

TACKLING CHILDHOOD OVERWEIGHT AND OBESITY IN EUROPE

Lessons learnt and recommendations from the Joint Action on Nutrition and Physical Activity

JANPA



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THE CONTEXT

Since 2000, several conclusions of the European Council invite the European Commission and EU Member States to develop measures aiming to improve nutrition and physical activity, especially for children. In 2013, the World Health Organization's Regional Office for Europe issued in 2013 the "Vienna Declaration on Nutrition and Noncommunicable Diseases in the Context of Health in 2020", signed by the European Health Ministers, also calling for mobilisation.

Since 2006, the High Level Group on Nutrition and Physical Activity composed of representatives of EU Member State governments, under the leadership of the European Commission, meets in order to share experiences and propose orientations for common actions. In 2014, the High Level Group established a European Action Plan on Childhood Obesity for the period 2014-2020.

JANPA, the Joint Action on Nutrition and Physical Activity, was initiated as a measure contributing to the implementation of this action plan.

WHAT IS JANPA?

JANPA was a Joint Action across Europe on nutrition and physical activity, implemented over the period of 2015 to 2017. The main objective of JANPA was to contribute to halting the rise of overweight and obesity in children and adolescents in EU Member states by 2020. JANPA focused on specific factors that contribute to the nutritional and physical activity policies for families, kindergarten, pre-school and school environments; an estimate and forecast of economic costs of overweight and obesity in children; and the gathering and use of nutritional information on foods.

WHO IS INVOLVED?

26 European countries participated in JANPA either as partners or collaborating stakeholders, as well as the World Health Organization's Regional Office for Europe and the Joint Research Centre (JRC-EU).

WHO IS THE TARGET?

JANPA had multiple targets including primarily decision-makers, educational bodies, schools, parent and citizen associations and all the other professionals in the fields of nutrition, physical activity and obesity prevention that are working to develop and implement the actions aimed at the final target groups (children, mothers and families).

KEY ELEMENTS OF JANPA WHY?

In Europe, the number of overweight or obese children is increasing in most countries: currently affecting on average 1 out of 3 children aged 6-9 years old. Obesity is a disease related to several other diseases and represents a large burden both on individuals, communities and on health and social care.

HOW?

A life-course approach is necessary, the promotion of a healthy diet and physical activity in children already starts during pregnancy and early age. Policies and interventions stem from a multi-sectoral approach, including better coordinated government actions between the social, labour, education, health, agriculture, urban planning, transport and private sectors. Nutrition and physical activity are related to social conditions; hence, the reduction of social inequalities was an overarching concern of JANPA.

THE JANPA WORK PACKAGES

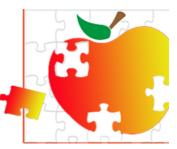
JANPA was composed of four technical Work Packages (WP), each involving 7 to 14 countries, dealing with specific yet complementary issues, supported by three horizontal work packages for general coordination, dissemination of work and knowledge, and internal and external evaluation.

WP1 COORDINATION

Leader: French Agency for Food, Environmental and Occupational Health & Safety - ANSES (France)

Technical Coordinator: French Ministry for Solidarity and Health- Directorate General for Health (DGS FR)

This work package was designed to manage and organise the Joint Action work. This included stimulating effective exchange of information among all partners,



management, coordination, budget management, guidance, leading meetings and interacting on the Joint Action's behalf with the European Commission, as well as other external bodies.



WP2 DISSEMINATION

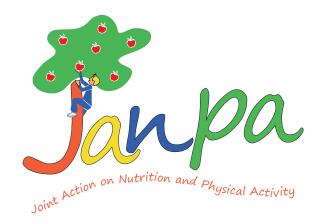
Leader: Istituto Superiore di Sanità - ISS (Italy)

Dissemination has been essential for spreading knowledge about the Joint Action, not only in terms of distribution of

deliverables, but also in involving and increasing awareness among the stakeholders and the groups interested in the Joint Action's ongoing work, outputs and results. The dissemination strategy was developed to ensure the visibility through visual identity,

The dissemination strategy was developed to ensure the visibility through visual identity, a website, slide presentations, an information leaflet, periodic newsletters, the brochure of the final report, and the position paper.

