luxembourg and the Netherlands.

Non-communicable diseases and related risk factors

The major cause of mortality in the sub-region is cardiovascular disease and cancer, which were partly due to consumption of a diet too high in fat and too low in fruit and vegetables in conjunction with a sedentary lifestyle. Germany stated that while the total intake of fat was declining it was still too high. The disadvantaged groups were reported to more often experience cardiovascular diseases and were more often obese. However, Switzerland had a low mortality from cardiovascular disease compared with the European average.

Recommendations and nutritional campaigns were carried out in the majority of the Member States. However, Germany stated a lack of interest in long-term prevention of ill health among many groups of the population and Ireland mentioned that there was a lack of resources to target different population groups.

Inequity and poverty leading to lack of food and nutrient deficiency

In many of the Member States there was a reported lack of support for preventive programmes and lack of data on dietary and lifestyle behaviours of the disadvantaged. In addition, low accessibility to healthy food and access for those who need help were major barriers to success of programmes.

Infant, young children and maternal nutrition

Many of the Member States in the sub-region had low breastfeeding rates and too early introduction of complementary foods. The breastfeeding rates were especially low among population groups with low education and social class. Austria had experienced a dramatic increase in breastfeeding rates from 1985 to 1999 with 70% of mothers breastfeeding at four months postpartum. Austria, Ireland and Switzerland mentioned implementing the “Baby Friendly Hospital Initiative” in their country.

There was a lack of surveys carried out to assess the diet of pregnant and breastfeeding mothers and the majority of Member States did not have specific policies for pregnant women. In addition, there was a lack of educated personnel to advise mothers. Moreover, infant formula producers continued to market their products aggressively.

Sustainable food production and distribution

In recent years more attention had been given to farming methods that protects the environment e.g. organic farming. Austria reported that it had experienced a decline in

use of pesticides and fertilisers and the numbers of organic farmers has increased to 8% of total farmers in the country. Ireland and UK mentioned that social cohesion and improvement of well-being in rural areas were now incorporated in agricultural policies.

Food safety

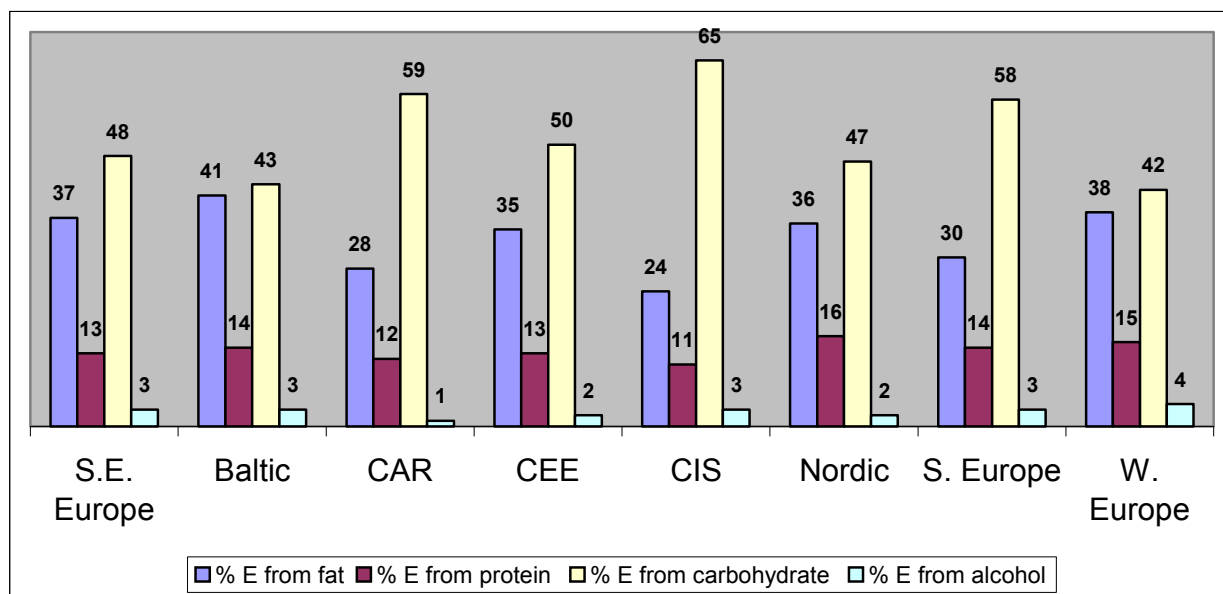
Food-borne diseases were widespread and some Member State such as Ireland had observed a recent increase in the number of food-borne disease cases. In contrast, Austria reported that food-borne diseases were rare and that the public concerns were related to genetic modified food, which had now been banned in most food stores. Germany, Switzerland and UK mentioned that Hazard Analysis and Critical Points system was implemented in the effort to increase food safety. Lack of knowledge of the true extent of the problems, co-ordination of efforts, consumer confidence and personnel resources were generally reducing the efficacy of programmes and initiatives.

