



Evaluating implementation of the resolution on the Slovenian food and nutrition action plan 2005–2010



Upgraded evaluation, 2016



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FOREWORD

Slovenia, like the vast majority of countries in Europe, has been confronted with the spread of unhealthy diets and physical inactivity in its population. Obesity in particular became the most relevant health problem in school-age children. The country has, however, been dealing with the problem in an exemplary way, using innovative approaches to the promotion of healthier diets, improving physical activity levels and preventing childhood obesity.

High-level political commitment and a relentless effort for a sustainable governance mechanism with stakeholders who have a vision to reduce inequality in diet and physical activity appear to have been the ingredients for the solid progress achieved so far in Slovenia.

Slovenia has been in the forefront of many actions to promote public health in the WHO European Region. It is one of the most determined, innovative countries, always looking for new solutions to promote and protect the health and well-being of its citizens. It was notably one of the first Member States to embrace the WHO European Region public policy, Health 2020.

Slovenia has shown strong leadership in public health, not only with its ground-breaking policies but also in implementing and evaluating them. Slovenia's nutrition policies and actions are no exception.

This report was prepared to evaluate Slovenian policies on nutrition and may be used by other Member States in the Region and particularly their policy-makers in health and welfare authorities at local and national levels, health care providers and professionals, civil society organizations and researchers.

The WHO Regional Office for Europe has been working with Member States to devise options to improve diets and physical activity. The remarkable experience of Slovenia has served as a stimulus and a guiding lighthouse for further work in Europe. This report shows that progress is being made but much remains to be done; at the same time, it conveys an honest self-evaluation of the pros and cons and the successes and the challenges in implementation of the Slovenian action plan.

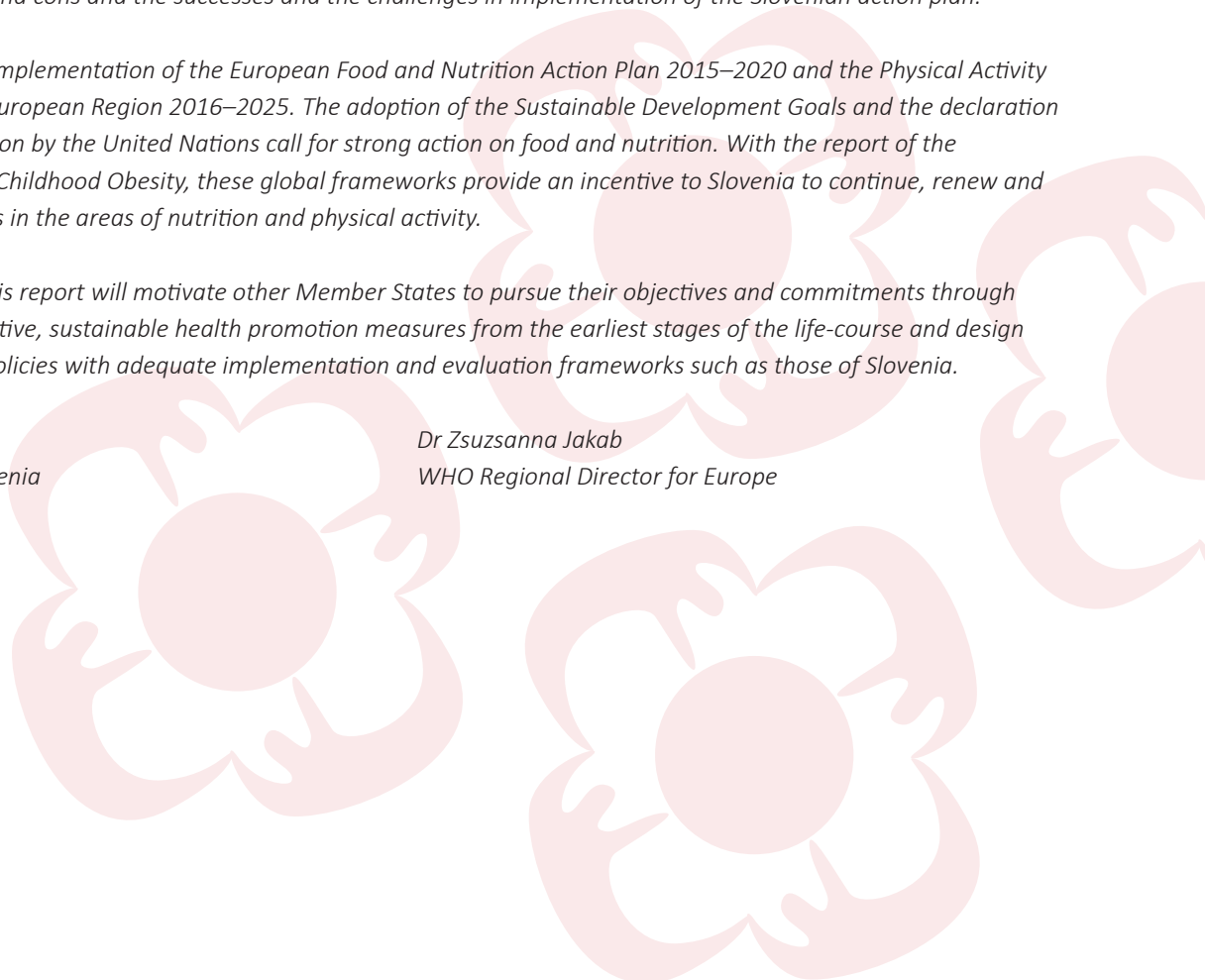
This report will inform implementation of the European Food and Nutrition Action Plan 2015–2020 and the Physical Activity Strategy for the WHO European Region 2016–2025. The adoption of the Sustainable Development Goals and the declaration of the Decade of Nutrition by the United Nations call for strong action on food and nutrition. With the report of the Commission on Ending Childhood Obesity, these global frameworks provide an incentive to Slovenia to continue, renew and scale-up its own policies in the areas of nutrition and physical activity.

Finally, we hope that this report will motivate other Member States to pursue their objectives and commitments through investment in cost-effective, sustainable health promotion measures from the earliest stages of the life-course and design and implement those policies with adequate implementation and evaluation frameworks such as those of Slovenia.

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V



EXECUTIVE SUMMARY

In 2010, the National Institute of Public Health undertook an internal evaluation of implementation of a resolution on the national Food and Nutrition Action Plan 2005–2010 (FNAP), which had three pillars: food safety, balanced and protective nutrition and a sustainable food supply. The evaluation was conducted internally to review the work (process), products or outcomes and, to a limited extent, the broader impacts in relation to strategic objectives, specific operational objectives and tasks in the individual fields of the Plan.

The main findings in 2010 were as follows:

- The objectives and measures were fairly well defined for all fields. Measures adopted by the Government enhanced coordination of inter-sector work at national, regional and local levels.
- The objectives in the field of food safety were achieved most successfully, followed by those for a sustainable local food supply. The Plan led to less progress in changing nutrition habits, as 5 years is too short to make major changes in the dietary behaviour of the population.
- The short period of implementation and lack of data were important obstacles for evaluating impact, which was thus relatively limited in 2010.

The evaluation was complemented by findings on childhood obesity in 2015. In line with the WHO Charter on Counteracting Obesity, Slovenia stabilized and reversed the trend in childhood obesity by 2015 and thus achieved one of the main goals of the Charter. Activities were more successful in young children than in adolescents and more successful in boys than in girls. Regional and socioeconomic differences were identified.

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Comprehensive, sound, well-coordinated, well-implemented inter-sector policies for nutrition and physical activity were beneficial in Slovenia. The encouraging results should not, however, be misinterpreted. Obesity in children and adolescents is still an important problem, and investment in policies and approaches to reduce the problem will continue. The results show that such investment is efficient. Whole-of-government policies adapted to the degree of disadvantage of particular groups of the population are the most promising.

1. INTRODUCTION

In 2010, the National Institute of Public Health undertook an internal evaluation of the resolution on the national Food and Nutrition Action Plan (FNAP) for the period 2005–2010 (1) to determine what progress had been made after adoption of the Plan and its usefulness in everyday life. An additional purpose was to prepare recommendations for a new food and nutrition policy for 2015–2025. The findings of the evaluation in 2010 are complemented here by findings on the prevalence of overweight and obesity among children and young people in Slovenia in 2015.

The new national nutrition and physical activity programme for health 2015–2025 (2) was based on the findings and recommendations of the evaluation of the FNAP and is in line with Health 2020 (3) and the importance of the life-course approach, as stated in the Minsk declaration (4).

2. THE NATIONAL FOOD AND NUTRITION ACTION PLAN 2005–2010

2.1 Origins of food and nutrition policy in Slovenia

Preparations for a national food and nutrition policy began in the 1990s, when WHO adopted the World Declaration and Plan of Action on Nutrition (1992) (5) in Rome. By signing this document, Member States pledged to adopt strategies for establishing healthy eating habits and healthy, safe food choices. The core activities in food safety, ensuring the food supply and healthy nutrition are integral parts of the Slovenian national health plan, “Health for all until 2004” (6).

The first step towards establishing an independent national food and nutrition policy was an Act regulating the “sanitary suitability of foodstuffs and products and materials coming into contact with foodstuffs” (2000) (7), which called for establishment of a Food and Nutrition Council to advise the Minister for Health. Using the recommendations and conclusions of working groups of the Council, the Minister of Health formulated a resolution establishing a FNAP for the period 2005–2010, the objectives of which were defined by issue or content area or by population age group.

The multisectoral Plan was adopted by an overwhelming majority in the National Assembly in March 2005, which confirmed its strong commitment to improving health and reducing the risks for communicable and chronic noncommunicable diseases related to food safety, nutrition and diet, including the increasing prevalence of overweight and obesity in the population.

2.2 Structure of the Plan

In the documentation defining the first action plan for food and nutrition in the WHO European Region (8), WHO identified three pillars that are important for ensuring safe, healthy nutrition. The comprehensive FNAP had three similar pillars:

Food safety includes prevention of biological, chemical and physical food contamination at all stages in the food chain: food production, processing and storage and the preparation and serving of food.

Healthy, balanced, protective nutrition ensures optimal health through healthy eating habits and environments supportive of healthy nutrition, especially for socioeconomically disadvantaged population groups and groups with special nutritional needs.

Providing a sustainable local food supply includes ensuring access to good-quality, healthy food, taking into account the eating culture of the population and development of sustainable agricultural and environmental policies.

2.3 Purpose and objectives of the Plan

The strategic purposes of the FNAP were to:

- ensure safety along the entire food chain;
- establish, maintain and strengthen healthy eating habits in the Slovenian population and create environments to encourage healthy eating; and
- ensure that the population has an adequate supply of good-quality, healthy food produced in a sustainable manner.

The long-term objectives included meeting the recommendations for nutritional intake for all age groups and all social and other population groups in Slovenia to achieve the optimal effects of healthy nutrition on health outcomes, including curbing and reversing the trends in obesity.

The medium-term objectives (1) were very ambitious and were achievable only when the optimal organizational, financial and staff conditions were ensured.

2.4 Implementing the Plan

Realization of the Plan required coordination by the Ministry of Health, with the ministries of Agriculture, Forestry and Food, Education, Science and Sport, Labour, Family and Social Affairs, the Environment and Spatial Planning and others, including the Ministry of Finance. The activities of each ministry in realizing the Plan were defined in annual or biennial action plans approved by the Government, with specific objectives, activities, the people responsible, the funds required and deadlines. During implementation of the FNAP, the Government adopted three action plans, for financial years 2006, 2007 and 2010. The Ministry of Health did not prepare an action plan for 2008 but carried out activities under the Slovenian Presidency of the Council of the European Union, in which food and nutrition were key health topics. The Government also did not adopt an action plan for 2009, but the Ministry of Health and other line ministries conducted many activities in food and nutrition, including measures to promote the consumption of fruits and vegetables by children and adolescents and legislation on school meals.



School fruit scheme in primary schools and accompanying measures, 2012. ©Elementary School Velike Lašče.

Many governmental and nongovernmental organizations, national, regional and local institutions, foreign experts and private sector associations in the field of food and nutrition cooperated in planning and implementing measures and activities. The National Institute of Public Health and its regional units had supported the implementation of Plan and frequently ensured “soft” coordination among sectors and institutions at national and regional levels.

2.5 Status of and issues in food safety, nutrition and food supply in 2005

2.5.1 Food safety

Food safety is well regulated in Slovenia. Before accession to the European Union, Slovenia had already adopted the *acquis communautaire* in food safety. Ensuring food safety requires an integrated approach along the food chain, in which every food business operator in any part of the chain must ensure that food safety is not compromised. The FNAP chapters on food security and the related objectives largely coincide with the requirements of European Union Food Law (9).

Key challenges in ensuring food safety in implementation of the FNAP are listed below.

- Slovenia does not have a uniform system for collecting data on food safety, and monitoring of identified risk factors is poorly coordinated.
- Of the infectious agents identified, rotavirus and *Campylobacter* bacteria were the most prevalent, while the prevalence of *Salmonella* and most other intestinal bacteria was decreasing.
- The reported epidemiological situation is relatively favourable; however, reports of intestinal bacterial infections of unknown origin are increasing.