Visual identity



WP3 EVALUATION

Leader: Alexander Technological Educational Institute of Thessaloniki - ATEITH (Greece)

The aim of this work package was to establish and conduct a regular and systematic evaluation of the performance of the Joint Action, and to start evaluating its impact.



The JANPA evaluation plan was carried out at regular intervals assessing all activities with respect to specific risks, planned impact and dissemination. The three main evaluation criteria were based on the performance of the project, the impact of the project on childhood obesity and the performance of the partners.



WP4 COST OF CHILDHOOD OBESITY

The burden we leave future generations if we do not tackle childhood obesity now

Leader: The Institute of Public Health in Ireland - IPH IRL (Ireland)

The work package summarised the evidence on childhood obesity and developed JANPA costing models to estimate the lifetime costs (direct healthcare costs and societal costs) attributable to childhood (0-17 years) obesity/overweight in participating countries, as well as the effects of 1% and 5% reductions in mean childhood Body Mass Index (BMI).

What is the evidence?

Four reviews of the international literature provide the most up-to-date picture on the prevalence of child and adolescent overweight and obesity, highlight the relevant aspects of childhood and adulthood overweight/obesity and the major gaps in the evidence base drawing on the best available international and European evidence.

What are the findings?

After many years of rapid increase in the prevalence of childhood obesity, in some, but not all EU countries, the increase appears to be slowing. These welcomed changes, however, have occurred mostly in younger age groups and mainly in more wealthy groups. Moreover, any plateauing

of prevalence has been at unacceptably high levels.

The reviews demonstrate that childhood and adult obesity/overweight are associated with a range of childhood and adult diseases including Type 2 Diabetes, diseases of the cardiovascular system, the respiratory system, the musculoskeletal system, many cancers as well as obstructive sleep apnoea and depression.

Fully documented data was collated in the participating countries (Croatia, Greece, Italy, Republic of Ireland, Northern Ireland, Portugal, Romania and Slovenia). Within the project timelines, scientifically acceptable modelling results were finalised for some of these countries. As an example, the final modelling results for the Republic of Ireland are presented.

Table 1. Lifetime impacts and costs attributable to childhood obesity/overweight in the Republic of Ireland (2015 values)

	Male	Female	Persons ¹
Direct healthcare costs (€M)	€422.0M	€527.0M	€944.7M
Lifetime income loss (€M)	€151.7M	€104.3M	€256.1M
Productivity loss due to premature mortality (€M)	€2,105.3M	€756.4M	€2,795.4M
Productivity loss due to work absenteeism (€M)	€223.5M	€299.6M	€521.9M
Total cost (€M)	€2,902.4M	€1,687.3M	€4,518.1M
Total cost per person (€)	€21,115	€11,694	€16,036
Total number of premature deaths	26,202	28,854	55,056

¹The table takes into account there are different numbers of males and females in the population

The JANPA costing model quantified the very heavy burden of childhood obesity/ overweight. In the Republic of Ireland, it is estimated that just over 55,000 of today's children will die prematurely because of childhood obesity/overweight (around 1 in 10 of all premature deaths).

The total lifetime costs (in 2015 values) are €4,518.1 million (M) (€16,036 per person) in the Republic of Ireland, accounting for 1.6% of the Republic of Ireland's GDP in 2015.

Total lifetime direct healthcare costs are €944.7M in the Republic of Ireland, accounting for 4.8% of the total public health expenditure in the Republic of Ireland in 2015.

In the Republic of Ireland, lifetime societal costs account for the majority of the total lifetime costs (79.1% of total lifetime cost) while lifetime productivity loss due to premature mortality is the largest single cost item accounting for 61.9% of total lifetime costs.

Towards a solution

In the Republic of Ireland, total lifetime savings that could be achieved if mean childhood BMI was reduced by 5% are estimated to be €1,127.1M.

Lifetime healthcare costs are expected to fall by €245.7M in the Republic of Ireland and lifetime societal costs are expected to fall by €881.4M.