Regional trends in dietary intake

The dietary data received from the Member States indicated that fat intake was too high in the majority of countries and often accompanied by a very low consumption of fruit and vegetables. Data suggested that the Baltic countries and Western Europe had the highest fat intake in the WHO European Region (41% and 38% of dietary energy from fat, respectively). In contrast, the CIS and CAR countries had the lowest fat consumption of 24% and 28% of dietary energy from fat, respectively. In addition, the lowest carbohydrate consumption and one of the highest intakes of protein was observed in the Western European and Baltic sub-regions. In contrast, data suggested that the highest carbohydrate intake and lowest protein intake in the Region was observed in the CIS Region. Generally, the distribution of macronutrient energy percentage was similar between sexes, though females tended to consume slightly more carbohydrate and less fat than males.

Data available on alcohol consumption indicated that the highest alcohol consumption was observed in West Europe and the lowest alcohol consumption in the CAR Region (data only provided by Kazakhstan). Additionally, a marked gender difference was noted for alcohol consumption in the majority of the WHO European Region. Exception being in the Nordic countries, where the alcohol consumption by males was only slightly higher than that of females. Especially, in Denmark alcohol consumption was high for both sexes and notably higher than in the rest of the Nordic countries. However, it was the French males and females that had the highest alcohol consumption of 9% and 5% of dietary energy from alcohol, respectively. Second highest alcohol consumption was observed in Danish males and females of 6% and 4% of dietary energy contributed by alcohol, respectively.

Figure 3 Total energy intake by macronutrient, by sub-region*



*Data source: National surveys from S.E. Europe (Croatia, Republic of Marcedonia, Slovenia), Baltic (Estonia, Latvia, Lithuania), CAR (Kazakhstan, Uzezbekistan), CEE (Bulgaria, Czech Republic, Hungary, Slovakia), CIS (Azerbaijan, Moldova, Ukraine), S. Europe (Italy, Portugal, Turkey), W. Europe (Austria, Belgium, France, Netherlands). No information on alcohol from Republic of Marcedonia, Latvia, Uzezbekistan, Slovaki, Moldova, Ukraine, Portugal, Turkey.