2.5.2 Nutrition

A balanced diet comprises adequate energy and nutritional intake in a daily meal, its diverse composition, appropriate food preparation and respect for the recommended eating frequency for all age and socioeconomic groups. For growing children, a balanced diet ensures optimal growth and development, improves overall well-being and productivity and, in the long term, promotes good health and contributes to active, healthy ageing. According to WHO, up to 41% of chronic diseases such as cardiovascular disease, diabetes, certain cancers, obesity and osteoporosis are significantly associated with nutritional risk factors, and these risk factors play an important role in the development of 38% of diseases (8, 10).

Key issues in infant nutrition in implementation of the FNAP:

- Slovenia does not have comprehensive data on the frequency of breastfeeding (up to at least 6 months of age).
- The duration of exclusive breastfeeding in Slovenia does not meet recommendations and decreases significantly soon after discharge from a maternity hospital. Nearly one third of all infants are fed exclusively with milk substitutes at the age of 3 months.
- Attendance by pregnant women, postpartum women and fathers at health education programmes varies substantially by socioeconomic status and social disadvantage.
- Legislation and policies supporting breastfeeding are not followed consistently.

Key issues in the nutrition of children and adolescents in implementation of the FNAP:

- In general, children and adolescents eat unhealthy diets: they eat fewer than the recommended number of daily meals, skip breakfast, do not eat enough vegetables and eat too many energy-rich meals, snacks and sweetened drinks. Children in families of low socioeconomic status have the least healthy diets.
- Children and adolescents have few practical skills in and little knowledge of nutrition.
- Healthy nutrition is included in the national curriculum but is still not taught in all schools. The provision of meals in secondary schools is suboptimal.

Key issues in the nutrition of adults and the elderly in implementation of the FNAP:

- More than half the adult population have risk factors for chronic noncommunicable diseases associated with unhealthy eating.

- The energy value of an average meal is too high; Slovenes consume too much salt and fats, especially saturated fats, and too few vegetables.
- Almost half of all adults eat light meals or lunch away from home during the week; only three quarters of the adult population still cook lunch every day during the week.
- Men, people of lower socioeconomic status and with lower education, rural residents and residents of eastern Slovenia have especially unhealthy eating habits; the actively employed population also eats poorly.
- People with the lowest income have the greatest total burden in expenditure on food, and they frequently choose unhealthy foods.
- There are too few institutionalized measures for improving the nutrition of older adults, too few activities adapted to local environments and challenges associated with the poorer socioeconomic position of older people. The problems of malnutrition and the physiology of the older organism are often neglected.

2.5.3 Sustainable local food supply

Local production and processing of foods mitigates dependence on the unstable global food market, facilitates supply to the market without long transport that burdens the environment and deteriorates food quality, promotes cultivation of the countryside and ensures work for local farmers. Better availability of locally grown foods can reduce poverty and social inequality and ensure a sustainable environment and development. Locally grown fruits and vegetables that are harvested when ripe are of better quality than those picked before maturity and can have greater health benefits. Increasing the proportion of locally grown foods in the diet, especially fruits and vegetables, may favour a sustainable food supply and minimize nutrient deficiencies in the diet.

Key issues in the local supply of food in implementation of the FNAP:

- Slovenia is poorly self-sufficient in basic agricultural products, and the supply is unbalanced, with low crop yields and much higher livestock production.
- The existing offer of locally produced food does not meet the requirements of public institutions owing to fluctuations in quality, inconsistent supply and dispersed producers.
- Offers of locally grown food are increasing, including organic foods, yet there is no comprehensive national programme to link producers and establish a stable market.

3. EVALUATION OF OUTPUTS IN 2010

3.1 Evaluation procedure

The FNAP was evaluated internally to review the work (process), products and, to a limited extent, its broader impact in relation to the strategic objectives, specific operational objectives and tasks in specific areas.

The evaluation was inspired by good practice in policy evaluation and projects:

- review of the Scottish Diet Action Plan. Progress and Impacts 1996–2005 (11), with participatory involvement of stakeholders;
- comparison of nutrition policy implementation in Scotland with that in 12 other countries (12);
- the Joint WHO/European Commission Directorate General for Health and Food Safety project for monitoring progress in improving nutrition and physical activity and preventing obesity in the European Union (13);
- evaluation of the European Union Platform for Action on Diet, Physical Activity and Health (14) for terms of reference; and
- examples of research on public policies (DETERMINE (15), PolMark (16) and Crossing Bridges (17)) for approaches and questionnaires.

The expert group appointed at the National Institute of Public Health by the Ministry of Health conducted the evaluation, with assistance from a representative of the Slovenian Evaluation Society (18). The aims, objectives and evaluation questions were to:

- assess achievement of the FNAP objectives (process);
- assess the success of realization of the FNAP objectives (outputs);
- assess the effectiveness of the FNAP in specific areas and, to a limited extent, in relation to time and data limitations;
- assess the applicability of the FNAP as a model for action plans and individual tasks; and,
- on the basis of the conclusions of the evaluation, draft starting points for preparation of a national FNAP for the next decade.

Two types of evaluation were used: targeted questionnaires completed by key informants (mixed quantitative and qualitative interviews with identified groups of stakeholders) and logic evaluation matrix questions adapted from the model of the Slovenian Evaluation Society (19) to evaluate the objectives. The results were synthesized to derive conclusions. This innovative approach was designed by the expert group, and the evaluation was a highly engaged, participatory process involving a broad scope of stakeholders and linking them with experts in a health-in-all-policies approach (Fig. 1).

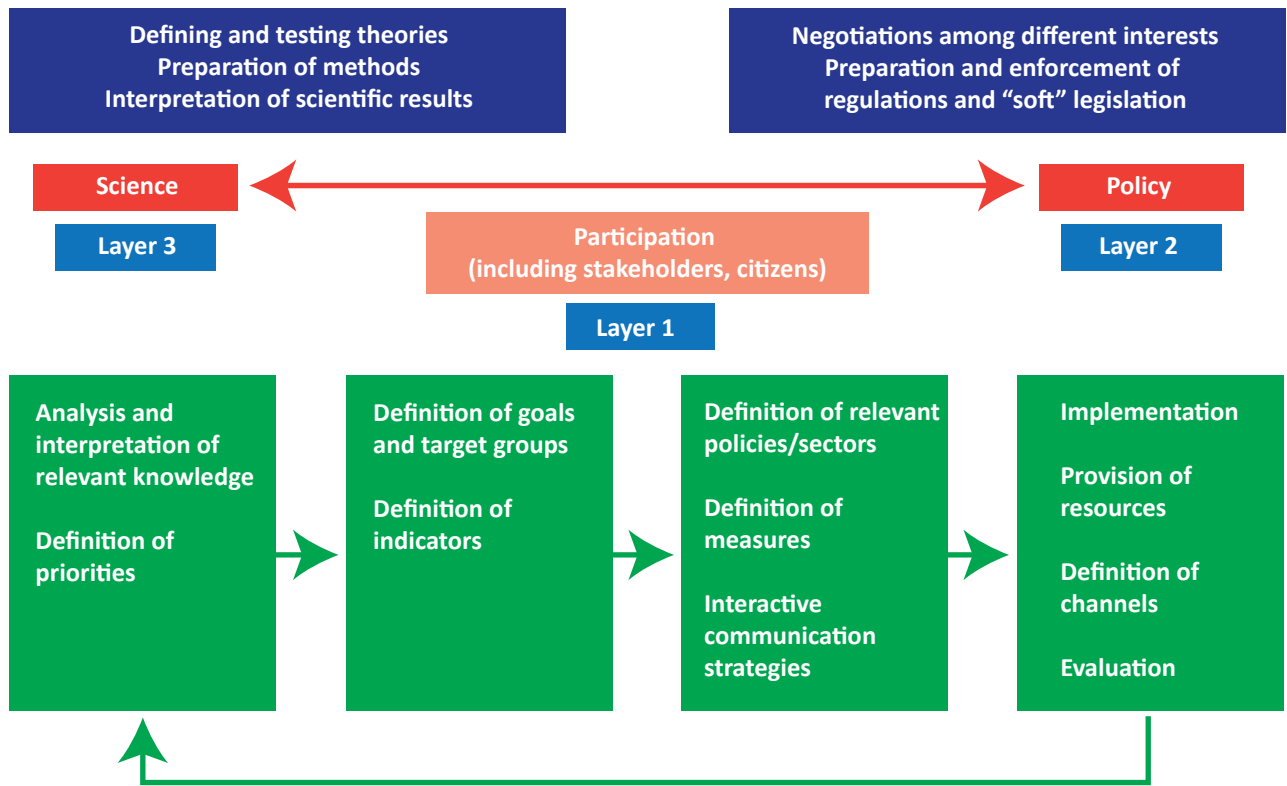
3.1.1 Questionnaire for key informants

In-depth interviews were conducted with stakeholders (key informants) in spring 2010. The questionnaire (Annex 1) had a general and a specific section. The general part contained introductory (“warming up”) questions, questions on the adequacy and implementation of the 2005–2010 FNAP, the adequacy of communication, whether the Plan addressed inequalities in health and recommendations. The specific section was for key informants active in specific areas of food safety, healthy nutrition and a sustainable local food supply, to elicit their perceptions of the success in achieving individual goals and recommendations for future policy. The questionnaire had both open questions and closed questions with space for opinions.

Stakeholders were defined as typical, reputable representatives of specific groups, and lists of key informants were drawn up for the three pillars of the FNAP (Fig. 2). A total of 75 were selected; 72 (20 male, 52 female) were interviewed, as three

were unable or unwilling to participate. To gain insight also at regional level, 17 of the 75 informants were from the regions. The participants were assured maximal anonymity.

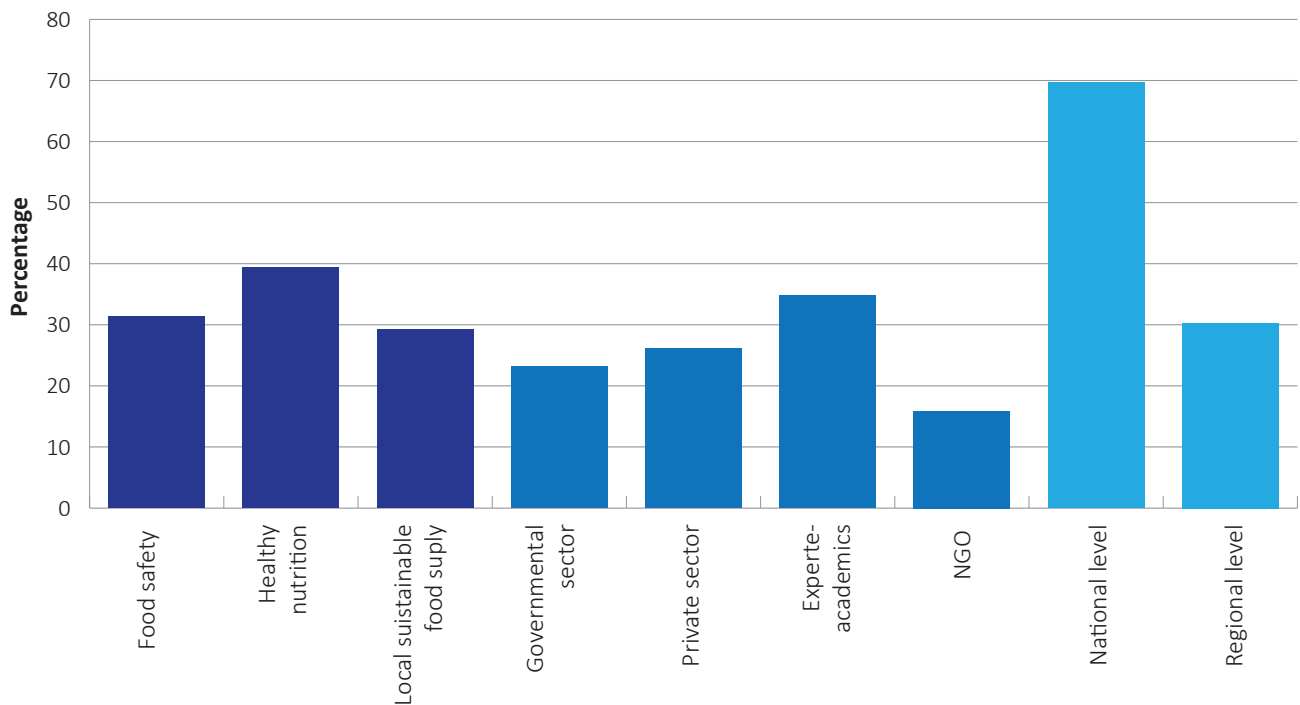
Fig. 1. Framework for a whole-of-government approach in health-in-all policies and health equity



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Source: Reference 20

Fig. 2. Proportions of key informants by pillar, category and level



NGO, nongovernmental organization

3.1.2 Logic evaluation matrix

Four steps were followed in evaluating the goals in a matrix. First, some of the FNAP goals were slightly reworded (without changing the content) because they were not clearly defined or measurable, and reasonable, measurable goals were formulated. Potential deviation of the assessment was considered in these cases, with a high level of transparency.

In the second step, documentation and materials were provided, comprising an overview of the annual action plans to determine whether they included goals; an overview of the outputs (products); an overview of the databases and data, with, if necessary, additional analysis; and the views and opinions of key informants.

The third step was assessment of the goals of the FNAP in the matrix (Table 1). Nine questions with assessment criteria were formulated, and assessment scores were defined as +, 0, -, +/0 and 0/-.