Table 2. Savings if reduction of 5% of mean childhood BMI in the Republic of Ireland (2015 values)

	Male	Female	Persons ¹
Direct healthcare costs (€M)	€123.7M	€122.0M	€245.7M
Lifetime income loss (€M)	€38.8M	€22.7M	€61.4M
Productivity loss due to premature mortality (€M)	€516.7M	€154.3M	€671.0M
Productivity loss due to work absenteeism (€M)	€70.4M	€78.6M	€149.0M
Total cost reduction (€M)	€749.5M	€377.6M	€1,127.1M
Total cost reduction per person (€)	€5,453	€2,617	€4,000
Total reduction in number of premature deaths	5,948	3,321	9,269

¹The table takes into account there are different numbers of males and females in the population

KEY MESSAGES

- The JANPA costing model should be refined by incorporating research into the psychosocial impacts of childhood obesity and their implications for human capital and the economy.
- Stand-alone dedicated software, written in open source code, should be developed to fully implement the model so it is available for use by all research teams.
- Co-ordination of national health information systems across the EU should be improved, namely on:
 - Obesity surveillance (particularly early years, childhood years, adolescence, and later adult years)
 - Surveillance of obesity-related diseases (particularly incidence and survival)
 - Healthcare costs (particularly primary care and drug prescription costs).



WP5 NUTRITIONAL INFORMATION

Leader: French Agency for Food, Environmental and Occupational Health & Safety - ANSES (France)

The main objective of the work package 5 of the JANPA project was to share, in the nine volunteering countries participating in the WP, best practices on how the nutritional information on food is gathered and used for nutritional policy by the different stakeholders.

What is the evidence?

Literature search and interviews conducted in the 9 countries participating in WP5 (Austria, Belgium, Bulgaria, France, Lithuania, Norway, Romania, Slovakia, Slovenia) have shown that only France has deployed a monitoring tool in order to follow the nutritional composition of the food products available on the market at the brand level.

Three main strategies implemented by the different countries were investigated:

- Food reformulation: can be implemented as the result of private initiatives or prompted by public policies. This has been shown to be quite efficient to improve the nutritional quality of the food on offer and has the advantage of benefiting the entire population but its impact is often too limited (to a single nutrient or a single product) to have a public health impact.
- Information campaigns: widely developed in the European countries, they increase the consumers' awareness regarding nutrition but have a low impact on consumers' behaviour and alone tend to increase social inequalities in nutrition.
- **Food environment**: work on issues such as serving sizes, advertisements, etc, has

a more direct impact and should be encouraged.

Food labelling can also be a valuable tool to empower the families but an inventory carried out within the 9 participating countries demonstrated that there was a need to simplify and homogenise food labels. The efficiency of such a tool has been proved in a situation of purchase but the impact on the food basket remains to be proven (due to the influence of other factors like the price, consumers habits or personal tastes).

What are the findings?

A pilot study was implemented in 2 countries (Austria and Romania) with the objectives of collecting nutritional information on food products sold in shops and presenting comparisons between countries, by testing the French "Ogali" approach used since 2008 (for monitoring changes in the supply of processed foods available on the French market by measuring over time the nutritional quality in terms of nutritional composition and labelling information). For the two countries, data for a total of 520 breakfast cereals and 890 soft drinks were collected during this phase. Breakfast cereals and soft drinks were selected for the pilot study because of their high consumption by children and adolescents.

The studv demonstrated the that "Ogali" methodology used in was adaptable to other European countries with minor modifications. Various analyses and comparisons have been produced. The main results are that the segmentation of the market is different between countries. both when considering the type of brand (proportion of national brands vs. private labels owned by retailers) or the food offer (proportion of the different kind of families of products for each food sector - for example, chocolate-based breakfast cereals within the broader sector of breakfast cereals). In each of the three countries (France, Austria, Romania), a great variability of the macro-nutrient contents has been observed for several families of products among breakfast cereals or soft drinks, suggesting real possibilities of reformulation. A difference in the nutritional content of soft drinks and breakfast cereals has also been highlighted among the 3 countries. This difference may be due to a different offer on the market. In addition, there is a low proportion of common references (same brand, same name and same flavour) and sometimes there are differences in the composition of common references.