Figure 4 Percent daily energy from fat

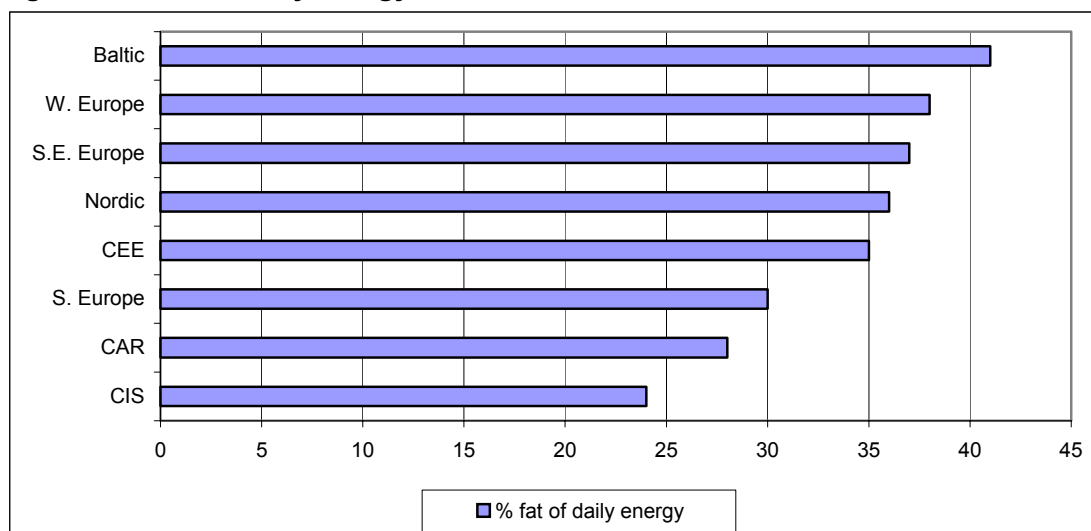


Figure 5 Percent daily dietary energy from protein

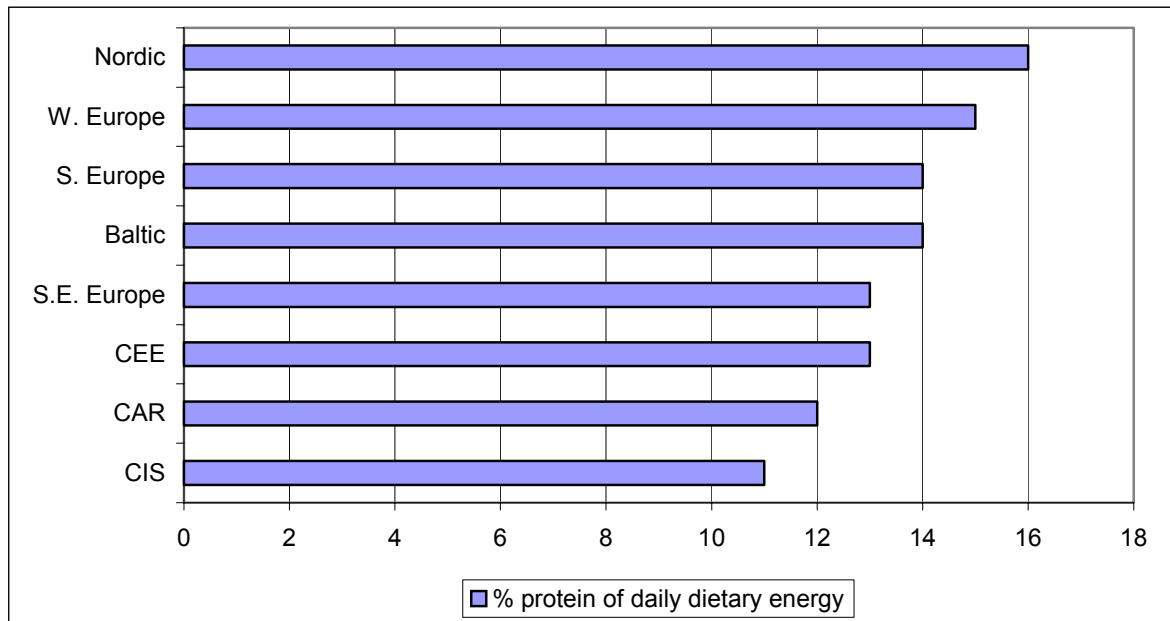