The results were validated by discussion at two workshops, one on the content, organized on 15 October 2010 (World Food Day) with a broad range of stakeholders, and a second on the method, organized on 19 November 2010 with members of the Slovene Evaluation Society. The criteria for the logic evaluation matrix (21) were prepared by the expert group and a consultant from the Slovene Evaluation Society.

Table 1. Questions for the logic evaluation matrix

Q1: Is there enough evidence to set priorities for individual goals?

+: Action area is well defined and researched, data are available, problems and challenges are well known, priorities are set.

0: Action area is partially defined and researched, partial data are available, problems and challenges are partly understood.

-: Action area is insufficiently defined and researched, there are few data, problems and challenges are not recognized.

Q2: Were appropriate measures proposed for individual goals?

+: A proposal was prepared; it is concrete and implementable, with clearly defined tasks.

0: A proposal is in a draft phase; it is not concrete and does not include clearly defined tasks.

-: There is no proposal.

Q3: Were the proposed measures adopted?

+: The proposed measures were adopted and implemented.

0: The proposed measures were adopted only partially and were not fully implemented.

-: Measures were proposed but were not adopted.

Q4: Were the adopted measures implemented?

+: The adopted measures have been implemented and are supported by legislation (laws or "soft" legislation).

0: The adopted measures have been partly implemented but with insufficient human or financial resources and little monitoring or control.

-: The adopted measures have not been implemented.

Q5: Were social inequalities addressed by the proposed measures?

+ : The measures also apply to socially disadvantaged groups and are reaching them well.

0 : The measures also target socially disadvantaged groups but are reaching them only partially.

– : The measures do not target socially disadvantaged groups.

Q6: Was at least 50% of the target population reached by the measure?

+ : The measure reached more than two thirds of the target population.

0 : The measures reached approximately half the target population.

– : The measures reached less than one third of the target population.

Q7: Were sufficient financial resources provided for implementation?

+ : The financial resources were sufficient for implementation; more than two thirds of those required were available.

0 : The financial resources were partly sufficient: about half the amount required was available.

– : The financial resources were partly sufficient: about one third of the amount required was available.

Q8: Were the strategic aims of the Plan in line with the goals?

+ : The strategic aims were fully in line with the goals.

0 : The strategic aims were partly in line with the goals.

– : The strategic aims were not in line with the goals.

Q9: Were implementation activities in line with individual goals?

+ : More than two thirds of the activities were in line with individual goals.

0 : About half the activities were in line with individual goals.

– : Less than one third of activities were in line with individual goals.

Source: reference 21

The criteria for evaluating and estimating achievement of individual goals in the FNAP were established by defining and ascribing scores (Table 2).

Table 2. Criteria for evaluating achievement of individual goals in the FNAP

Criterion	Score
Considerable success (+)	4.8–5.0
Considerable or moderate success	4.3–4.7
Moderate success (+/0)	3.8–4.2
Moderate or little success	3.3–3.7
Little success (0)	2.8–3.2
Little or minimal success	2.3–2.7
Minimal success (0/-)	1.8–2.2
Minimal or no success	1.3–1.7
No success (-)	≤ 1.2

All areas were assessed from the logic evaluation matrix questions and scored.

3.1.3 Capacity-building and validation workshops

As part of the evaluation, two capacity-building and two validation workshops were organized:

- 2 June 2010: workshop on capacity-building for methodological evaluation, led by Dr Bojan Radej, Slovene Evaluation Society;
- 14 and 15 June 2010: workshop on sharing best practices, with presentation of an evaluation of the Scottish food and nutrition action plan by Professor Elisabeth Dowler, University of Warwick, and Dr Martin Caraher, City University, London;
- 13 October 2010: workshop on evaluation of results, with a broad range of stakeholders; Caroline Bollars, WHO Regional Office for Europe, participated as an external observer;
- 19 November 2010: workshop on methodological validation of the evaluation, with the participation of members of the Slovene Evaluation Society.

3.2 Overall findings

The FNAP is an appropriate, effective tool for realizing its objectives and tasks. In principle, the activities planned annually followed the strategic objectives in the document.

The objectives in all fields were fairly well defined on the basis of research results; suitable measures have been proposed to meet most objectives. Measures adopted by the Government contributed most to coordination of the numerous sectors. Implementation of the FNAP resulted in preparation of national supporting documents, guidelines and tools, which is a real breakthrough.

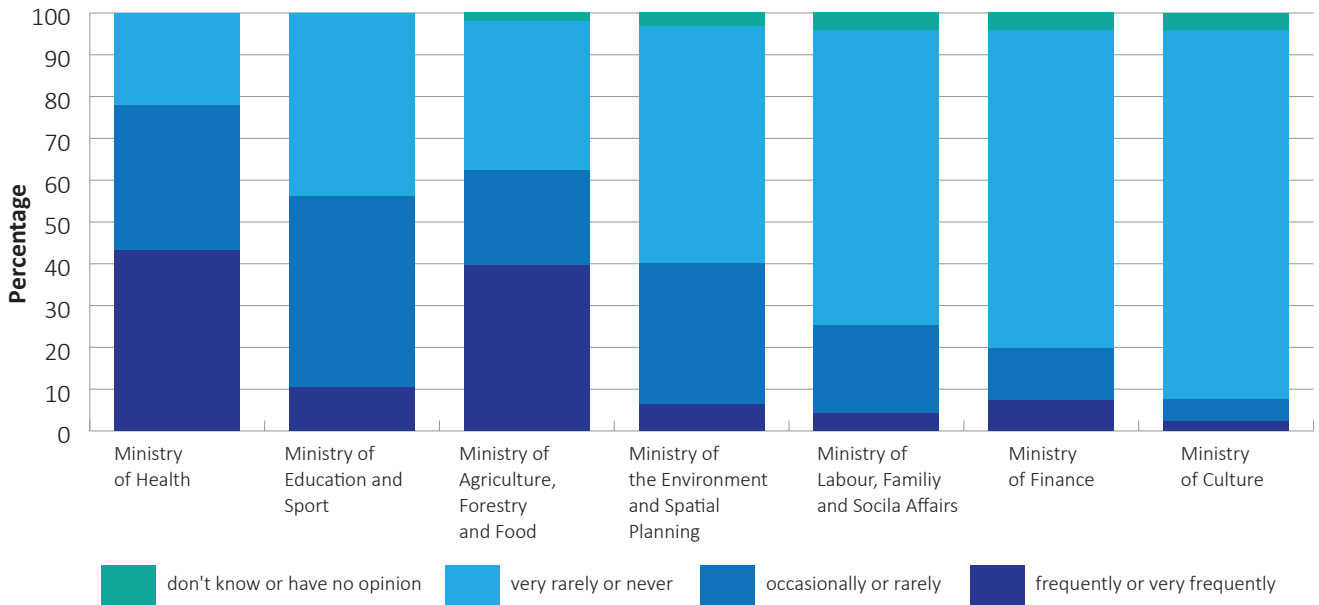
3.2.1 Results of interviews with key informants

The FNAP supported the mobilization and involvement of various stakeholders and thus raised their awareness of the importance of activities in the field of food and nutrition. Appropriate representatives were chosen to perform the tasks, although with varying involvement.

The FNAP created the greatest progress in establishing better communication and cooperation, which are often prerequisites for achieving objectives. The evaluation showed high visibility of the document among stakeholders in various

sectors. The greatest progress in communication and cooperation was made in the agricultural and education sectors (Fig. 3). Communication was most successful for healthy nutrition, less in ensuring a sustainable local supply and relatively poor for food safety, probably due to the specificity of the regulatory approach.

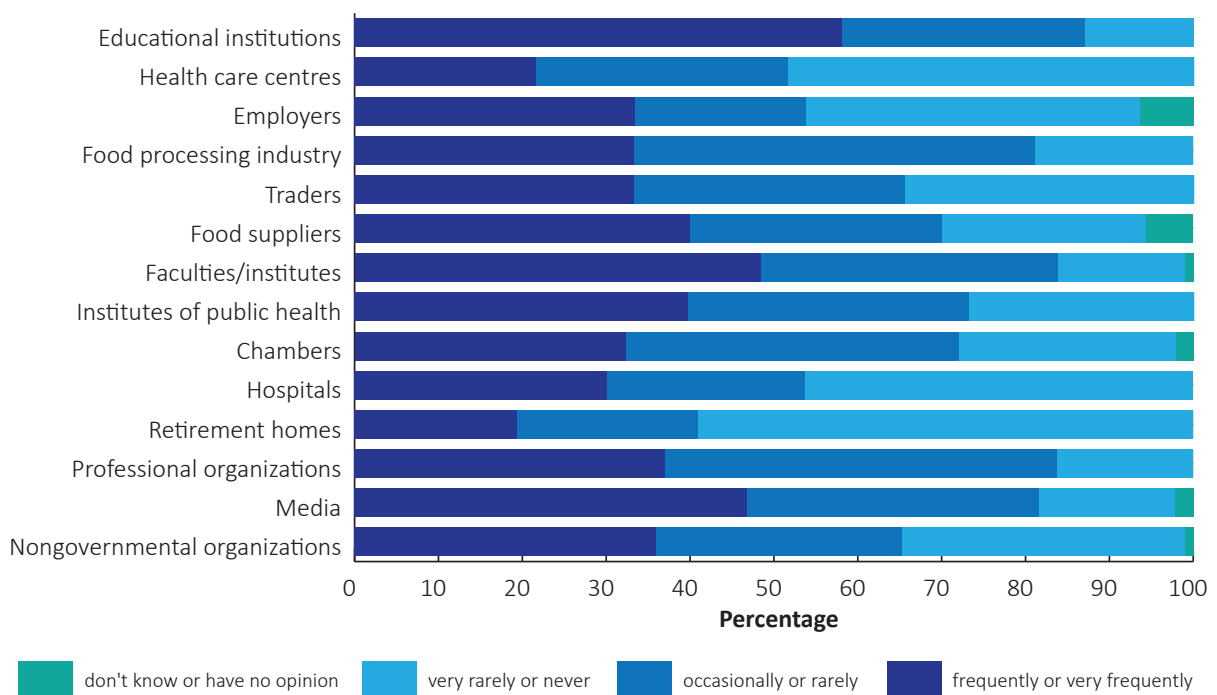
Fig. 3. Frequency of cooperation with other sectors during implementation of the FNAP estimated by key informants (N = 72)



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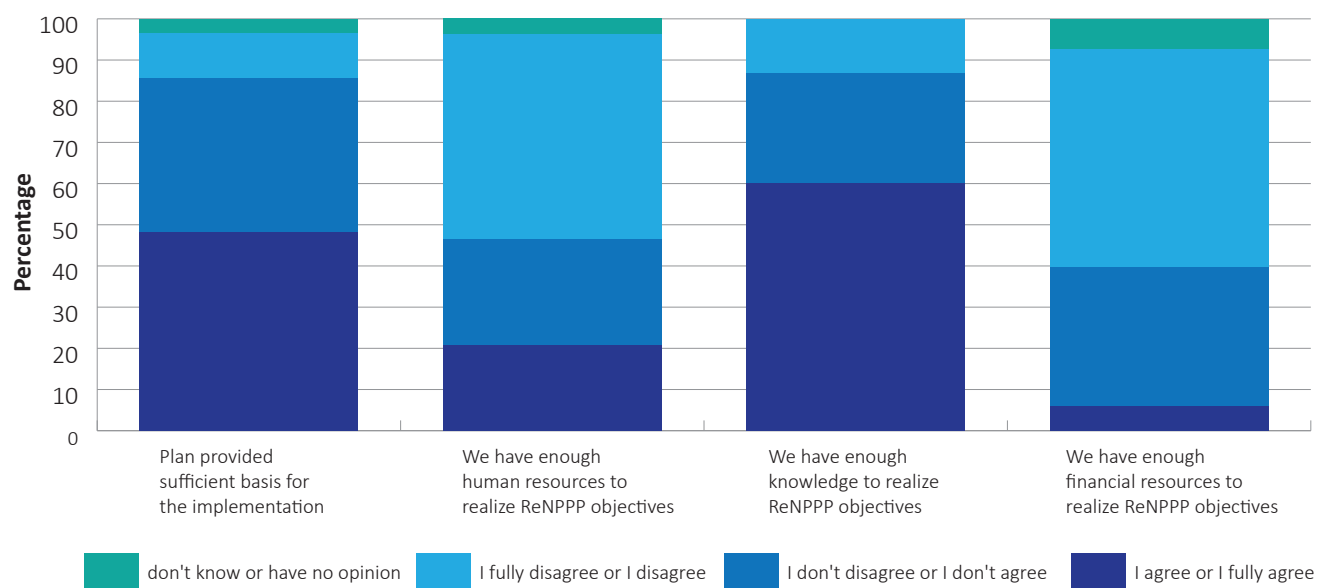
Cooperation among different stakeholders was established most successfully for educational institutions, faculties and institutes, institutions of public health, nongovernmental organizations, food suppliers, professional organizations and the media (Fig. 4). More cooperation should be encouraged with retirement homes and health care centres.

Fig. 4. Frequency of cooperation with other stakeholders in implementation of the FNAP estimated by key informants (N = 72)



Interviews with key informants showed that there was generally sufficient knowledge to implement activities (Fig. 5). They agreed that the Plan provided a sufficient basis for actions. In certain action areas, such as education, there was less implementation of the planned strategies and activities than expected owing to limited organizational, financial and human resources. In general, lack of resources was a major obstacle to implementation of the Plan.