Conclusions

Various and complementary nutrition strategies are necessary to decrease obesity. Governments will have to deploy different types of actions to improve the quality of the food offer which is a good strategy for decreasing health inequalities.

The implementation of a monitoring tool is

necessary to qualify the nutritional quality of the food offer to fix ambitious and realistic objectives for nutritional improvement and to allow a follow-up and evaluation of the impact of the strategies which are aimed at improving it. JANPA has shown that the implementation of such a tool (based on the example of the French "Oqali") was possible with limited time and budget.

Such a monitoring tool needs to be deployed at the brand level in each country. National public authorities will then have a tool to evaluate in an objective way the nutrition variability and the improvement capacity because the food offer varies depending of the country and also because the composition of a same product can be different from one country to another.

KEY MESSAGES

Improvement of the nutritional quality of foods within each category and family (group, sub group) of products is possible and necessary to tackle childhood overweight and obesity and reduce social inequalities in nutrition. JANPA has demonstrated that there is room for this, on a much larger scale than has been performed up to now, based on the "best in class" products.

The monitoring tool tested by JANPA to describe the nutritional composition of foods has proved to be useful and easily transposable. It can and should be developed by public authorities in each European country as a means to allow the nutritional food improvement asked by the European Council. A harmonised approach will allow comparisons between countries.



WP6 HEALTHY ENVIRONMENTS BY INTEGRATED APPROACHES

Leader: National Institute of Pharmacy and Nutrition - OGYEI (Hungary)

WP6 provided guidance on policy options and initiatives at different levels for facilitating more effective actions at kindergartens and schools. Following a rigorous approach, WP6 collected and analysed good practices and assessed policy capacities for prevention.

What is the evidence?

Childhood and adolescence is a critical period to intervene because eating habits, lifestyle and behaviour patterns are developed that may persist throughout adulthood.

Kindergartens and schools are in the front line to form children's behaviour. In these settings, a health promoting environment has to be created.

Based on a shared selection of 9 rigorous criteria, 39 best practices having as objective prevention of childhood obesity with some actions at kindergarten and/ or primary or secondary school level were identified. They were issued from 16 countries where complementary data were also collected for national information on the education institutional system and school environment. These best practices were analysed according to the EU Action Plan on Childhood Obesity 2014-2020 makes recommendations for which creating healthy environments.

What are the findings?

The importance of integrated approaches, especially in fighting against social inequalities, was commonly agreed. An

integrated approach has to fulfil these criteria: multi-component, inclusive, intersectoral, or multi-level. Beyond actions in schools and kindergartens, families and public catering appears to be important. It is however commonly agreed that there is still room for improvement in the use of integrated approaches. Moreover, despite the rigorous selection, several actions are still focusing on one single determinant of childhood obesity or targeting only one setting. Only a minority of the selected practices and policies have been rigorously assessed even if, during the planning phase, the political, social and cultural context was taken into account.

Actions within the school settings cannot be considered in isolation from the more global context. This view leads one to consider that many conditions hinder reaching results: a general lack of awareness of the importance of healthy nutrition and physical activity, improper nutrition habits at home with parental support, the generally higher costs of healthy food, and the massive food marketing through mass media for unhealthy food. Regarding the existing policy capacities, the main barriers are

insufficiently skilled professionals and financial resources. As facilitators, the overall regulations on food advertisement and on restriction of food marketing in schools come out in first position. In contrast, none of the selected good practices addressed marketing in schools.

Conclusions

Given the limited resources in most countries, it is crucial to distinguish between effective policies and interventions and those initiatives that should be questioned as their efficiency is doubtful. Moreover, understanding the mechanisms and identifying factors that make an intervention or policy run successfully is essential. Without robust evaluation the answers to these questions cannot be obtained.