Figure 6 Percent daily dietary energy from carbohydrate

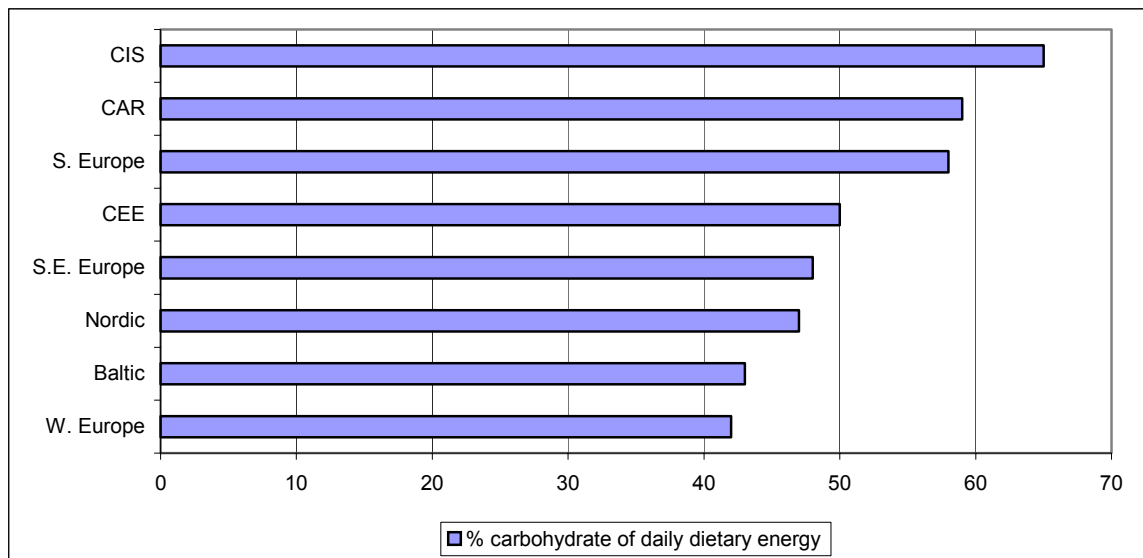
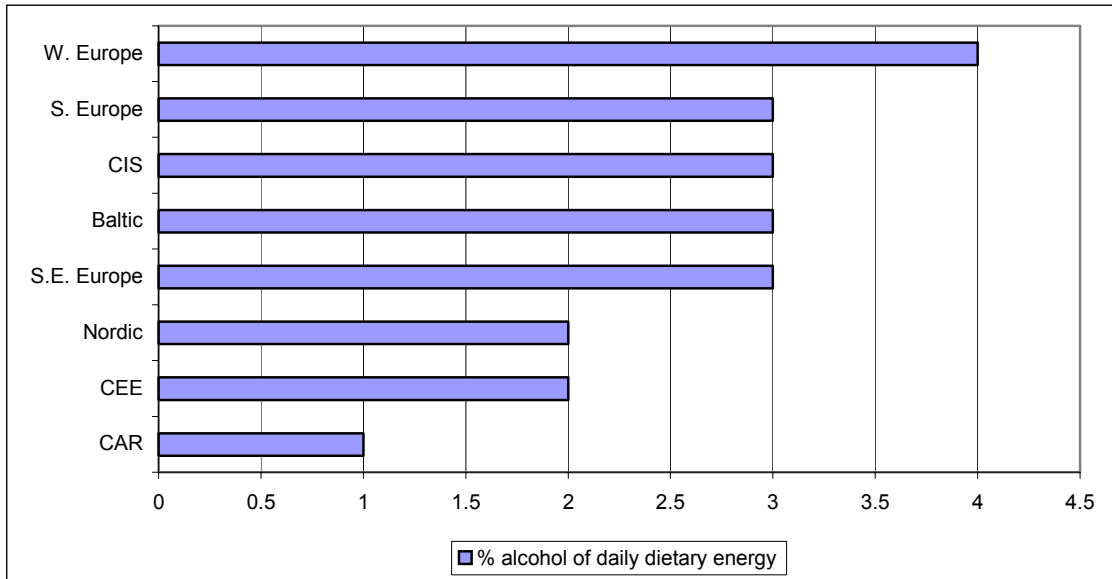