Fig. 5. Estimates by key informants of the potential for achieving the objectives and tasks of the Plan



Interviews with key informants are valuable for obtaining insight into the processes of implementation, for ensuring a participatory process, for more valid results and for sharing opinions. The results were used to evaluate the present policy and define the priorities for the future policy.

3.2.2 General findings

A logic evaluation matrix indicates the extent of implementation of actions in different areas and comparisons among the areas of the FNAP. Situation analyses for action areas were available, priorities and measures were defined to a slightly lesser extent. Adoption of measures was problematic in some implementation areas (Table 1), especially with regard to pregnant and lactating women and infants and nutrition education. Measures reached more than 50% of the population (i.e. were institutionalized) only in the areas of food safety and healthy nutrition for children and adolescents, mainly because there is well-organized nursery school and school nutrition. “Soft” legislative approaches in the area of healthy nutrition had the lowest coverage for the target populations (Table 1). Insufficient funding was perceived as the main barrier in the areas of healthy nutrition and, to some extent, a sustainable local food supply.

The **social determinants of safe and healthy nutrition** were considered in particular for the pillar of healthy nutrition, mainly for children and adolescents and to some extent in providing sustainable local food. These determinants should be considered to a greater extent in “healthy food offered” and in “nutrition education”. Social determinants were not recognized as a factor in the field of food safety (Table 3). Consideration of social gradients and targeted approaches to reducing inequalities in all activities and measures increased during the years of implementation of the FNAP, especially at the end, with growing awareness of the significance of social determinants at European Union and WHO Europe level.

Regulation-based, **institutionalized system measures** encouraged implementation of objectives (Tables 3 and 4). Thus, 50% of the goals in the area of food safety were achieved with “considerable success”, and the lowest score was “little success” (Table 4). Most goals in the areas of healthy nutrition and a sustainable local food supply were achieved with “little success” or “little to moderate success” (Table 4). Some goals in the area of healthy nutrition (nutrition education and healthy food offered) had the lowest scores, perhaps because actions in the field of nutrition are not supported by legislation.

Table 3. Achievement of the objectives of the FNAP according to the nine logic evaluation matrix questions

Area	Situation analysis, priorities set	Measures were defined	Measures were adopted	Measures were implemented	Health inequalities considered	Measure reached > 50% of target population	Adequate funding available	Goal in line with strategic aims	Implemented activities in line with goals	Degree of implementation
LE Matrix questions	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Question 8	Question 9	
Food safety	4.3	4.5	4.3	3.5	NA	4.5	4.0	5.0	5.0	Substantial / moderate
Healthy nutrition	4.1	4.1	3.1	2.8	3.2	2.4	2.4	4.6	3.7	Moderate / little
Pregnant & lactating women, infants	3.8	3.8	2.6	2.2	3.0	3.8	2.2	5.0	4.2	Moderate / little
Children and adolescents	4.4	4.5	4.0	3.3	4.5	3.4	2.8	5.0	3.5	Moderate
Active population	4.1	4.3	2.9	2.6	3.3	1.9	2.9	4.1	3.7	Moderate / little
Healthy food offered	4.0	3.0	3.0	3.0	1.0	1.0	1.0	3.0	3.0	Little / minimal
Nutrition education	3.3	3.7	3.0	2.0	1.7	2.3	2.3	4.0	3.0	Little
Sustainable local food supply	4.3	3.7	3.5	3.2	2.8	3.3	2.3	4.7	4.2	Moderate

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Answers to questions about achievement of groups of objectives were rated on a scale of 1 to 5, from the lowest to the highest; considerable, small and moderate are interim values.

Table 4. Qualitative scores in achieving the goals of the Plan, by area

Area	No. of goals per area	Average score per area	No success (% of goals)	No/ minimal success (% of goals)	Minimal success (% of goals)	Minimal/ little success (% of goals)	Little success (% of goals)	Little/ moderate success (% of goals)	Moderate success (% of goals)	Moderate/ considerable success (% of goals)	Considerable success (% of goals)
Food safety	8	Considerable/ moderate	0	0	0	0	12.5	0	25	12.5	50
Healthy nutrition	29	Moderate/ little	0	0	6.9	13.8	20.7	27.5	13.8	17.2	0
Food supply	6	Moderate	0	0	0	0	50	17	17	0	17

The field of nutrition had 29 objectives. It was found that too many disparate targets in a given field hinders their implementation, as a large number of objectives can overstretch limited resources and overload the network of implementers. In some places, the objectives set were too ambitious, particularly in the area of healthy nutrition.

3.2.3 Specific findings by policy pillar

Objectives in the field of food safety were the most successfully achieved.

The evaluation results show that the greatest progress was made in establishing an effective food safety system. Success is mainly attributable to the European Union legislative mechanism in this field, which also regularly provides funding for

activities. More could be achieved by educating and enlightening the general population on food safety. The issue of health inequalities in food safety area should be further explored.

Objectives in terms of healthy nutrition were achieved moderately.

The food and nutrition policy made relatively little progress in changing nutrition habits (Table 5), as 5 years is too short a time to bring about major changes in the dietary behaviour of the population. Even changes in environments such as the workplace, where people are given a choice of healthy foods, take place gradually. Lack of data was an important obstacle for evaluating impacts. A system of minimum, sustainable, regular indicators of nutrition should be established. Effects on dietary behaviour are complex and depend on a variety of determinants.

Table 5. Trends in attaining the medium-term objectives of the FNAP in 2010

Objective	Achievement
Increase consumption of vegetables by $\geq 30\%$ and of fruits by $\geq 15\%$.	Objective achieved for consumption of fruits but not for consumption of vegetables. Data are similar for children and adolescents.
Decrease intake of total fat by 20% and saturated fat by 30%.	Objective not achieved, but there is visible trend to lower intake of total fats and animal fats and greater use of olive oil.
Increase dietary fibre by 20%.	No data
Increase intake of calcium by 25% and of vitamin C by 15%.	No data
Decrease the daily intake of alcohol by 35% for men and by 20% for women.	Objective not achieved, but there is visible decreasing trend in alcohol intake
Decrease the proportion of the population that is pre-obesity and obese (BMI > 25 kg/m ³) by 15% for adults and 10% for children and adolescents.	The rates of pre-obesity and obesity are the same or increasing among adults and are increasing among children and adolescents.
Attain about 60% exclusive breastfeeding up to the 6th month and about 40% breastfeeding with food substitutes up to 1 year of age.	Slight decrease in breastfeeding at discharge from the maternity hospital and later.

BMI, body mass index

The greatest advance in healthy nutrition was setting nutritional norms and standards for children and adolescents and promoting encouragement of breastfeeding among health care providers. More could be achieved by strengthening group and individual diet counselling and nutrition education.

Objectives in the field of a sustainable local food supply were achieved.

Most progress was made in increasing the availability of locally produced food in public institutions (schools, nursery schools). Population self-sufficiency in agricultural produce could be reinforced.

3.3 Remarks

The evaluation showed that the impact of the FNAP depended strongly on the effects of policies in other sectors. As the inter-sector, horizontal component of the Plan predominated, the future food and nutrition policy will closely involve the sectors of agriculture, education, sports, culture, regional and local development, finance, the economy and others in preparing and implementing measures. The general public – the ultimate recipient of the achievements of the FNAP –

should also be involved. Therefore, the food and nutrition policy should achieve more and more of its objectives through other public policy measures.

The resolution on the FNAP was one of the first policy documents for a healthy lifestyle adopted by the Ministry of Health. Its evaluation provides a basis for the new food and nutrition policy. The FNAP was based on promoting activities, managing norms, encouraging research and adopting a wide scope of standards and guidelines. The Plan may not have responded to actual issues as well as expected because elements of the evaluations were not systematically included in the document.

The long- and medium-term objectives of the FNAP represent a good strategic framework for action in the field of food and nutrition. A number of activities will be continued, as they could lead to significant reductions in the burden of diseases and the associated economic burden due to unhealthy nutrition. The medium- and long-term objectives in the field of a sustainable local food supply should be better defined in the future policy.

The nutrition action plan for Slovenia for the next period, from 2011 on, will include the following six priorities, as defined by this evaluation:

1. Support a healthy life-course approach to nutrition, from pregnancy, infancy, young childhood and adolescence, to nutrition for workers and the ageing population.
2. Ensure a safe, healthy, sustainable food supply.
3. Provide comprehensive information and education to consumers.
4. Conduct integrated actions to address the determinants of poor nutrition.
5. Strengthen local food supplies, and intensify nutrition standards and actions in the health sector.
6. Regularly monitor and evaluate implementation of the plan with the logic evaluation matrix approach.

It is encouraging to notice that Albania has successfully use the methodological approach for evaluation of the complex national policy, developed in Slovenia, for the evaluation of the Albanian FNAP in years 2011-12 (Slovene Journal of Public Health 2017, in print).

4. EVALUATION OF OUTCOMES IN CHILDHOOD OBESITY IN 2015

4.1 Rationale for the upgraded evaluation

Overweight and obesity are complex individual and social phenomena. Different individual metabolic types of obesity are driven at the social level by global and local obesogenic environments (22, 23). Complex inter-sector policies are required to tackle obesity in children and adolescents, with comprehensive evaluations of the outputs and outcomes.

Owing to the short period of implementation of the FNAP for 2005–2010, outcomes are difficult to discern, and data were not available on the impact on the prevalence of overweight and obesity among children and adolescents in 2010. The results summarized here represent additional insight into the success of the FNAP measures. A new resolution on the policy for Nutrition and Physical Activity 2015–2025 was adopted only in 2015 but FNAP measures were implemented also in the period 2010-15.

4.2 Datasets on trends in childhood obesity

WHO European Childhood Obesity Surveillance Initiative (COSI)

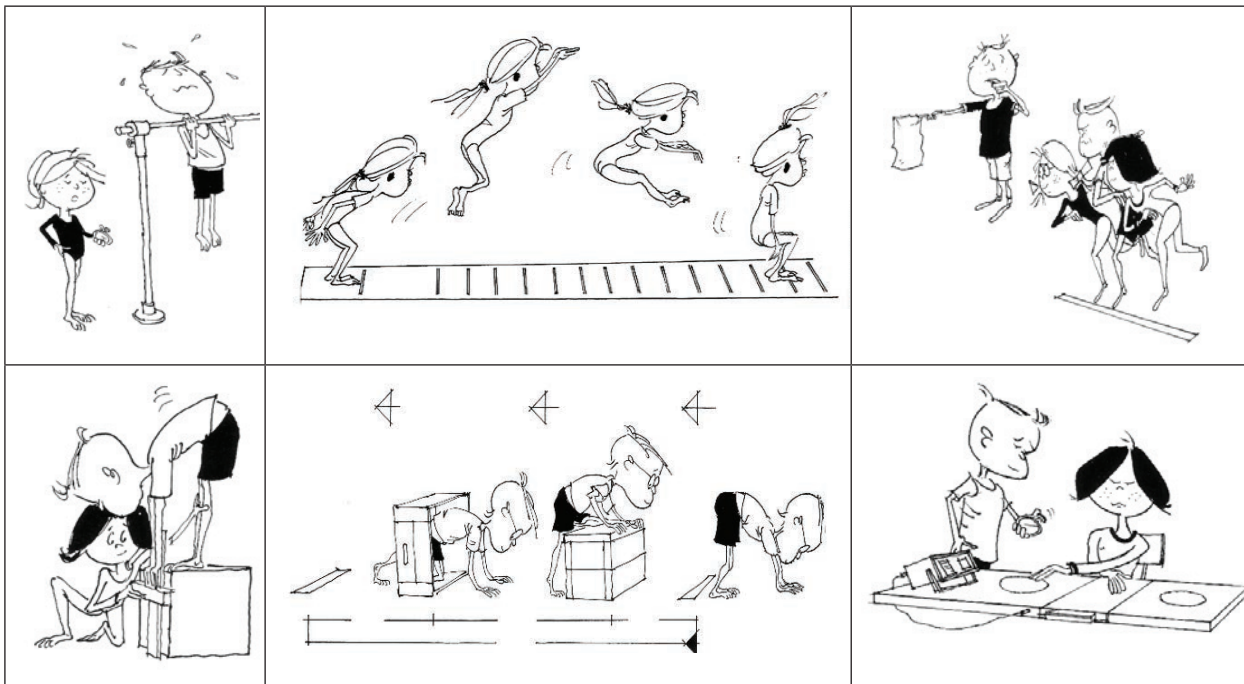
The WHO European Childhood Obesity Surveillance Initiative (COSI) is a response to a recommendation of the European Ministerial Conference on Counteracting Obesity (24), to assure harmonized surveillance systems that provide comparable data on the rates of overweight and obesity among primary schoolchildren, indicating trends and the impact of actions taken.

Slovenia has participated routinely in COSI to measure trends in overweight and obesity in primary schoolchildren (6–9 years) in order to follow the progress of the epidemic and inter-country comparisons within the European Region. The Faculty of Sports, University of Ljubljana, is responsible for national coordination, management and implementation of COSI protocols and reporting. The COSI protocol allows each participating country to devise a system suitable for its circumstances. The COSI approach was implemented within the national SLOfit system.