Sharing ideas and the lessons drawn from rigorously selected good practices might help decision-makers, programme planners and professionals implementing actions. Easy access to these good practices was organised through a toolbox on Internet. The toolbox's ambition, along with the Guide specially written on the "What and How" to create healthier environments in kindergartens and school, is to maintain, on the long-term, a European reflection on the issue.

KEY MESSAGES

School-wide messages delivered through the curriculum, school programmes, school environment and physical activity facilities must be coherent, consistent and mutually reinforcing to reach children and their families. To obtain the greatest impact, actions need to be undertaken in multiple settings in parallel, incorporating a variety of approaches and involving a wide range of stakeholders. This can be reached by combining environmental elements with educational elements and with the involvement of teachers, caterers, food retailers, urban designers, parents/ caregivers and children.



WP 7 EARLY INTERVENTIONS

Leader: The National Institute for Health and Welfare - THL (Finland)

The work package identified programmes for overweight and obesity prevention in the early stages of life, and thus targeted to families during pregnancy, lactation and early childhood. This is a key period for delivering effective preventive interventions.

What is the evidence?

The early childhood years (up to age 3 years) are periods of sensitivity to environmental influences, and they are periods of maximum societal care and protection thereby providing multiple settings for intervention and changeability. Twelve countries (Austria, Bulgaria, Croatia, Czech Republic, Estonia, Finland, Germany, Italy, Malta, Norway, Portugal and Romania) participated in WP7, and 11 submitted programmes/interventions for a total of 50 initiatives. The majority of these initiatives (74%) were still ongoing and only a quarter was already finished. Only a small percentage had a private partnership (14%). Approximately half of the programmes/interventions were designed for vulnerable groups, and only 42% reported to have an evaluation system. From these, more detailed information was collected and scored for country and programme/intervention on various themes such as equity, comprehensiveness, transferability, sustainability and evaluation. An additional qualitative assessment among the most promising programmes/ initiatives was performed to check how important aspects were taken into account. Based on this work, 20 different practices from 9 European countries were identified as having some characteristics of transferability and were considered as best practices.

What are the findings?

All 12 countries participating in WP7 have nutrition guidelines or recommendations for infants and toddlers and all but one have nutrition guidelines for pregnant women. Only a few countries have guidelines for Physical Activity (PA) for pregnant women and children below 3 years of age. Most reported instead having PA guidelines for the general population. The analysis of the good practices shows recommendations guidelines, that and regulations are powerful tools for implementing policies. However, follow-up and monitoring of actions through a strong public authority's commitment at regional and/or municipal level is essential to ensure sustainability. Public health authorities' decisions and actions should be based on up-to-date information, on research, expertise, regular statistics and evidence-based practices. All professionals providing support to pregnant women and families with young children need to have up to date tools, validated by experts who are free from economic interests. Therefore, proper resources have to be allocated accordingly and participatory planning ensured. Some of the actions that have proven effective do not need extra funding but rather require a wider involvement of the stakeholders in planning and monitoring – not just in the health-sector but also in other sectors, for example in education, city-planning, food production and from non-governmental organisations.

Campaigns and one-off measures have limited impact. General services (e.g. counselling during pregnancy and breastfeeding period, family counselling, hospital birth, health services for the family, immunisation services, health check-ups and growth monitoring) and simple and multilingual health messages which are close to the everyday life of families with young children can be transferred through personal counselling, printed material and/or via Internet. There are powerful digital tools for health promotion but it should be ensured that the vulnerable groups also have access to them.

Conclusions

Public authorities can promote health by affecting the structures of the society and through community-based interventions which aim for more permanent and wide-reaching results to reduce social inequalities from the very beginning of life. A proportionate universalism¹

approach should contribute to this goal. Populations that are hard to reach (for instance immigrants or people that are unregistered in the health/social service systems) need targeted interventions. Depending on the national policy in different countries or national coverage by the public sector, these services could be provided by a complementary sector like non-governmental organisations.

KEY MESSAGES

Early intervention to prevent childhood obesity is particularly important. The increase of scientific knowledge on the crucial role that this period plays for health over the entire life makes it a priority. It is also a specific period for parents when generally more health services, including counselling are required.