Figure 7 Percent daily dietary energy from alcohol

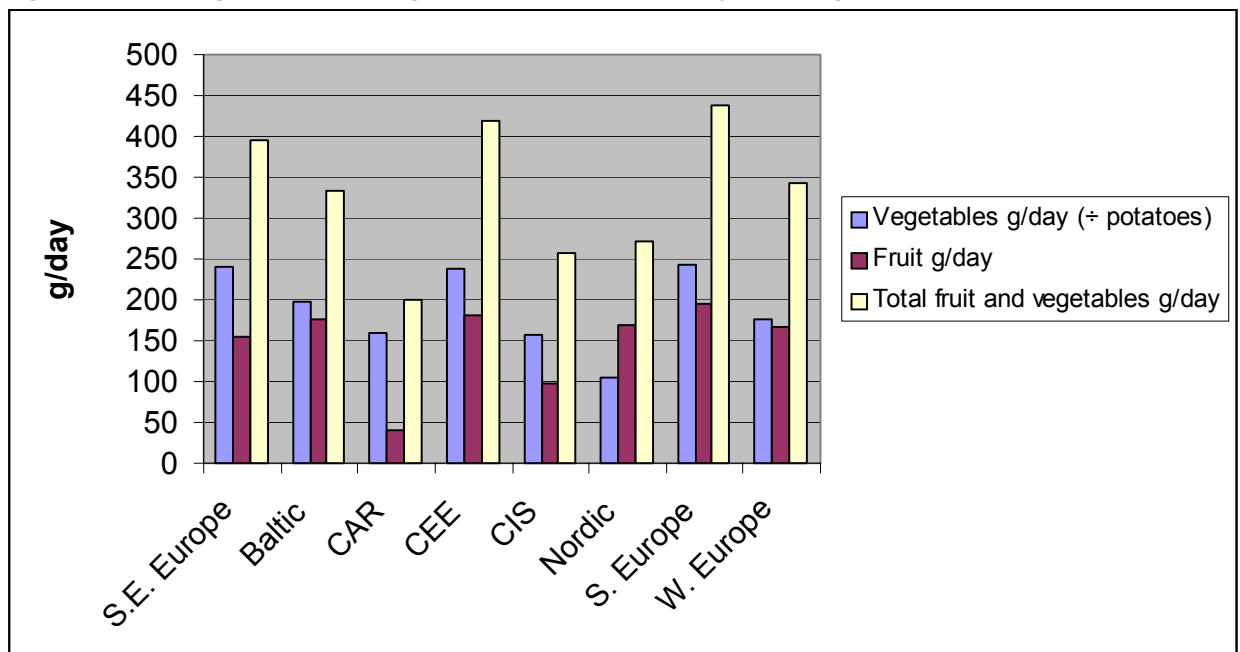


Regional trends in vegetable and fruit consumption

Nordic countries appeared to have a low intake of vegetables, around 100 g/day, when compared with the other WHO Sub Regions and WHO recommendations. The highest vegetable consumption was observed in the Southern European countries of 243 g/day followed by the CEE sub-region. The CAR countries had the lowest fruit intake, about 40 g/day. Additionally, the lowest combined fruit and vegetable intake is observed in the CAR sub-region, with about 200g/day.

Women seemed to consume more fruit than men and on average similar or slightly less amounts of vegetables than men. The exception were women in the Nordic countries: they generally consumed more vegetables than men. The difference in vegetable consumption between men and women was most marked in the Eastern European and Baltic countries.

Figure 8 Average fruit and vegetable consumption by sub-region, 1980-1998.*



*Data source: National surveys S.E Europe (Croatia, Republic of Marcedonia, Slovenia), Baltic (Estonia, Latvia, Lithuania), CAR (Kazakhstan, Kyrgyatan, Uzezbekistan), CEE (Czech Republic, Hungary, Slovakia), CIS (Azerbaijan, Moldova, Ukraine), S. Europe (Italy, Portugal), W. Europe (Austria, Belgium, France).

Conclusions and recommendations

Traditionally, policymakers viewed issues concerning nutrition, health, food safety and food production as separate disciplines. However, nutrition is an interdisciplinary science. Hence, optimal public health and policymaking will require a holistic approach, which incorporates issues related to healthy nutrition, sustainable food production and distribution and food safety. The following conclusions and recommendations are presented following analysis of the comparison between different sub-regions in WHO EURO.

Food and Nutrition Policy

A large number of WHO European Member States had developed national food and nutrition policies although 25% of the Member States returning questionnaires in 1998/99 reported not to have adopted a national food and nutrition policy at time of the survey. Several Member States recognised that an effective national food and nutrition policy requires intersectoral collaboration and assignment of responsibility for the implementation of the policy. However, there were still a notable number of Member States that were lacking established advisory and administrative structures to ensure successful and sustainable implementation of national food and nutrition policies. Many WHO European Member States had developed reference values for nutrient intakes and dietary guidelines; though scope and population groups targeted varied considerably between Member States.

Recommendations:

1. Establish an advisory body to provide scientific advice to relevant policy makers;
2. Develop scientific based recommended nutrient reference values and dietary guidelines directed at the whole population and special groups;
3. Encourage interdisciplinary collaboration across sectors involved in food and nutrition policy;
4. Designate responsibility for implementation of food and nutrition policy;
5. Establish guidelines for the monitoring and evaluation of the impact food and nutrition policy.

Nutritional Health

Non-communicable diseases and related risk factors

In the majority of the WHO European Member States, non-communicable diseases presented a serious problem and the rise in the prevalence of overweight and obesity across the WHO European Region calls for urgent action. The problems of non-communicable diseases and overweight/obesity were mainly linked to the consumption of an energy dense diet high in saturated fat and low in fruit and vegetables in conjunction with sedentary lifestyles. The rise in prevalence of overweight and obesity increases the risk of non-communicable diseases including cardiovascular diseases, certain cancers, and diabetes.

Recommendation:

1. Develop and implement scientific sound policies and programmes to encourage healthy lifestyles;
2. Surveillance of trends in BMI compared with WHO recommendations;
3. Surveillance of dietary habits compared with WHO recommendations.