SLOfit system and database

The SLOfit system, organized and managed by the Faculty of Sports, University of Ljubljana, is a unique monitoring system embedded in the education system. SLOfit data represent an integrated database on body weight, body height and physical fitness in children and adolescence in Slovenia (25). The data include the results of physical fitness tests (six of eight tests are shown below) and measurements of body height, body weight and skin folds.

Measurements are made annually in April during physical education classes in all Slovenian primary and secondary schools. Height and weight are measured by trained physical education teachers, who complete a 30-h course in anthropometrics during their studies according to a standard protocol. Height is measured with stadiometers of various brands to the nearest 0.1 cm and weight on pre-calibrated portable scales of various brands to the nearest 0.1 kg.



University Children's Hospital Ljubljana

Anthropometrics (body weight, height and BMI) and total cholesterol levels were measured in a population of 5-year-old children attending mandatory nationwide medical examinations, to determine trends in the prevalence of overweight, obesity and hypercholesterolaemia over a period of 8 years (2001–2009) and to assess the impact of national nutritional guidelines for nursery schools introduced in 2005. Overweight, obesity and anthropometrics, defined by International Obesity Taskforce criteria (25), were also measured in adolescents entering secondary school during mandatory medical examinations in 2004, 2009 and 2014 (26,27).

Health behaviour in school-age children

The international survey on health behaviour in school-age children (28), involving 42 countries, provides data on pre-obesity and obesity. Body weight and height are self-reported and are therefore not very reliable; however, they serve as internationally comparable indicators.

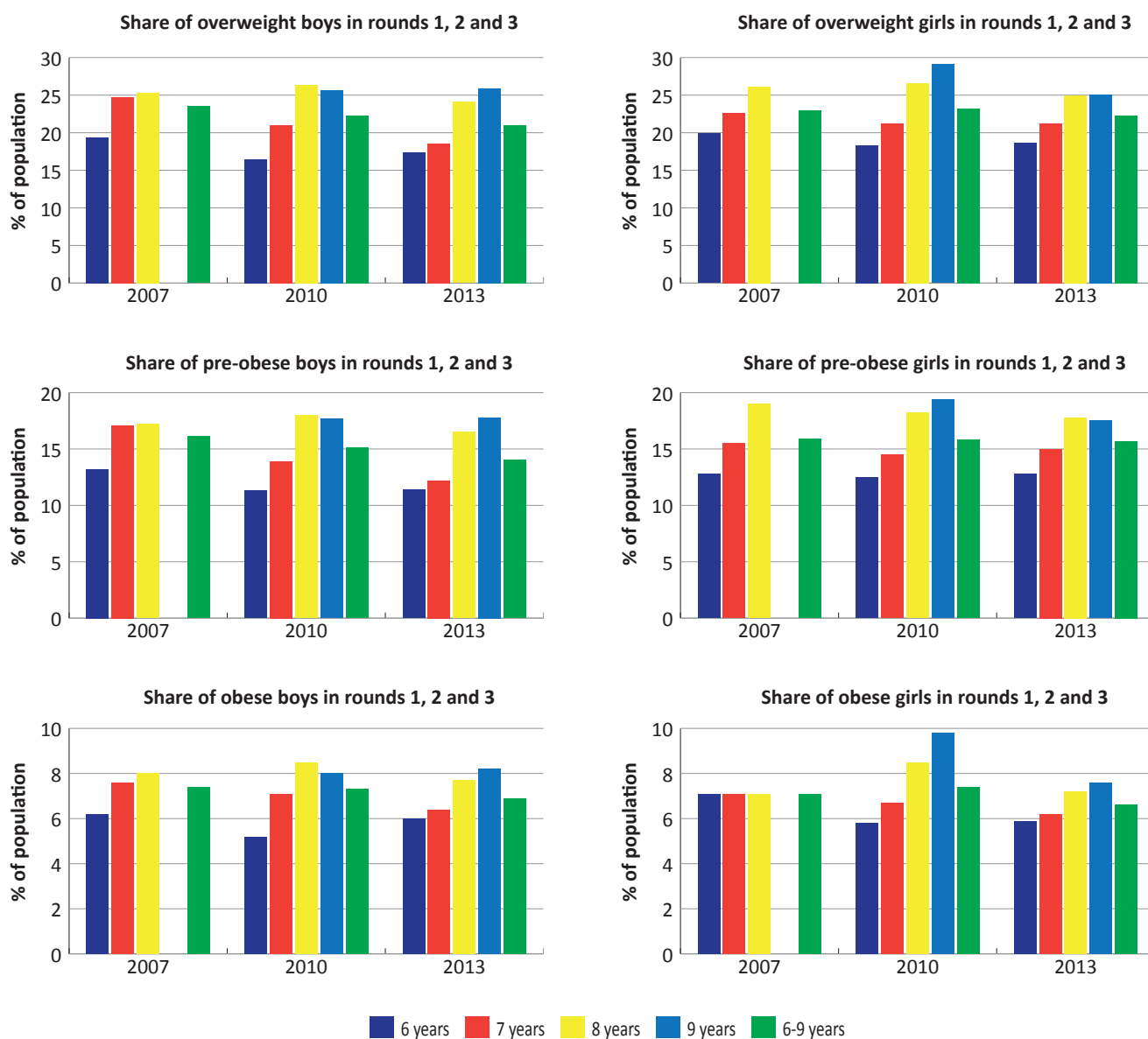
4.3 Pre-obesity and obesity in Slovene children and adolescents

All three datasets of measured BMI in Slovenia – SLOfit (29), COSI (30) and data from the University Children's Hospital, University Clinical Centre Ljubljana (26) – show that the upward trend in overweight and obesity in children and adolescents has flattened out in the past 10 years and show a decrease in overweight and obesity in the past 5-year period in children and to some extent in adolescents.

WHO COSI results for Slovenia

Slovenia has participated in COSI since its establishment in 2008. In this initiative, countries in the WHO European Region monitor the BMI of children aged 6, 7, 8 and 9 years. Between rounds 1 and 2 of COSI in 2007–2008 and 2009–2010, the rates of overweight and obesity were reduced in 6- and 7-year-old boys and 7-year-old girl but not in 8-year olds of either sex (30). In the third round (2012–2013, Fig. 6), the trends in overweight and obesity in girls flattened out, and the trends in boys aged 6–9 years were reversed (31).

Fig. 6. Prevalence of overweight and obesity together and of overweight and obesity separately, by gender



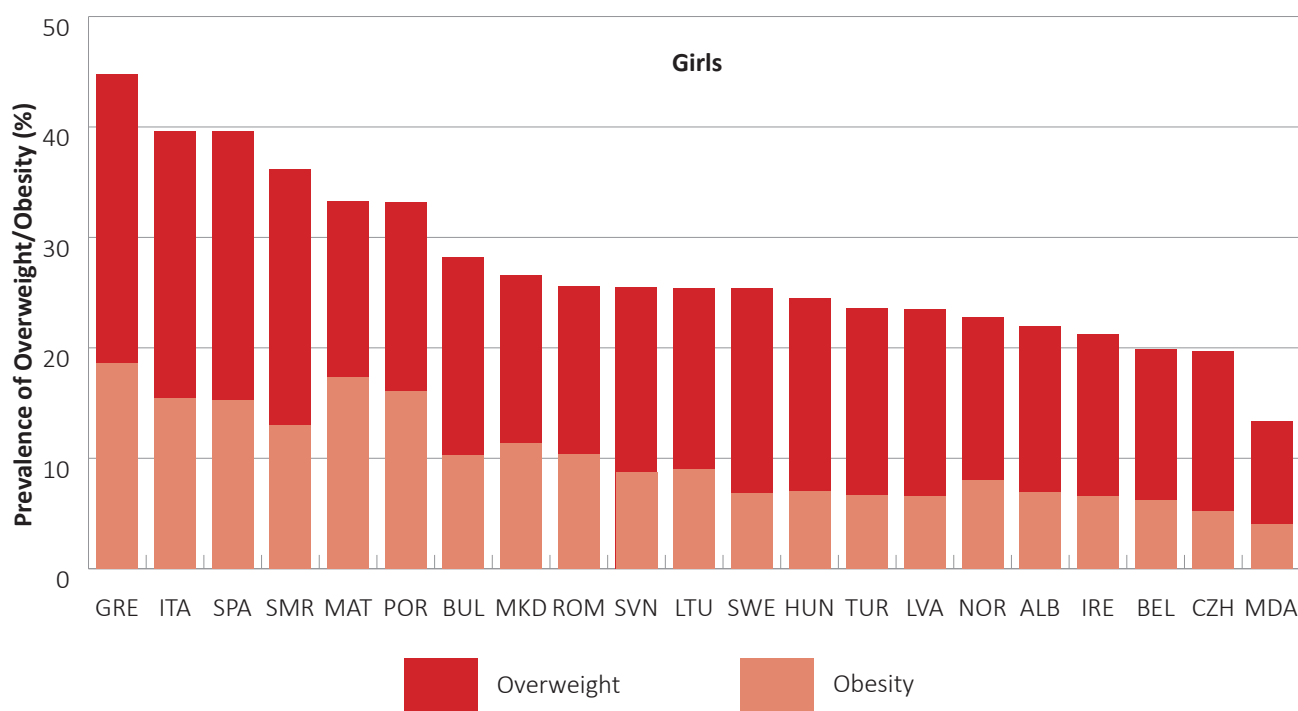
Based on data from COSI rounds 1, 2 and 3, with International Obesity Taskforce definitions
 Sources: WHO European Office in Copenhagen and Faculty of Sport, University of Ljubljana, 2016

Trends were also calculated according to WHO criteria to allow comparisons with other WHO references. The WHO criteria are very strict, and we therefore found a discrepancy, with a relatively large proportion of children who were pre-obese and obese according to WHO criteria but a smaller proportion of children with poor physical fitness. (This is a discrepancy, unless there are many very fit obese children in Slovenia!) Although the trends are similar with the WHO and International Obesity Taskforce definitions, we used the latter for the calculations in Fig. 6.

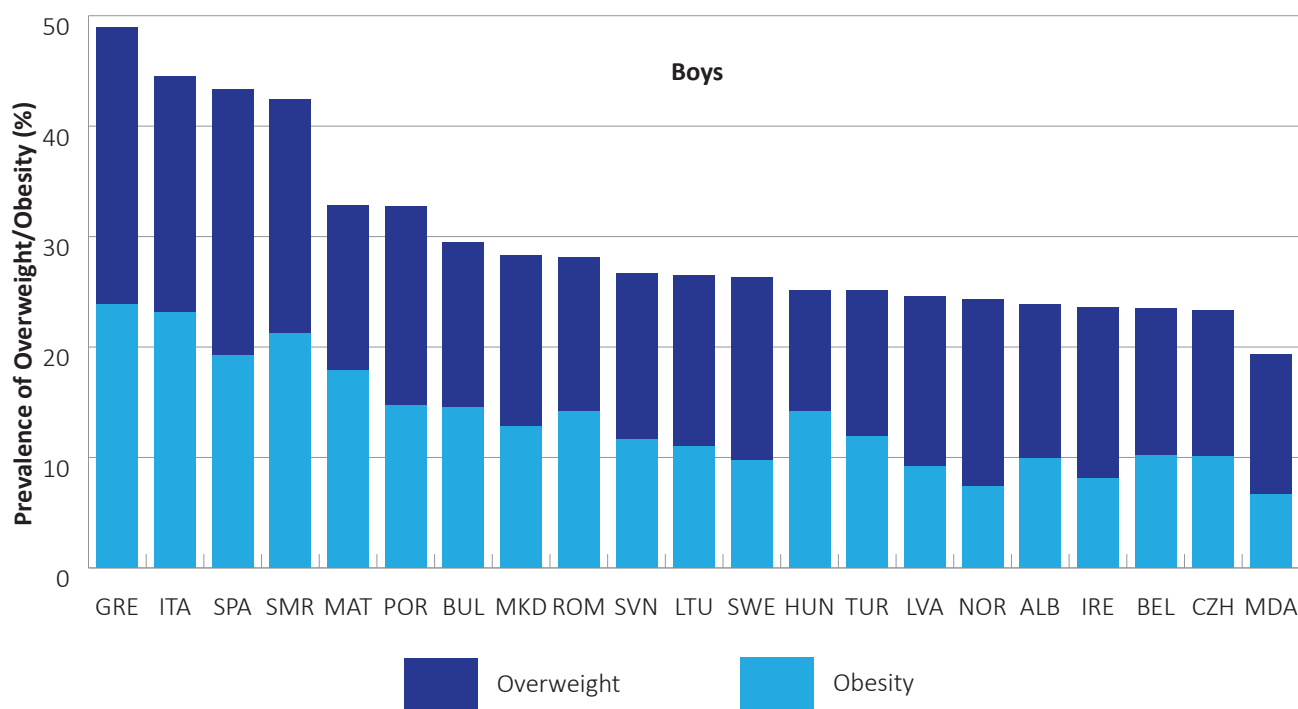
WHO COSI inter-country results

The finding that 25.5% of girls and 26.7% of boys are overweight or obese places Slovenia in the middle rank of the COSI countries (Fig. 7). The trends are not easy to categorize, as the mean BMI-for-age Z scores differed by age group in boys and girls. Nevertheless, the general trend ranks Slovenia among countries in which the BMI of children decreased the most, with Italy and Portugal. Nevertheless, BMI values are reduced most in countries with a higher initial measured BMI (30).