To advance the achievements of WP7, the web-based toolbox for decision-makers and programme planners created by WP6 (for kindergarten, pre-school and school environments) should be expanded to cover early interventions, particularly those addressing social inequalities. Countries could make it available in the national languages and disseminate it to national stakeholders. This contribute could to the implementation of a European network and it could also facilitate international transfer of the findings.

¹ Proportionate universalism is the resourcing and delivering of universal services at a scale and intensity proportionate to the degree of need. Services are therefore universally available, not only for the most disadvantaged, and are able to respond to the level of presenting need. http://www.healthscotland.com/uploads/documents/24296-ProportionateUniversalismBriefing.pdf

CONCLUSIONS

JANPA is a contribution to the implementation of the EU Action Plan on Nutrition and Physical Activity for 2014-2020. The work carried out during the 2 years of JANPA, thanks to the involvement of 26 countries and 39 public institutions, with the support of additional partners such as the European Commission's Joint Research Centre (JRC) and the WHO Regional Office for Europe (WHO–Europe), gives an optimistic outlook. Over a short period of only two years, JANPA has achieved concrete and positive results. New tools have been created by and shared between sub-groups of the 26 countries. Scaling-up of these harmonised tools is needed. Europe is large and diverse, with many national institutions working in different manners. Without further support from European institutions and particularly the European Commission, the work done so far will not be fruitful. To allow the flowers of JANPA to bloom, various proposals are made and decisions need to be taken.

On the estimation of the forecasting costs of childhood obesity

- Share the JANPA costing model with the OECD so that its management and development can be incorporated into their ongoing project to improve the modelling capacity of the economics of prevention.
- Deploy the JANPA costing model in all European countries for which good-quality data are available, if possible by building on the OECD economics of prevention project.
 This could be done over the next two years (2018-2019) possibly with the support of a dedicated European budget.
- Organise a high-level European conference in 2020, for example at the European Parliament, to draw comprehensive conclusions based on this work.

On nutritional information

Develop the powerful tool tested during JANPA for determining average levels of nutrients of interest (sugar, salt, fat, saturated fatty acids, energy) and their variability, by product groups and sub groups (for example, the sub group chocolate-based breakfast cereals within the broader group of breakfast cereals), and type of brand (national brands versus retailer brands). It will allow comparison, within and between countries, of the nutritional quality of foods by groups and sub groups, and ensure the reliable monitoring of trends in these data.

To ensure its implementation:

 In 2018, under the leadership and with the support of the European Commission, hold a meeting of the organisations appointed by the volunteering Member States, and constitute the core of a network.

- Develop, by 2020, the country network, initiated by JANPA, to implement a harmonised methodology for the collection and processing of nutritional information.
 The objective can be to include 15 to 20 countries in this network.
- By mid-2019, have useful results making it possible, for some product groups and sub-groups, to set appropriate and realistic objectives for the nutritional reformulation and improvement of foods. This will lead to the proposal of a European regulation setting threshold values.

On best practices from early life till adolescence

- The online toolbox created by JANPA is easy to access, promotes and facilitates interactions between the initiators of programmes/actions and professionals wanting to use them as an inspiration source for their own practices. This is essential in order to rally, at the European level, the national teams that develop such programmes.
- After JANPA ends, the toolbox should remain alive and continue to collect public health/prevention programmes that are supported by national (or regional) public authorities, selected according to strict and standardised criteria. Beyond childhood obesity prevention programmes, an objective could be to extend the content of the toolbox to the major determinants of chronic diseases (nutrition, physical activity, smoking, alcohol, etc.) for various age groups. Only the European Commission (possibly through the JRC) can ensure the deployment of such a database with Member States.
- Give special attention to and develop systematic evaluations on the impact of initiatives on the reduction of social inequalities in particular through specific indicators, harmonised as far as possible.
- Strengthen the analysis of conditions for the inter-country transferability of "good practices". A call for proposals aimed at multi-disciplinary research and action teams and specifically targeting this issue within the framework of preventing childhood obesity will help broaden the body of theory intended to help programme developers.