Inequity and poverty leading to lack of food and nutrient deficiency

The majority of WHO European Member States had yet to develop policies and programmes targeting the disadvantaged groups. The most often mentioned nutrient deficiencies were iodine deficiency disorder and iron deficiency anaemia. Several Member States had developed programmes to tackle problems of these deficiencies, but often a lack of human and financial resources limited the implementation of effective programmes.

Recommendation:

1. Identify and monitor vulnerable groups with regards to dietary intake patterns;
2. Develop policies and programmes aimed at enhancing health and living conditions of the disadvantaged groups to promote equity;
3. Develop and implement guidelines on the elimination of iodine deficiency disorders and the control of iron deficiency anaemia.

Infant, young children and maternal nutrition

Many WHO European Member States provided little information regarding child and maternal health indicating a general lack of data collection in these groups. However, it was clear that low breastfeeding rates and poor weaning practices were common throughout the Region. Aggressive marketing of commercial milk substitutes can have adverse effects on breastfeeding rates. In addition, there is a general lack of professionals employed in the health sector to guide mothers on nutritional and health issues.

Recommendation:

1. Surveillance of breastfeeding rates and infant and young child feeding practices;
2. Promote exclusive breastfeeding for six months;
3. Promote safe and adequate complementary foods from the age of six months;
4. Set targets to increase the number of Baby Friendly Hospitals nationally;
5. Educate health professionals on breastfeeding and complementary foods;
6. Enforce national legislation on the marketing of breast milk substitutes.

Sustainable Food Production and Distribution

Many of the former eastern block and CIS Member States were going through a transition period from a centrally controlled economy to a market economy. This transition had negative influences on agricultural food yield. Additionally, collaboration between the different sectors involved in the food chain was commonly lacking.

Recommendation:

1. Encourage close collaboration between the agricultural and health sectors and other sectors involved in sustainable food production and distribution;
2. Ensure sufficient production of healthy food in a sustainable environment to meet international nutrient recommendations and dietary guidelines for healthy eating.

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Annex 1: Resolution

REGIONAL COMMITTEE FOR EUROPE
Fiftieth session, Copenhagen, 11 – 14 September 2000

RESOLUTION

EUR/RC50/R8
14 September 2000
01218
ORIGINAL: ENGLISH

**THE IMPACT OF FOOD AND NUTRITION ON PUBLIC HEALTH
THE CASE FOR A FOOD AND NUTRITION POLICY AND AN ACTION PLAN
FOR THE EUROPEAN REGION OF WHO
2000–2005**

The Regional Committee,

Concerned by the threat to public health from the lack of safe and healthy food;

Recognizing the roles of other international organizations and sectors with an interest in food;

Recalling Health Assembly resolution WHA46.7, which called for implementation of comprehensive plans of action on nutrition and which endorsed the goals of the fourth United Nations Development Decade and the World Summit for Children;

Further recalling previous Health Assembly resolutions and particularly WHA49.15 on infant and young child nutrition and WHA52.24 on the prevention and control of iodine deficiency, which demonstrate the need for comprehensive food and nutrition policies;

Having considered document EUR/RC50/8, entitled *The impact of food and nutrition on public health – The case for a food and nutrition policy and action plan for the European Region of WHO 2000–2005*;

1. ENDORSES the Action Plan for the European Region of WHO for 2000–2005;
2. RECOMMENDS that Member States take steps to carry out the Action Plan, taking account of differences in their cultural, social, legal and economic environments;
3. REQUESTS European integrational, intergovernmental and nongovernmental organizations to undertake joint action with Member States and the Regional Office to maximize Region-wide efforts to promote public health through food and nutrition policy;
4. REQUESTS the Regional Director:
 - (a) to ensure appropriate support for the Action Plan from the WHO Regional Office for Europe;
 - (b) to cooperate with and support Member States and other organizations in comprehensive efforts to promote public health through appropriate food and nutrition policies;
 - (c) to examine the possibility of setting up, in collaboration with international agencies, the European Commission and the Council of Europe, a Task Force for Food and Nutrition Policies in the European Region of WHO;
 - (d) to organize a ministerial conference in 2005 to evaluate the implementation of comprehensive food and nutrition policies at Regional and country levels;
5. URGES Member States to report on steps taken to promote the health of their population through a food and nutrition policy at the ministerial conference to be held in 2005;
6. REQUESTS the Regional Director to report to the Regional Committee in 2002 on the progress made in implementing the Action Plan.