Fig. 7. Prevalence of overweight and obesity (together) in 6–8-year-old children, intercountry comparison



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Based on data from COSI round 3 (2012–2013) and on rounds 1 and 2 when only those data were available, with WHO definitions. Each country chose the age group that best represented it: MKD, 6 year-old children; BEL, BUL, CZH, GRE, HUN, IRE, LTU, LVT, MAT, MDA, POR, SPA, SVN, SWE; TUR, 7-year-old children; ALB, ITA, NOR, ROM, SMR, 8-year-old children

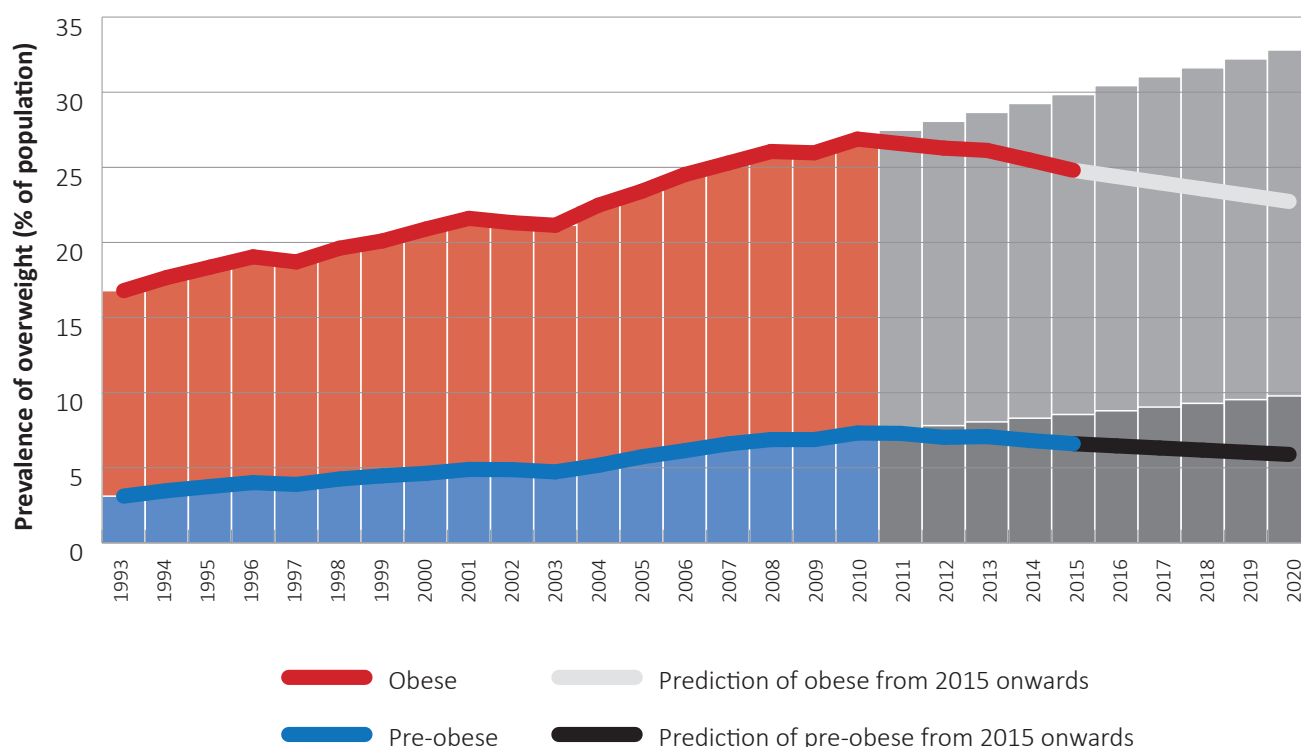
ALB, Albania; BEL, Belarus; BUL, Bulgaria; CZH, Czech Republic; GRE, Greece; HUN, Hungary; IRE, Ireland; ITA, Italy; LTU, Lithuania; LVA, Latvia; MAT, Malta; MKD, the former Yugoslav Republic of Macedonia; MDA, Republic of Moldova; NOR, Norway; POR, Portugal; ROM, Romania; SPA, Spain; SVN, Slovenia; SMR, San Marino; SWE, Sweden; TUR, Turkey

Slovene SLOfit system and database

The 5-year data show a decreasing trend in overweight since 2011, with greater improvement in younger age groups and slightly more favourable results for girls than for boys. Differences by regions are also seen, with major improvements in central and northwest Slovenia and less promising results in northern and eastern regions.

If the State continues to invest in measures to reduce childhood obesity, the target of less than 20% overweight and obese Slovenian primary schoolchildren (6–14 years) will be reached within the next 10 years (Fig. 8). The Slovene approach thus appears to be working, if austerity measures are not imposed in the education, social and health sectors. In addition, if lowering the prevalence of overweight by 0.2% per year continues, the physical fitness of our children will rise exponentially.

Fig. 8. Secular trends in overweight among 7–14-year-olds in Slovenia 1993–2015 and predictions to 2020



Source: SLOfit database, Faculty of Sports, University of Ljubljana

Red line, change in proportion of pre-obese children; red bars, proportion of pre-obese children; blue line, change in proportion of obese children; blue bars, proportion of obese children; black line, predicted trend in proportion of pre-obese and obese children in comparison with 2010–2015; light-grey bars, predicted proportion of pre-obese children in 2010 according to 1993–2010 trends; dark-grey columns, predicted proportion of obese children in 2010 according to 1993–2010 trends; black line, predicted trend of pre-obesity from 2015 onwards according to the 2010–2015 trends; light-gray line, predicted trend of obesity from 2015 onwards according to the 2010–2015 trends.

The problem of obesity in schoolchildren is closely linked to their physical fitness. The Faculty of Sports, University of Ljubljana, showed that obesity, sarcopenic obesity (recommended weight but low muscle mass) and lower physical fitness occur simultaneously in children and adolescents. As approximately one tenth of children in Slovenia are physically unfit, recommendations for physical activity should be complemented by promotion of physical fitness.

Annual monitoring of the effectiveness of the physical activity curriculum in the school systems of Member States is foreseen (32), following the example of SLOfit. The target of the European Union Action Plan on Childhood Obesity 2020 is that 75% of European Union member states will have reported on progress in implementation.

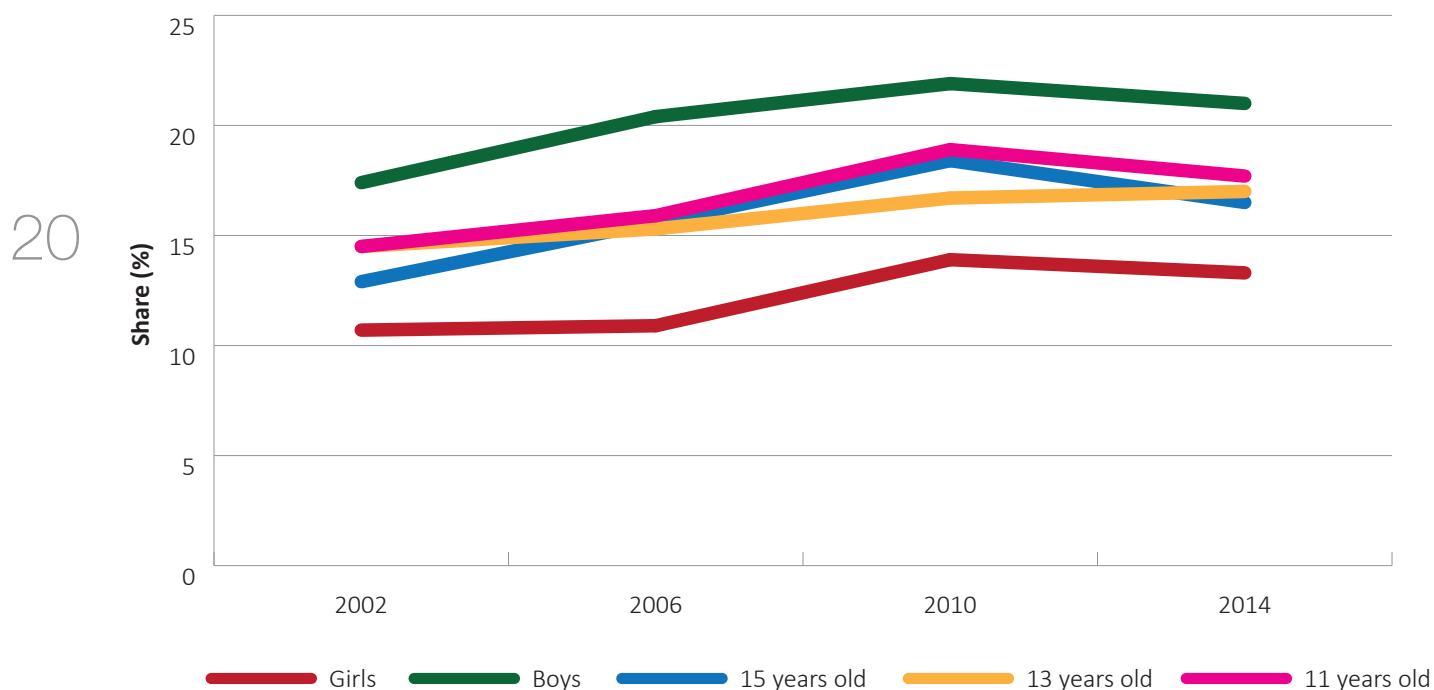
Survey by the University Children's Hospital Ljubljana

Researchers at the University Children's Hospital Ljubljana reported stabilization of the BMI and a reduced incidence of hypercholesterolaemia in 5-year-old children in Slovenia in the period 2001–2009 (26). The authors attributed the result to comprehensive public policies, especially the FNAP. The same group also reported stabilization of overweight and obesity in 15-year-old adolescents between 2004–2009 and 2009–2014 (27). During 2004–2009, the prevalence increased, especially in boys, but then stabilized in both genders. They reported that adolescents attending secondary vocational and technical or professional schools were at increased risk for overweight and obesity. The researchers noted that, despite stabilization of the upward trend, the prevalence of overweight and obesity remains high in both age groups.

Health behaviour in school-age children: data on pre-obesity and obesity in Slovenia

The Health behaviour in school-age children survey for 2010 data (33) classified Slovenia in third place among European countries with regard to pre-obesity and obesity in adolescents aged 15 years. Slovene data for 2014 (34,35) show that, for the first time since 2010, the proportion of pre-obese and obese adolescents (11–15 years old) has decreased, supporting previous results.

Fig. 9. Proportions of pre-obese or obese children and adolescents based on self-reported body weight and height



Health behaviour in school-age children 2002–2014. International Obesity Taskforce definition

4.4 Remarks

The rising trend in overweight and obesity among children and adolescents in Slovenia has stopped and has even decreased since 2010, more successfully in younger children than in adolescents and more successfully in boys than in girls. As regional and socioeconomic differences have been observed, the trends for children and adolescents in lower socioeconomic strata will be carefully followed up. The encouraging results should not be over-interpreted, however, as the important problem of obesity in children and adolescents in Slovenia remains. Investment in policies and approaches to reduce the prevalence should be continued, as they appear to work well.

Strategic documents on obesity have been adopted nationally and at the levels of the WHO European Region and the European Union. One of the main European documents on reducing the burden of obesity is the WHO European Charter

on Counteracting Obesity, adopted in 2006, one priority of which was to halt the rise in obesity and reverse the trend in children and adolescents in the European Region by 2015. Slovenia has achieved that goal.

Measures to address the challenges of over-nutrition, obesity and low physical activity in children and adolescents in Slovenia are based on the National Programme on Nutrition and Physical Activity 2015–2025 (2), which was approved by the Slovene Government in July 2015. The programme includes comprehensive measures to improve nutrition and physical activity for children in all environments, with a focus on those in disadvantaged groups. As the measures were prepared jointly by numerous sectors, implementation of the programme is expected to be successful.

Good practices implemented in the past 10 years in Slovenia, such as the School fruit scheme of the Common agricultural policy, show that a comprehensive approach, with networking of activities, sectors and stakeholders, is effective. Another promising approach is the Joint Action on Nutrition and Physical Activity (36), in which Slovenia is participating to estimate the economic burden of childhood obesity. SLOfit data will be used in this project, as they represent good practice in monitoring the nutritional status and physical fitness of children and adolescents in the school system.

Numerous comprehensive, well-coordinated activities at country level, linked to international initiatives, have given encouraging results. The obesity epidemic has begun to slow, and the trends are turning, however more needs to be done to secure that for all age groups, both genders and, especially importantly, for all social groups.

5. CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE WORK

The resolution on the FNAP 2005–2010 has been successfully implemented. It was found to be an appropriate, effective tool for achieving the set objectives and tasks.

Most of the objectives in the field of food safety were achieved, followed by those for a sustainable local food supply. Only relative success was achieved in the field of healthy nutrition. Measures to ensure food safety covered a significant proportion of the target population, while those for a sustainable local food supply and healthy nutrition were less successful, suggesting the importance of legislation to support action. Measures supported by regulations and institutionalized measures gave the best results.

The greatest achievements were seen in preparing supporting documents, guidelines and tools, especially for integrating different stakeholders and establishing better communication and cooperation. Consideration of the social gradient and targeted approaches to reducing inequalities in all activities and measures increased during the years of implementation of the Plan, especially towards the end of the period.