As health is a concern for every citizen of Europe, and childhood overweight and obesity is at such high rates in all EU countries, thereby threatening health and social systems, the European Parliament is invited to open specific discussions on this threat to public health.

PARTNERS

JANPA brought together a consortium of 39 organisations and public institutions (universities, ministries, public health institutes, etc.) from 24 European countries. In addition, 13 collaborating stakeholders were involved in JANPA including institutions from Cyprus and Sweden as well as WHO-Europe and the Joint Research Centre (JRC-EU).

- Austrian Federal Ministry of Health and Women's Affairs, BMGF, Austria
- Austrian Agency for Health and Food Safety, AGES, Austria
- Federal Public Service Health, FPS Health, Belgium
- Scientific Institute of Public Health, WIV-ISP, Belgium
- National Centre of Public Health and Analysis, NCPHA, Bulgaria
- Ministry of Health, MoH BG, Bulgaria
- Faculty of Medicine, Sofia University with University Hospital "Lozenetz", MFSU-UHL, Bulgaria
- Croatian Institute of Public Health, HZJZ, Croatia
- Croatian Health Insurance Fund, HZZO, Croatia
- National Institute of Public Health, SZU, Czech Republic
- National Institute for Health Development, NIHD, Estonia
- National Institute for Health and Welfare, THL, Finland
- French Agency for Food, Environmental and Occupational Health & Safety, ANSES, France
- French Ministry for Solidarity and Health, DGS FR, France
- French National Institute for Agricultural Research, INRA, France
- Friedrich-Alexander-University, Erlangen-Nürmberg, FAU. Germany
- German Nutrition Society, DGE, Germany
- aid information service / Healthy Start- Young Family Network, aid/GiL, Germany
- Alexander Technological Educational Institute of Thessaloniki, ATEITH, Greece

- AHEPA University Hospital of Aristotle University of Thessaloniki, AHEPA, Greece
- National Institute of Pharmacy and Nutrition, OGYEI, Hungary
- Ministry of Human Capacities, MHC, replacing National Institute for Health Development, NEFI, Hungary
- Institute of Public Health, IPH IRL, Ireland
- HRB Centre for Health and Diet Research, UCC-CHDR, Ireland
- Ministry of Health, MoH I, Italy
- Istituto Superiore di Sanità, ISS-CNaPPS, Italy
- Centre for Disease Prevention and Control, SPKC, Latvia
- Health Education and Diseases Prevention Centre, SMLPC, Lithuania
- Ministry of Health, Government of Luxembourg, MISA, Luxembourg
- Ligue médico-sociale (Ligue luxembourgeoise de Prévention et d'Action médico-sociales), La Ligue, Luxembourg
- Ministry for Energy and Health, MEH, Malta
- Norwegian Directorate of Health, HDIR, Norway
- Medical University of Silesia, SUM, Poland
- Directorate General of Health, MS, Portugal
- National Institute for Mother and Child Health, INSMC, Romania
- Babes-Bolyai University, UBB, Romania
- Public Health Authority of the Slovak Republic, UVZ SR, Slovakia
- National Institute of Public Health, NIJZ, Slovenia
- Spanish Agency for Consumer Affairs, Food Safety and Nutrition, AECOSAN, Spain

COLLABORATING STAKEHOLDERS

- Department of Health, Ireland
- Joint Research Centre, Institute for Health and Consumer Protection (IHCP DG JRC), Italy
- Federal Ministry of Food and Agriculture (BMEL), Germany
- Federal Ministry of Health (BMG), Germany
- Ministry of Health (MoH), Cyprus
- Ministry of Social Affairs, Estonia
- Ministry of Social Affairs and Health (STM), Finland
- National Association "Diabetes, Prediabetes and metabolic Syndrome" (NADPMS), Bulgaria
- National Institute of Public Health (NIPH), Romania
- Public Health Agency of Sweden (PHA), Sweden
- The Food Safety Promotion Board (safefood), Ireland
- The National Board of Health and Welfare (NBHW), Sweden
- World Health Organization, Regional Office for Europe (WHO Europe), Denmark