The rising trend in overweight and obesity in children and adolescents stabilized and has decreased since 2010, especially in younger children and among boys. As regional and socioeconomic differences were identified, trends for children and adolescents of lower socio-economic status will be carefully followed up.

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The results of the evaluation formed the basis for the food and nutrition policy for 2015–2025 (2), including linking nutrition and physical activity into a comprehensive action plan, with synergistic implementation of actions in the two areas. The new national programme on nutrition and physical activity for 2015–2025 (2), approved by the Government in July 2015, proposes comprehensive measures for improving nutrition and physical activity for children in all environments in which they live, work and play (37), with a focus on disadvantaged groups. Joint preparation and implementation by numerous sectors are expected to increase its impact. Inter-sector cooperation, addressing the social determinants of food, nutrition and physical exercise and the consequent health inequalities and establishing good communication among all stakeholders and with citizens are the prerequisites for implementation of the new programme. The programme for 2015–2025 is a promising successor to the FNAP and also to the National Programme on Physical Activity 2007–2012. Good practices used in the past 10 years in Slovenia show that a comprehensive approach supported by networking of activities, sectors and stakeholders gives promising results. The goals of the new programme are in line with those proposed in the WHO European Action Plan for Food and Nutrition Policy 2015–2020 (38) and those of the European Union action plan on childhood obesity (34).

Obesity is a complex social problem that requires complex solutions in the fields of nutrition, physical activity and physical fitness, sleep patterns and mental health. The creation of environments that allow individual healthy choices should be a top public health priority in all policies at national, regional and local levels in Slovenia. Comprehensive, sound, well-coordinated and well-implemented inter-sector policies for nutrition and physical activity have a beneficial impact. Although the important problem of obesity in children and adolescents in Slovenia remains, the results show that the country has found the right way to address it. Investment in policies and approaches to reducing obesity in children and adolescents should be continued.

In 2015, at a consultation that contributed to the report of the WHO Commission on Ending Childhood Obesity (39), Slovenia suggested that a WHO Framework Convention on Nutrition and Physical Activity be prepared, which might result in more effective country actions in the global environment.

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ANNEX 1. QUESTIONNAIRE FOR KEY INFORMANTS



Evaluation of the resolution on the National Programme of Food and Nutrition Policy 2005–2010

All selected key informants receive a letter notifying them that they have been chosen for an interview and explaining the purpose of the interview. Before starting the interview, verify that they received the letter. If they state that they did not, explain the purpose of the interview and hand them the notification letter.

Not all the questions on the questionnaire are intended for all informants, as certain questions are for people familiar with the resolution and others for people who are unfamiliar with it. The questionnaire therefore contains filters, whereby questions not intended for certain people are skipped. These are identified by an arrow and the number of the question with which the interview continues. As certain questions address fields only by content (food safety, healthy eating habits, supply of good-quality, healthy food), it is important to pay attention to the notes and identifiers!

Certain questions include a notice that a support card should be handed to the respondent to facilitate a response.

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Institution: _____

Informant: _____

Informant category: _____

Date: _____

Interview conducted by: _____

I. General

Q1. In your opinion, are Slovenian eating habits:

- (a) *Very healthy*
- (b) *Moderately healthy*
- (c) *Neither healthy nor unhealthy*
- (d) *Relatively unhealthy*
- (e) *Very unhealthy*
- (f) *Don't know or no opinion*

Additional comments: _____

Q2. Do you think that the situation regarding healthy nutrition in the past 5 years is:

- (a) *Improving*
- (b) *Remains the same*
- (c) *Worsening*
- (d) *Don't know or no opinion*

Additional comments: _____

Q3. Do you think the food in Slovenia is:

- (a) *Very safe*
- (b) *Moderately safe*
- (c) *Neither safe nor unsafe*
- (d) *Relatively unsafe*
- (e) *Very unsafe*
- (f) *Don't know or no opinion*

Additional comments: _____

Q4. Do you think the State takes enough care of ensuring a healthy diet for its citizens?

(Note: A healthy diet is defined in terms of safety, balance, access to healthy options and eating habits. The emphasis is on the concern of the State.)

- (a) *Very good*
- (b) *Moderately good*
- (c) *Neither good nor bad*
- (d) *Relatively bad*
- (e) *Very bad*
- (f) *Don't know or no opinion*

Additional comments: _____

**Q5. How familiar are you with the resolution on the National Programme of Food and Nutrition Policy 2005–2010?
(Filter question)**

- (a) *Very familiar, I know the details* → go to question Q7
- (b) *Moderately familiar or familiar to some extent*
- (c) *I have heard of it and am only superficially familiar with the contents*
- (d) *I am not familiar with it* → go to question Q6, and then to question Q17

If the respondent is (very) familiar with the resolution (answer a, b and c), go to Q7.

If the respondent is not familiar with the resolution (answer d), go to Q6 and then to Q17.

Q6. You have stated that you are not very familiar with the resolution; what is the reason?

(e.g. lack of information, lack of interest, other priorities)

Adequacy of the nutrition policy

Q7. Do you think the objectives of the resolution conform to the priorities in the field of →/food safety/ → /healthy nutrition/ →/food supply/?

- (a) *Conform very well*
- (b) *Conform moderately*
- (c) *Neither conform nor contradict*
- (d) *Conform poorly*
- (e) *Do not conform*
- (f) *Don't know or no opinion*

Additional comments: _____

Q8. How realistic do you consider the objectives of the resolution in general?

- (a) *Very realistic*
- (b) *Moderately realistic*
- (c) *Neither realistic nor unrealistic*
- (d) *Barely realistic*
- (e) *Completely unrealistic*
- (f) *Don't know or no opinion*

Additional comments: _____

Q9. In general, would you say that the resolution could contribute to →/ensuring safer food in the food chain/ →/ healthier eating habits/ →/an adequate supply of good-quality, healthy food?

- (a) *Very well*
- (b) *Moderately well*
- (c) *Neither well nor poorly*
- (d) *Poorly*
- (e) *Very poorly or no*
- (f) *Don't know or no opinion*

Additional comments: _____

Implementation of the nutrition policy

Q10. Do you consider your field is sufficiently represented in the resolution?

- (a) Yes, completely
- (b) Moderately well
- (c) Neither well nor poorly
- (d) Poorly
- (e) Very poorly or no
- (f) Don't know or no opinion

Additional comments: _____

Q11. To what extent does the resolution affect achievement of your institution's objectives?

- (a) A lot
- (b) Moderately
- (c) Neither a lot nor a little
- (d) A little
- (e) Very little
- (f) Don't know or no opinion

Additional comments: _____

30

Q12. How frequently in your work (in the field of →/food safety/ →/healthy nutrition/ →/food supply/) did you use the resolution for the following:

	6 Very often	5	4	3	2 Very rarely	1 Never	Don't know or no opinion
Planning tasks							
Implementing activities							
Advocating objectives							
Drafting legislation							
Working with the media							
Other:							

Additional comments: _____

Q13. How well do you agree with the following statements about your options for achieving the objectives and tasks of the resolution?

	6 Completely agree	5	4	3	2	1 Completely disagree	Don't know or no opinion
The resolution provides a sufficient basis for its implementation							
We have enough human resources to achieve the objectives of the resolution.							
We have enough knowledge to achieve the objectives of the resolution.							
We have enough financial resources to achieve the objectives of the resolution.							
Other:							

Communication effectiveness Q14. How effective was the resolution for communication with and providing information to:

	6 Very effective	5	4	3	2	1 Very ineffective	We did not use it	Don't know or no opinion
Colleagues								
Other sectors								
Other stakeholders								
Professionals								
The lay public								
The media								
Other:								

Q15. Would you like to describe an experience in communication?

Q16. In your opinion, to what extent could implementation of the resolution contribute to the following:

	6 A lot	5	4	3	2	1 Very little	Don't know or no opinion
Reducing infections and food poisoning							
Increasing consumption of fruits and vegetables							
Reducing obesity							

Additional comments: _____

Filter: → to be answered by all

Q17. Please specify at least three activities in the field of → /food safety/ → /supply of good-quality, healthy food/ → / nutrition, physical activity and obesity prevention/ in which your institution was the most active and achieved the most in the past 5 years (briefly describe the activities):

(Note: The respondent is questioned only about the field that is relevant to them.)

1. _____
2. _____
3. _____

Q18. Please indicate on which field → /food safety/ → /supply of good-quality, healthy food/ → /nutrition, physical activity and obesity prevention/ your institution will focus or consider a priority in the coming years (briefly describe the activities)

(Note: The respondent is questioned only about the field that is relevant to them.)

1. _____
2. _____
3. _____

32

Q19. Please describe some of the main encouragements to your institution in implementing policies, programmes and other activities in the fields of → /food safety/ → /supply of good-quality, healthy food/ → /nutrition, physical activity and obesity prevention/ (give basic examples for each factor, e.g. inter-sector cooperation, programme development).

(Note: The respondent is questioned only about the field that is relevant to them.)

1. _____
2. _____
3. _____

Q20. How often do you cooperate with the following sectors

→ /in implementing the resolution? /

→ /for tasks in the field of food safety/ healthy nutrition/ food supply? /

	6 Very often	5	4	3	2 Very rarely	1 Never	Don't know or no opinion
Ministry of Health							
Ministry of Education and Sport							
Ministry of Agriculture, Forestry and Food							
Ministry of the Environment and Spatial Planning							

Ministry of Labour, Family and Social Affairs							
Ministry of Finance							
Ministry of Culture							
Other:							

Ask the first part of the question if in question Q5 the respondent was familiar with the resolution (answers a, b and c).

Ask the second part of the question if in question Q5 the respondent was not familiar with the resolution (answer d).

Q21. In your opinion, what would improve cooperation with these sectors? What are the major obstacles to better cooperation? _____

Q22. How often do you cooperate with the following stakeholders

→ /in implementing the resolution/

→ / in tasks in the field of food safety/ healthy nutrition/ food supply:

	6 Very often	5	4	3	2 Very rarely	1 Never	Don't know or no opinion
Educational institutions							
Health care centres							
Employers							
Food processing Industry							
Traders							
Food providers							
Faculties and institutes							
Institutes of public health							
Chambers							
Hospitals							
Retirement homes							
Professional associations							
Media							
Nongovernmental organizations							
Other:							

Ask the first part of the question if in question Q5 the respondent was familiar with the resolution (answers a, b and c).

Ask the second part of the question if in question Q5 the respondent was not familiar with the resolution (answer d).

Q23. In your opinion, what would improve cooperation with stakeholders? What are the major obstacles to better cooperation? _____

Q24. Would the following better contribute to realizing

→ /the objectives or tasks of the resolution? /

→ /the objective of your work? /

	6 Completely agree	5	4	3	2	1 Completely disagree	Don't know or no opinion
Better cooperation with other sectors							
Better institutionalized measures and structural improvements							
Better defined public–private partnerships							
More activities to reduce social inequality							
More political support							
Better awareness of the professional and lay public							
More activities of nongovernmental organizations							
Constructive cooperation with the media							
Better financial support							
Better support from the European Union							
Other:							

Ask the first part of the question if in question Q5 the respondent was familiar with the resolution (answers a, b and c).

Ask the second part of the question if in question Q5 the respondent was not familiar with the resolution (answer d).

Consideration of health inequalities**Q25. To what extent have you taken into consideration social status and social inequality**

→ /in implementing the tasks of the resolution /

→ /in your work in the field of food safety/ healthy nutrition/ food supply? /

(Note: Social status and social inequality are discussed in terms of differences by socioeconomic status.)

(a) A lot

(b) Moderately

(c) A little

(d) Not at all

(e) Don't know or no opinion

Ask the first part of the question if in question Q5 the respondent was familiar with the resolution (answers a, b and c).

Ask the second part of the question if in question Q5 the respondent was not familiar with the resolution (answer d).

Q26. Please give an example:

General open questions

Q27. In your opinion, what were the greatest achievements in Slovenia in the field of food safety/ healthy nutrition/ food supply between 2005 and 2010?

Q28. In your opinion, how did the

→ / resolution contribute? /

→ / nutrition policy contribute with its support? /

Ask the first part of the question if in question Q5 the respondent was familiar with the resolution (answers a, b and c).

Ask the second part of the question if in question Q5 the respondent was not familiar with the resolution (answer d).

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Q29. What are the main reasons that you did or did not better use the

→ / resolution? /

→ / State support in this field? /

Ask the first part of the question if in question Q5 the respondent was familiar with the resolution (answers a, b and c).

Ask the second part of the question if in question Q5 the respondent was not familiar with the resolution (answer d).

Recommendations for the future

Q30. Please evaluate how important you consider the following measures.

	6 Very important	5	4	3	2	1 Very unimportant	Don't know or no opinion
Establishment of a cross-sectoral body in the field of food supply/food safety/nutrition							
Increased taxation of unhealthy foods							
Lower taxation of fruits and vegetables							
Restricting marketing of unhealthy foods to children							
Greater involvement of the food processing industry in creating a food policy							
Regular inspection of the energy and nutritional value of school and nursery school meals							
Integration of the issues of healthy nutrition into school curricula							
Equipping food and drink vending machines in schools only with healthy foods							
Prohibiting installation of food and drink vending machines in schools							
Installing water fountains in schools and nursery schools							
Promoting direct connection (short food chains) between public institutions and local farmers							
Increasing encouragement for farmers to sell food locally							
Supporting measures to improve the diet of socially disadvantaged groups							
Preparing specific measures to limit the trend in obesity							
Integrating measures in the field of nutrition with measures in the field of physical activity							
Increasing control over food safety							
More Government monitoring to ensure food safety							
Standardizing collection procedures and databases on food safety							
Other:							

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Q31. In your opinion, what could contribute to better use of national nutrition policies, especially in Slovenia? What are the mechanisms? _____

II. Specific fields

Filter: → To be answered only by people who answered question V5 that they were familiar with the resolution (answers a, b and c)

Q32. In your opinion, how successful was implementation the resolution in the field of:

(Note: Respondents are questioned only about the activities that are relevant to them.)

→ /healthy nutrition / in terms of...

	6 Very successful	5	4	3	2	1 Unsuccessful	Don't know or no opinion
Establishing conditions for promoting breastfeeding							
Establishing health education programmes for pregnant and postpartum women and fathers							
Promoting healthy nutrition for children and adolescents							
Promoting healthy nutrition for the adult population							
Establishing contemporary nutrition standards in educational institutions							
Improving regulation of organized nutrition in secondary schools							
Improving the promotion and organization of healthy nutrition for workers							
Providing adequate nutrition for patients in hospitals and care recipients in retirement homes							
Strengthening programmes and conditions for healthy nutrition for socially disadvantaged groups							
Enhancing nutrition and dietary counselling in the health system							
Improving healthy foods options and healthy nutrition							
Enhancing education and training in healthy nutrition and a healthy lifestyle in the educational system							
Other:							

→ / food safety/ in terms of...

	6 Very successful	5	4	3	2	1 Unsuccessful	Don't know or no opinion
Establishing and guaranteeing a Slovenian food safety system, based on scientific risk assessment							
Improving the effectiveness of risk management throughout the food chain							
Generating data on risk factors and health risks in food							

Providing education on risk management in food safety							
Strengthening public confidence in food safety							
Establishing an effective food safety system							
Reducing microbiological and chemical contamination of foods on the market							
Reducing the number of cases of intestinal infection and poisoning							
Strengthening population knowledge, skills, awareness and motivation in relation to food safety							
Other:							

→ /food supply/ in terms of...

	6 Very successful	5	4	3	2	1 Unsuccessful	Don't know or no opinion
Enhancing and establishing local food supplies in Slovenia (within a radius of 60 km)							
Establishing new market opportunities for local food production and sales							
Improving the supply of good-quality, healthy, locally produced food							
Increasing the demand for locally produced food							
Increasing self-sufficiency in relation to natural conditions, also during periods of instability on the global market							
Other:							

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Filter: → Everyone should answer

Q33. What are the main activities that should be implemented in your field to improve nutritional status?

Do you have any concluding comments? Is there anything you would like us to know?

ANNEX 2. PROPOSED PRINCIPLES FOR PREPARING A FOOD AND NUTRITION POLICY FOR THE NEXT PERIOD

In planning and implementing a food and nutrition policy for Slovenia in the next period, the following principles derived from earlier findings should be considered:

- Respect the right to a healthy lifestyle, including healthy nutrition, and the culture-specific eating habits of the inhabitants of Slovenia.
- Respect ethical principles by distributing social, moral and environmental responsibility to all participants in the food chain (production, processing, distribution and marketing of food and the consumer) for a supply of safe, healthy nutrition.
- Focus on system solutions and specific measures for target subgroups to ensure healthy nutrition and a healthy lifestyle, and reduce the risk of disadvantaged population groups of all ages for overweight, especially at the start of life.
- Increase access to healthy foods, and limit the supply of unhealthy foods for all residents, regardless of socioeconomic status.
- Establish broad inter-sector links at State level to support good communication and cooperation among sectors and operation on the principle of “health in all policies”.
- Ensure proportional representation of all ministries, nongovernmental organizations, interested professionals, the lay public and other stakeholders in planning, realizing and monitoring the food and nutrition policy.
- Integrate programme logic into planning and implementing the food and nutrition policy and into planning and implementing State activities and measures, with monitoring and evaluation of progress and realization of individual objectives.
- Plan long-term orientation, with planned interim evaluations, taking into account achievements in science and professional development.
- Ensure flexible policy implementation based on interim evaluations and continuous updating with new priorities.
- Conduct intermittent qualitative and quantitative studies to determine the status and trends of the eating habits and the quality of the diet of individual population groups in Slovenia and its regions, with suggestions for priorities and actions.
- Orient policy towards comprehensive halting of the growing trend of obesity with activities related to diet and exercise.
- Use modern communication strategies to ensure the visibility of the food and nutrition policy in all regions.
- Reinforce use of existing systems for healthy nutrition and a healthy lifestyle for all population groups.
- Focus on national activities at local and regional level with regional policies.
- Ensure the right to knowledge and skills on healthy nutrition and a healthy lifestyle in public education systems.
- Enforce consumer rights and protection.
- Take into account the financial capacity of the country.

ANNEX 3. PROPOSED CONCRETE OBJECTIVES FOR THE NEW FOOD AND NUTRITION POLICY

A3.1 Food safety

- Ensure better communication among sectors and institutions in the field of food safety.
- Conduct inter-ministry planning for monitoring current and longer-term risk factors.
- Ensure more unified collection, analysis and compilation of data in the field of food safety.
- Provide stronger, better-integrated financial and human resources.
- Update and modernize educational programmes in primary and secondary schools and higher education, with courses on risk management in food safety and ensuring food safety from purchase to preparation.
- Raise awareness of risk factors in the general population and target groups of consumers (children, pregnant women, the elderly, allergy sufferers and people intolerant to certain food ingredients).
- Coordinate identification and management of current threats to food safety.

40

A3.2 Healthy nutrition

Infants and pregnant and postpartum women:

- Maintain the strategic objective of achieving at least a 60% of fully breastfed infants up to 6 months of age.
- Establish a system for regular, comprehensive monitoring of breastfeeding to measure the effectiveness of promotional activities and supportive environments.
- Legally protect breastfeeding from the influences of marketing of breast-milk substitutes under the International Code of Marketing of Breast-milk Substitutes.
- Standardize the doctrine of transfer of knowledge and skills on breastfeeding among implementers, while monitoring their education and professional qualifications.
- Establish breastfeeding-friendly environments in public places.
- Preserve the existing health care infrastructure, and add new breastfeeding-friendly institutions; extend, encourage and monitor the quality of the network of newborn-friendly maternity hospitals; and systematically monitor the situation.
- Continue standardizing the education programme for future parents, with advice on healthy nutrition for pregnant women, breastfeeding mothers, infants and small children; enforce the programme nationally, and monitor its implementation.
- Conduct further research on and enforce culturally specific measures that would increase breastfeeding.

Children and adolescents:

- Enhance specific and comprehensive national institutionalized promotion activities, including and connecting parents, children, schools, the health care system and the local environment, to be financed regularly from public funds.
- Renew and systematically integrate aspects of a healthy diet into the educational system as part of a healthy lifestyle and into the school environment at levels varying from the curriculum to extracurricular activities, by involving teachers,

parents and health professionals, so that every student in the country is exposed to these topics during their schooling, regardless of their interests, gender or social status.

- Focus educational and promotional activities on the acquisition of practical skills for recommended nutrition, including cooking from basic ingredients and selecting and combining healthy foods.
- Further improve the system of organized nutrition in educational institutions that follows the guidelines of healthy eating, and protect school premises from marketing of unhealthy foods and beverages to children; limit the availability of unhealthy foods in educational establishments.
- Conduct regular professional monitoring and counselling on the quality of meals offered in schools and nursery schools, and report regularly within the established system.
- Regulate the conditions for preparing school meals (standards and training for all educational institutions, from nursery school to secondary school), and further improve the technical and spatial conditions for nutrition, especially in secondary schools.
- Strengthen professional knowledge and practical skills among management and professional staff in educational institutions involved in the process, from purchase of food to planning, preparation and serving of meals, and establish staff norms.
- Encourage a general increase in the availability of healthy choices for children and adolescents, both at school and at home, especially for those of lower socioeconomic status.
- Enforce general restrictions on marketing of unhealthy foods to children.
- Provide and promote adequate consumption of healthy drinks in educational institutions; introduce water dispensers.

Children and adolescents at risk due to an unhealthy lifestyle:

- Establish a system of early detection of children and adolescents who are vulnerable to risk factors for diseases and conditions related to unhealthy nutrition, an unhealthy lifestyle, eating disorders and, especially, excessive body weight.
- Prepare health education in primary health care for vulnerable children and adolescents and their parents or relatives, linked to local and school environments and community activities.
- Establish a comprehensive information system for monitoring indicators in the field of nutrition and lifestyle and indicators of preventive treatment of children, adolescents and adults and for monitoring vulnerable populations.
- Continue health promotion programmes, particularly for the most vulnerable population groups in respect of lifestyle or healthy nutrition in local communities, and integrate health care and social and other relevant services.

General adult population:

- Enhance specific and comprehensive promotional activities for the general population and the local environment.
- Increase access to healthy eating options.

Active population:

- Enhance specific, comprehensive promotional activities for workers and the work environment.
- Increase access to healthy eating options in organizations, including regulating foods in vending machines, and monitor external providers.
- Provide institutionalized healthy eating guidelines for workers in organizations.
- Reduce the risks due to unhealthy nutrition of socially weaker, heavy manual labourers in industry and agriculture.

Preventing cardiovascular and other chronic non-communicable diseases:

- Ensure early detection of risk factors for diseases and conditions associated with unhealthy nutrition and an unhealthy lifestyle for vulnerable adults.
- Increase the participation of vulnerable adults and groups with special needs in group health education and individual counselling.
- Ensure comprehensive treatment of vulnerable population groups.
- Establish a comprehensive information system for monitoring indicators of nutrition and lifestyle and of preventive treatment.
- Continue health promotion programmes, particularly for the most vulnerable population groups, in respect of lifestyle or nutrition, and integrate health care and social and other relevant services.
- Strengthen professional knowledge and practical skills of staff in health education institutions and hospitals.
- Improve the quality of individual and group counselling.

Socioeconomically disadvantaged population groups:

- Monitor dispersed and new data on nutrition and nutritional status according to socioeconomic status, and establish priorities.
- Ensure access to healthy foods and nutrition for socioeconomically disadvantaged population groups.
- Explore options for fiscal measures (lower taxes on healthy foods and higher taxes on unhealthy foods) by adapting international standards and criteria to the Slovene context.
- Provide health promotion programmes for socioeconomically disadvantaged population groups, emphasizing a healthy start in life for pregnant women, breastfeeding mothers, infants and small children.
- Raise awareness among professionals, policy-makers and the general public on the impact of socioeconomic determinants of obesity and an unhealthy diet on health.

Elderly and population groups with special needs:

- Institutionalize implementation of recommendations for nutritional treatment of people with special needs, and monitor or screen nutritional status.
- Institutionalize implementation of guidelines for people with special needs, with monitoring.
- Increase resources (financial, professional, staff with appropriate licensing, training and monitoring) for ensuring nutrition in hospitals and retirement homes.
- Introduce professional monitoring, with counselling, of nutrition and the quality of meals offered in accordance with guidelines for people with special needs who are in the health and social care system.
- Increase the possibilities for nutrition screening and healthy nourishment of the elderly who are not included in the health and social care system.
- During individual preparation for old age (e.g. pre-retirement seminars), conduct activities to support healthy nourishment.
- Increase the participation of local communities in ensuring greater social inclusion of the elderly, and include the elderly in education.

Supply of healthy food and nutrition:

- Promote the production of reformulated products with lower contents of salt, sugars and fats or smaller portions, especially of products used daily, for all population groups, taking into account the social gradient and disadvantaged groups.
- Install vending machines with healthy products in all health care institutions, in accordance with the guidelines for healthier choices in vending machines.
- Encourage use of water dispensers in public areas.
- Seek approaches and measures for better understanding of nutritional information by the general population and target population groups.

Professional education and training in healthy nutrition and a healthy lifestyle:

- As the objectives of the FNAP 2010–2015 in this area were not fully realized, they will be summarized in the new food and nutrition programme.
- Regulate the licensing of nutrition specialists.

A3.3 Local food supply

- Increase and improve inter-sector collaboration in the field of a sustainable local food supply and self-sufficiency in Slovenia nationally and regionally, including by establishing local nutrition strategies.
- Encourage local producers to maximize their yields (including the diversity of products), especially of fruits and vegetables, increase their visibility on the local market, integrate incentive mechanisms, and organize producers into short chains, with the help of professional agricultural institutions.
- Strengthen the awareness and knowledge of the population on the importance of fresh, good-quality, local produce, and adapt to consumer demand, including establishing new market opportunities (e.g. local markets).
- Increase self-sufficiency through a system of incentives, by establishing balance and systematic monitoring of self-sufficiency for individual products.
- Increase access to good-quality, healthy, locally grown, sustainable foods in public institutions.
- Simplify and facilitate the procurement of locally grown agricultural products by readjusting Directive 2004/18/ES, simplifying the public ordering system and considering the Green Public Procurement directive.
- Continue and extend the school fruit scheme, with simplification, and transfer the experience to the school milk scheme and other forms of community assistance.
- Integrate organic foods and production into the sustainable local supply.

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The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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